



SRC ENERGY

**SECTION 15, T6N, R66W
HARVESTERS STATE 7-15 PAD
HARVESTERS STATE 4C-16-M**

**OH
PLAN #1**

Anticollision Report

04 October, 2017





Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference	PLAN #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00 ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.45 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	10/4/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	15,116.21	PLAN #1 (OH)	MWD+IFR1	OWSG MWD + IFR1

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
BERG 33-15 (AB_150CC) - OH - OH	100.00	57.55	1,755.31	1,751.85	507.554	CC
BERG 33-15 (AB_150CC) - OH - OH	500.00	458.99	1,756.09	1,750.44	310.842	ES
BERG 33-15 (AB_150CC) - OH - OH	8,600.00	7,181.10	3,530.59	3,454.67	46.506	SF
BERRY 22-2(PR_75CC) - OH - OH	100.00	28.32	4,492.56	4,489.10	1,299.902	CC
BERRY 22-2(PR_75CC) - OH - OH	500.00	411.50	4,493.68	4,488.13	808.530	ES
BERRY 22-2(PR_75CC) - OH - OH	11,800.00	7,116.02	7,722.93	7,593.93	59.867	SF
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	0.00	19.26	4,492.56			
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	500.00	519.78	4,493.21	4,487.43	777.721	ES
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	11,800.00	7,400.00	7,727.65	7,597.09	59.190	SF
BLACKGOLD 3(AB_150CC) - OH - OH	8,140.69	7,276.11	956.09	881.84	12.876	CC, ES
BLACKGOLD 3(AB_150CC) - OH - OH	8,400.00	7,277.85	990.63	911.23	12.476	SF
BURBACH 15-22(SI_150CC) - OH - OH	9,124.05	7,234.19	372.58	57.30	1.182	Level 2, CC, ES, SF
BURBACH 15-23(SI_150CC) - OH - OH	9,516.17	7,217.54	1,699.59	1,375.10	5.238	CC, ES
BURBACH 15-23(SI_150CC) - OH - OH	9,700.00	7,216.77	1,709.50	1,381.24	5.208	SF
BURMAN 16-42(PR_75CC) - OH - OH	11,796.79	7,203.05	2,831.00	2,445.73	7.348	CC
BURMAN 16-42(PR_75CC) - OH - OH	11,900.00	7,203.48	2,832.88	2,445.02	7.304	ES
BURMAN 16-42(PR_75CC) - OH - OH	12,200.00	7,204.74	2,859.57	2,465.19	7.251	SF
BURMAN 16-43(PR_75CC) - OH - OH	11,827.54	7,206.18	4,331.63	3,945.40	11.215	CC
BURMAN 16-43(PR_75CC) - OH - OH	11,900.00	7,206.48	4,332.23	3,944.09	11.162	ES
BURMAN 16-43(PR_75CC) - OH - OH	12,700.00	7,209.84	4,418.62	4,012.07	10.869	SF
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	10,170.91	7,317.25	4,877.96	4,751.88	38.689	CC
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	15,116.21	12,347.95	4,967.29	4,558.55	12.153	ES, SF
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	10,163.28	7,419.01	5,070.13	4,943.80	40.134	CC
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	15,116.21	12,336.14	5,104.75	4,699.08	12.584	ES, SF
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	7,671.23	16,529.80	784.12	479.11	2.571	CC
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,300.00	19,118.26	832.61	395.76	1.906	ES, SF
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	7,572.60	16,342.11	626.33	328.76	2.105	CC
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,300.00	19,018.34	641.87	211.26	1.491	Level 3, ES, SF
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,108.05	7,362.41	4,791.23	4,556.59	20.420	CC
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,200.00	7,359.71	4,792.11	4,554.95	20.206	ES
FRITZLER 11-21-4(PR_150CC) - OH - OH	15,116.21	7,383.22	4,896.06	4,637.97	18.970	SF
FRITZLER 11-21(PR_150CC) - OH - OH	14,705.76	7,163.73	5,456.39	4,991.05	11.726	CC
FRITZLER 11-21(PR_150CC) - OH - OH	14,800.00	7,163.33	5,457.20	4,989.34	11.664	ES
FRITZLER 11-21(PR_150CC) - OH - OH	15,116.21	7,162.00	5,471.80	4,995.97	11.500	SF
FRITZLER 1-17(PR_150CC) - OH - OH	15,116.21	7,177.00	4,208.06	3,734.34	8.883	CC, ES, SF
FRITZLER 17-23-18(PR_150CC) - OH - OH	15,116.21	7,386.00	4,538.68	4,303.72	19.317	CC, ES, SF
FRITZLER 17-32-12(PR_150CC) - OH - OH	15,116.21	7,610.61	2,624.21	2,385.03	10.972	CC, ES, SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
FRITZLER 17-42-11(PR_150CC) - OH - MWD	15,116.21	7,596.71	2,158.28	1,893.18	8.141	CC, ES, SF
FRITZLER 34-17(PR_150CC) - OH - OH	15,116.21	7,149.36	4,692.00	4,447.11	19.159	CC, ES, SF
FRITZLER 43-17(PR_150CC) - OH - OH	15,116.21	7,394.54	2,918.19	2,664.28	11.493	CC, ES, SF
FRITZLER 6-6-17 (PR_150CC) - OH - OH	15,116.21	7,260.39	3,804.08	3,556.54	15.368	CC, ES, SF
FRITZLER 6-8-17(PR_150CC) - OH - OH	15,116.21	7,377.25	4,958.26	4,705.44	19.612	CC, ES, SF
FRITZLER 8-8-17(PR_150CC) - OH - OH	15,116.21	7,194.63	4,785.61	4,523.61	18.266	CC, ES, SF
GREELEY SWD #1(XX) - OH - OH	10,398.61	7,184.83	4,563.26	4,216.79	13.171	CC
GREELEY SWD #1(XX) - OH - OH	10,500.00	7,184.40	4,564.39	4,215.35	13.077	ES
GREELEY SWD #1(XX) - OH - OH	11,600.00	7,179.78	4,718.75	4,345.06	12.627	SF
HARVESTER 31-15(SI_150CC) - OH - OH	4,830.39	4,748.06	597.18	554.62	14.030	CC
HARVESTER 31-15(SI_150CC) - OH - OH	4,900.00	4,813.88	597.47	554.30	13.840	ES
HARVESTER 31-15(SI_150CC) - OH - OH	6,800.00	6,712.72	666.02	606.01	11.099	SF
HARVESTER 32-15(SI_150CC) - OH - OH	505.19	483.73	559.35	553.63	97.654	CC, ES
HARVESTER 32-15(SI_150CC) - OH - OH	6,800.00	6,677.06	1,461.48	1,402.25	24.676	SF
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,142.73	7,218.85	92.52	36.67	1.657	CC, ES, SF
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,037.64	7,177.35	409.62	351.22	7.015	CC, ES
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,100.00	7,209.57	416.22	355.29	6.831	SF
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,898.00	7,076.49	817.86	757.46	13.542	CC
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,900.00	7,077.20	817.86	757.43	13.533	ES
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	7,000.00	7,125.02	830.85	768.71	13.370	SF
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	6,902.51	7,235.41	1,140.84	1,078.02	18.161	CC, ES
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	7,000.00	7,290.98	1,151.24	1,087.28	17.998	SF
HARVESTERS STATE 30C-16-M - OH - PLAN #1	200.00	200.00	39.71	35.76	10.050	CC
HARVESTERS STATE 30C-16-M - OH - PLAN #1	15,116.21	15,216.01	404.27	-53.14	0.884	Level 1, ES, SF
HARVESTERS STATE 30N-16B-M - OH - PLAN #1	300.00	300.00	20.04	15.54	4.456	CC
HARVESTERS STATE 30N-16B-M - OH - PLAN #1	15,116.21	14,942.77	258.34	-94.34	0.732	Level 1, ES, SF
HARVESTERS STATE 31C-16-M - OH - PLAN #1	500.00	501.00	60.11	54.37	10.475	CC, ES
HARVESTERS STATE 31C-16-M - OH - PLAN #1	15,116.21	15,010.63	695.56	238.15	1.521	SF
HARVESTERS STATE 33C-16-M - OH - PLAN #1	200.00	198.00	359.95	356.00	91.134	CC, ES
HARVESTERS STATE 33C-16-M - OH - PLAN #1	15,116.21	15,234.35	3,365.57	2,908.99	7.371	SF
HARVESTERS STATE 34C-16-M - OH - PLAN #1	200.00	197.00	480.17	476.22	121.595	CC, ES
HARVESTERS STATE 34C-16-M - OH - PLAN #1	15,116.21	15,753.22	4,627.75	4,170.80	10.128	SF
HARVESTERS STATE 5C-16-M - OH - PLAN #1	500.00	501.00	100.19	94.45	17.458	CC, ES
HARVESTERS STATE 5C-16-M - OH - PLAN #1	15,116.21	14,980.60	1,135.66	679.02	2.487	SF
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	200.00	198.00	340.27	336.32	86.151	CC, ES
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	15,116.21	14,893.63	3,170.54	2,716.10	6.977	SF
HARVESTERS STATE 12N-16B-M - OH - PLAN #1	200.00	198.00	320.24	316.29	81.080	CC, ES
HARVESTERS STATE 12N-16B-M - OH - PLAN #1	15,116.21	14,960.71	2,952.11	2,496.53	6.480	SF
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	200.00	198.00	300.19	296.24	76.003	CC, ES
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	15,116.21	14,957.24	2,740.21	2,285.25	6.023	SF
HARVESTERS STATE 13C-16-M - OH - PLAN #1	200.00	197.00	420.06	416.11	106.375	CC, ES
HARVESTERS STATE 13C-16-M - OH - PLAN #1	15,116.21	15,405.04	3,996.84	3,540.19	8.753	SF
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	200.00	197.00	440.09	436.14	111.445	CC, ES
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	15,116.21	15,308.26	4,210.49	3,754.20	9.228	SF
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	500.00	499.00	80.14	74.40	13.975	CC
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	600.00	601.51	80.31	73.89	12.494	ES
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	15,116.21	14,807.87	961.10	526.38	2.211	SF
HARVESTERS STATE 32C-16-M - OH - PLAN #1	200.00	198.00	280.15	276.20	70.930	CC, ES
HARVESTERS STATE 32C-16-M - OH - PLAN #1	15,116.21	15,069.80	2,526.64	2,030.66	5.094	SF
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	500.00	499.00	160.29	154.56	27.953	CC, ES
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	15,116.21	14,992.74	1,796.92	1,340.49	3.937	SF
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	300.00	298.00	260.12	255.62	57.864	CC, ES
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	15,116.21	14,856.48	2,335.24	1,880.60	5.136	SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	500.00	501.00	179.96	174.22	31.358	CC, ES
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	15,116.21	14,898.64	2,018.95	1,563.66	4.434	SF
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	200.00	198.00	379.97	376.02	96.202	CC, ES
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	15,116.21	15,115.60	3,582.98	3,127.07	7.859	SF
HARVESTERS STATE 33N-16C-M - OH - PLAN #1	200.00	197.00	400.03	396.08	101.300	CC, ES
HARVESTERS STATE 33N-16C-M - OH - PLAN #1	15,116.21	15,244.12	3,787.59	3,331.22	8.299	SF
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	200.00	197.00	460.13	456.18	116.520	CC, ES
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	15,116.21	15,453.74	4,418.53	3,961.92	9.677	SF
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	500.00	501.00	40.07	34.33	6.982	CC, ES
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	15,116.21	14,727.86	561.24	171.26	1.439	Level 3, SF
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	500.00	501.00	20.03	14.29	3.490	CC
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	15,116.21	14,955.89	373.59	-57.64	0.866	Level 1, ES, SF
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	400.00	399.00	140.25	135.16	27.536	CC, ES
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	15,116.21	14,798.90	1,488.26	1,036.05	3.291	SF
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	500.00	499.00	120.22	114.48	20.965	CC, ES
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	15,116.21	14,848.92	1,360.25	906.72	2.999	SF
HOOD 41-20(PR_150CC) - OH - OH	15,116.21	7,169.00	5,536.61	5,061.70	11.658	CC, ES, SF
HOOD 6-2-20(PR_150CC) - OH - OH	15,116.21	7,570.16	6,269.33	6,011.26	24.293	CC, ES, SF
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,058.83	7,100.01	5,458.30	5,285.26	31.545	CC
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,200.00	7,108.34	5,460.12	5,283.30	30.880	ES
LEFFLER 1 21-2(SI_75CC) - OH - OH	14,300.00	7,233.47	5,898.99	5,679.30	26.852	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	6,410.85	10,574.62	5,092.82	4,948.91	35.389	CC, ES
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	13,100.00	7,052.01	5,816.50	5,631.39	31.423	SF
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	6,293.14	10,401.16	4,802.50	4,660.31	33.774	CC, ES
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	12,900.00	7,000.00	5,500.36	5,319.59	30.428	SF
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,390.92	7,171.25	5,658.19	5,229.59	13.201	CC
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,500.00	7,170.79	5,659.25	5,227.73	13.115	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	14,700.00	7,165.75	5,807.65	5,349.05	12.664	SF
LOVELY 1(AB_150CC) - OH - OH	13,290.58	7,218.67	1,140.11	712.66	2.667	CC
LOVELY 1(AB_150CC) - OH - OH	13,300.00	7,218.63	1,140.14	712.39	2.665	ES
LOVELY 1(AB_150CC) - OH - OH	13,400.00	7,218.21	1,145.34	715.12	2.662	SF
LOVELY 14-9(AB_150CC) - OH - OH	14,787.73	7,215.38	1,099.79	630.34	2.343	CC
LOVELY 14-9(AB_150CC) - OH - OH	14,800.00	7,215.33	1,099.86	630.01	2.341	ES, SF
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,561.82	7,250.14	1,145.30	792.16	3.243	CC
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,600.00	7,249.98	1,145.93	791.65	3.235	ES
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,700.00	7,249.56	1,153.60	796.81	3.233	SF
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,777.49	7,205.03	1,136.52	751.72	2.953	CC
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,800.00	7,204.94	1,136.75	751.24	2.949	ES
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,900.00	7,204.52	1,143.11	755.10	2.946	SF
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,405.67	4,452.00	6,098.93	5,799.84	20.391	CC
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,600.00	4,452.00	6,102.03	5,798.23	20.086	ES
MAURICE LEFFLER 1(AB_150CC) - OH - OH	15,116.21	4,452.00	6,334.27	5,999.12	18.900	SF
MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH	15,116.21	7,434.00	3,421.29	3,158.90	13.039	CC, ES, SF
MCGLOTHLIN 17-11(PR_75CC) - OH - OH	15,116.21	7,200.00	980.87	693.62	3.415	CC, ES, SF
MONTERA 10-34 (PR_75CC) - OH - OH	7,087.47	6,983.31	1,039.94	977.89	16.760	CC
MONTERA 10-34 (PR_75CC) - OH - OH	7,100.00	6,993.48	1,040.00	977.85	16.731	ES
MONTERA 10-34 (PR_75CC) - OH - OH	7,200.00	7,072.81	1,045.63	982.56	16.579	SF
RUTT-ADAMS HEIRS 2-22 - OH - OH	500.00	439.00	4,445.05	4,429.15	279.544	CC
RUTT-ADAMS HEIRS 2-22 - OH - OH	600.00	538.98	4,446.68	4,426.92	225.119	ES
RUTT-ADAMS HEIRS 2-22 - OH - OH	10,100.00	7,208.92	5,870.36	5,537.33	17.627	SF
SENA 15-21(PR_75CC) - OH - OH	8,115.72	7,254.42	123.40	-170.78	0.419	Level 1, CC, ES, SF
SENA 15-24(PR_75CC) - OH - OH	500.00	480.00	1,129.44	1,112.15	65.301	CC
SENA 15-24(PR_75CC) - OH - OH	1,600.00	1,567.16	1,151.02	1,091.06	19.197	ES

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
SENA 15-24(PR_75CC) - OH - OH	8,200.00	7,240.07	1,433.52	1,138.70	4.862	SF
SENA 15-25(PR_75CC) - OH - OH	8,445.89	7,246.04	740.95	440.71	2.468	CC, ES, SF
STATE 1(AB_150CC) - OH - OH	11,944.98	7,205.67	174.90	-214.56	0.449	Level 1, CC, ES, SF
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,074.50	7,204.22	151.96	-241.05	0.387	Level 1, CC, ES, SF
STATE BEATRICE 32-16(PR_75CC) - OH - OH	11,896.20	7,189.53	1,626.95	1,239.40	4.198	CC
STATE BEATRICE 32-16(PR_75CC) - OH - OH	11,900.00	7,189.52	1,626.96	1,239.31	4.197	ES
STATE BEATRICE 32-16(PR_75CC) - OH - OH	12,000.00	7,189.10	1,630.26	1,240.46	4.182	SF
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,678.52	7,174.84	4,288.72	3,823.76	9.224	CC
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,800.00	7,174.33	4,290.44	3,822.31	9.165	ES
STATE-HOPPE 16-1(SI_75CC) - OH - OH	15,116.21	7,173.00	4,310.99	3,835.45	9.065	SF
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,518.30	7,207.28	2,815.89	2,382.45	6.497	CC
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,600.00	7,207.63	2,817.08	2,381.56	6.468	ES
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,900.00	7,208.89	2,841.64	2,399.85	6.432	SF
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,711.84	7,182.64	1,640.65	1,392.88	6.622	CC, ES
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,900.00	7,185.43	1,651.41	1,400.33	6.577	SF
STOCKOVER 16-1(PR_75CC) - OH - OH	10,566.41	7,187.12	2,819.19	2,468.13	8.031	CC
STOCKOVER 16-1(PR_75CC) - OH - OH	10,600.00	7,186.98	2,819.39	2,467.50	8.012	ES
STOCKOVER 16-1(PR_75CC) - OH - OH	11,000.00	7,185.30	2,852.34	2,491.58	7.907	SF
ULRICH PC I 17-07D(PR_75CC) - OH - OH	15,116.21	7,326.25	2,665.83	2,491.13	15.260	CC, ES, SF
ULRICH PC I 17-08(PR_75CC) - OH - OH	15,116.21	7,209.00	1,775.08	1,332.80	4.013	CC, ES, SF
ULRICH PC I 17-17D(PR_75CC) - OH - OH	15,116.21	7,391.75	1,831.87	1,700.62	13.957	CC, ES, SF

Offset Design													Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Well Error:	3.28 ft
Survey Program: 100-GYRO-NS														
Reference		Offset		Semi Major Axis		Distance								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	39.00	0.00	3.28	168.54	-1,720.25	348.81	1,755.69					
100.00	100.00	57.55	96.55	0.18	3.28	168.54	-1,720.30	348.81	1,755.31	1,751.85	3.46	507.554	CC	
200.00	200.00	155.43	194.43	0.61	3.31	168.54	-1,720.61	348.79	1,755.62	1,751.69	3.93	447.210		
300.00	300.00	258.15	297.15	1.05	3.40	168.55	-1,720.93	348.59	1,755.88	1,751.43	4.45	394.375		
400.00	400.00	359.32	398.32	1.49	3.54	168.55	-1,721.04	348.51	1,755.97	1,750.94	5.03	349.132		
500.00	500.00	458.99	497.99	1.93	3.72	168.55	-1,721.15	348.53	1,756.09	1,750.44	5.65	310.842	ES	
600.00	599.98	554.80	593.80	2.37	3.93	176.30	-1,721.30	348.66	1,758.01	1,751.71	6.30	279.078		
700.00	699.84	650.81	689.81	2.81	4.17	176.30	-1,721.78	348.77	1,763.74	1,756.75	6.98	252.553		
800.00	799.45	752.59	791.59	3.26	4.45	176.32	-1,722.37	348.62	1,772.98	1,765.27	7.71	229.942		
900.00	898.70	855.46	894.46	3.70	4.76	176.35	-1,722.82	348.07	1,785.46	1,777.00	8.46	210.925		
1,000.00	997.47	956.28	995.27	4.15	5.08	176.38	-1,723.11	347.55	1,801.25	1,792.01	9.23	195.079		
1,100.00	1,095.78	1,052.56	1,091.55	4.60	5.41	176.43	-1,723.37	346.88	1,819.64	1,809.64	10.00	181.928		
1,200.00	1,194.05	1,148.54	1,187.52	5.05	5.74	176.48	-1,723.81	346.32	1,838.41	1,827.64	10.78	170.618		
1,300.00	1,292.33	1,246.81	1,285.79	5.50	6.09	176.54	-1,724.28	345.67	1,857.20	1,845.63	11.57	160.530		
1,400.00	1,390.61	1,346.59	1,385.57	5.96	6.45	176.60	-1,724.79	344.87	1,875.98	1,863.61	12.38	151.534		
1,500.00	1,488.89	1,449.42	1,488.39	6.43	6.84	176.66	-1,725.11	344.06	1,894.59	1,881.37	13.21	143.402		
1,600.00	1,587.16	1,550.94	1,589.91	6.89	7.22	176.72	-1,725.16	343.32	1,912.96	1,898.91	14.05	136.190		
1,700.00	1,685.44	1,647.94	1,686.91	7.36	7.59	176.78	-1,725.22	342.27	1,931.27	1,916.40	14.87	129.889		
1,800.00	1,783.72	1,742.68	1,781.64	7.83	7.96	176.84	-1,725.42	341.37	1,949.74	1,934.05	15.69	124.293		
1,900.00	1,882.00	1,839.50	1,878.46	8.30	8.34	176.90	-1,725.76	340.45	1,968.36	1,951.84	16.52	119.164		
2,000.00	1,980.27	1,936.81	1,975.76	8.77	8.73	176.95	-1,726.11	339.48	1,986.98	1,969.63	17.36	114.488		
2,100.00	2,078.55	2,032.53	2,071.47	9.25	9.11	177.02	-1,726.64	338.35	2,005.75	1,987.56	18.19	110.272		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
2,200.00	2,176.83	2,130.96	2,169.89	9.72	9.50	177.08	-1,727.17	337.29	2,024.54	2,005.50	19.04	106.342	
2,300.00	2,275.11	2,227.40	2,266.33	10.19	9.89	177.13	-1,727.68	336.60	2,043.37	2,023.49	19.88	102.784	
2,400.00	2,373.38	2,326.22	2,365.14	10.66	10.29	177.18	-1,728.29	335.82	2,062.29	2,041.56	20.74	99.456	
2,500.00	2,471.66	2,431.77	2,470.69	11.14	10.72	177.23	-1,728.68	334.79	2,080.93	2,059.30	21.63	96.226	
2,600.00	2,569.94	2,532.13	2,571.05	11.61	11.13	177.28	-1,728.82	334.03	2,099.39	2,076.90	22.49	93.339	
2,700.00	2,668.22	2,630.13	2,669.04	12.09	11.54	177.32	-1,728.83	333.49	2,117.76	2,094.41	23.35	90.701	
2,800.00	2,766.49	2,723.81	2,762.72	12.56	11.92	177.35	-1,729.01	333.00	2,136.31	2,112.13	24.19	88.328	
2,900.00	2,864.77	2,822.07	2,860.98	13.04	12.33	177.39	-1,729.29	332.48	2,154.96	2,129.92	25.05	86.035	
3,000.00	2,963.05	2,921.38	2,960.29	13.51	12.74	177.43	-1,729.50	332.03	2,173.55	2,147.63	25.92	83.872	
3,100.00	3,061.33	3,015.31	3,054.22	13.99	13.13	177.46	-1,729.79	331.60	2,192.23	2,165.48	26.76	81.931	
3,200.00	3,159.60	3,110.81	3,149.72	14.46	13.53	177.50	-1,730.28	331.11	2,211.10	2,183.49	27.61	80.090	
3,300.00	3,257.88	3,216.52	3,255.42	14.94	13.97	177.53	-1,730.63	330.86	2,229.85	2,201.34	28.51	78.208	
3,400.00	3,356.16	3,325.73	3,364.64	15.41	14.42	177.56	-1,730.57	330.35	2,248.18	2,218.74	29.43	76.381	
3,500.00	3,454.43	3,428.72	3,467.62	15.89	14.85	177.60	-1,730.10	329.70	2,266.09	2,235.76	30.32	74.729	
3,600.00	3,552.71	3,519.78	3,558.68	16.36	15.23	177.63	-1,729.84	329.01	2,284.14	2,252.99	31.15	73.317	
3,700.00	3,650.99	3,610.40	3,649.30	16.84	15.61	177.67	-1,729.86	328.34	2,302.50	2,270.51	31.98	71.992	
3,800.00	3,749.27	3,694.46	3,733.36	17.32	15.96	177.70	-1,730.30	327.68	2,321.34	2,288.56	32.78	70.824	
3,900.00	3,847.54	3,790.04	3,828.93	17.79	16.36	177.74	-1,731.17	326.89	2,340.55	2,306.92	33.63	69.594	
4,000.00	3,945.82	3,896.89	3,935.77	18.27	16.81	177.78	-1,731.99	326.11	2,359.64	2,325.09	34.55	68.300	
4,100.00	4,044.10	3,996.36	4,035.24	18.75	17.23	177.82	-1,732.51	325.41	2,378.49	2,343.07	35.43	67.141	
4,200.00	4,142.38	4,094.64	4,133.51	19.22	17.65	177.86	-1,733.02	324.62	2,397.32	2,361.03	36.30	66.048	
4,300.00	4,240.65	4,198.23	4,237.10	19.70	18.08	177.89	-1,733.42	323.88	2,416.05	2,378.85	37.20	64.953	
4,400.00	4,338.93	4,321.56	4,360.42	20.18	18.60	177.93	-1,732.98	322.93	2,434.02	2,395.81	38.20	63.712	
4,500.00	4,437.21	4,414.75	4,453.61	20.65	18.99	177.96	-1,732.41	322.16	2,451.75	2,412.70	39.05	62.788	
4,600.00	4,535.49	4,519.79	4,558.64	21.13	19.44	178.00	-1,731.79	321.16	2,469.50	2,429.54	39.96	61.805	
4,700.00	4,633.76	4,632.72	4,671.56	21.61	19.91	178.04	-1,730.40	319.94	2,486.57	2,445.66	40.91	60.786	
4,800.00	4,732.04	4,723.73	4,762.55	22.08	20.29	178.05	-1,729.19	319.96	2,503.74	2,462.00	41.74	59.982	
4,900.00	4,830.32	4,817.94	4,856.75	22.56	20.69	178.07	-1,728.09	319.31	2,520.98	2,478.39	42.59	59.188	
5,000.00	4,928.60	4,887.99	4,926.80	23.04	20.99	178.10	-1,727.90	318.39	2,538.97	2,495.66	43.31	58.622	
5,100.00	5,026.87	4,974.85	5,013.66	23.51	21.35	178.13	-1,728.34	317.65	2,557.79	2,513.67	44.12	57.973	
5,200.00	5,125.15	5,112.53	5,151.33	23.99	21.93	178.15	-1,728.20	317.93	2,576.27	2,531.05	45.22	56.978	
5,300.00	5,223.43	5,220.67	5,259.46	24.47	22.39	178.14	-1,726.79	318.53	2,593.56	2,547.42	46.14	56.207	
5,400.00	5,321.71	5,314.69	5,353.46	24.94	22.78	178.13	-1,725.35	319.38	2,610.70	2,563.71	47.00	55.553	
5,500.00	5,419.98	5,393.52	5,432.29	25.42	23.11	178.12	-1,724.51	320.41	2,628.34	2,580.58	47.76	55.030	
5,600.00	5,518.26	5,474.16	5,512.92	25.90	23.45	178.10	-1,724.23	321.42	2,646.69	2,598.15	48.54	54.530	
5,700.00	5,616.54	5,585.88	5,624.64	26.38	23.92	178.10	-1,724.22	322.25	2,665.29	2,615.80	49.49	53.857	
5,800.00	5,714.82	5,683.45	5,722.19	26.85	24.33	178.09	-1,723.69	323.32	2,683.42	2,633.06	50.36	53.285	
5,900.00	5,813.09	5,785.32	5,824.06	27.33	24.76	178.08	-1,723.21	324.26	2,701.58	2,650.33	51.26	52.707	
6,000.00	5,911.37	5,878.99	5,917.73	27.81	25.15	178.09	-1,722.86	324.36	2,719.71	2,667.61	52.11	52.197	
6,100.00	6,009.65	5,971.14	6,009.87	28.28	25.54	178.08	-1,722.59	325.29	2,738.06	2,685.12	52.95	51.715	
6,200.00	6,107.93	6,054.84	6,093.56	28.76	25.89	178.06	-1,722.47	326.99	2,756.74	2,703.01	53.74	51.302	
6,300.00	6,206.20	6,153.87	6,192.57	29.24	26.31	178.03	-1,722.85	328.89	2,775.90	2,721.29	54.62	50.826	
6,400.00	6,304.48	6,264.09	6,302.77	29.72	26.78	178.01	-1,722.80	330.42	2,794.55	2,738.99	55.56	50.295	
6,500.00	6,402.76	6,352.91	6,391.58	30.19	27.15	177.99	-1,722.62	332.22	2,813.17	2,756.78	56.38	49.893	
6,600.00	6,501.04	6,428.53	6,467.19	30.67	27.47	177.97	-1,722.94	333.58	2,832.36	2,775.24	57.12	49.584	
6,700.00	6,599.31	6,500.00	6,538.63	31.15	27.77	177.96	-1,723.98	334.99	2,852.54	2,794.71	57.83	49.326	
6,800.00	6,697.50	6,620.93	6,659.53	31.63	28.29	-160.23	-1,726.05	336.41	2,873.16	2,814.31	58.85	48.822	
6,900.00	6,794.18	6,777.59	6,761.01	32.10	28.95	-132.71	-1,726.74	336.18	2,894.32	2,834.34	59.98	48.252	
7,000.00	6,886.96	6,814.89	6,853.49	32.55	29.11	-119.61	-1,727.76	336.48	2,917.85	2,857.26	60.59	48.156	
7,100.00	6,973.57	6,901.17	6,939.76	32.99	29.48	-112.17	-1,728.72	336.76	2,943.08	2,881.68	61.40	47.931	
7,200.00	7,051.87	6,979.12	7,017.70	33.41	29.81	-107.17	-1,729.58	337.01	2,969.98	2,907.79	62.18	47.762	
7,300.00	7,119.93	7,046.82	7,085.40	33.85	30.10	-103.32	-1,730.33	337.23	2,998.57	2,935.62	62.95	47.635	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
7,400.00	7,176.09	7,102.60	7,141.18	34.39	30.34	-99.99	-1,730.95	337.41	3,028.85	2,965.13	63.72	47.533		
7,500.00	7,218.95	7,145.09	7,183.67	35.09	30.52	-96.85	-1,731.42	337.55	3,060.72	2,996.20	64.52	47.441		
7,600.00	7,247.46	7,173.25	7,211.82	35.98	30.64	-93.71	-1,731.73	337.64	3,093.92	3,028.58	65.34	47.353		
7,700.00	7,260.92	7,186.38	7,224.95	37.04	30.69	-90.51	-1,731.87	337.68	3,127.99	3,061.82	66.17	47.272		
7,800.00	7,261.75	7,186.90	7,225.47	38.23	30.70	-89.20	-1,731.88	337.68	3,162.82	3,095.81	67.01	47.196		
7,900.00	7,261.33	7,186.18	7,224.75	39.59	30.69	-89.19	-1,731.87	337.68	3,200.18	3,132.23	67.96	47.092		
8,000.00	7,260.91	7,185.45	7,224.02	41.10	30.69	-89.17	-1,731.86	337.68	3,240.19	3,171.22	68.98	46.974		
8,100.00	7,260.49	7,184.73	7,223.30	42.75	30.69	-89.16	-1,731.85	337.68	3,282.77	3,212.70	70.06	46.853		
8,200.00	7,260.07	7,184.00	7,222.57	44.53	30.68	-89.15	-1,731.85	337.68	3,327.80	3,256.60	71.20	46.741		
8,300.00	7,259.65	7,183.27	7,221.84	46.41	30.68	-89.13	-1,731.84	337.67	3,375.20	3,302.84	72.36	46.644		
8,400.00	7,259.23	7,182.55	7,221.12	48.39	30.68	-89.12	-1,731.83	337.67	3,424.86	3,351.32	73.54	46.570		
8,500.00	7,258.81	7,181.82	7,220.39	50.45	30.67	-89.10	-1,731.82	337.67	3,476.69	3,401.96	74.73	46.523		
8,600.00	7,258.39	7,181.10	7,219.67	52.59	30.67	-89.09	-1,731.81	337.67	3,530.59	3,454.67	75.92	46.506 SF		
8,700.00	7,257.97	7,180.37	7,218.94	54.79	30.67	-89.08	-1,731.81	337.66	3,586.47	3,509.37	77.09	46.522		
8,800.00	7,257.55	7,179.64	7,218.22	57.05	30.67	-89.06	-1,731.80	337.66	3,644.23	3,565.98	78.25	46.570		
8,900.00	7,257.13	7,178.92	7,217.49	59.36	30.66	-89.05	-1,731.79	337.66	3,703.80	3,624.41	79.39	46.652		
9,000.00	7,256.71	7,178.19	7,216.76	61.72	30.66	-89.03	-1,731.78	337.66	3,765.08	3,684.57	80.51	46.767		
9,100.00	7,256.29	7,177.47	7,216.04	64.12	30.66	-89.02	-1,731.77	337.65	3,827.99	3,746.39	81.60	46.914		
9,200.00	7,255.87	7,176.74	7,215.31	66.56	30.65	-89.01	-1,731.77	337.65	3,892.45	3,809.80	82.65	47.093		
9,300.00	7,255.45	7,176.02	7,214.59	69.02	30.65	-88.99	-1,731.76	337.65	3,958.39	3,874.71	83.68	47.303		
9,400.00	7,255.03	7,175.29	7,213.86	71.52	30.65	-88.98	-1,731.75	337.65	4,025.74	3,941.06	84.68	47.542		
9,500.00	7,254.61	7,174.56	7,213.14	74.04	30.64	-88.96	-1,731.74	337.64	4,094.42	4,008.77	85.64	47.809		
9,600.00	7,254.19	7,173.84	7,212.41	76.58	30.64	-88.95	-1,731.73	337.64	4,164.36	4,077.79	86.57	48.103		
9,700.00	7,253.77	7,173.11	7,211.68	79.15	30.64	-88.93	-1,731.73	337.64	4,235.52	4,148.05	87.47	48.422		
9,800.00	7,253.35	7,172.39	7,210.96	81.74	30.63	-88.92	-1,731.72	337.64	4,307.82	4,219.48	88.34	48.765		
9,900.00	7,252.92	7,171.66	7,210.23	84.34	30.63	-88.91	-1,731.71	337.64	4,381.21	4,292.03	89.17	49.131		
10,000.00	7,252.50	7,170.93	7,209.51	86.96	30.63	-88.89	-1,731.70	337.63	4,455.63	4,365.65	89.98	49.518		
10,100.00	7,252.08	7,170.21	7,208.78	89.59	30.63	-88.88	-1,731.69	337.63	4,531.04	4,440.29	90.75	49.926		
10,200.00	7,251.66	7,169.48	7,208.06	92.24	30.62	-88.86	-1,731.69	337.63	4,607.39	4,515.88	91.50	50.353		
10,300.00	7,251.24	7,168.76	7,207.33	94.90	30.62	-88.85	-1,731.68	337.63	4,684.62	4,592.40	92.22	50.798		
10,400.00	7,250.82	7,168.03	7,206.60	97.57	30.62	-88.84	-1,731.67	337.62	4,762.79	4,669.79	92.91	51.261		
10,500.00	7,250.40	7,167.31	7,205.88	100.25	30.61	-88.82	-1,731.66	337.62	4,841.59	4,748.02	93.58	51.739		
10,600.00	7,249.98	7,166.58	7,205.15	102.93	30.61	-88.81	-1,731.65	337.62	4,921.25	4,827.03	94.22	52.233		
10,700.00	7,249.56	7,165.85	7,204.43	105.63	30.61	-88.79	-1,731.65	337.62	5,001.64	4,906.80	94.83	52.741		
10,800.00	7,249.14	7,165.13	7,203.70	108.34	30.60	-88.78	-1,731.64	337.61	5,082.72	4,987.29	95.43	53.262		
10,900.00	7,248.72	7,164.40	7,202.97	111.05	30.60	-88.77	-1,731.63	337.61	5,164.47	5,068.47	96.00	53.797		
11,000.00	7,248.30	7,163.68	7,202.25	113.77	30.60	-88.75	-1,731.62	337.61	5,246.85	5,150.30	96.55	54.343		
11,100.00	7,247.88	7,162.95	7,201.52	116.50	30.59	-88.74	-1,731.61	337.61	5,329.83	5,232.75	97.08	54.901		
11,200.00	7,247.46	7,162.22	7,200.80	119.23	30.59	-88.72	-1,731.61	337.60	5,413.38	5,315.79	97.59	55.470		
11,300.00	7,247.04	7,161.50	7,200.07	121.97	30.59	-88.71	-1,731.60	337.60	5,497.49	5,399.41	98.08	56.049		
11,400.00	7,246.62	7,160.77	7,199.35	124.72	30.58	-88.70	-1,731.59	337.60	5,582.12	5,483.56	98.56	56.638		
11,500.00	7,246.20	7,160.05	7,198.62	127.46	30.58	-88.68	-1,731.58	337.60	5,667.25	5,568.23	99.02	57.236		
11,600.00	7,245.78	7,159.32	7,197.89	130.22	30.58	-88.67	-1,731.57	337.60	5,752.86	5,653.40	99.46	57.842		
11,700.00	7,245.36	7,158.60	7,197.17	132.98	30.58	-88.65	-1,731.57	337.59	5,838.92	5,739.04	99.88	58.457		
11,800.00	7,244.94	7,157.87	7,196.44	135.74	30.57	-88.64	-1,731.56	337.59	5,925.43	5,825.13	100.30	59.079		
11,900.00	7,244.52	7,157.14	7,195.72	138.50	30.57	-88.62	-1,731.55	337.59	6,012.35	5,911.66	100.69	59.709		
12,000.00	7,244.10	7,156.42	7,194.99	141.27	30.57	-88.61	-1,731.54	337.59	6,099.67	5,998.60	101.08	60.346		
12,100.00	7,243.68	7,155.69	7,194.27	144.04	30.56	-88.60	-1,731.53	337.58	6,187.38	6,085.93	101.45	60.989		
12,200.00	7,243.26	7,154.97	7,193.54	146.82	30.56	-88.58	-1,731.53	337.58	6,275.45	6,173.64	101.81	61.639		
12,300.00	7,242.84	7,154.24	7,192.81	149.60	30.56	-88.57	-1,731.52	337.58	6,363.88	6,261.72	102.16	62.295		
12,400.00	7,242.42	7,153.51	7,192.09	152.38	30.55	-88.55	-1,731.51	337.58	6,452.65	6,350.15	102.50	62.956		
12,500.00	7,242.00	7,152.79	7,191.36	155.16	30.55	-88.54	-1,731.50	337.57	6,541.73	6,438.91	102.82	63.622		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
12,600.00	7,241.58	7,152.06	7,190.64	157.95	30.55	-88.53	-1,731.49	337.57	6,631.13	6,528.00	103.14	64.294	
12,700.00	7,241.16	7,151.34	7,189.91	160.74	30.54	-88.51	-1,731.49	337.57	6,720.83	6,617.39	103.44	64.970	
12,800.00	7,240.74	7,150.61	7,189.18	163.53	30.54	-88.50	-1,731.48	337.57	6,810.82	6,707.08	103.74	65.651	
12,900.00	7,240.32	7,149.89	7,188.46	166.32	30.54	-88.48	-1,731.47	337.56	6,901.08	6,797.05	104.03	66.337	
13,000.00	7,239.89	7,149.16	7,187.73	169.12	30.54	-88.47	-1,731.46	337.56	6,991.61	6,887.29	104.31	67.026	
13,100.00	7,239.47	7,148.43	7,187.01	171.92	30.53	-88.46	-1,731.45	337.56	7,082.39	6,977.80	104.58	67.720	
13,200.00	7,239.05	7,147.71	7,186.28	174.72	30.53	-88.44	-1,731.45	337.56	7,173.41	7,068.56	104.85	68.417	
13,300.00	7,238.63	7,146.98	7,185.56	177.52	30.53	-88.43	-1,731.44	337.56	7,264.67	7,159.57	105.11	69.118	
13,400.00	7,238.21	7,146.26	7,184.83	180.32	30.52	-88.41	-1,731.43	337.55	7,356.16	7,250.81	105.36	69.822	
13,500.00	7,237.79	7,145.53	7,184.10	183.13	30.52	-88.40	-1,731.42	337.55	7,447.87	7,342.27	105.60	70.529	
13,600.00	7,237.37	7,144.80	7,183.38	185.93	30.52	-88.39	-1,731.41	337.55	7,539.79	7,433.95	105.84	71.239	
13,700.00	7,236.95	7,144.08	7,182.65	188.74	30.51	-88.37	-1,731.41	337.55	7,631.91	7,525.84	106.07	71.952	
13,800.00	7,236.53	7,143.35	7,181.93	191.55	30.51	-88.36	-1,731.40	337.54	7,724.23	7,617.93	106.29	72.668	
13,900.00	7,236.11	7,142.63	7,181.20	194.36	30.51	-88.34	-1,731.39	337.54	7,816.73	7,710.22	106.51	73.387	
14,000.00	7,235.69	7,141.90	7,180.48	197.17	30.50	-88.33	-1,731.38	337.54	7,909.42	7,802.69	106.73	74.108	
14,100.00	7,235.27	7,141.18	7,179.75	199.98	30.50	-88.31	-1,731.37	337.54	8,002.29	7,895.35	106.94	74.831	
14,200.00	7,234.85	7,140.45	7,179.02	202.80	30.50	-88.30	-1,731.36	337.53	8,095.32	7,988.18	107.14	75.557	
14,300.00	7,234.43	7,139.72	7,178.30	205.61	30.50	-88.29	-1,731.36	337.53	8,188.52	8,081.18	107.34	76.285	
14,400.00	7,234.01	7,139.00	7,177.57	208.43	30.49	-88.27	-1,731.35	337.53	8,281.88	8,174.34	107.54	77.015	
14,500.00	7,233.59	7,138.27	7,176.85	211.25	30.49	-88.26	-1,731.34	337.53	8,375.39	8,267.66	107.73	77.746	
14,600.00	7,233.17	7,137.55	7,176.12	214.06	30.49	-88.24	-1,731.33	337.52	8,469.05	8,361.13	107.91	78.480	
14,700.00	7,232.75	7,136.82	7,175.40	216.88	30.48	-88.23	-1,731.32	337.52	8,562.85	8,454.75	108.10	79.215	
14,800.00	7,232.33	7,136.10	7,174.67	219.70	30.48	-88.22	-1,731.32	337.52	8,656.79	8,548.52	108.28	79.952	
14,900.00	7,231.91	7,135.37	7,173.94	222.52	30.48	-88.20	-1,731.31	337.52	8,750.87	8,642.42	108.45	80.690	
15,000.00	7,231.49	7,134.64	7,173.22	225.35	30.47	-88.19	-1,731.30	337.52	8,845.07	8,736.45	108.62	81.430	
15,100.00	7,231.07	7,133.92	7,172.49	228.17	30.47	-88.17	-1,731.29	337.51	8,939.40	8,830.61	108.79	82.171	
15,116.21	7,231.00	7,133.80	7,172.37	228.63	30.47	-88.17	-1,731.29	337.51	8,954.71	8,845.89	108.82	82.291	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	71.00	0.00	3.28	173.04	-4,459.45	544.41	4,493.12					
100.00	100.00	28.32	99.32	0.18	3.28	173.04	-4,459.45	544.40	4,492.56	4,489.10	3.46	1,299.902 CC		
200.00	200.00	123.73	194.72	0.61	3.30	173.04	-4,459.52	544.19	4,492.61	4,488.70	3.91	1,149.155		
300.00	300.00	213.57	284.57	1.05	3.35	173.05	-4,459.77	543.93	4,492.84	4,488.44	4.41	1,019.423		
400.00	400.00	308.06	379.06	1.49	3.46	173.05	-4,460.18	543.83	4,493.26	4,488.30	4.95	907.129		
500.00	500.00	411.50	482.50	1.93	3.63	173.05	-4,460.62	543.87	4,493.68	4,488.13	5.56	808.530 ES		
600.00	599.98	509.29	580.29	2.37	3.83	-179.20	-4,461.03	543.88	4,495.85	4,489.66	6.20	725.675		
700.00	699.84	612.53	683.53	2.81	4.07	-179.20	-4,461.49	543.63	4,501.49	4,494.61	6.88	653.920		
800.00	799.45	716.35	787.35	3.26	4.35	-179.19	-4,461.85	543.14	4,510.49	4,502.89	7.61	592.999		
900.00	898.70	807.93	878.92	3.70	4.62	-179.18	-4,462.27	542.45	4,523.04	4,514.72	8.32	543.678		
1,000.00	997.47	910.00	980.98	4.15	4.94	-179.16	-4,462.81	541.37	4,539.08	4,529.99	9.08	499.654		
1,100.00	1,095.78	986.88	1,057.85	4.60	5.19	-179.15	-4,463.43	540.30	4,557.99	4,548.20	9.78	465.890		
1,200.00	1,194.05	1,073.08	1,144.03	5.05	5.48	-179.13	-4,464.45	538.87	4,577.42	4,566.91	10.52	435.270		
1,300.00	1,292.33	1,166.09	1,237.02	5.50	5.80	-179.11	-4,465.75	537.22	4,597.05	4,585.76	11.29	407.353		
1,400.00	1,390.61	1,271.73	1,342.63	5.96	6.18	-179.09	-4,467.22	535.23	4,616.67	4,604.55	12.11	381.161		
1,500.00	1,488.89	1,377.94	1,448.81	6.43	6.57	-179.07	-4,468.49	532.99	4,636.06	4,623.11	12.95	357.920		
1,600.00	1,587.16	1,476.42	1,547.27	6.89	6.94	-179.04	-4,469.57	530.96	4,655.38	4,641.60	13.77	338.021		
1,700.00	1,685.44	1,567.56	1,638.38	7.36	7.29	-179.02	-4,470.63	529.16	4,674.75	4,660.18	14.57	320.862		
1,800.00	1,783.72	1,681.80	1,752.59	7.83	7.73	-179.00	-4,471.94	527.02	4,694.15	4,678.68	15.46	303.540		
1,900.00	1,882.00	1,771.73	1,842.51	8.30	8.08	-178.98	-4,472.75	525.38	4,713.30	4,697.04	16.27	289.757		
2,000.00	1,980.27	1,861.64	1,932.39	8.77	8.44	-178.96	-4,473.78	523.93	4,732.71	4,715.64	17.07	277.232		
2,100.00	2,078.55	1,952.78	2,023.51	9.25	8.80	-178.95	-4,474.95	522.38	4,752.25	4,734.36	17.88	265.720		
2,200.00	2,176.83	2,041.05	2,111.76	9.72	9.15	-178.93	-4,476.26	520.75	4,771.96	4,753.27	18.69	255.346		
2,300.00	2,275.11	2,132.10	2,202.78	10.19	9.52	-178.91	-4,477.81	519.02	4,791.87	4,772.37	19.51	245.660		
2,400.00	2,373.38	2,255.42	2,326.07	10.66	10.02	-178.88	-4,479.79	516.64	4,811.73	4,791.27	20.47	235.101		
2,500.00	2,471.66	2,432.96	2,503.57	11.14	10.74	-178.86	-4,480.47	513.80	4,830.43	4,808.77	21.66	222.964		
2,600.00	2,569.94	2,569.91	2,640.51	11.61	11.30	-178.84	-4,478.98	511.78	4,847.61	4,824.92	22.69	213.664		
2,700.00	2,668.22	2,669.63	2,740.20	12.09	11.71	-178.83	-4,477.69	510.22	4,864.64	4,841.08	23.55	206.541		
2,800.00	2,766.49	2,763.76	2,834.31	12.56	12.09	-178.82	-4,476.50	508.61	4,881.69	4,857.29	24.40	200.108		
2,900.00	2,864.77	2,859.10	2,929.63	13.04	12.49	-178.80	-4,475.41	506.89	4,898.84	4,873.60	25.24	194.057		
3,000.00	2,963.05	2,952.24	3,022.75	13.51	12.87	-178.79	-4,474.40	505.16	4,916.05	4,889.97	26.08	188.464		
3,100.00	3,061.33	3,050.33	3,120.81	13.99	13.28	-178.77	-4,473.47	503.25	4,933.38	4,906.43	26.95	183.067		
3,200.00	3,159.60	3,158.53	3,228.99	14.46	13.73	-178.75	-4,472.30	501.06	4,950.58	4,922.72	27.86	177.704		
3,300.00	3,257.88	3,250.85	3,321.28	14.94	14.11	-178.74	-4,471.20	499.28	4,967.68	4,938.98	28.70	173.099		
3,400.00	3,356.16	3,333.81	3,404.23	15.41	14.46	-178.72	-4,470.46	497.62	4,985.05	4,955.56	29.50	169.006		
3,500.00	3,454.43	3,419.32	3,489.70	15.89	14.82	-178.70	-4,469.97	495.67	5,002.72	4,972.41	30.31	165.072		
3,600.00	3,552.71	3,509.47	3,579.83	16.36	15.20	-178.68	-4,469.67	493.33	5,020.58	4,989.45	31.14	161.236		
3,700.00	3,650.99	3,599.06	3,669.39	16.84	15.57	-178.66	-4,469.53	490.99	5,038.61	5,006.65	31.97	157.616		
3,800.00	3,749.27	3,698.71	3,769.01	17.32	15.99	-178.64	-4,469.40	488.81	5,056.72	5,023.88	32.84	153.963		
3,900.00	3,847.54	3,786.52	3,856.80	17.79	16.36	-178.62	-4,469.34	487.05	5,074.91	5,041.25	33.66	150.748		
4,000.00	3,945.82	3,888.04	3,958.31	18.27	16.78	-178.61	-4,469.37	485.00	5,093.20	5,058.65	34.55	147.412		
4,100.00	4,044.10	3,989.59	4,059.84	18.75	17.21	-178.59	-4,469.28	483.27	5,111.40	5,075.96	35.44	144.239		
4,200.00	4,142.38	4,089.49	4,159.73	19.22	17.63	-178.58	-4,469.11	481.82	5,129.56	5,093.24	36.32	141.249		
4,300.00	4,240.65	4,203.66	4,273.90	19.70	18.11	-178.58	-4,468.61	481.43	5,147.57	5,110.30	37.26	138.146		
4,400.00	4,338.93	4,344.51	4,414.73	20.18	18.70	-178.60	-4,467.09	482.43	5,165.09	5,126.76	38.33	134.739		
4,500.00	4,437.21	4,465.14	4,535.34	20.65	19.20	-178.62	-4,464.78	483.29	5,181.74	5,142.43	39.31	131.812		
4,600.00	4,535.49	4,543.00	4,613.18	21.13	19.53	-178.63	-4,463.32	483.96	5,198.49	5,158.40	40.09	129.674		
4,700.00	4,633.76	4,600.01	4,670.18	21.61	19.77	-178.64	-4,462.56	484.31	5,215.80	5,175.03	40.77	127.945		
4,800.00	4,732.04	4,672.21	4,742.38	22.08	20.07	-178.65	-4,462.09	484.65	5,233.72	5,192.21	41.51	126.074		
4,900.00	4,830.32	4,754.93	4,825.10	22.56	20.41	-178.66	-4,462.09	485.06	5,252.24	5,209.93	42.31	124.136		
5,000.00	4,928.60	4,852.95	4,923.12	23.04	20.82	-178.67	-4,462.13	485.56	5,270.81	5,227.63	43.18	122.059		
5,100.00	5,026.87	4,950.09	5,020.25	23.51	21.23	-178.68	-4,462.22	485.78	5,289.40	5,245.35	44.05	120.077		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,125.15	5,051.47	5,121.64	23.99	21.66	-178.68	-4,462.28	486.21	5,307.99	5,263.05	44.94	118.115	
5,300.00	5,223.43	5,163.04	5,233.20	24.47	22.12	-178.70	-4,462.16	486.92	5,326.43	5,280.55	45.88	116.098	
5,400.00	5,321.71	5,319.59	5,389.74	24.94	22.78	-178.72	-4,460.96	488.14	5,344.28	5,297.24	47.04	113.616	
5,500.00	5,419.98	5,531.61	5,601.62	25.42	23.68	-178.79	-4,455.25	493.15	5,360.29	5,311.84	48.46	110.619	
5,600.00	5,518.26	5,600.01	5,669.95	25.90	23.97	-178.82	-4,453.00	495.14	5,375.82	5,326.63	49.19	109.276	
5,700.00	5,616.54	5,648.71	5,718.62	26.38	24.18	-178.83	-4,451.79	496.28	5,392.06	5,342.22	49.83	108.199	
5,800.00	5,714.82	5,709.16	5,779.05	26.85	24.43	-178.85	-4,450.74	497.34	5,409.03	5,358.50	50.53	107.052	
5,900.00	5,813.09	5,778.54	5,848.42	27.33	24.73	-178.86	-4,450.02	498.06	5,426.60	5,375.34	51.26	105.864	
6,000.00	5,911.37	5,861.58	5,931.46	27.81	25.08	-178.87	-4,449.59	498.41	5,444.62	5,392.56	52.06	104.583	
6,100.00	6,009.65	5,973.03	6,042.91	28.28	25.55	-178.87	-4,449.10	498.63	5,462.70	5,409.70	53.00	103.066	
6,200.00	6,107.93	6,070.13	6,140.01	28.76	25.96	-178.88	-4,448.47	498.54	5,480.53	5,426.66	53.87	101.731	
6,300.00	6,206.20	6,181.31	6,251.18	29.24	26.43	-178.88	-4,447.78	498.33	5,498.39	5,443.57	54.81	100.310	
6,400.00	6,304.48	6,297.13	6,367.00	29.72	26.92	-178.88	-4,446.66	498.04	5,515.89	5,460.12	55.78	98.889	
6,500.00	6,402.76	6,382.65	6,452.51	30.19	27.29	-178.88	-4,445.81	497.83	5,533.37	5,476.77	56.59	97.776	
6,600.00	6,501.04	6,473.66	6,543.52	30.67	27.67	-178.89	-4,445.09	497.53	5,551.04	5,493.60	57.43	96.653	
6,700.00	6,599.31	6,572.79	6,642.65	31.15	28.09	-178.88	-4,444.40	496.95	5,568.77	5,510.46	58.31	95.495	
6,800.00	6,697.50	6,694.87	6,764.72	31.63	28.61	-157.17	-4,443.24	496.91	5,586.49	5,527.18	59.31	94.187	
6,900.00	6,794.18	6,798.04	6,867.88	32.10	29.05	-129.82	-4,441.91	496.99	5,605.01	5,544.79	60.22	93.079	
7,000.00	6,886.96	6,887.74	6,957.57	32.55	29.43	-116.82	-4,440.78	496.72	5,624.51	5,563.46	61.05	92.125	
7,100.00	6,973.57	6,980.61	7,050.43	32.99	29.83	-109.53	-4,439.53	497.01	5,644.76	5,582.85	61.91	91.180	
7,200.00	7,051.87	7,037.11	7,106.92	33.41	30.07	-104.55	-4,438.71	497.76	5,665.66	5,603.06	62.60	90.507	
7,300.00	7,119.93	7,078.63	7,148.44	33.85	30.24	-100.74	-4,438.31	498.39	5,687.34	5,624.08	63.26	89.902	
7,400.00	7,176.09	7,120.29	7,190.09	34.39	30.42	-97.69	-4,438.06	499.08	5,709.52	5,645.51	64.01	89.196	
7,500.00	7,218.95	7,161.68	7,231.47	35.09	30.60	-95.15	-4,437.84	499.76	5,731.78	5,666.90	64.88	88.346	
7,600.00	7,247.46	7,188.62	7,258.41	35.98	30.71	-92.88	-4,437.70	500.21	5,753.84	5,688.03	65.81	87.434	
7,700.00	7,260.92	7,200.44	7,270.23	37.04	30.76	-90.81	-4,437.64	500.41	5,775.36	5,708.57	66.79	86.475	
7,800.00	7,261.75	7,199.60	7,269.39	38.23	30.76	-90.02	-4,437.64	500.39	5,796.43	5,728.62	67.81	85.475	
7,900.00	7,261.33	7,197.51	7,267.30	39.59	30.75	-90.00	-4,437.65	500.36	5,818.93	5,749.95	68.98	84.358	
8,000.00	7,260.91	7,195.42	7,265.21	41.10	30.74	-89.98	-4,437.66	500.32	5,843.05	5,772.78	70.27	83.152	
8,100.00	7,260.49	7,193.33	7,263.12	42.75	30.73	-89.96	-4,437.67	500.29	5,868.77	5,797.11	71.67	81.889	
8,200.00	7,260.07	7,191.24	7,261.03	44.53	30.72	-89.94	-4,437.69	500.25	5,896.08	5,822.92	73.16	80.595	
8,300.00	7,259.65	7,189.15	7,258.94	46.41	30.71	-89.92	-4,437.70	500.22	5,924.95	5,850.23	74.72	79.293	
8,400.00	7,259.23	7,187.07	7,256.85	48.39	30.70	-89.90	-4,437.71	500.18	5,955.36	5,879.01	76.35	78.001	
8,500.00	7,258.81	7,184.98	7,254.76	50.45	30.69	-89.88	-4,437.72	500.15	5,987.28	5,909.25	78.03	76.734	
8,600.00	7,258.39	7,182.89	7,252.68	52.59	30.69	-89.85	-4,437.73	500.11	6,020.69	5,940.95	79.74	75.502	
8,700.00	7,257.97	7,180.80	7,250.59	54.79	30.68	-89.83	-4,437.74	500.08	6,055.58	5,974.09	81.49	74.314	
8,800.00	7,257.55	7,178.71	7,248.50	57.05	30.67	-89.81	-4,437.75	500.05	6,091.90	6,008.65	83.25	73.175	
8,900.00	7,257.13	7,176.62	7,246.41	59.36	30.66	-89.79	-4,437.76	500.01	6,129.63	6,044.60	85.03	72.088	
9,000.00	7,256.71	7,174.53	7,244.32	61.72	30.65	-89.77	-4,437.77	499.98	6,168.76	6,081.95	86.81	71.056	
9,100.00	7,256.29	7,172.44	7,242.23	64.12	30.64	-89.75	-4,437.79	499.94	6,209.25	6,120.65	88.60	70.081	
9,200.00	7,255.87	7,170.35	7,240.14	66.56	30.63	-89.73	-4,437.80	499.91	6,251.08	6,160.69	90.38	69.161	
9,300.00	7,255.45	7,168.26	7,238.05	69.02	30.62	-89.71	-4,437.81	499.87	6,294.22	6,202.06	92.16	68.297	
9,400.00	7,255.03	7,166.17	7,235.96	71.52	30.61	-89.69	-4,437.82	499.84	6,338.64	6,244.71	93.92	67.487	
9,500.00	7,254.61	7,164.08	7,233.87	74.04	30.61	-89.66	-4,437.83	499.80	6,384.32	6,288.64	95.67	66.731	
9,600.00	7,254.19	7,161.99	7,231.78	76.58	30.60	-89.64	-4,437.84	499.77	6,431.22	6,333.82	97.40	66.026	
9,700.00	7,253.77	7,159.90	7,229.69	79.15	30.59	-89.62	-4,437.85	499.73	6,479.33	6,380.22	99.12	65.370	
9,800.00	7,253.35	7,157.81	7,227.60	81.74	30.58	-89.60	-4,437.86	499.70	6,528.62	6,427.81	100.81	64.762	
9,900.00	7,252.92	7,155.72	7,225.51	84.34	30.57	-89.58	-4,437.87	499.66	6,579.06	6,476.58	102.48	64.200	
10,000.00	7,252.50	7,153.63	7,223.42	86.96	30.56	-89.56	-4,437.89	499.63	6,630.62	6,526.50	104.12	63.681	
10,100.00	7,252.08	7,151.54	7,221.33	89.59	30.55	-89.54	-4,437.90	499.59	6,683.28	6,577.54	105.74	63.204	
10,200.00	7,251.66	7,149.45	7,219.25	92.24	30.54	-89.52	-4,437.91	499.56	6,737.01	6,629.68	107.33	62.767	
10,300.00	7,251.24	7,147.36	7,217.16	94.90	30.54	-89.50	-4,437.92	499.52	6,791.79	6,682.89	108.90	62.367	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,145.27	7,215.07	97.57	30.53	-89.47	-4,437.93	499.49	6,847.59	6,737.15	110.44	62.004		
10,500.00	7,250.40	7,143.18	7,212.98	100.25	30.52	-89.45	-4,437.94	499.46	6,904.39	6,792.44	111.95	61.675		
10,600.00	7,249.98	7,141.09	7,210.89	102.93	30.51	-89.43	-4,437.95	499.42	6,962.16	6,848.73	113.43	61.379		
10,700.00	7,249.56	7,139.00	7,208.80	105.63	30.50	-89.41	-4,437.96	499.39	7,020.87	6,905.99	114.88	61.114		
10,800.00	7,249.14	7,136.91	7,206.71	108.34	30.49	-89.39	-4,437.98	499.35	7,080.52	6,964.21	116.31	60.878		
10,900.00	7,248.72	7,134.82	7,204.62	111.05	30.48	-89.37	-4,437.99	499.32	7,141.06	7,023.36	117.70	60.671		
11,000.00	7,248.30	7,132.73	7,202.53	113.77	30.47	-89.35	-4,438.00	499.28	7,202.48	7,083.42	119.07	60.490		
11,100.00	7,247.88	7,130.64	7,200.44	116.50	30.46	-89.33	-4,438.01	499.25	7,264.76	7,144.36	120.41	60.335		
11,200.00	7,247.46	7,128.55	7,198.35	119.23	30.46	-89.30	-4,438.02	499.21	7,327.88	7,206.16	121.72	60.204		
11,300.00	7,247.04	7,126.46	7,196.26	121.97	30.45	-89.28	-4,438.03	499.18	7,391.81	7,268.81	123.00	60.096		
11,400.00	7,246.62	7,124.37	7,194.17	124.72	30.44	-89.26	-4,438.04	499.14	7,456.53	7,332.27	124.25	60.010		
11,500.00	7,246.20	7,122.28	7,192.08	127.46	30.43	-89.24	-4,438.05	499.11	7,522.02	7,396.54	125.48	59.946		
11,600.00	7,245.78	7,120.19	7,189.99	130.22	30.42	-89.22	-4,438.06	499.07	7,588.26	7,461.58	126.68	59.901		
11,700.00	7,245.36	7,118.10	7,187.90	132.98	30.41	-89.20	-4,438.08	499.04	7,655.24	7,527.39	127.85	59.875		
11,800.00	7,244.94	7,116.02	7,185.81	135.74	30.40	-89.18	-4,438.09	499.00	7,722.93	7,593.93	129.00	59.867 SF		
11,900.00	7,244.52	7,113.93	7,183.73	138.50	30.39	-89.16	-4,438.10	498.97	7,791.32	7,661.19	130.12	59.877		
12,000.00	7,244.10	7,111.84	7,181.64	141.27	30.38	-89.14	-4,438.11	498.93	7,860.38	7,729.16	131.22	59.903		
12,100.00	7,243.68	7,109.75	7,179.55	144.04	30.38	-89.11	-4,438.12	498.90	7,930.10	7,797.81	132.29	59.945		
12,200.00	7,243.26	7,107.66	7,177.46	146.82	30.37	-89.09	-4,438.13	498.87	8,000.46	7,867.13	133.34	60.002		
12,300.00	7,242.84	7,105.57	7,175.37	149.60	30.36	-89.07	-4,438.14	498.83	8,071.45	7,937.09	134.36	60.074		
12,400.00	7,242.42	7,103.48	7,173.28	152.38	30.35	-89.05	-4,438.15	498.80	8,143.05	8,007.69	135.36	60.159		
12,500.00	7,242.00	7,101.39	7,171.19	155.16	30.34	-89.03	-4,438.16	498.76	8,215.24	8,078.90	136.33	60.258		
12,600.00	7,241.58	7,100.73	7,169.10	157.95	30.34	-89.01	-4,438.18	498.73	8,288.00	8,150.71	137.29	60.367		
12,700.00	7,241.16	7,102.82	7,167.01	160.74	30.35	-88.99	-4,438.19	498.69	8,361.33	8,223.09	138.24	60.482		
12,800.00	7,240.74	7,104.91	7,164.92	163.53	30.35	-88.97	-4,438.20	498.66	8,435.21	8,296.04	139.17	60.610		
12,900.00	7,240.32	7,107.00	7,162.83	166.32	30.36	-88.95	-4,438.21	498.62	8,509.62	8,369.54	140.08	60.748		
13,000.00	7,239.89	7,109.09	7,160.74	169.12	30.37	-88.92	-4,438.22	498.59	8,584.55	8,443.58	140.97	60.897		
13,100.00	7,239.47	7,111.18	7,158.65	171.92	30.38	-88.90	-4,438.23	498.55	8,659.98	8,518.15	141.83	61.057		
13,200.00	7,239.05	7,113.27	7,156.56	174.72	30.39	-88.88	-4,438.24	498.52	8,735.91	8,593.23	142.68	61.226		
13,300.00	7,238.63	7,115.36	7,154.47	177.52	30.40	-88.86	-4,438.25	498.48	8,812.32	8,668.81	143.51	61.405		
13,400.00	7,238.21	7,117.45	7,152.38	180.32	30.41	-88.84	-4,438.27	498.45	8,889.19	8,744.87	144.32	61.593		
13,500.00	7,237.79	7,119.54	7,150.30	183.13	30.42	-88.82	-4,438.28	498.41	8,966.52	8,821.41	145.11	61.790		
13,600.00	7,237.37	7,121.63	7,148.21	185.93	30.43	-88.80	-4,438.29	498.38	9,044.30	8,898.41	145.89	61.995		
13,700.00	7,236.95	7,100.01	7,169.82	188.74	30.33	-89.02	-4,438.17	498.74	9,122.54	8,975.98	146.56	62.244		
13,800.00	7,236.53	7,100.01	7,169.82	191.55	30.33	-89.02	-4,438.17	498.74	9,201.17	9,053.88	147.29	62.468		
13,900.00	7,236.11	7,100.01	7,169.82	194.36	30.33	-89.02	-4,438.17	498.74	9,280.22	9,132.21	148.01	62.700		
14,000.00	7,235.69	7,100.01	7,169.82	197.17	30.33	-89.02	-4,438.17	498.74	9,359.67	9,210.96	148.71	62.938		
14,100.00	7,235.27	7,082.47	7,152.28	199.98	30.26	-88.84	-4,438.28	498.45	9,439.47	9,290.16	149.31	63.220		
14,200.00	7,234.85	7,081.36	7,151.16	202.80	30.26	-88.83	-4,438.29	498.43	9,519.69	9,369.71	149.98	63.474		
14,300.00	7,234.43	7,080.25	7,150.05	205.61	30.25	-88.82	-4,438.30	498.42	9,600.28	9,449.65	150.63	63.735		
14,400.00	7,234.01	7,079.14	7,148.95	208.43	30.25	-88.80	-4,438.31	498.40	9,681.22	9,529.96	151.26	64.002		
14,500.00	7,233.59	7,078.04	7,147.84	211.25	30.24	-88.79	-4,438.31	498.38	9,762.52	9,610.64	151.89	64.275		
14,600.00	7,233.17	7,076.94	7,146.74	214.06	30.24	-88.78	-4,438.32	498.36	9,844.17	9,691.67	152.50	64.554		
14,700.00	7,232.75	7,075.84	7,145.65	216.88	30.23	-88.77	-4,438.33	498.35	9,926.15	9,773.06	153.09	64.838		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	19.26	-1.74	0.00	3.28	173.04	-4,459.45	544.41	4,492.56					
100.00	100.00	111.67	90.67	0.18	3.29	173.04	-4,459.59	544.31	4,492.69	4,489.22	3.47	1,295.936		
200.00	200.00	210.35	189.35	0.61	3.35	173.04	-4,459.83	544.19	4,492.92	4,488.96	3.97	1,132.942		
300.00	300.00	317.05	296.05	1.05	3.47	173.05	-4,460.02	543.99	4,493.07	4,488.55	4.53	992.557		
400.00	400.00	417.21	396.21	1.49	3.64	173.05	-4,460.15	543.65	4,493.17	4,488.04	5.13	876.038		
500.00	500.00	519.78	498.78	1.93	3.85	173.05	-4,460.24	543.33	4,493.21	4,487.43	5.78	777.721 ES		
600.00	599.98	617.83	596.83	2.37	4.09	-179.19	-4,460.34	542.97	4,495.01	4,488.56	6.45	696.747		
700.00	699.84	719.67	698.67	2.81	4.36	-179.19	-4,460.41	542.67	4,500.28	4,493.11	7.17	627.880		
800.00	799.45	815.58	794.58	3.26	4.64	-179.19	-4,460.51	542.47	4,509.07	4,501.18	7.89	571.349		
900.00	898.70	916.17	895.16	3.70	4.96	-179.18	-4,460.64	542.15	4,521.34	4,512.69	8.65	522.629		
1,000.00	997.47	1,013.37	992.36	4.15	5.28	-179.17	-4,460.77	541.87	4,537.08	4,527.67	9.42	481.784		
1,100.00	1,095.78	1,114.64	1,093.63	4.60	5.62	-179.17	-4,460.87	541.58	4,555.45	4,545.24	10.21	446.160		
1,200.00	1,194.05	1,207.74	1,186.74	5.05	5.95	-179.17	-4,461.01	541.24	4,574.02	4,563.04	10.98	416.592		
1,300.00	1,292.33	1,296.94	1,275.93	5.50	6.27	-179.17	-4,461.29	540.86	4,592.76	4,581.01	11.75	391.023		
1,400.00	1,390.61	1,397.13	1,376.12	5.96	6.65	-179.17	-4,461.69	540.38	4,611.57	4,599.01	12.56	367.118		
1,500.00	1,488.89	1,503.88	1,482.87	6.43	7.05	-179.16	-4,462.01	539.73	4,630.27	4,616.86	13.41	345.242		
1,600.00	1,587.16	1,599.77	1,578.76	6.89	7.41	-179.16	-4,462.24	539.09	4,648.90	4,634.68	14.23	326.770		
1,700.00	1,685.44	1,697.46	1,676.44	7.36	7.79	-179.15	-4,462.50	538.47	4,667.57	4,652.51	15.05	310.038		
1,800.00	1,783.72	1,790.72	1,769.70	7.83	8.16	-179.15	-4,462.81	537.84	4,686.29	4,670.42	15.87	295.296		
1,900.00	1,882.00	1,882.71	1,861.68	8.30	8.52	-179.14	-4,463.23	537.10	4,705.12	4,688.44	16.68	282.025		
2,000.00	1,980.27	1,978.61	1,957.58	8.77	8.90	-179.13	-4,463.80	536.14	4,724.06	4,706.54	17.52	269.689		
2,100.00	2,078.55	2,086.14	2,065.10	9.25	9.33	-179.12	-4,464.39	534.84	4,742.94	4,724.53	18.40	257.733		
2,200.00	2,176.83	2,190.68	2,169.63	9.72	9.75	-179.10	-4,464.77	533.51	4,761.62	4,742.34	19.28	246.985		
2,300.00	2,275.11	2,305.02	2,283.96	10.19	10.22	-179.09	-4,464.95	531.97	4,780.09	4,759.89	20.20	236.633		
2,400.00	2,373.38	2,414.09	2,393.02	10.66	10.66	-179.08	-4,464.79	530.60	4,798.28	4,777.18	21.10	227.387		
2,500.00	2,471.66	2,510.10	2,489.03	11.14	11.05	-179.07	-4,464.56	529.58	4,816.41	4,794.46	21.95	219.441		
2,600.00	2,569.94	2,612.35	2,591.28	11.61	11.47	-179.06	-4,464.25	528.68	4,834.48	4,811.66	22.82	211.816		
2,700.00	2,668.22	2,709.55	2,688.46	12.09	11.87	-179.06	-4,463.92	527.85	4,852.53	4,828.85	23.68	204.931		
2,800.00	2,766.49	2,799.02	2,777.93	12.56	12.24	-179.05	-4,463.72	527.09	4,870.69	4,846.19	24.50	198.797		
2,900.00	2,864.77	2,904.15	2,883.06	13.04	12.68	-179.04	-4,463.49	526.31	4,888.87	4,863.48	25.39	192.524		
3,000.00	2,963.05	2,983.63	2,962.54	13.51	13.00	-179.04	-4,463.41	525.84	4,907.18	4,881.01	26.17	187.495		
3,100.00	3,061.33	3,071.22	3,050.13	13.99	13.37	-179.04	-4,463.58	525.43	4,925.79	4,898.80	26.99	182.517		
3,200.00	3,159.60	3,170.54	3,149.45	14.46	13.78	-179.04	-4,463.89	524.92	4,944.51	4,916.66	27.86	177.490		
3,300.00	3,257.88	3,260.47	3,239.38	14.94	14.16	-179.03	-4,464.18	524.41	4,963.24	4,934.55	28.69	173.022		
3,400.00	3,356.16	3,346.70	3,325.60	15.41	14.52	-179.03	-4,464.67	523.90	4,982.21	4,952.71	29.50	168.909		
3,500.00	3,454.43	3,481.06	3,459.96	15.89	15.08	-179.03	-4,465.39	523.08	5,001.21	4,970.68	30.53	163.807		
3,600.00	3,552.71	3,620.95	3,599.84	16.36	15.66	-179.03	-4,464.59	522.79	5,019.08	4,987.49	31.59	158.877		
3,700.00	3,650.99	3,734.30	3,713.19	16.84	16.13	-179.03	-4,463.38	522.56	5,036.49	5,003.96	32.53	154.828		
3,800.00	3,749.27	3,835.37	3,814.25	17.32	16.55	-179.03	-4,462.05	522.36	5,053.66	5,020.24	33.41	151.251		
3,900.00	3,847.54	3,919.79	3,898.66	17.79	16.91	-179.04	-4,461.11	522.09	5,071.01	5,036.79	34.22	148.193		
4,000.00	3,945.82	4,008.37	3,987.24	18.27	17.28	-179.04	-4,460.34	521.73	5,088.60	5,053.55	35.04	145.203		
4,100.00	4,044.10	4,099.37	4,078.23	18.75	17.66	-179.03	-4,459.72	521.24	5,106.35	5,070.47	35.88	142.310		
4,200.00	4,142.38	4,176.03	4,154.89	19.22	17.98	-179.03	-4,459.43	520.77	5,124.38	5,087.73	36.65	139.814		
4,300.00	4,240.65	4,270.57	4,249.43	19.70	18.38	-179.03	-4,459.35	520.21	5,142.71	5,105.20	37.51	137.119		
4,400.00	4,338.93	4,365.07	4,343.93	20.18	18.78	-179.03	-4,459.26	519.70	5,161.03	5,122.67	38.36	134.543		
4,500.00	4,437.21	4,462.07	4,440.92	20.65	19.19	-179.03	-4,459.26	519.23	5,179.45	5,140.22	39.23	132.041		
4,600.00	4,535.49	4,563.68	4,542.54	21.13	19.62	-179.02	-4,459.21	518.79	5,197.83	5,157.71	40.11	129.573		
4,700.00	4,633.76	4,656.40	4,635.26	21.61	20.01	-179.02	-4,459.15	518.32	5,216.19	5,175.23	40.96	127.345		
4,800.00	4,732.04	4,743.10	4,721.95	22.08	20.38	-179.02	-4,459.27	517.90	5,234.75	5,192.97	41.78	125.299		
4,900.00	4,830.32	4,833.46	4,812.32	22.56	20.76	-179.02	-4,459.55	517.86	5,253.52	5,210.90	42.61	123.285		
5,000.00	4,928.60	4,932.28	4,911.14	23.04	21.18	-179.03	-4,459.88	517.88	5,272.32	5,228.83	43.49	121.233		
5,100.00	5,026.87	5,028.88	5,007.74	23.51	21.58	-179.03	-4,460.20	517.91	5,291.13	5,246.78	44.35	119.291		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,122.59	5,101.44	23.99	21.98	-179.03	-4,460.58	517.95	5,310.01	5,264.81	45.21	117.462		
5,300.00	5,223.43	5,220.26	5,199.11	24.47	22.39	-179.04	-4,461.03	518.04	5,328.95	5,282.87	46.08	115.651		
5,400.00	5,321.71	5,324.28	5,303.13	24.94	22.83	-179.04	-4,461.45	517.99	5,347.81	5,300.83	46.98	113.829		
5,500.00	5,419.98	5,422.06	5,400.91	25.42	23.24	-179.04	-4,461.79	517.92	5,366.62	5,318.77	47.85	112.146		
5,600.00	5,518.26	5,538.18	5,517.03	25.90	23.73	-179.04	-4,462.21	517.87	5,385.48	5,336.66	48.82	110.317		
5,700.00	5,616.54	5,678.31	5,657.16	26.38	24.32	-179.05	-4,461.39	518.23	5,403.33	5,353.43	49.90	108.281		
5,800.00	5,714.82	5,757.05	5,735.89	26.85	24.66	-179.06	-4,460.87	518.34	5,421.21	5,370.53	50.68	106.970		
5,900.00	5,813.09	5,835.64	5,814.49	27.33	24.99	-179.06	-4,460.75	518.31	5,439.52	5,388.06	51.46	105.710		
6,000.00	5,911.37	5,927.77	5,906.61	27.81	25.38	-179.06	-4,460.82	518.20	5,458.05	5,405.75	52.30	104.356		
6,100.00	6,009.65	6,028.19	6,007.04	28.28	25.81	-179.06	-4,460.91	517.84	5,476.57	5,423.38	53.19	102.964		
6,200.00	6,107.93	6,121.36	6,100.20	28.76	26.20	-179.06	-4,461.06	517.41	5,495.16	5,441.12	54.04	101.688		
6,300.00	6,206.20	6,228.47	6,207.31	29.24	26.66	-179.06	-4,461.25	516.79	5,513.75	5,458.79	54.96	100.322		
6,400.00	6,304.48	6,354.34	6,333.18	29.72	27.20	-179.05	-4,460.98	515.77	5,531.91	5,475.94	55.98	98.825		
6,500.00	6,402.76	6,457.44	6,436.27	30.19	27.63	-179.04	-4,460.49	514.70	5,549.80	5,492.92	56.88	97.574		
6,600.00	6,501.04	6,565.97	6,544.79	30.67	28.10	-179.03	-4,459.91	513.56	5,567.65	5,509.84	57.81	96.315		
6,700.00	6,599.31	6,668.04	6,646.85	31.15	28.53	-179.02	-4,459.19	512.18	5,585.28	5,526.57	58.70	95.144		
6,800.00	6,697.50	6,762.30	6,741.10	31.63	28.93	-157.28	-4,458.58	510.79	5,603.12	5,543.56	59.56	94.073		
6,900.00	6,794.18	6,871.38	6,850.15	32.10	29.40	-129.88	-4,457.94	508.54	5,622.10	5,561.60	60.50	92.934		
7,000.00	6,886.96	6,982.41	6,961.14	32.55	29.87	-116.90	-4,457.03	505.38	5,641.75	5,580.31	61.44	91.827		
7,100.00	6,973.57	7,083.94	7,062.60	32.99	30.30	-109.62	-4,456.00	501.97	5,661.91	5,599.57	62.34	90.825		
7,200.00	7,051.87	7,166.82	7,145.41	33.41	30.66	-104.80	-4,455.09	498.68	5,682.50	5,619.34	63.17	89.958		
7,300.00	7,119.93	7,237.83	7,216.36	33.85	30.96	-101.25	-4,454.32	495.84	5,703.51	5,639.53	63.99	89.132		
7,400.00	7,176.09	7,297.32	7,275.79	34.39	31.22	-98.40	-4,453.68	493.47	5,724.82	5,659.98	64.84	88.294		
7,500.00	7,218.95	7,343.80	7,322.24	35.09	31.41	-95.97	-4,453.17	491.62	5,746.27	5,680.53	65.74	87.410		
7,600.00	7,247.46	7,376.15	7,354.56	35.98	31.55	-93.81	-4,452.82	490.33	5,767.67	5,700.97	66.70	86.468		
7,700.00	7,260.92	7,393.56	7,371.95	37.04	31.63	-91.83	-4,452.63	489.63	5,788.74	5,721.02	67.72	85.485		
7,800.00	7,261.75	7,398.36	7,376.75	38.23	31.65	-91.11	-4,452.58	489.44	5,809.56	5,740.78	68.78	84.469		
7,900.00	7,261.33	7,401.91	7,380.30	39.59	31.66	-91.14	-4,452.54	489.30	5,831.82	5,761.84	69.98	83.341		
8,000.00	7,260.91	7,405.46	7,383.85	41.10	31.68	-91.18	-4,452.50	489.16	5,855.70	5,784.40	71.30	82.129		
8,100.00	7,260.49	7,409.01	7,387.39	42.75	31.69	-91.22	-4,452.46	489.02	5,881.18	5,808.45	72.73	80.863		
8,200.00	7,260.07	7,412.56	7,390.94	44.53	31.71	-91.25	-4,452.42	488.87	5,908.25	5,833.99	74.25	79.570		
8,300.00	7,259.65	7,416.11	7,394.49	46.41	31.72	-91.29	-4,452.38	488.73	5,936.87	5,861.02	75.85	78.271		
8,400.00	7,259.23	7,419.67	7,398.04	48.39	31.74	-91.32	-4,452.35	488.59	5,967.03	5,889.52	77.51	76.984		
8,500.00	7,258.81	7,423.22	7,401.59	50.45	31.75	-91.36	-4,452.31	488.45	5,998.70	5,919.48	79.22	75.723		
8,600.00	7,258.39	7,426.77	7,405.14	52.59	31.77	-91.40	-4,452.27	488.31	6,031.86	5,950.90	80.97	74.498		
8,700.00	7,257.97	7,400.00	7,378.39	54.79	31.65	-91.12	-4,452.56	489.37	6,066.57	5,983.98	82.58	73.459		
8,800.00	7,257.55	7,400.00	7,378.39	57.05	31.65	-91.12	-4,452.56	489.37	6,102.65	6,018.29	84.36	72.338		
8,900.00	7,257.13	7,400.00	7,378.39	59.36	31.65	-91.12	-4,452.56	489.37	6,140.15	6,054.00	86.16	71.268		
9,000.00	7,256.71	7,400.00	7,378.39	61.72	31.65	-91.12	-4,452.56	489.37	6,179.05	6,091.09	87.96	70.252		
9,100.00	7,256.29	7,400.00	7,378.39	64.12	31.65	-91.12	-4,452.56	489.37	6,219.31	6,129.55	89.76	69.291		
9,200.00	7,255.87	7,400.00	7,378.39	66.56	31.65	-91.12	-4,452.56	489.37	6,260.90	6,169.35	91.55	68.385		
9,300.00	7,255.45	7,400.00	7,378.39	69.02	31.65	-91.12	-4,452.56	489.37	6,303.81	6,210.47	93.34	67.534		
9,400.00	7,255.03	7,400.00	7,378.39	71.52	31.65	-91.12	-4,452.56	489.37	6,348.01	6,252.89	95.12	66.736		
9,500.00	7,254.61	7,400.00	7,378.39	74.04	31.65	-91.12	-4,452.56	489.37	6,393.46	6,296.57	96.89	65.990		
9,600.00	7,254.19	7,400.00	7,378.39	76.58	31.65	-91.12	-4,452.56	489.37	6,440.15	6,341.51	98.63	65.294		
9,700.00	7,253.77	7,400.00	7,378.39	79.15	31.65	-91.12	-4,452.56	489.37	6,488.04	6,387.68	100.36	64.647		
9,800.00	7,253.35	7,400.00	7,378.39	81.74	31.65	-91.12	-4,452.56	489.37	6,537.11	6,435.04	102.07	64.047		
9,900.00	7,252.92	7,400.00	7,378.39	84.34	31.65	-91.12	-4,452.56	489.37	6,587.33	6,483.58	103.75	63.492		
10,000.00	7,252.50	7,400.00	7,378.39	86.96	31.65	-91.12	-4,452.56	489.37	6,638.68	6,533.27	105.41	62.980		
10,100.00	7,252.08	7,400.00	7,378.39	89.59	31.65	-91.12	-4,452.56	489.37	6,691.13	6,584.08	107.04	62.508		
10,200.00	7,251.66	7,400.00	7,378.39	92.24	31.65	-91.12	-4,452.56	489.37	6,744.65	6,636.00	108.65	62.076		
10,300.00	7,251.24	7,400.00	7,378.39	94.90	31.65	-91.12	-4,452.56	489.37	6,799.22	6,688.99	110.23	61.681		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,400.00	7,378.39	97.57	31.65	-91.12	-4,452.56	489.37	6,854.82	6,743.04	111.79	61.321		
10,500.00	7,250.40	7,400.00	7,378.39	100.25	31.65	-91.12	-4,452.56	489.37	6,911.42	6,798.11	113.31	60.995		
10,600.00	7,249.98	7,400.00	7,378.39	102.93	31.65	-91.12	-4,452.56	489.37	6,968.99	6,854.19	114.81	60.702		
10,700.00	7,249.56	7,400.00	7,378.39	105.63	31.65	-91.12	-4,452.56	489.37	7,027.52	6,911.24	116.28	60.439		
10,800.00	7,249.14	7,400.00	7,378.39	108.34	31.65	-91.12	-4,452.56	489.37	7,086.97	6,969.26	117.71	60.205		
10,900.00	7,248.72	7,400.00	7,378.39	111.05	31.65	-91.12	-4,452.56	489.37	7,147.33	7,028.20	119.13	59.998		
11,000.00	7,248.30	7,400.00	7,378.39	113.77	31.65	-91.12	-4,452.56	489.37	7,208.57	7,088.06	120.51	59.819		
11,100.00	7,247.88	7,400.00	7,378.39	116.50	31.65	-91.12	-4,452.56	489.37	7,270.66	7,148.80	121.86	59.664		
11,200.00	7,247.46	7,400.00	7,378.39	119.23	31.65	-91.12	-4,452.56	489.37	7,333.60	7,210.41	123.19	59.533		
11,300.00	7,247.04	7,400.00	7,378.39	121.97	31.65	-91.12	-4,452.56	489.37	7,397.35	7,272.87	124.48	59.425		
11,400.00	7,246.62	7,400.00	7,378.39	124.72	31.65	-91.12	-4,452.56	489.37	7,461.90	7,336.15	125.75	59.338		
11,500.00	7,246.20	7,400.00	7,378.39	127.46	31.65	-91.12	-4,452.56	489.37	7,527.22	7,400.23	126.99	59.273		
11,600.00	7,245.78	7,400.00	7,378.39	130.22	31.65	-91.12	-4,452.56	489.37	7,593.30	7,465.10	128.21	59.226		
11,700.00	7,245.36	7,400.00	7,378.39	132.98	31.65	-91.12	-4,452.56	489.37	7,660.12	7,530.72	129.40	59.199		
11,800.00	7,244.94	7,400.00	7,378.39	135.74	31.65	-91.12	-4,452.56	489.37	7,727.65	7,597.09	130.56	59.190 SF		
11,900.00	7,244.52	7,400.00	7,378.39	138.50	31.65	-91.12	-4,452.56	489.37	7,795.88	7,664.18	131.69	59.197		
12,000.00	7,244.10	7,400.00	7,378.39	141.27	31.65	-91.12	-4,452.56	489.37	7,864.78	7,731.98	132.80	59.221		
12,100.00	7,243.68	7,400.00	7,378.39	144.04	31.65	-91.12	-4,452.56	489.37	7,934.35	7,800.46	133.89	59.261		
12,200.00	7,243.26	7,400.00	7,378.39	146.82	31.65	-91.12	-4,452.56	489.37	8,004.57	7,869.62	134.95	59.315		
12,300.00	7,242.84	7,400.00	7,378.39	149.60	31.65	-91.12	-4,452.56	489.37	8,075.41	7,939.42	135.99	59.384		
12,400.00	7,242.42	7,400.00	7,378.39	152.38	31.65	-91.12	-4,452.56	489.37	8,146.86	8,009.86	137.00	59.466		
12,500.00	7,242.00	7,400.00	7,378.39	155.16	31.65	-91.12	-4,452.56	489.37	8,218.91	8,080.92	137.99	59.562		
12,600.00	7,241.58	7,400.00	7,378.39	157.95	31.65	-91.12	-4,452.56	489.37	8,291.54	8,152.58	138.96	59.670		
12,700.00	7,241.16	7,400.00	7,378.39	160.74	31.65	-91.12	-4,452.56	489.37	8,364.73	8,224.83	139.90	59.789		
12,800.00	7,240.74	7,400.00	7,378.39	163.53	31.65	-91.12	-4,452.56	489.37	8,438.48	8,297.65	140.83	59.921		
12,900.00	7,240.32	7,400.00	7,378.39	166.32	31.65	-91.12	-4,452.56	489.37	8,512.76	8,371.03	141.73	60.063		
13,000.00	7,239.89	7,400.00	7,378.39	169.12	31.65	-91.12	-4,452.56	489.37	8,587.56	8,444.95	142.61	60.215		
13,100.00	7,239.47	7,400.00	7,378.39	171.92	31.65	-91.12	-4,452.56	489.37	8,662.87	8,519.39	143.48	60.378		
13,200.00	7,239.05	7,400.00	7,378.39	174.72	31.65	-91.12	-4,452.56	489.37	8,738.68	8,594.36	144.32	60.551		
13,300.00	7,238.63	7,400.00	7,378.39	177.52	31.65	-91.12	-4,452.56	489.37	8,814.97	8,669.82	145.14	60.732		
13,400.00	7,238.21	7,400.00	7,378.39	180.32	31.65	-91.12	-4,452.56	489.37	8,891.72	8,745.77	145.95	60.923		
13,500.00	7,237.79	7,400.00	7,378.39	183.13	31.65	-91.12	-4,452.56	489.37	8,968.94	8,822.20	146.74	61.122		
13,600.00	7,237.37	7,400.00	7,378.39	185.93	31.65	-91.12	-4,452.56	489.37	9,046.60	8,899.10	147.51	61.330		
13,700.00	7,236.95	7,400.00	7,378.39	188.74	31.65	-91.12	-4,452.56	489.37	9,124.70	8,976.44	148.26	61.545		
13,800.00	7,236.53	7,400.00	7,378.39	191.55	31.65	-91.12	-4,452.56	489.37	9,203.22	9,054.23	149.00	61.769		
13,900.00	7,236.11	7,400.00	7,378.39	194.36	31.65	-91.12	-4,452.56	489.37	9,282.16	9,132.44	149.71	61.999		
14,000.00	7,235.69	7,400.00	7,378.39	197.17	31.65	-91.12	-4,452.56	489.37	9,361.50	9,211.08	150.42	62.236		
14,100.00	7,235.27	7,400.00	7,378.39	199.98	31.65	-91.12	-4,452.56	489.37	9,441.22	9,290.12	151.11	62.481		
14,200.00	7,234.85	7,400.00	7,378.39	202.80	31.65	-91.12	-4,452.56	489.37	9,521.34	9,369.56	151.78	62.732		
14,300.00	7,234.43	7,400.00	7,378.39	205.61	31.65	-91.12	-4,452.56	489.37	9,601.82	9,449.39	152.44	62.989		
14,400.00	7,234.01	7,400.00	7,378.39	208.43	31.65	-91.12	-4,452.56	489.37	9,682.67	9,529.59	153.08	63.252		
14,500.00	7,233.59	7,400.00	7,378.39	211.25	31.65	-91.12	-4,452.56	489.37	9,763.88	9,610.17	153.71	63.521		
14,600.00	7,233.17	7,400.00	7,378.39	214.06	31.65	-91.12	-4,452.56	489.37	9,845.43	9,691.10	154.33	63.796		
14,700.00	7,232.75	7,400.00	7,378.39	216.88	31.65	-91.12	-4,452.56	489.37	9,927.31	9,772.38	154.93	64.076		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	21.80	-0.20	0.00	3.28	-27.50	2,222.66	-1,156.95	2,505.74					
100.00	100.00	119.89	97.89	0.18	3.29	-27.50	2,222.59	-1,157.15	2,505.77	2,502.30	3.47	722.284		
200.00	200.00	218.00	196.00	0.61	3.36	-27.50	2,222.75	-1,157.24	2,505.96	2,501.99	3.97	630.882		
300.00	300.00	327.35	305.34	1.05	3.49	-27.50	2,222.74	-1,156.89	2,505.80	2,501.26	4.54	551.830		
343.85	343.85	365.85	343.85	1.25	3.55	-27.49	2,222.75	-1,156.79	2,505.75	2,500.96	4.79	522.851		
400.00	400.00	419.08	397.08	1.49	3.64	-27.49	2,222.83	-1,156.77	2,505.81	2,500.68	5.13	488.319		
500.00	500.00	526.96	504.96	1.93	3.86	-27.49	2,222.77	-1,156.71	2,505.73	2,499.94	5.79	432.591		
600.00	599.98	633.26	611.26	2.37	4.12	-19.77	2,222.61	-1,156.44	2,503.85	2,497.36	6.49	385.819		
700.00	699.84	739.21	717.21	2.81	4.41	-19.84	2,222.05	-1,155.84	2,498.19	2,490.96	7.22	345.945		
800.00	799.45	836.41	814.41	3.26	4.70	-19.96	2,221.75	-1,155.36	2,489.48	2,481.53	7.95	313.042		
900.00	898.70	943.27	921.26	3.70	5.04	-20.14	2,221.11	-1,154.54	2,477.13	2,468.40	8.74	283.580		
1,000.00	997.47	1,035.10	1,013.09	4.15	5.34	-20.36	2,220.62	-1,153.96	2,461.67	2,452.19	9.49	259.514		
1,100.00	1,095.78	1,129.94	1,107.92	4.60	5.67	-20.54	2,220.32	-1,153.46	2,443.98	2,433.72	10.26	238.238		
1,200.00	1,194.05	1,230.79	1,208.77	5.05	6.02	-20.69	2,219.95	-1,152.95	2,426.08	2,415.03	11.06	219.394		
1,300.00	1,292.33	1,327.86	1,305.84	5.50	6.38	-20.84	2,219.52	-1,152.51	2,408.17	2,396.31	11.86	203.113		
1,400.00	1,390.61	1,423.01	1,400.99	5.96	6.73	-20.98	2,219.34	-1,151.89	2,390.40	2,377.74	12.66	188.857		
1,500.00	1,488.89	1,523.31	1,501.28	6.43	7.11	-21.13	2,219.14	-1,151.28	2,372.66	2,359.18	13.48	175.954		
1,600.00	1,587.16	1,625.15	1,603.12	6.89	7.50	-21.29	2,218.61	-1,150.88	2,354.75	2,340.43	14.32	164.384		
1,700.00	1,685.44	1,718.06	1,696.03	7.36	7.86	-21.46	2,217.92	-1,151.03	2,336.94	2,321.80	15.14	154.373		
1,800.00	1,783.72	1,812.10	1,790.07	7.83	8.22	-21.63	2,217.45	-1,151.29	2,319.40	2,303.44	15.96	145.320		
1,900.00	1,882.00	1,921.96	1,899.92	8.30	8.66	-21.84	2,216.57	-1,151.43	2,301.55	2,284.71	16.84	136.637		
2,000.00	1,980.27	2,010.49	1,988.44	8.77	9.01	-22.01	2,215.79	-1,151.84	2,283.83	2,266.18	17.66	129.358		
2,100.00	2,078.55	2,111.98	2,089.93	9.25	9.41	-22.21	2,215.02	-1,152.35	2,266.26	2,247.74	18.52	122.398		
2,200.00	2,176.83	2,216.37	2,194.32	9.72	9.83	-22.42	2,214.04	-1,152.61	2,248.44	2,229.05	19.39	115.964		
2,300.00	2,275.11	2,309.29	2,287.23	10.19	10.21	-22.61	2,213.16	-1,152.94	2,230.69	2,210.46	20.22	110.295		
2,400.00	2,373.38	2,408.33	2,386.26	10.66	10.61	-22.82	2,212.16	-1,153.56	2,213.04	2,191.96	21.08	104.963		
2,500.00	2,471.66	2,503.39	2,481.32	11.14	11.00	-23.03	2,211.13	-1,154.38	2,195.48	2,173.55	21.93	100.106		
2,600.00	2,569.94	2,599.08	2,577.00	11.61	11.39	-23.25	2,210.15	-1,155.31	2,178.06	2,155.28	22.78	95.600		
2,700.00	2,668.22	2,691.49	2,669.41	12.09	11.77	-23.46	2,209.45	-1,156.15	2,160.86	2,137.24	23.62	91.467		
2,800.00	2,766.49	2,780.82	2,758.73	12.56	12.14	-23.66	2,209.12	-1,156.95	2,144.02	2,119.56	24.46	87.667		
2,900.00	2,864.77	2,879.77	2,857.67	13.04	12.55	-23.89	2,208.95	-1,157.99	2,127.45	2,102.13	25.32	84.014		
3,000.00	2,963.05	2,976.14	2,954.03	13.51	12.94	-24.12	2,208.66	-1,159.13	2,110.87	2,084.69	26.18	80.625		
3,100.00	3,061.33	3,073.92	3,051.81	13.99	13.35	-24.37	2,208.22	-1,160.69	2,094.43	2,067.38	27.05	77.438		
3,200.00	3,159.60	3,167.42	3,145.29	14.46	13.74	-24.61	2,207.87	-1,162.21	2,078.09	2,050.19	27.90	74.487		
3,300.00	3,257.88	3,259.77	3,237.62	14.94	14.12	-24.86	2,207.59	-1,164.11	2,062.09	2,033.34	28.75	71.729		
3,400.00	3,356.16	3,355.02	3,332.84	15.41	14.52	-25.13	2,207.35	-1,166.42	2,046.36	2,016.75	29.61	69.113		
3,500.00	3,454.43	3,455.78	3,433.57	15.89	14.94	-25.42	2,207.11	-1,168.89	2,030.71	2,000.22	30.49	66.605		
3,600.00	3,552.71	3,554.50	3,532.26	16.36	15.35	-25.70	2,206.79	-1,171.13	2,014.94	1,983.58	31.36	64.246		
3,700.00	3,650.99	3,665.47	3,643.20	16.84	15.82	-26.03	2,206.34	-1,173.59	1,999.14	1,966.86	32.28	61.937		
3,800.00	3,749.27	3,777.41	3,755.11	17.32	16.29	-26.38	2,204.66	-1,176.05	1,982.46	1,949.27	33.19	59.725		
3,900.00	3,847.54	3,878.48	3,856.14	17.79	16.71	-26.70	2,202.81	-1,178.09	1,965.48	1,931.40	34.08	57.678		
4,000.00	3,945.82	3,975.47	3,953.09	18.27	17.12	-27.02	2,200.99	-1,180.05	1,948.52	1,913.57	34.95	55.754		
4,100.00	4,044.10	4,073.87	4,051.45	18.75	17.53	-27.36	2,199.09	-1,182.18	1,931.66	1,895.84	35.83	53.919		
4,200.00	4,142.38	4,173.08	4,150.62	19.22	17.95	-27.70	2,197.11	-1,184.32	1,914.81	1,878.11	36.71	52.168		
4,300.00	4,240.65	4,272.51	4,250.01	19.70	18.37	-28.05	2,195.09	-1,186.40	1,897.96	1,860.37	37.59	50.497		
4,400.00	4,338.93	4,370.26	4,347.71	20.18	18.78	-28.40	2,193.06	-1,188.41	1,881.13	1,842.66	38.46	48.908		
4,500.00	4,437.21	4,467.85	4,445.26	20.65	19.20	-28.75	2,191.04	-1,190.46	1,864.39	1,825.05	39.34	47.392		
4,600.00	4,535.49	4,566.39	4,543.75	21.13	19.61	-29.12	2,188.91	-1,192.64	1,847.72	1,807.50	40.22	45.941		
4,700.00	4,633.76	4,663.58	4,640.89	21.61	20.02	-29.49	2,186.79	-1,194.79	1,831.11	1,790.01	41.10	44.556		
4,800.00	4,732.04	4,767.46	4,744.73	22.08	20.46	-29.90	2,184.46	-1,197.07	1,814.53	1,772.54	41.99	43.212		
4,900.00	4,830.32	4,869.78	4,846.98	22.56	20.90	-30.31	2,181.75	-1,199.16	1,797.62	1,754.73	42.88	41.920		
5,000.00	4,928.60	4,966.17	4,943.32	23.04	21.30	-30.71	2,179.16	-1,201.09	1,780.73	1,736.97	43.76	40.694		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	5,062.39	5,039.50	23.51	21.71	-31.10	2,176.77	-1,202.95	1,764.05	1,719.41	44.64	39.521		
5,200.00	5,125.15	5,157.35	5,134.42	23.99	22.11	-31.49	2,174.61	-1,204.67	1,747.54	1,702.03	45.51	38.399		
5,300.00	5,223.43	5,252.33	5,229.36	24.47	22.52	-31.88	2,172.70	-1,206.40	1,731.32	1,684.94	46.39	37.325		
5,400.00	5,321.71	5,349.11	5,326.11	24.94	22.93	-32.28	2,171.03	-1,207.99	1,715.30	1,668.04	47.26	36.292		
5,500.00	5,419.98	5,446.67	5,423.66	25.42	23.34	-32.66	2,169.80	-1,209.11	1,699.40	1,651.25	48.15	35.297		
5,600.00	5,518.26	5,542.37	5,519.34	25.90	23.75	-33.05	2,168.67	-1,210.20	1,683.63	1,634.60	49.02	34.344		
5,700.00	5,616.54	5,636.28	5,613.25	26.38	24.15	-33.43	2,167.75	-1,211.38	1,668.16	1,618.26	49.90	33.433		
5,800.00	5,714.82	5,739.98	5,716.94	26.85	24.59	-33.83	2,167.31	-1,212.22	1,652.91	1,602.12	50.79	32.543		
5,900.00	5,813.09	5,849.30	5,826.26	27.33	25.05	-34.24	2,166.50	-1,212.09	1,636.86	1,585.16	51.70	31.663		
6,000.00	5,911.37	5,951.62	5,928.57	27.81	25.48	-34.64	2,165.56	-1,211.83	1,620.69	1,568.11	52.59	30.819		
6,100.00	6,009.65	6,078.08	6,055.01	28.28	26.02	-35.12	2,164.02	-1,210.24	1,603.77	1,550.26	53.51	29.971		
6,200.00	6,107.93	6,184.82	6,161.70	28.76	26.47	-35.53	2,161.51	-1,207.83	1,585.36	1,530.96	54.40	29.143		
6,300.00	6,206.20	6,314.79	6,291.53	29.24	27.03	-36.05	2,157.25	-1,203.88	1,565.83	1,510.53	55.29	28.318		
6,400.00	6,304.48	6,403.00	6,379.62	29.72	27.41	-36.44	2,153.41	-1,201.33	1,545.72	1,489.55	56.17	27.517		
6,500.00	6,402.76	6,471.41	6,447.97	30.19	27.70	-36.77	2,150.83	-1,200.18	1,526.94	1,469.89	57.04	26.768		
6,600.00	6,501.04	6,546.75	6,523.28	30.67	28.02	-37.12	2,149.03	-1,199.75	1,509.95	1,452.04	57.91	26.075		
6,700.00	6,599.31	6,630.81	6,607.34	31.15	28.38	-37.51	2,147.99	-1,199.73	1,494.25	1,435.48	58.78	25.423		
6,800.00	6,697.50	6,722.93	6,699.46	31.63	28.77	-16.39	2,147.24	-1,200.02	1,477.92	1,418.27	59.65	24.775		
6,900.00	6,794.18	6,810.98	6,787.50	32.10	29.14	11.11	2,146.76	-1,200.67	1,452.87	1,392.37	60.50	24.014		
7,000.00	6,886.96	6,889.63	6,866.15	32.55	29.48	25.48	2,146.86	-1,201.64	1,418.56	1,357.27	61.29	23.146		
7,100.00	6,973.57	6,978.20	6,954.71	32.99	29.85	35.76	2,147.44	-1,202.93	1,375.76	1,313.72	62.04	22.176		
7,200.00	7,051.87	7,057.62	7,034.12	33.41	30.19	45.14	2,147.92	-1,203.96	1,325.48	1,262.76	62.72	21.134		
7,300.00	7,119.93	7,126.88	7,103.37	33.85	30.48	54.72	2,148.40	-1,204.82	1,270.01	1,206.67	63.34	20.051		
7,400.00	7,176.09	7,185.18	7,161.66	34.39	30.73	64.55	2,148.87	-1,205.40	1,211.89	1,147.95	63.94	18.954		
7,500.00	7,218.95	7,228.61	7,205.09	35.09	30.91	73.87	2,149.24	-1,205.76	1,154.18	1,089.58	64.59	17.868		
7,600.00	7,247.46	7,257.65	7,234.13	35.98	31.04	81.80	2,149.48	-1,206.04	1,100.13	1,034.74	65.39	16.824		
7,700.00	7,260.92	7,272.00	7,248.48	37.04	31.10	87.68	2,149.60	-1,206.19	1,052.95	986.55	66.40	15.857		
7,800.00	7,261.75	7,273.88	7,250.36	38.23	31.10	89.40	2,149.61	-1,206.21	1,014.98	947.29	67.69	14.995		
7,900.00	7,261.33	7,274.53	7,251.01	39.59	31.11	89.44	2,149.62	-1,206.21	985.92	916.59	69.33	14.221		
8,000.00	7,260.91	7,275.18	7,251.66	41.10	31.11	89.48	2,149.62	-1,206.22	966.39	895.13	71.26	13.562		
8,100.00	7,260.49	7,275.84	7,252.32	42.75	31.11	89.52	2,149.63	-1,206.23	956.96	883.60	73.36	13.044		
8,140.69	7,260.32	7,276.11	7,252.59	43.47	31.11	89.54	2,149.63	-1,206.23	956.09	881.84	74.25	12.876 CC, ES		
8,200.00	7,260.07	7,276.51	7,252.98	44.53	31.11	89.56	2,149.63	-1,206.24	957.93	882.43	75.51	12.687		
8,300.00	7,259.65	7,277.18	7,253.65	46.41	31.12	89.60	2,149.64	-1,206.24	969.28	891.72	77.56	12.498		
8,400.00	7,259.23	7,277.85	7,254.33	48.39	31.12	89.64	2,149.64	-1,206.25	990.63	911.23	79.41	12.476 SF		
8,500.00	7,258.81	7,278.53	7,255.01	50.45	31.12	89.68	2,149.65	-1,206.26	1,021.38	940.39	80.99	12.611		
8,600.00	7,258.39	7,279.22	7,255.70	52.59	31.13	89.72	2,149.65	-1,206.27	1,060.70	978.41	82.29	12.890		
8,700.00	7,257.97	7,279.91	7,256.39	54.79	31.13	89.76	2,149.66	-1,206.27	1,107.67	1,024.37	83.30	13.297		
8,800.00	7,257.55	7,280.61	7,257.09	57.05	31.13	89.81	2,149.67	-1,206.28	1,161.37	1,077.31	84.07	13.815		
8,900.00	7,257.13	7,281.32	7,257.79	59.36	31.14	89.85	2,149.67	-1,206.29	1,220.92	1,136.30	84.62	14.428		
9,000.00	7,256.71	7,282.03	7,258.51	61.72	31.14	89.89	2,149.68	-1,206.30	1,285.50	1,200.50	85.00	15.124		
9,100.00	7,256.29	7,282.75	7,259.22	64.12	31.14	89.93	2,149.68	-1,206.31	1,354.38	1,269.15	85.23	15.890		
9,200.00	7,255.87	7,283.47	7,259.95	66.56	31.14	89.98	2,149.69	-1,206.31	1,426.96	1,341.59	85.37	16.716		
9,300.00	7,255.45	7,284.20	7,260.68	69.02	31.15	90.02	2,149.69	-1,206.32	1,502.68	1,417.27	85.42	17.592		
9,400.00	7,255.03	7,284.94	7,261.41	71.52	31.15	90.07	2,149.70	-1,206.33	1,581.11	1,495.70	85.41	18.512		
9,500.00	7,254.61	7,285.68	7,262.16	74.04	31.15	90.11	2,149.70	-1,206.34	1,661.86	1,576.49	85.36	19.468		
9,600.00	7,254.19	7,286.43	7,262.91	76.58	31.16	90.16	2,149.71	-1,206.35	1,744.60	1,659.31	85.28	20.457		
9,700.00	7,253.77	7,287.19	7,263.66	79.15	31.16	90.20	2,149.72	-1,206.36	1,829.06	1,743.88	85.18	21.473		
9,800.00	7,253.35	7,287.95	7,264.43	81.74	31.16	90.25	2,149.72	-1,206.36	1,915.02	1,829.95	85.07	22.512		
9,900.00	7,252.92	7,288.72	7,265.20	84.34	31.17	90.29	2,149.73	-1,206.37	2,002.29	1,917.34	84.94	23.572		
10,000.00	7,252.50	7,289.50	7,265.97	86.96	31.17	90.34	2,149.73	-1,206.38	2,090.69	2,005.88	84.82	24.649		
10,100.00	7,252.08	7,290.28	7,266.76	89.59	31.17	90.39	2,149.74	-1,206.39	2,180.10	2,095.41	84.69	25.742		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,291.07	7,267.55	92.24	31.18	90.43	2,149.75	-1,206.40	2,270.39	2,185.83	84.56	26.849		
10,300.00	7,251.24	7,291.87	7,268.35	94.90	31.18	90.48	2,149.75	-1,206.41	2,361.47	2,277.03	84.44	27.967		
10,400.00	7,250.82	7,292.68	7,269.15	97.57	31.18	90.53	2,149.76	-1,206.42	2,453.24	2,368.92	84.32	29.095		
10,500.00	7,250.40	7,293.49	7,269.97	100.25	31.19	90.58	2,149.77	-1,206.43	2,545.62	2,461.42	84.20	30.233		
10,600.00	7,249.98	7,294.31	7,270.79	102.93	31.19	90.63	2,149.77	-1,206.44	2,638.57	2,554.48	84.09	31.379		
10,700.00	7,249.56	7,295.14	7,271.62	105.63	31.19	90.68	2,149.78	-1,206.45	2,732.01	2,648.03	83.98	32.531		
10,800.00	7,249.14	7,295.98	7,272.45	108.34	31.20	90.73	2,149.78	-1,206.46	2,825.90	2,742.02	83.88	33.690		
10,900.00	7,248.72	7,296.82	7,273.30	111.05	31.20	90.78	2,149.79	-1,206.47	2,920.20	2,836.41	83.78	34.854		
11,000.00	7,248.30	7,297.68	7,274.15	113.77	31.20	90.83	2,149.80	-1,206.48	3,014.86	2,931.17	83.69	36.023		
11,100.00	7,247.88	7,298.54	7,275.01	116.50	31.21	90.88	2,149.80	-1,206.49	3,109.86	3,026.25	83.61	37.196		
11,200.00	7,247.46	7,299.41	7,275.88	119.23	31.21	90.93	2,149.81	-1,206.50	3,205.16	3,121.63	83.53	38.372		
11,300.00	7,247.04	7,300.28	7,276.76	121.97	31.22	90.99	2,149.82	-1,206.51	3,300.74	3,217.29	83.45	39.552		
11,400.00	7,246.62	7,301.17	7,277.65	124.72	31.22	91.04	2,149.82	-1,206.52	3,396.57	3,313.19	83.38	40.735		
11,500.00	7,246.20	7,302.07	7,278.54	127.46	31.22	91.09	2,149.83	-1,206.53	3,492.64	3,409.32	83.32	41.919		
11,600.00	7,245.78	7,302.97	7,279.44	130.22	31.23	91.15	2,149.84	-1,206.54	3,588.92	3,505.66	83.26	43.106		
11,700.00	7,245.36	7,303.88	7,280.36	132.98	31.23	91.20	2,149.85	-1,206.55	3,685.40	3,602.20	83.20	44.295		
11,800.00	7,244.94	7,304.80	7,281.28	135.74	31.23	91.26	2,149.85	-1,206.56	3,782.06	3,698.91	83.15	45.485		
11,900.00	7,244.52	7,305.74	7,282.21	138.50	31.24	91.31	2,149.86	-1,206.57	3,878.89	3,795.79	83.10	46.676		
12,000.00	7,244.10	7,306.68	7,283.15	141.27	31.24	91.37	2,149.87	-1,206.58	3,975.88	3,892.82	83.06	47.868		
12,100.00	7,243.68	7,307.63	7,284.10	144.04	31.25	91.42	2,149.87	-1,206.60	4,073.02	3,990.00	83.02	49.060		
12,200.00	7,243.26	7,308.58	7,285.06	146.82	31.25	91.48	2,149.88	-1,206.61	4,170.28	4,087.30	82.98	50.254		
12,300.00	7,242.84	7,309.55	7,286.03	149.60	31.25	91.54	2,149.89	-1,206.62	4,267.68	4,184.73	82.95	51.447		
12,400.00	7,242.42	7,310.53	7,287.01	152.38	31.26	91.60	2,149.90	-1,206.63	4,365.19	4,282.27	82.92	52.641		
12,500.00	7,242.00	7,311.52	7,288.00	155.16	31.26	91.66	2,149.90	-1,206.64	4,462.81	4,379.92	82.90	53.834		
12,600.00	7,241.58	7,312.52	7,288.99	157.95	31.27	91.72	2,149.91	-1,206.66	4,560.54	4,477.66	82.88	55.027		
12,700.00	7,241.16	7,313.53	7,290.00	160.74	31.27	91.78	2,149.92	-1,206.67	4,658.36	4,575.50	82.86	56.220		
12,800.00	7,240.74	7,314.55	7,291.02	163.53	31.28	91.84	2,149.93	-1,206.68	4,756.27	4,673.43	82.84	57.413		
12,900.00	7,240.32	7,315.58	7,292.05	166.32	31.28	91.90	2,149.93	-1,206.69	4,854.27	4,771.44	82.83	58.605		
13,000.00	7,239.89	7,316.62	7,293.10	169.12	31.28	91.96	2,149.94	-1,206.71	4,952.35	4,869.53	82.82	59.796		
13,100.00	7,239.47	7,317.68	7,294.15	171.92	31.29	92.03	2,149.95	-1,206.72	5,050.50	4,967.69	82.81	60.987		
13,200.00	7,239.05	7,318.74	7,295.21	174.72	31.29	92.09	2,149.96	-1,206.73	5,148.72	5,065.91	82.81	62.176		
13,300.00	7,238.63	7,319.81	7,296.29	177.52	31.30	92.15	2,149.96	-1,206.75	5,247.01	5,164.21	82.81	63.365		
13,400.00	7,238.21	7,316.13	7,292.60	180.32	31.28	91.93	2,149.94	-1,206.70	5,345.37	5,262.59	82.78	64.570		
13,500.00	7,237.79	7,316.88	7,293.36	183.13	31.29	91.98	2,149.94	-1,206.70	5,443.79	5,361.00	82.79	65.758		
13,600.00	7,237.37	7,317.64	7,294.11	185.93	31.29	92.02	2,149.95	-1,206.71	5,542.26	5,459.47	82.79	66.944		
13,700.00	7,236.95	7,318.40	7,294.87	188.74	31.29	92.07	2,149.96	-1,206.72	5,640.78	5,557.99	82.79	68.130		
13,800.00	7,236.53	7,319.15	7,295.63	191.55	31.30	92.11	2,149.96	-1,206.73	5,739.36	5,656.56	82.80	69.314		
13,900.00	7,236.11	7,319.91	7,296.38	194.36	31.30	92.16	2,149.97	-1,206.74	5,837.98	5,755.17	82.81	70.496		
14,000.00	7,235.69	7,320.67	7,297.14	197.17	31.30	92.20	2,149.97	-1,206.75	5,936.65	5,853.83	82.82	71.678		
14,100.00	7,235.27	7,321.42	7,297.89	199.98	31.31	92.25	2,149.98	-1,206.76	6,035.36	5,952.53	82.84	72.857		
14,200.00	7,234.85	7,322.18	7,298.65	202.80	31.31	92.30	2,149.98	-1,206.77	6,134.12	6,051.27	82.85	74.036		
14,300.00	7,234.43	7,322.93	7,299.41	205.61	31.31	92.34	2,149.99	-1,206.78	6,232.91	6,150.04	82.87	75.212		
14,400.00	7,234.01	7,323.69	7,300.16	208.43	31.31	92.39	2,150.00	-1,206.79	6,331.75	6,248.86	82.89	76.387		
14,500.00	7,233.59	7,324.45	7,300.92	211.25	31.32	92.43	2,150.00	-1,206.79	6,430.61	6,347.70	82.91	77.560		
14,600.00	7,233.17	7,325.20	7,301.68	214.06	31.32	92.48	2,150.01	-1,206.80	6,529.52	6,446.58	82.93	78.731		
14,700.00	7,232.75	7,325.96	7,302.43	216.88	31.32	92.52	2,150.01	-1,206.81	6,628.45	6,545.49	82.96	79.900		
14,800.00	7,232.33	7,326.72	7,303.19	219.70	31.33	92.57	2,150.02	-1,206.82	6,727.42	6,644.43	82.98	81.068		
14,900.00	7,231.91	7,327.47	7,303.94	222.52	31.33	92.61	2,150.03	-1,206.83	6,826.42	6,743.40	83.01	82.233		
15,000.00	7,231.49	7,328.23	7,304.70	225.35	31.33	92.66	2,150.03	-1,206.84	6,925.44	6,842.40	83.04	83.397		
15,100.00	7,231.07	7,328.99	7,305.46	228.17	31.34	92.70	2,150.04	-1,206.85	7,024.50	6,941.42	83.07	84.559		
15,116.21	7,231.00	7,329.11	7,305.58	228.63	31.34	92.71	2,150.04	-1,206.85	7,040.56	6,957.48	83.08	84.747		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	22.00	0.00	3.28	-69.63	804.85	-2,167.45	2,312.16					
100.00	100.00	78.00	100.00	0.18	3.55	-69.63	804.85	-2,167.45	2,312.06	2,308.33	3.73	620.375		
200.00	200.00	178.00	200.00	0.61	5.54	-69.63	804.85	-2,167.45	2,312.06	2,305.90	6.16	375.495		
300.00	300.00	278.00	300.00	1.05	8.61	-69.63	804.85	-2,167.45	2,312.06	2,302.40	9.66	239.297		
400.00	400.00	378.00	400.00	1.49	11.91	-69.63	804.85	-2,167.45	2,312.06	2,298.66	13.40	172.505		
500.00	500.00	478.00	500.00	1.93	15.30	-69.63	804.85	-2,167.45	2,312.06	2,294.83	17.23	134.205		
600.00	599.98	577.98	599.98	2.37	18.72	-61.93	804.85	-2,167.45	2,311.24	2,290.15	21.09	109.589		
700.00	699.84	677.84	699.84	2.81	22.16	-62.09	804.85	-2,167.45	2,308.78	2,283.81	24.97	92.468		
800.00	799.45	777.45	799.45	3.26	25.61	-62.35	804.85	-2,167.45	2,304.70	2,275.85	28.85	79.883		
900.00	898.70	876.70	898.70	3.70	29.05	-62.72	804.85	-2,167.45	2,299.05	2,266.32	32.73	70.240		
1,000.00	997.47	975.47	997.47	4.15	32.47	-63.20	804.85	-2,167.45	2,291.87	2,255.26	36.60	62.613		
1,100.00	1,095.78	1,073.78	1,095.78	4.60	35.89	-63.65	804.85	-2,167.45	2,283.57	2,243.10	40.47	56.428		
1,200.00	1,194.05	1,172.05	1,194.05	5.05	39.31	-64.06	804.85	-2,167.45	2,275.32	2,230.98	44.34	51.316		
1,300.00	1,292.33	1,270.33	1,292.33	5.50	42.73	-64.47	804.85	-2,167.45	2,267.18	2,218.96	48.22	47.022		
1,400.00	1,390.61	1,368.61	1,390.61	5.96	46.15	-64.89	804.85	-2,167.45	2,259.16	2,207.06	52.10	43.365		
1,500.00	1,488.89	1,466.89	1,488.89	6.43	49.57	-65.31	804.85	-2,167.45	2,251.27	2,195.29	55.98	40.215		
1,600.00	1,587.16	1,565.16	1,587.16	6.89	53.00	-65.73	804.85	-2,167.45	2,243.50	2,183.63	59.87	37.474		
1,700.00	1,685.44	1,663.44	1,685.44	7.36	56.42	-66.16	804.85	-2,167.45	2,235.86	2,172.10	63.76	35.068		
1,800.00	1,783.72	1,761.72	1,783.72	7.83	59.85	-66.59	804.85	-2,167.45	2,228.34	2,160.69	67.65	32.940		
1,900.00	1,882.00	1,860.00	1,882.00	8.30	63.27	-67.02	804.85	-2,167.45	2,220.95	2,149.41	71.54	31.044		
2,000.00	1,980.27	1,958.27	1,980.27	8.77	66.70	-67.45	804.85	-2,167.45	2,213.70	2,138.26	75.44	29.345		
2,100.00	2,078.55	2,056.55	2,078.55	9.25	70.13	-67.89	804.85	-2,167.45	2,206.57	2,127.24	79.33	27.814		
2,200.00	2,176.83	2,154.83	2,176.83	9.72	73.55	-68.33	804.85	-2,167.45	2,199.57	2,116.34	83.23	26.428		
2,300.00	2,275.11	2,253.11	2,275.11	10.19	76.98	-68.77	804.85	-2,167.45	2,192.71	2,105.58	87.13	25.166		
2,400.00	2,373.38	2,351.38	2,373.38	10.66	80.41	-69.21	804.85	-2,167.45	2,185.99	2,094.96	91.03	24.014		
2,500.00	2,471.66	2,449.66	2,471.66	11.14	83.84	-69.66	804.85	-2,167.45	2,179.40	2,084.47	94.93	22.958		
2,600.00	2,569.94	2,547.94	2,569.94	11.61	87.26	-70.11	804.85	-2,167.45	2,172.94	2,074.11	98.83	21.987		
2,700.00	2,668.22	2,646.22	2,668.22	12.09	90.69	-70.56	804.85	-2,167.45	2,166.63	2,063.90	102.73	21.090		
2,800.00	2,766.49	2,744.49	2,766.49	12.56	94.12	-71.02	804.85	-2,167.45	2,160.45	2,053.82	106.63	20.261		
2,900.00	2,864.77	2,842.77	2,864.77	13.04	97.55	-71.48	804.85	-2,167.45	2,154.42	2,043.88	110.54	19.491		
3,000.00	2,963.05	2,941.05	2,963.05	13.51	100.98	-71.94	804.85	-2,167.45	2,148.53	2,034.09	114.44	18.774		
3,100.00	3,061.33	3,039.33	3,061.33	13.99	104.41	-72.40	804.85	-2,167.45	2,142.78	2,024.44	118.34	18.107		
3,200.00	3,159.60	3,137.60	3,159.60	14.46	107.84	-72.86	804.85	-2,167.45	2,137.17	2,014.93	122.25	17.482		
3,300.00	3,257.88	3,235.88	3,257.88	14.94	111.27	-73.33	804.85	-2,167.45	2,131.71	2,005.56	126.15	16.898		
3,400.00	3,356.16	3,334.16	3,356.16	15.41	114.70	-73.80	804.85	-2,167.45	2,126.40	1,996.34	130.06	16.350		
3,500.00	3,454.43	3,432.43	3,454.43	15.89	118.13	-74.27	804.85	-2,167.45	2,121.24	1,987.27	133.96	15.835		
3,600.00	3,552.71	3,530.71	3,552.71	16.36	121.56	-74.75	804.85	-2,167.45	2,116.22	1,978.35	137.87	15.350		
3,700.00	3,650.99	3,628.99	3,650.99	16.84	124.99	-75.22	804.85	-2,167.45	2,111.35	1,969.58	141.77	14.892		
3,800.00	3,749.27	3,727.27	3,749.27	17.32	128.42	-75.70	804.85	-2,167.45	2,106.64	1,960.96	145.68	14.461		
3,900.00	3,847.54	3,825.54	3,847.54	17.79	131.85	-76.18	804.85	-2,167.45	2,102.07	1,952.49	149.59	14.053		
4,000.00	3,945.82	3,923.82	3,945.82	18.27	135.28	-76.66	804.85	-2,167.45	2,097.66	1,944.17	153.49	13.666		
4,100.00	4,044.10	4,022.10	4,044.10	18.75	138.71	-77.15	804.85	-2,167.45	2,093.41	1,936.01	157.40	13.300		
4,200.00	4,142.38	4,120.38	4,142.38	19.22	142.13	-77.63	804.85	-2,167.45	2,089.31	1,928.00	161.31	12.952		
4,300.00	4,240.65	4,218.65	4,240.65	19.70	145.56	-78.12	804.85	-2,167.45	2,085.36	1,920.14	165.22	12.622		
4,400.00	4,338.93	4,316.93	4,338.93	20.18	148.99	-78.61	804.85	-2,167.45	2,081.57	1,912.45	169.12	12.308		
4,500.00	4,437.21	4,415.21	4,437.21	20.65	152.43	-79.10	804.85	-2,167.45	2,077.94	1,904.91	173.03	12.009		
4,600.00	4,535.49	4,513.49	4,535.49	21.13	155.86	-79.59	804.85	-2,167.45	2,074.46	1,897.52	176.94	11.724		
4,700.00	4,633.76	4,611.76	4,633.76	21.61	159.29	-80.09	804.85	-2,167.45	2,071.15	1,890.30	180.85	11.452		
4,800.00	4,732.04	4,710.04	4,732.04	22.08	162.72	-80.58	804.85	-2,167.45	2,067.99	1,883.24	184.76	11.193		
4,900.00	4,830.32	4,808.32	4,830.32	22.56	166.15	-81.08	804.85	-2,167.45	2,065.00	1,876.33	188.67	10.945		
5,000.00	4,928.60	4,906.60	4,928.60	23.04	169.58	-81.58	804.85	-2,167.45	2,062.17	1,869.59	192.58	10.708		
5,100.00	5,026.87	5,004.87	5,026.87	23.51	173.01	-82.08	804.85	-2,167.45	2,059.50	1,863.01	196.48	10.482		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,125.15	5,103.15	5,125.15	23.99	176.44	-82.58	804.85	-2,167.45	2,056.99	1,856.59	200.39	10.265	
5,300.00	5,223.43	5,201.43	5,223.43	24.47	179.87	-83.08	804.85	-2,167.45	2,054.64	1,850.34	204.30	10.057	
5,400.00	5,321.71	5,300.29	5,321.71	24.94	183.32	-83.59	804.85	-2,167.45	2,052.46	1,844.23	208.23	9.857	
5,500.00	5,419.98	5,402.02	5,419.98	25.42	186.87	-84.09	804.85	-2,167.45	2,050.44	1,838.18	212.26	9.660	
5,600.00	5,518.26	5,503.74	5,518.26	25.90	190.42	-84.60	804.85	-2,167.45	2,048.59	1,832.30	216.29	9.471	
5,700.00	5,616.54	5,605.46	5,616.54	26.38	193.97	-85.10	804.85	-2,167.45	2,046.90	1,826.58	220.32	9.291	
5,800.00	5,714.82	5,707.18	5,714.82	26.85	197.52	-85.61	804.85	-2,167.45	2,045.38	1,821.03	224.35	9.117	
5,900.00	5,813.09	5,808.91	5,813.09	27.33	201.07	-86.12	804.85	-2,167.45	2,044.02	1,815.64	228.38	8.950	
6,000.00	5,911.37	5,889.37	5,911.37	27.81	203.88	-86.63	804.85	-2,167.45	2,042.84	1,811.17	231.67	8.818	
6,100.00	6,009.65	5,987.65	6,009.65	28.28	207.31	-87.14	804.85	-2,167.45	2,041.81	1,806.23	235.58	8.667	
6,200.00	6,107.93	6,085.93	6,107.93	28.76	210.74	-87.65	804.85	-2,167.45	2,040.96	1,801.47	239.49	8.522	
6,300.00	6,206.20	6,184.20	6,206.20	29.24	214.17	-88.15	804.85	-2,167.45	2,040.27	1,796.87	243.40	8.382	
6,400.00	6,304.48	6,282.48	6,304.48	29.72	217.60	-88.66	804.85	-2,167.45	2,039.75	1,792.44	247.31	8.248	
6,500.00	6,402.76	6,380.76	6,402.76	30.19	221.03	-89.17	804.85	-2,167.45	2,039.39	1,788.17	251.22	8.118	
6,600.00	6,501.04	6,479.04	6,501.04	30.67	224.46	-89.69	804.85	-2,167.45	2,039.20	1,784.08	255.13	7.993	
6,700.00	6,599.31	6,577.31	6,599.31	31.15	227.89	-90.20	804.85	-2,167.45	2,039.18	1,780.15	259.03	7.872	
6,712.12	6,611.23	6,589.23	6,611.23	31.21	228.31	-87.48	804.85	-2,167.45	2,039.14	1,779.63	259.51	7.858	
6,800.00	6,697.50	6,675.50	6,697.50	31.63	231.32	-69.77	804.85	-2,167.45	2,037.50	1,774.56	262.94	7.749	
6,900.00	6,794.18	6,772.18	6,794.18	32.10	234.69	-44.70	804.85	-2,167.45	2,022.58	1,755.79	266.79	7.581	
7,000.00	6,886.96	6,864.96	6,886.96	32.55	237.93	-34.26	804.85	-2,167.45	1,992.76	1,722.28	270.48	7.368	
7,100.00	6,973.57	6,951.57	6,973.57	32.99	240.96	-29.89	804.85	-2,167.45	1,948.82	1,674.90	273.92	7.114	
7,200.00	7,051.87	7,029.87	7,051.87	33.41	243.69	-28.62	804.85	-2,167.45	1,891.91	1,614.86	277.05	6.829	
7,300.00	7,119.93	7,102.07	7,119.93	33.85	246.21	-29.64	804.85	-2,167.45	1,823.45	1,543.53	279.92	6.514	
7,400.00	7,176.09	7,154.09	7,176.09	34.39	248.03	-33.12	804.85	-2,167.45	1,745.19	1,463.13	282.06	6.187	
7,500.00	7,218.95	7,203.05	7,218.95	35.09	249.74	-40.19	804.85	-2,167.45	1,659.06	1,375.00	284.06	5.840	
7,600.00	7,247.46	7,225.46	7,247.46	35.98	250.52	-53.69	804.85	-2,167.45	1,567.21	1,282.09	285.12	5.497	
7,700.00	7,260.92	7,238.92	7,260.92	37.04	250.99	-78.06	804.85	-2,167.45	1,471.89	1,186.03	285.86	5.149	
7,800.00	7,261.75	7,239.75	7,261.75	38.23	251.02	-90.86	804.85	-2,167.45	1,375.46	1,089.29	286.18	4.806	
7,900.00	7,261.33	7,239.33	7,261.33	39.59	251.00	-90.79	804.85	-2,167.45	1,279.49	992.98	286.51	4.466	
8,000.00	7,260.91	7,238.91	7,260.91	41.10	250.99	-90.73	804.85	-2,167.45	1,184.18	897.24	286.94	4.127	
8,100.00	7,260.49	7,238.49	7,260.49	42.75	250.97	-90.66	804.85	-2,167.45	1,089.72	802.21	287.50	3.790	
8,200.00	7,260.07	7,238.07	7,260.07	44.53	250.96	-90.60	804.85	-2,167.45	996.33	708.09	288.24	3.457	
8,300.00	7,259.65	7,237.65	7,259.65	46.41	250.94	-90.53	804.85	-2,167.45	904.36	615.16	289.20	3.127	
8,400.00	7,259.23	7,237.23	7,259.23	48.39	250.93	-90.47	804.85	-2,167.45	814.29	523.79	290.50	2.803	
8,500.00	7,258.81	7,236.81	7,258.81	50.45	250.91	-90.40	804.85	-2,167.45	726.81	434.57	292.24	2.487	
8,600.00	7,258.39	7,236.39	7,258.39	52.59	250.90	-90.34	804.85	-2,167.45	643.00	348.41	294.58	2.183	
8,700.00	7,257.97	7,235.97	7,257.97	54.79	250.88	-90.27	804.85	-2,167.45	564.48	266.75	297.73	1.896	
8,800.00	7,257.55	7,235.55	7,257.55	57.05	250.87	-90.21	804.85	-2,167.45	493.79	191.98	301.80	1.636	
8,900.00	7,257.13	7,235.13	7,257.13	59.36	250.85	-90.14	804.85	-2,167.45	434.76	128.08	306.69	1.418 Level 3	
9,000.00	7,256.71	7,234.71	7,256.71	61.72	250.84	-90.08	804.85	-2,167.45	392.69	81.10	311.59	1.260 Level 3	
9,100.00	7,256.29	7,234.29	7,256.29	64.12	250.83	-90.02	804.85	-2,167.45	373.36	58.45	314.91	1.186 Level 2	
9,124.05	7,256.19	7,234.19	7,256.19	64.71	250.82	-90.00	804.85	-2,167.45	372.58	57.30	315.29	1.182 Level 2, CC, ES, SF	
9,200.00	7,255.87	7,233.87	7,255.87	66.56	250.81	-89.95	804.85	-2,167.45	380.25	65.05	315.20	1.206 Level 2	
9,300.00	7,255.45	7,233.45	7,255.45	69.02	250.80	-89.89	804.85	-2,167.45	412.04	99.37	312.66	1.318 Level 3	
9,400.00	7,255.03	7,233.03	7,255.03	71.52	250.78	-89.82	804.85	-2,167.45	463.64	154.83	308.82	1.501	
9,500.00	7,254.61	7,232.61	7,254.61	74.04	250.77	-89.76	804.85	-2,167.45	529.30	224.36	304.93	1.736	
9,600.00	7,254.19	7,232.19	7,254.19	76.58	250.75	-89.69	804.85	-2,167.45	604.44	302.85	301.58	2.004	
9,700.00	7,253.77	7,231.77	7,253.77	79.15	250.74	-89.63	804.85	-2,167.45	685.95	387.09	298.87	2.295	
9,800.00	7,253.35	7,231.35	7,253.35	81.74	250.72	-89.56	804.85	-2,167.45	771.83	475.11	296.71	2.601	
9,900.00	7,252.92	7,230.92	7,252.92	84.34	250.71	-89.50	804.85	-2,167.45	860.76	565.74	295.02	2.918	
10,000.00	7,252.50	7,230.50	7,252.50	86.96	250.69	-89.43	804.85	-2,167.45	951.89	658.22	293.67	3.241	
10,100.00	7,252.08	7,230.08	7,252.08	89.59	250.68	-89.37	804.85	-2,167.45	1,044.64	752.05	292.60	3.570	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,229.66	7,251.66	92.24	250.66	-89.30	804.85	-2,167.45	1,138.62	846.90	291.73	3.903		
10,300.00	7,251.24	7,229.24	7,251.24	94.90	250.65	-89.24	804.85	-2,167.45	1,233.55	942.53	291.02	4.239		
10,400.00	7,250.82	7,228.82	7,250.82	97.57	250.63	-89.18	804.85	-2,167.45	1,329.22	1,038.79	290.43	4.577		
10,500.00	7,250.40	7,228.40	7,250.40	100.25	250.62	-89.11	804.85	-2,167.45	1,425.49	1,135.54	289.95	4.916		
10,600.00	7,249.98	7,227.98	7,249.98	102.93	250.61	-89.05	804.85	-2,167.45	1,522.24	1,232.70	289.54	5.257		
10,700.00	7,249.56	7,227.56	7,249.56	105.63	250.59	-88.98	804.85	-2,167.45	1,619.38	1,330.18	289.20	5.600		
10,800.00	7,249.14	7,227.14	7,249.14	108.34	250.58	-88.92	804.85	-2,167.45	1,716.85	1,427.94	288.91	5.943		
10,900.00	7,248.72	7,226.72	7,248.72	111.05	250.56	-88.85	804.85	-2,167.45	1,814.60	1,525.94	288.66	6.286		
11,000.00	7,248.30	7,226.30	7,248.30	113.77	250.55	-88.79	804.85	-2,167.45	1,912.57	1,624.13	288.44	6.631		
11,100.00	7,247.88	7,225.88	7,247.88	116.50	250.53	-88.72	804.85	-2,167.45	2,010.75	1,722.49	288.26	6.975		
11,200.00	7,247.46	7,225.46	7,247.46	119.23	250.52	-88.66	804.85	-2,167.45	2,109.10	1,821.00	288.10	7.321		
11,300.00	7,247.04	7,225.04	7,247.04	121.97	250.50	-88.59	804.85	-2,167.45	2,207.60	1,919.63	287.97	7.666		
11,400.00	7,246.62	7,224.62	7,246.62	124.72	250.49	-88.53	804.85	-2,167.45	2,306.22	2,018.38	287.85	8.012		
11,500.00	7,246.20	7,224.20	7,246.20	127.46	250.47	-88.46	804.85	-2,167.45	2,404.96	2,117.22	287.75	8.358		
11,600.00	7,245.78	7,223.78	7,245.78	130.22	250.46	-88.40	804.85	-2,167.45	2,503.80	2,216.14	287.66	8.704		
11,700.00	7,245.36	7,223.36	7,245.36	132.98	250.44	-88.34	804.85	-2,167.45	2,602.73	2,315.15	287.58	9.050		
11,800.00	7,244.94	7,222.94	7,244.94	135.74	250.43	-88.27	804.85	-2,167.45	2,701.74	2,414.22	287.52	9.397		
11,900.00	7,244.52	7,222.52	7,244.52	138.50	250.41	-88.21	804.85	-2,167.45	2,800.82	2,513.35	287.46	9.743		
12,000.00	7,244.10	7,222.10	7,244.10	141.27	250.40	-88.14	804.85	-2,167.45	2,899.96	2,612.54	287.42	10.090		
12,100.00	7,243.68	7,221.68	7,243.68	144.04	250.39	-88.08	804.85	-2,167.45	2,999.16	2,711.78	287.38	10.436		
12,200.00	7,243.26	7,221.26	7,243.26	146.82	250.37	-88.01	804.85	-2,167.45	3,098.40	2,811.06	287.35	10.783		
12,300.00	7,242.84	7,220.84	7,242.84	149.60	250.36	-87.95	804.85	-2,167.45	3,197.70	2,910.38	287.32	11.129		
12,400.00	7,242.42	7,220.42	7,242.42	152.38	250.34	-87.88	804.85	-2,167.45	3,297.04	3,009.74	287.30	11.476		
12,500.00	7,242.00	7,220.00	7,242.00	155.16	250.33	-87.82	804.85	-2,167.45	3,396.42	3,109.13	287.29	11.822		
12,600.00	7,241.58	7,219.58	7,241.58	157.95	250.31	-87.75	804.85	-2,167.45	3,495.83	3,208.55	287.28	12.169		
12,700.00	7,241.16	7,219.16	7,241.16	160.74	250.30	-87.69	804.85	-2,167.45	3,595.27	3,308.00	287.27	12.515		
12,800.00	7,240.74	7,218.74	7,240.74	163.53	250.28	-87.63	804.85	-2,167.45	3,694.75	3,407.48	287.27	12.861		
12,900.00	7,240.32	7,218.32	7,240.32	166.32	250.27	-87.56	804.85	-2,167.45	3,794.25	3,506.98	287.28	13.208		
13,000.00	7,239.89	7,217.89	7,239.89	169.12	250.25	-87.50	804.85	-2,167.45	3,893.78	3,606.50	287.28	13.554		
13,100.00	7,239.47	7,217.47	7,239.47	171.92	250.24	-87.43	804.85	-2,167.45	3,993.33	3,706.04	287.29	13.900		
13,200.00	7,239.05	7,217.05	7,239.05	174.72	250.22	-87.37	804.85	-2,167.45	4,092.91	3,805.60	287.30	14.246		
13,300.00	7,238.63	7,216.63	7,238.63	177.52	250.21	-87.30	804.85	-2,167.45	4,192.50	3,905.18	287.32	14.592		
13,400.00	7,238.21	7,216.21	7,238.21	180.32	250.19	-87.24	804.85	-2,167.45	4,292.11	4,004.77	287.34	14.937		
13,500.00	7,237.79	7,215.79	7,237.79	183.13	250.18	-87.17	804.85	-2,167.45	4,391.74	4,104.38	287.36	15.283		
13,600.00	7,237.37	7,215.37	7,237.37	185.93	250.17	-87.11	804.85	-2,167.45	4,491.39	4,204.01	287.38	15.629		
13,700.00	7,236.95	7,214.95	7,236.95	188.74	250.15	-87.04	804.85	-2,167.45	4,591.05	4,303.64	287.41	15.974		
13,800.00	7,236.53	7,214.53	7,236.53	191.55	250.14	-86.98	804.85	-2,167.45	4,690.73	4,403.29	287.44	16.319		
13,900.00	7,236.11	7,214.11	7,236.11	194.36	250.12	-86.92	804.85	-2,167.45	4,790.42	4,502.95	287.47	16.664		
14,000.00	7,235.69	7,213.69	7,235.69	197.17	250.11	-86.85	804.85	-2,167.45	4,890.12	4,602.62	287.50	17.009		
14,100.00	7,235.27	7,213.27	7,235.27	199.98	250.09	-86.79	804.85	-2,167.45	4,989.83	4,702.30	287.53	17.354		
14,200.00	7,234.85	7,212.85	7,234.85	202.80	250.08	-86.72	804.85	-2,167.45	5,089.56	4,801.99	287.57	17.698		
14,300.00	7,234.43	7,212.43	7,234.43	205.61	250.06	-86.66	804.85	-2,167.45	5,189.30	4,901.69	287.61	18.043		
14,400.00	7,234.01	7,212.01	7,234.01	208.43	250.05	-86.59	804.85	-2,167.45	5,289.04	5,001.39	287.65	18.387		
14,500.00	7,233.59	7,211.59	7,233.59	211.25	250.03	-86.53	804.85	-2,167.45	5,388.80	5,101.11	287.69	18.731		
14,600.00	7,233.17	7,211.17	7,233.17	214.06	250.02	-86.47	804.85	-2,167.45	5,488.56	5,200.83	287.73	19.075		
14,700.00	7,232.75	7,210.75	7,232.75	216.88	250.00	-86.40	804.85	-2,167.45	5,588.33	5,300.56	287.78	19.419		
14,800.00	7,232.33	7,210.33	7,232.33	219.70	249.99	-86.34	804.85	-2,167.45	5,688.11	5,400.29	287.82	19.763		
14,900.00	7,231.91	7,209.91	7,231.91	222.52	249.97	-86.27	804.85	-2,167.45	5,787.90	5,500.03	287.87	20.106		
15,000.00	7,231.49	7,209.49	7,231.49	225.35	249.96	-86.21	804.85	-2,167.45	5,887.70	5,599.78	287.92	20.449		
15,100.00	7,231.07	7,209.07	7,231.07	228.17	249.95	-86.14	804.85	-2,167.45	5,987.50	5,699.53	287.97	20.792		
15,116.21	7,231.00	7,209.00	7,231.00	228.63	249.94	-86.13	804.85	-2,167.45	6,003.68	5,715.70	287.98	20.848		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	37.00	0.00	3.28	-101.76	-528.47	-2,537.49	2,592.20					
100.00	100.00	63.00	100.00	0.18	3.46	-101.76	-528.47	-2,537.49	2,591.94	2,588.31	3.63	713.057		
200.00	200.00	163.00	200.00	0.61	5.13	-101.76	-528.47	-2,537.49	2,591.94	2,586.20	5.74	451.197		
300.00	300.00	263.00	300.00	1.05	8.13	-101.76	-528.47	-2,537.49	2,591.94	2,582.76	9.18	282.341		
400.00	400.00	363.00	400.00	1.49	11.41	-101.76	-528.47	-2,537.49	2,591.94	2,579.04	12.90	200.920		
500.00	500.00	463.00	500.00	1.93	14.79	-101.76	-528.47	-2,537.49	2,591.94	2,575.22	16.72	155.050		
600.00	599.98	562.98	599.98	2.37	18.21	-94.05	-528.47	-2,537.49	2,592.06	2,571.49	20.57	125.984		
700.00	699.84	662.84	699.84	2.81	21.64	-94.16	-528.47	-2,537.49	2,592.44	2,567.99	24.45	106.032		
800.00	799.45	762.45	799.45	3.26	25.09	-94.34	-528.47	-2,537.49	2,593.09	2,564.76	28.33	91.531		
900.00	898.70	861.70	898.70	3.70	28.53	-94.59	-528.47	-2,537.49	2,594.04	2,561.83	32.21	80.537		
1,000.00	997.47	960.47	997.47	4.15	31.95	-94.90	-528.47	-2,537.49	2,595.35	2,559.27	36.08	71.929		
1,100.00	1,095.78	1,058.78	1,095.78	4.60	35.37	-95.29	-528.47	-2,537.49	2,597.00	2,557.06	39.95	65.008		
1,200.00	1,194.05	1,157.05	1,194.05	5.05	38.79	-95.68	-528.47	-2,537.49	2,598.80	2,554.98	43.82	59.302		
1,300.00	1,292.33	1,255.33	1,292.33	5.50	42.21	-96.08	-528.47	-2,537.49	2,600.73	2,553.03	47.70	54.518		
1,400.00	1,390.61	1,353.61	1,390.61	5.96	45.63	-96.48	-528.47	-2,537.49	2,602.79	2,551.20	51.59	50.453		
1,500.00	1,488.89	1,451.89	1,488.89	6.43	49.05	-96.88	-528.47	-2,537.49	2,604.97	2,549.50	55.48	46.957		
1,600.00	1,587.16	1,550.16	1,587.16	6.89	52.47	-97.27	-528.47	-2,537.49	2,607.29	2,547.92	59.37	43.918		
1,700.00	1,685.44	1,648.44	1,685.44	7.36	55.90	-97.67	-528.47	-2,537.49	2,609.73	2,546.47	63.26	41.254		
1,800.00	1,783.72	1,746.72	1,783.72	7.83	59.32	-98.06	-528.47	-2,537.49	2,612.31	2,545.15	67.15	38.900		
1,900.00	1,882.00	1,845.00	1,882.00	8.30	62.75	-98.46	-528.47	-2,537.49	2,615.01	2,543.96	71.05	36.805		
2,000.00	1,980.27	1,943.27	1,980.27	8.77	66.18	-98.85	-528.47	-2,537.49	2,617.84	2,542.89	74.95	34.928		
2,100.00	2,078.55	2,041.55	2,078.55	9.25	69.60	-99.24	-528.47	-2,537.49	2,620.79	2,541.95	78.85	33.239		
2,200.00	2,176.83	2,139.83	2,176.83	9.72	73.03	-99.64	-528.47	-2,537.49	2,623.88	2,541.13	82.75	31.710		
2,300.00	2,275.11	2,238.11	2,275.11	10.19	76.46	-100.03	-528.47	-2,537.49	2,627.09	2,540.44	86.65	30.319		
2,400.00	2,373.38	2,336.38	2,373.38	10.66	79.89	-100.42	-528.47	-2,537.49	2,630.42	2,539.87	90.55	29.050		
2,500.00	2,471.66	2,434.66	2,471.66	11.14	83.31	-100.81	-528.47	-2,537.49	2,633.88	2,539.43	94.45	27.887		
2,600.00	2,569.94	2,532.94	2,569.94	11.61	86.74	-101.19	-528.47	-2,537.49	2,637.47	2,539.12	98.35	26.817		
2,700.00	2,668.22	2,631.22	2,668.22	12.09	90.17	-101.58	-528.47	-2,537.49	2,641.18	2,538.92	102.25	25.830		
2,800.00	2,766.49	2,729.49	2,766.49	12.56	93.60	-101.97	-528.47	-2,537.49	2,645.01	2,538.85	106.16	24.916		
2,900.00	2,864.77	2,827.77	2,864.77	13.04	97.03	-102.35	-528.47	-2,537.49	2,648.97	2,538.91	110.06	24.068		
3,000.00	2,963.05	2,926.05	2,963.05	13.51	100.46	-102.73	-528.47	-2,537.49	2,653.05	2,539.09	113.96	23.280		
3,100.00	3,061.33	3,024.33	3,061.33	13.99	103.89	-103.12	-528.47	-2,537.49	2,657.25	2,539.39	117.87	22.545		
3,200.00	3,159.60	3,122.60	3,159.60	14.46	107.31	-103.50	-528.47	-2,537.49	2,661.58	2,539.81	121.77	21.857		
3,300.00	3,257.88	3,220.88	3,257.88	14.94	110.74	-103.88	-528.47	-2,537.49	2,666.02	2,540.35	125.67	21.214		
3,400.00	3,356.16	3,319.16	3,356.16	15.41	114.17	-104.26	-528.47	-2,537.49	2,670.59	2,541.01	129.58	20.610		
3,500.00	3,454.43	3,417.43	3,454.43	15.89	117.60	-104.63	-528.47	-2,537.49	2,675.27	2,541.79	133.48	20.042		
3,600.00	3,552.71	3,515.71	3,552.71	16.36	121.03	-105.01	-528.47	-2,537.49	2,680.08	2,542.69	137.39	19.508		
3,700.00	3,650.99	3,613.99	3,650.99	16.84	124.46	-105.38	-528.47	-2,537.49	2,685.00	2,543.71	141.29	19.003		
3,800.00	3,749.27	3,712.27	3,749.27	17.32	127.89	-105.76	-528.47	-2,537.49	2,690.04	2,544.85	145.19	18.527		
3,900.00	3,847.54	3,810.54	3,847.54	17.79	131.32	-106.13	-528.47	-2,537.49	2,695.20	2,546.10	149.10	18.077		
4,000.00	3,945.82	3,908.82	3,945.82	18.27	134.75	-106.50	-528.47	-2,537.49	2,700.48	2,547.48	153.00	17.650		
4,100.00	4,044.10	4,007.10	4,044.10	18.75	138.18	-106.87	-528.47	-2,537.49	2,705.87	2,548.96	156.91	17.245		
4,200.00	4,142.38	4,105.38	4,142.38	19.22	141.61	-107.24	-528.47	-2,537.49	2,711.38	2,550.56	160.81	16.861		
4,300.00	4,240.65	4,203.65	4,240.65	19.70	145.04	-107.60	-528.47	-2,537.49	2,717.00	2,552.28	164.72	16.495		
4,400.00	4,338.93	4,301.93	4,338.93	20.18	148.47	-107.97	-528.47	-2,537.49	2,722.73	2,554.11	168.62	16.147		
4,500.00	4,437.21	4,400.21	4,437.21	20.65	151.90	-108.33	-528.47	-2,537.49	2,728.58	2,556.06	172.52	15.816		
4,600.00	4,535.49	4,501.51	4,535.49	21.13	155.44	-108.69	-528.47	-2,537.49	2,734.54	2,558.01	176.53	15.490		
4,700.00	4,633.76	4,603.24	4,633.76	21.61	158.99	-109.06	-528.47	-2,537.49	2,740.61	2,560.06	180.56	15.179		
4,800.00	4,732.04	4,704.96	4,732.04	22.08	162.54	-109.41	-528.47	-2,537.49	2,746.80	2,562.22	184.58	14.881		
4,900.00	4,830.32	4,806.68	4,830.32	22.56	166.09	-109.77	-528.47	-2,537.49	2,753.09	2,564.48	188.61	14.597		
5,000.00	4,928.60	4,908.40	4,928.60	23.04	169.64	-110.13	-528.47	-2,537.49	2,759.49	2,566.86	192.63	14.325		
5,100.00	5,026.87	4,989.87	5,026.87	23.51	172.48	-110.48	-528.47	-2,537.49	2,766.01	2,570.06	195.95	14.116		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,088.15	5,125.15	23.99	175.91	-110.83	-528.47	-2,537.49	2,772.62	2,572.77	199.85	13.873		
5,300.00	5,223.43	5,186.43	5,223.43	24.47	179.34	-111.18	-528.47	-2,537.49	2,779.35	2,575.60	203.75	13.641		
5,400.00	5,321.71	5,284.71	5,321.71	24.94	182.77	-111.53	-528.47	-2,537.49	2,786.18	2,578.53	207.66	13.417		
5,500.00	5,419.98	5,382.98	5,419.98	25.42	186.20	-111.88	-528.47	-2,537.49	2,793.12	2,581.56	211.56	13.202		
5,600.00	5,518.26	5,481.26	5,518.26	25.90	189.63	-112.23	-528.47	-2,537.49	2,800.17	2,584.70	215.46	12.996		
5,700.00	5,616.54	5,579.54	5,616.54	26.38	193.06	-112.57	-528.47	-2,537.49	2,807.31	2,587.94	219.37	12.797		
5,800.00	5,714.82	5,677.82	5,714.82	26.85	196.49	-112.91	-528.47	-2,537.49	2,814.56	2,591.29	223.27	12.606		
5,900.00	5,813.09	5,776.09	5,813.09	27.33	199.93	-113.25	-528.47	-2,537.49	2,821.92	2,594.74	227.17	12.422		
6,000.00	5,911.37	5,874.37	5,911.37	27.81	203.36	-113.59	-528.47	-2,537.49	2,829.37	2,598.29	231.08	12.244		
6,100.00	6,009.65	5,972.65	6,009.65	28.28	206.79	-113.93	-528.47	-2,537.49	2,836.93	2,601.95	234.98	12.073		
6,200.00	6,107.93	6,070.93	6,107.93	28.76	210.22	-114.26	-528.47	-2,537.49	2,844.58	2,605.70	238.88	11.908		
6,300.00	6,206.20	6,169.20	6,206.20	29.24	213.65	-114.60	-528.47	-2,537.49	2,852.33	2,609.55	242.78	11.748		
6,400.00	6,304.48	6,267.48	6,304.48	29.72	217.08	-114.93	-528.47	-2,537.49	2,860.19	2,613.50	246.69	11.594		
6,500.00	6,402.76	6,365.76	6,402.76	30.19	220.51	-115.26	-528.47	-2,537.49	2,868.14	2,617.55	250.59	11.446		
6,600.00	6,501.04	6,464.04	6,501.04	30.67	223.94	-115.59	-528.47	-2,537.49	2,876.19	2,621.70	254.49	11.302		
6,700.00	6,599.31	6,562.31	6,599.31	31.15	227.37	-115.92	-528.47	-2,537.49	2,884.33	2,625.94	258.39	11.163		
6,800.00	6,697.59	6,660.59	6,697.59	31.63	230.80	-95.18	-528.47	-2,537.49	2,891.02	2,628.73	262.29	11.022		
6,900.00	6,794.18	6,757.18	6,794.18	32.10	234.17	-70.05	-528.47	-2,537.49	2,886.45	2,620.31	266.14	10.846		
7,000.00	6,886.96	6,849.96	6,886.96	32.55	237.41	-60.07	-528.47	-2,537.49	2,869.19	2,599.34	269.85	10.633		
7,100.00	6,973.57	6,936.57	6,973.57	32.99	240.43	-56.59	-528.47	-2,537.49	2,839.92	2,566.60	273.33	10.390		
7,200.00	7,051.87	7,014.87	7,051.87	33.41	243.17	-56.58	-528.47	-2,537.49	2,799.68	2,523.16	276.52	10.125		
7,300.00	7,119.93	7,082.93	7,119.93	33.85	245.54	-59.01	-528.47	-2,537.49	2,749.78	2,470.40	279.39	9.842		
7,400.00	7,176.09	7,139.09	7,176.09	34.39	247.50	-63.48	-528.47	-2,537.49	2,691.79	2,409.92	281.88	9.550		
7,500.00	7,218.95	7,181.95	7,218.95	35.09	249.00	-69.79	-528.47	-2,537.49	2,627.45	2,343.48	283.97	9.252		
7,600.00	7,247.46	7,210.46	7,247.46	35.98	249.99	-77.65	-528.47	-2,537.49	2,558.62	2,272.96	285.66	8.957		
7,700.00	7,260.92	7,223.92	7,260.92	37.04	250.46	-86.54	-528.47	-2,537.49	2,487.19	2,200.27	286.92	8.669		
7,800.00	7,261.75	7,224.75	7,261.75	38.23	250.49	-90.24	-528.47	-2,537.49	2,415.32	2,127.48	287.84	8.391		
7,900.00	7,261.33	7,224.33	7,261.33	39.59	250.48	-90.23	-528.47	-2,537.49	2,345.32	2,056.45	288.87	8.119		
8,000.00	7,260.91	7,223.91	7,260.91	41.10	250.46	-90.21	-528.47	-2,537.49	2,277.57	1,987.49	290.08	7.852		
8,100.00	7,260.49	7,223.49	7,260.49	42.75	250.45	-90.20	-528.47	-2,537.49	2,212.26	1,920.80	291.46	7.590		
8,200.00	7,260.07	7,223.07	7,260.07	44.53	250.43	-90.19	-528.47	-2,537.49	2,149.62	1,856.59	293.03	7.336		
8,300.00	7,259.65	7,222.65	7,259.65	46.41	250.42	-90.17	-528.47	-2,537.49	2,089.89	1,795.11	294.77	7.090		
8,400.00	7,259.23	7,222.23	7,259.23	48.39	250.40	-90.16	-528.47	-2,537.49	2,033.32	1,736.62	296.70	6.853		
8,500.00	7,258.81	7,221.81	7,258.81	50.45	250.39	-90.14	-528.47	-2,537.49	1,980.19	1,681.39	298.81	6.627		
8,600.00	7,258.39	7,221.39	7,258.39	52.59	250.38	-90.13	-528.47	-2,537.49	1,930.79	1,629.72	301.07	6.413		
8,700.00	7,257.97	7,220.97	7,257.97	54.79	250.36	-90.12	-528.47	-2,537.49	1,885.39	1,581.92	303.48	6.213		
8,800.00	7,257.55	7,220.55	7,257.55	57.05	250.35	-90.10	-528.47	-2,537.49	1,844.31	1,538.31	306.00	6.027		
8,900.00	7,257.13	7,220.13	7,257.13	59.36	250.33	-90.09	-528.47	-2,537.49	1,807.83	1,499.21	308.62	5.858		
9,000.00	7,256.71	7,219.71	7,256.71	61.72	250.32	-90.07	-528.47	-2,537.49	1,776.24	1,464.94	311.29	5.706		
9,100.00	7,256.29	7,219.29	7,256.29	64.12	250.30	-90.06	-528.47	-2,537.49	1,749.80	1,435.81	313.99	5.573		
9,200.00	7,255.87	7,218.87	7,255.87	66.56	250.29	-90.04	-528.47	-2,537.49	1,728.74	1,412.08	316.66	5.459		
9,300.00	7,255.45	7,218.45	7,255.45	69.02	250.27	-90.03	-528.47	-2,537.49	1,713.28	1,394.01	319.26	5.366		
9,400.00	7,255.03	7,218.03	7,255.03	71.52	250.26	-90.02	-528.47	-2,537.49	1,703.55	1,381.79	321.76	5.294		
9,500.00	7,254.61	7,217.61	7,254.61	74.04	250.24	-90.00	-528.47	-2,537.49	1,699.66	1,375.55	324.12	5.244		
9,516.17	7,254.54	7,217.54	7,254.54	74.45	250.24	-90.00	-528.47	-2,537.49	1,699.59	1,375.10	324.48	5.238 CC, ES		
9,600.00	7,254.19	7,217.19	7,254.19	76.58	250.23	-89.99	-528.47	-2,537.49	1,701.65	1,375.36	326.29	5.215		
9,700.00	7,253.77	7,216.77	7,253.77	79.15	250.21	-89.97	-528.47	-2,537.49	1,709.50	1,381.24	328.26	5.208 SF		
9,800.00	7,253.35	7,216.35	7,253.35	81.74	250.20	-89.96	-528.47	-2,537.49	1,723.12	1,393.12	330.00	5.222		
9,900.00	7,252.92	7,215.92	7,252.92	84.34	250.18	-89.95	-528.47	-2,537.49	1,742.39	1,410.88	331.50	5.256		
10,000.00	7,252.50	7,215.50	7,252.50	86.96	250.17	-89.93	-528.47	-2,537.49	1,767.11	1,434.34	332.77	5.310		
10,100.00	7,252.08	7,215.08	7,252.08	89.59	250.16	-89.92	-528.47	-2,537.49	1,797.07	1,463.27	333.80	5.384		
10,200.00	7,251.66	7,214.66	7,251.66	92.24	250.14	-89.90	-528.47	-2,537.49	1,832.00	1,497.39	334.61	5.475		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,251.24	7,214.24	7,251.24	94.90	250.13	-89.89	-528.47	-2,537.49	1,871.62	1,536.42	335.21	5.583	
10,400.00	7,250.82	7,213.82	7,250.82	97.57	250.11	-89.87	-528.47	-2,537.49	1,915.66	1,580.04	335.62	5.708	
10,500.00	7,250.40	7,213.40	7,250.40	100.25	250.10	-89.86	-528.47	-2,537.49	1,963.80	1,627.94	335.86	5.847	
10,600.00	7,249.98	7,212.98	7,249.98	102.93	250.08	-89.85	-528.47	-2,537.49	2,015.76	1,679.80	335.95	6.000	
10,700.00	7,249.56	7,212.56	7,249.56	105.63	250.07	-89.83	-528.47	-2,537.49	2,071.24	1,735.32	335.92	6.166	
10,800.00	7,249.14	7,212.14	7,249.14	108.34	250.05	-89.82	-528.47	-2,537.49	2,129.98	1,794.19	335.78	6.343	
10,900.00	7,248.72	7,211.72	7,248.72	111.05	250.04	-89.80	-528.47	-2,537.49	2,191.70	1,856.15	335.55	6.532	
11,000.00	7,248.30	7,211.30	7,248.30	113.77	250.02	-89.79	-528.47	-2,537.49	2,256.17	1,920.93	335.25	6.730	
11,100.00	7,247.88	7,210.88	7,247.88	116.50	250.01	-89.78	-528.47	-2,537.49	2,323.16	1,988.28	334.88	6.937	
11,200.00	7,247.46	7,210.46	7,247.46	119.23	249.99	-89.76	-528.47	-2,537.49	2,392.45	2,057.98	334.47	7.153	
11,300.00	7,247.04	7,210.04	7,247.04	121.97	249.98	-89.75	-528.47	-2,537.49	2,463.86	2,129.83	334.03	7.376	
11,400.00	7,246.62	7,209.62	7,246.62	124.72	249.96	-89.73	-528.47	-2,537.49	2,537.20	2,203.64	333.56	7.606	
11,500.00	7,246.20	7,209.20	7,246.20	127.46	249.95	-89.72	-528.47	-2,537.49	2,612.30	2,279.23	333.07	7.843	
11,600.00	7,245.78	7,208.78	7,245.78	130.22	249.94	-89.70	-528.47	-2,537.49	2,689.03	2,356.46	332.57	8.086	
11,700.00	7,245.36	7,208.36	7,245.36	132.98	249.92	-89.69	-528.47	-2,537.49	2,767.24	2,435.18	332.06	8.334	
11,800.00	7,244.94	7,207.94	7,244.94	135.74	249.91	-89.68	-528.47	-2,537.49	2,846.82	2,515.27	331.55	8.586	
11,900.00	7,244.52	7,207.52	7,244.52	138.50	249.89	-89.66	-528.47	-2,537.49	2,927.65	2,596.61	331.04	8.844	
12,000.00	7,244.10	7,207.10	7,244.10	141.27	249.88	-89.65	-528.47	-2,537.49	3,009.64	2,679.10	330.53	9.105	
12,100.00	7,243.68	7,206.68	7,243.68	144.04	249.86	-89.63	-528.47	-2,537.49	3,092.68	2,762.65	330.04	9.371	
12,200.00	7,243.26	7,206.26	7,243.26	146.82	249.85	-89.62	-528.47	-2,537.49	3,176.70	2,847.16	329.54	9.640	
12,300.00	7,242.84	7,205.84	7,242.84	149.60	249.83	-89.61	-528.47	-2,537.49	3,261.62	2,932.56	329.06	9.912	
12,400.00	7,242.42	7,205.42	7,242.42	152.38	249.82	-89.59	-528.47	-2,537.49	3,347.38	3,018.79	328.59	10.187	
12,500.00	7,242.00	7,205.00	7,242.00	155.16	249.80	-89.58	-528.47	-2,537.49	3,433.90	3,105.77	328.13	10.465	
12,600.00	7,241.58	7,204.58	7,241.58	157.95	249.79	-89.56	-528.47	-2,537.49	3,521.14	3,193.46	327.69	10.745	
12,700.00	7,241.16	7,204.16	7,241.16	160.74	249.77	-89.55	-528.47	-2,537.49	3,609.05	3,281.79	327.25	11.028	
12,800.00	7,240.74	7,203.74	7,240.74	163.53	249.76	-89.53	-528.47	-2,537.49	3,697.56	3,370.73	326.83	11.313	
12,900.00	7,240.32	7,203.32	7,240.32	166.32	249.74	-89.52	-528.47	-2,537.49	3,786.65	3,460.23	326.42	11.601	
13,000.00	7,239.89	7,202.89	7,239.89	169.12	249.73	-89.51	-528.47	-2,537.49	3,876.27	3,550.25	326.02	11.890	
13,100.00	7,239.47	7,202.47	7,239.47	171.92	249.71	-89.49	-528.47	-2,537.49	3,966.39	3,640.75	325.64	12.180	
13,200.00	7,239.05	7,202.05	7,239.05	174.72	249.70	-89.48	-528.47	-2,537.49	4,056.97	3,731.70	325.27	12.473	
13,300.00	7,238.63	7,201.63	7,238.63	177.52	249.69	-89.46	-528.47	-2,537.49	4,147.98	3,823.07	324.91	12.767	
13,400.00	7,238.21	7,201.21	7,238.21	180.32	249.67	-89.45	-528.47	-2,537.49	4,239.40	3,914.84	324.56	13.062	
13,500.00	7,237.79	7,200.79	7,237.79	183.13	249.66	-89.44	-528.47	-2,537.49	4,331.19	4,006.97	324.22	13.359	
13,600.00	7,237.37	7,200.37	7,237.37	185.93	249.64	-89.42	-528.47	-2,537.49	4,423.35	4,099.45	323.90	13.657	
13,700.00	7,236.95	7,200.05	7,236.95	188.74	249.63	-89.41	-528.47	-2,537.49	4,515.83	4,192.25	323.59	13.956	
13,800.00	7,236.53	7,200.47	7,236.53	191.55	249.64	-89.39	-528.47	-2,537.49	4,608.63	4,285.32	323.31	14.254	
13,900.00	7,236.11	7,200.89	7,236.11	194.36	249.66	-89.38	-528.47	-2,537.49	4,701.73	4,378.68	323.05	14.554	
14,000.00	7,235.69	7,201.31	7,235.69	197.17	249.67	-89.36	-528.47	-2,537.49	4,795.10	4,472.31	322.80	14.855	
14,100.00	7,235.27	7,201.73	7,235.27	199.98	249.69	-89.35	-528.47	-2,537.49	4,888.74	4,566.18	322.55	15.156	
14,200.00	7,234.85	7,202.15	7,234.85	202.80	249.70	-89.34	-528.47	-2,537.49	4,982.62	4,660.30	322.32	15.459	
14,300.00	7,234.43	7,202.57	7,234.43	205.61	249.72	-89.32	-528.47	-2,537.49	5,076.74	4,754.64	322.09	15.762	
14,400.00	7,234.01	7,202.99	7,234.01	208.43	249.73	-89.31	-528.47	-2,537.49	5,171.07	4,849.20	321.88	16.065	
14,500.00	7,233.59	7,203.41	7,233.59	211.25	249.75	-89.29	-528.47	-2,537.49	5,265.62	4,943.95	321.67	16.370	
14,600.00	7,233.17	7,203.83	7,233.17	214.06	249.76	-89.28	-528.47	-2,537.49	5,360.36	5,038.89	321.47	16.674	
14,700.00	7,232.75	7,204.25	7,232.75	216.88	249.78	-89.27	-528.47	-2,537.49	5,455.30	5,134.02	321.28	16.980	
14,800.00	7,232.33	7,204.67	7,232.33	219.70	249.79	-89.25	-528.47	-2,537.49	5,550.41	5,229.31	321.10	17.286	
14,900.00	7,231.91	7,205.09	7,231.91	222.52	249.81	-89.24	-528.47	-2,537.49	5,645.68	5,324.76	320.92	17.592	
15,000.00	7,231.49	7,205.51	7,231.49	225.35	249.82	-89.22	-528.47	-2,537.49	5,741.12	5,420.37	320.75	17.899	
15,100.00	7,231.07	7,205.93	7,231.07	228.17	249.84	-89.21	-528.47	-2,537.49	5,836.72	5,516.12	320.59	18.206	
15,116.21	7,231.00	7,206.00	7,231.00	228.63	249.84	-89.21	-528.47	-2,537.49	5,852.23	5,531.66	320.57	18.256	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	48.00	0.00	3.28	-109.48	-1,697.55	-4,799.02	5,090.64					
100.00	100.00	52.00	100.00	0.18	3.40	-109.48	-1,697.55	-4,799.02	5,090.41	5,086.83	3.58	1,422.375		
200.00	200.00	152.00	200.00	0.61	4.84	-109.48	-1,697.55	-4,799.02	5,090.41	5,084.95	5.46	933.071		
300.00	300.00	252.00	300.00	1.05	7.78	-109.48	-1,697.55	-4,799.02	5,090.41	5,081.58	8.83	576.466		
400.00	400.00	352.00	400.00	1.49	11.04	-109.48	-1,697.55	-4,799.02	5,090.41	5,077.88	12.53	406.157		
500.00	500.00	452.00	500.00	1.93	14.41	-109.48	-1,697.55	-4,799.02	5,090.41	5,074.07	16.34	311.480		
600.00	599.98	551.98	599.98	2.37	17.83	-101.75	-1,697.55	-4,799.02	5,090.77	5,070.57	20.20	252.055		
700.00	699.84	651.84	699.84	2.81	21.26	-101.78	-1,697.55	-4,799.02	5,091.83	5,067.76	24.07	211.538		
800.00	799.45	751.45	799.45	3.26	24.71	-101.84	-1,697.55	-4,799.02	5,093.62	5,065.67	27.95	182.238		
900.00	898.70	850.70	898.70	3.70	28.14	-101.93	-1,697.55	-4,799.02	5,096.15	5,064.32	31.83	160.109		
1,000.00	997.47	949.47	997.47	4.15	31.57	-102.03	-1,697.55	-4,799.02	5,099.44	5,063.74	35.70	142.833		
1,100.00	1,095.78	1,047.78	1,095.78	4.60	34.99	-102.21	-1,697.55	-4,799.02	5,103.34	5,063.77	39.57	128.974		
1,200.00	1,194.05	1,146.05	1,194.05	5.05	38.40	-102.40	-1,697.55	-4,799.02	5,107.35	5,063.90	43.44	117.565		
1,300.00	1,292.33	1,244.33	1,292.33	5.50	41.82	-102.60	-1,697.55	-4,799.02	5,111.41	5,064.09	47.32	108.013		
1,400.00	1,390.61	1,342.61	1,390.61	5.96	45.24	-102.80	-1,697.55	-4,799.02	5,115.55	5,064.34	51.21	99.901		
1,500.00	1,488.89	1,440.89	1,488.89	6.43	48.67	-103.00	-1,697.55	-4,799.02	5,119.74	5,064.65	55.09	92.928		
1,600.00	1,587.16	1,539.16	1,587.16	6.89	52.09	-103.20	-1,697.55	-4,799.02	5,124.00	5,065.01	58.98	86.871		
1,700.00	1,685.44	1,637.44	1,685.44	7.36	55.51	-103.40	-1,697.55	-4,799.02	5,128.32	5,065.44	62.88	81.562		
1,800.00	1,783.72	1,735.72	1,783.72	7.83	58.94	-103.59	-1,697.55	-4,799.02	5,132.70	5,065.93	66.77	76.870		
1,900.00	1,882.00	1,834.00	1,882.00	8.30	62.37	-103.79	-1,697.55	-4,799.02	5,137.15	5,066.48	70.67	72.695		
2,000.00	1,980.27	1,932.27	1,980.27	8.77	65.79	-103.99	-1,697.55	-4,799.02	5,141.66	5,067.10	74.56	68.956		
2,100.00	2,078.55	2,030.55	2,078.55	9.25	69.22	-104.18	-1,697.55	-4,799.02	5,146.23	5,067.77	78.46	65.589		
2,200.00	2,176.83	2,128.83	2,176.83	9.72	72.65	-104.38	-1,697.55	-4,799.02	5,150.87	5,068.51	82.36	62.540		
2,300.00	2,275.11	2,227.11	2,275.11	10.19	76.07	-104.58	-1,697.55	-4,799.02	5,155.56	5,069.30	86.26	59.767		
2,400.00	2,373.38	2,325.38	2,373.38	10.66	79.50	-104.77	-1,697.55	-4,799.02	5,160.32	5,070.16	90.16	57.234		
2,500.00	2,471.66	2,423.66	2,471.66	11.14	82.93	-104.97	-1,697.55	-4,799.02	5,165.14	5,071.08	94.06	54.912		
2,600.00	2,569.94	2,521.94	2,569.94	11.61	86.36	-105.16	-1,697.55	-4,799.02	5,170.02	5,072.06	97.96	52.775		
2,700.00	2,668.22	2,620.22	2,668.22	12.09	89.79	-105.36	-1,697.55	-4,799.02	5,174.97	5,073.10	101.87	50.801		
2,800.00	2,766.49	2,718.49	2,766.49	12.56	93.21	-105.55	-1,697.55	-4,799.02	5,179.97	5,074.20	105.77	48.974		
2,900.00	2,864.77	2,816.77	2,864.77	13.04	96.64	-105.74	-1,697.55	-4,799.02	5,185.03	5,075.36	109.67	47.278		
3,000.00	2,963.05	2,915.05	2,963.05	13.51	100.07	-105.94	-1,697.55	-4,799.02	5,190.16	5,076.59	113.57	45.698		
3,100.00	3,061.33	3,013.33	3,061.33	13.99	103.50	-106.13	-1,697.55	-4,799.02	5,195.35	5,077.87	117.48	44.224		
3,200.00	3,159.60	3,111.60	3,159.60	14.46	106.93	-106.32	-1,697.55	-4,799.02	5,200.59	5,079.21	121.38	42.845		
3,300.00	3,257.88	3,209.88	3,257.88	14.94	110.36	-106.51	-1,697.55	-4,799.02	5,205.90	5,080.62	125.29	41.552		
3,400.00	3,356.16	3,308.16	3,356.16	15.41	113.79	-106.71	-1,697.55	-4,799.02	5,211.27	5,082.08	129.19	40.338		
3,500.00	3,454.43	3,406.43	3,454.43	15.89	117.22	-106.90	-1,697.55	-4,799.02	5,216.70	5,083.60	133.09	39.196		
3,600.00	3,552.71	3,504.71	3,552.71	16.36	120.65	-107.09	-1,697.55	-4,799.02	5,222.18	5,085.19	137.00	38.119		
3,700.00	3,650.99	3,602.99	3,650.99	16.84	124.08	-107.28	-1,697.55	-4,799.02	5,227.73	5,086.83	140.90	37.102		
3,800.00	3,749.27	3,701.27	3,749.27	17.32	127.51	-107.47	-1,697.55	-4,799.02	5,233.34	5,088.53	144.81	36.140		
3,900.00	3,847.54	3,800.46	3,847.54	17.79	130.97	-107.66	-1,697.55	-4,799.02	5,239.00	5,090.26	148.74	35.222		
4,000.00	3,945.82	3,902.18	3,945.82	18.27	134.52	-107.85	-1,697.55	-4,799.02	5,244.73	5,091.96	152.77	34.332		
4,100.00	4,044.10	4,003.90	4,044.10	18.75	138.07	-108.04	-1,697.55	-4,799.02	5,250.51	5,093.72	156.79	33.487		
4,200.00	4,142.38	4,105.62	4,142.38	19.22	141.62	-108.23	-1,697.55	-4,799.02	5,256.35	5,095.54	160.82	32.685		
4,300.00	4,240.65	4,207.35	4,240.65	19.70	145.17	-108.41	-1,697.55	-4,799.02	5,262.25	5,097.41	164.84	31.923		
4,400.00	4,338.93	4,309.07	4,338.93	20.18	148.72	-108.60	-1,697.55	-4,799.02	5,268.21	5,099.35	168.87	31.197		
4,500.00	4,437.21	4,389.21	4,437.21	20.65	151.52	-108.79	-1,697.55	-4,799.02	5,274.23	5,102.09	172.14	30.639		
4,600.00	4,535.49	4,487.49	4,535.49	21.13	154.95	-108.98	-1,697.55	-4,799.02	5,280.30	5,104.26	176.04	29.994		
4,700.00	4,633.76	4,585.76	4,633.76	21.61	158.38	-109.16	-1,697.55	-4,799.02	5,286.44	5,106.49	179.95	29.378		
4,800.00	4,732.04	4,684.04	4,732.04	22.08	161.81	-109.35	-1,697.55	-4,799.02	5,292.62	5,108.77	183.85	28.787		
4,900.00	4,830.32	4,782.32	4,830.32	22.56	165.24	-109.53	-1,697.55	-4,799.02	5,298.87	5,111.11	187.76	28.222		
5,000.00	4,928.60	4,880.60	4,928.60	23.04	168.67	-109.72	-1,697.55	-4,799.02	5,305.18	5,113.51	191.66	27.680		
5,100.00	5,026.87	4,978.87	5,026.87	23.51	172.10	-109.90	-1,697.55	-4,799.02	5,311.54	5,115.97	195.57	27.160		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,077.15	5,125.15	23.99	175.53	-110.09	-1,697.55	-4,799.02	5,317.95	5,118.48	199.47	26.660		
5,300.00	5,223.43	5,175.43	5,223.43	24.47	178.96	-110.27	-1,697.55	-4,799.02	5,324.43	5,121.05	203.38	26.180		
5,400.00	5,321.71	5,273.71	5,321.71	24.94	182.39	-110.46	-1,697.55	-4,799.02	5,330.96	5,123.67	207.28	25.718		
5,500.00	5,419.98	5,371.98	5,419.98	25.42	185.82	-110.64	-1,697.55	-4,799.02	5,337.54	5,126.36	211.19	25.274		
5,600.00	5,518.26	5,470.26	5,518.26	25.90	189.25	-110.82	-1,697.55	-4,799.02	5,344.18	5,129.09	215.09	24.846		
5,700.00	5,616.54	5,568.54	5,616.54	26.38	192.68	-111.00	-1,697.55	-4,799.02	5,350.88	5,131.89	219.00	24.434		
5,800.00	5,714.82	5,666.82	5,714.82	26.85	196.11	-111.19	-1,697.55	-4,799.02	5,357.63	5,134.73	222.90	24.036		
5,900.00	5,813.09	5,765.09	5,813.09	27.33	199.54	-111.37	-1,697.55	-4,799.02	5,364.44	5,137.64	226.81	23.652		
6,000.00	5,911.37	5,863.37	5,911.37	27.81	202.97	-111.55	-1,697.55	-4,799.02	5,371.30	5,140.59	230.71	23.282		
6,100.00	6,009.65	5,961.65	6,009.65	28.28	206.40	-111.73	-1,697.55	-4,799.02	5,378.22	5,143.61	234.61	22.924		
6,200.00	6,107.93	6,059.93	6,107.93	28.76	209.83	-111.91	-1,697.55	-4,799.02	5,385.19	5,146.67	238.52	22.578		
6,300.00	6,206.20	6,158.20	6,206.20	29.24	213.26	-112.09	-1,697.55	-4,799.02	5,392.22	5,149.80	242.42	22.243		
6,400.00	6,304.48	6,256.48	6,304.48	29.72	216.69	-112.27	-1,697.55	-4,799.02	5,399.30	5,152.97	246.33	21.919		
6,500.00	6,402.76	6,354.76	6,402.76	30.19	220.12	-112.45	-1,697.55	-4,799.02	5,406.43	5,156.20	250.23	21.606		
6,600.00	6,501.04	6,453.04	6,501.04	30.67	223.55	-112.62	-1,697.55	-4,799.02	5,413.62	5,159.49	254.14	21.302		
6,700.00	6,599.31	6,551.31	6,599.31	31.15	226.98	-112.80	-1,697.55	-4,799.02	5,420.86	5,162.82	258.04	21.008		
6,800.00	6,697.59	6,649.59	6,697.59	31.63	230.41	-91.94	-1,697.55	-4,799.02	5,426.56	5,164.62	261.94	20.717		
6,900.00	6,794.18	6,746.18	6,794.18	32.10	233.79	-66.64	-1,697.55	-4,799.02	5,420.52	5,154.72	265.79	20.394		
7,000.00	6,886.96	6,838.96	6,886.96	32.55	237.03	-56.37	-1,697.55	-4,799.02	5,401.18	5,131.67	269.50	20.041		
7,100.00	6,973.57	6,925.57	6,973.57	32.99	240.05	-52.51	-1,697.55	-4,799.02	5,369.13	5,096.15	272.98	19.668		
7,200.00	7,051.87	7,003.87	7,051.87	33.41	242.78	-52.08	-1,697.55	-4,799.02	5,325.31	5,049.14	276.17	19.283		
7,300.00	7,119.93	7,071.93	7,119.93	33.85	245.16	-54.11	-1,697.55	-4,799.02	5,270.91	4,991.90	279.01	18.892		
7,400.00	7,176.09	7,128.09	7,176.09	34.39	247.12	-58.37	-1,697.55	-4,799.02	5,207.40	4,925.95	281.45	18.502		
7,500.00	7,218.95	7,170.95	7,218.95	35.09	248.61	-64.96	-1,697.55	-4,799.02	5,136.45	4,852.98	283.47	18.120		
7,600.00	7,247.46	7,200.54	7,247.46	35.98	249.65	-74.01	-1,697.55	-4,799.02	5,059.88	4,774.80	285.07	17.749		
7,700.00	7,260.92	7,212.92	7,260.92	37.04	250.08	-85.32	-1,697.55	-4,799.02	4,979.60	4,693.49	286.12	17.404		
7,800.00	7,261.75	7,213.75	7,261.75	38.23	250.11	-90.34	-1,697.55	-4,799.02	4,897.82	4,611.01	286.81	17.077		
7,900.00	7,261.33	7,213.33	7,261.33	39.59	250.09	-90.33	-1,697.55	-4,799.02	4,816.56	4,529.02	287.54	16.751		
8,000.00	7,260.91	7,212.91	7,260.91	41.10	250.08	-90.32	-1,697.55	-4,799.02	4,736.02	4,447.64	288.38	16.423		
8,100.00	7,260.49	7,212.49	7,260.49	42.75	250.06	-90.31	-1,697.55	-4,799.02	4,656.24	4,366.92	289.32	16.094		
8,200.00	7,260.07	7,212.07	7,260.07	44.53	250.05	-90.31	-1,697.55	-4,799.02	4,577.25	4,286.89	290.36	15.764		
8,300.00	7,259.65	7,211.65	7,259.65	46.41	250.04	-90.30	-1,697.55	-4,799.02	4,499.10	4,207.59	291.51	15.434		
8,400.00	7,259.23	7,211.23	7,259.23	48.39	250.02	-90.29	-1,697.55	-4,799.02	4,421.83	4,129.06	292.77	15.104		
8,500.00	7,258.81	7,210.81	7,258.81	50.45	250.01	-90.28	-1,697.55	-4,799.02	4,345.48	4,051.35	294.13	14.774		
8,600.00	7,258.39	7,210.39	7,258.39	52.59	249.99	-90.27	-1,697.55	-4,799.02	4,270.11	3,974.50	295.61	14.445		
8,700.00	7,257.97	7,209.97	7,257.97	54.79	249.98	-90.26	-1,697.55	-4,799.02	4,195.77	3,898.57	297.21	14.117		
8,800.00	7,257.55	7,209.55	7,257.55	57.05	249.96	-90.25	-1,697.55	-4,799.02	4,122.52	3,823.61	298.91	13.792		
8,900.00	7,257.13	7,209.13	7,257.13	59.36	249.95	-90.25	-1,697.55	-4,799.02	4,050.41	3,749.68	300.73	13.469		
9,000.00	7,256.71	7,208.71	7,256.71	61.72	249.93	-90.24	-1,697.55	-4,799.02	3,979.50	3,676.84	302.66	13.148		
9,100.00	7,256.29	7,208.29	7,256.29	64.12	249.92	-90.23	-1,697.55	-4,799.02	3,909.87	3,605.16	304.71	12.832		
9,200.00	7,255.87	7,207.87	7,255.87	66.56	249.90	-90.22	-1,697.55	-4,799.02	3,841.58	3,534.72	306.87	12.519		
9,300.00	7,255.45	7,207.45	7,255.45	69.02	249.89	-90.21	-1,697.55	-4,799.02	3,774.71	3,465.57	309.14	12.210		
9,400.00	7,255.03	7,207.03	7,255.03	71.52	249.87	-90.20	-1,697.55	-4,799.02	3,709.32	3,397.80	311.52	11.907		
9,500.00	7,254.61	7,206.61	7,254.61	74.04	249.86	-90.20	-1,697.55	-4,799.02	3,645.50	3,331.50	314.01	11.610		
9,600.00	7,254.19	7,206.19	7,254.19	76.58	249.84	-90.19	-1,697.55	-4,799.02	3,583.34	3,266.74	316.60	11.318		
9,700.00	7,253.77	7,205.77	7,253.77	79.15	249.83	-90.18	-1,697.55	-4,799.02	3,522.93	3,203.63	319.30	11.033		
9,800.00	7,253.35	7,205.35	7,253.35	81.74	249.82	-90.17	-1,697.55	-4,799.02	3,464.34	3,142.25	322.09	10.756		
9,900.00	7,252.92	7,204.92	7,252.92	84.34	249.80	-90.16	-1,697.55	-4,799.02	3,407.68	3,082.70	324.99	10.486		
10,000.00	7,252.50	7,204.50	7,252.50	86.96	249.79	-90.15	-1,697.55	-4,799.02	3,353.05	3,025.08	327.97	10.224		
10,100.00	7,252.08	7,204.08	7,252.08	89.59	249.77	-90.14	-1,697.55	-4,799.02	3,300.55	2,969.51	331.03	9.970		
10,200.00	7,251.66	7,203.66	7,251.66	92.24	249.76	-90.14	-1,697.55	-4,799.02	3,250.27	2,916.09	334.17	9.726		
10,300.00	7,251.24	7,203.24	7,251.24	94.90	249.74	-90.13	-1,697.55	-4,799.02	3,202.33	2,864.94	337.38	9.492		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,202.82	7,250.82	97.57	249.73	-90.12	-1,697.55	-4,799.02	3,156.82	2,816.17	340.65	9.267		
10,500.00	7,250.40	7,202.40	7,250.40	100.25	249.71	-90.11	-1,697.55	-4,799.02	3,113.87	2,769.90	343.97	9.053		
10,600.00	7,249.98	7,201.98	7,249.98	102.93	249.70	-90.10	-1,697.55	-4,799.02	3,073.57	2,726.24	347.33	8.849		
10,700.00	7,249.56	7,201.56	7,249.56	105.63	249.68	-90.09	-1,697.55	-4,799.02	3,036.03	2,685.32	350.71	8.657		
10,800.00	7,249.14	7,201.14	7,249.14	108.34	249.67	-90.08	-1,697.55	-4,799.02	3,001.35	2,647.26	354.10	8.476		
10,900.00	7,248.72	7,200.72	7,248.72	111.05	249.65	-90.08	-1,697.55	-4,799.02	2,969.64	2,612.16	357.48	8.307		
11,000.00	7,248.30	7,200.30	7,248.30	113.77	249.64	-90.07	-1,697.55	-4,799.02	2,940.99	2,580.14	360.85	8.150		
11,100.00	7,247.88	7,200.12	7,247.88	116.50	249.63	-90.06	-1,697.55	-4,799.02	2,915.49	2,551.30	364.19	8.005		
11,200.00	7,247.46	7,200.54	7,247.46	119.23	249.65	-90.05	-1,697.55	-4,799.02	2,893.22	2,525.72	367.50	7.873		
11,300.00	7,247.04	7,200.96	7,247.04	121.97	249.66	-90.04	-1,697.55	-4,799.02	2,874.26	2,503.52	370.74	7.753		
11,400.00	7,246.62	7,201.38	7,246.62	124.72	249.68	-90.03	-1,697.55	-4,799.02	2,858.67	2,484.77	373.89	7.646		
11,500.00	7,246.20	7,201.80	7,246.20	127.46	249.69	-90.03	-1,697.55	-4,799.02	2,846.51	2,469.56	376.95	7.551		
11,600.00	7,245.78	7,202.22	7,245.78	130.22	249.71	-90.02	-1,697.55	-4,799.02	2,837.83	2,457.94	379.88	7.470		
11,700.00	7,245.36	7,202.64	7,245.36	132.98	249.72	-90.01	-1,697.55	-4,799.02	2,832.65	2,449.96	382.69	7.402		
11,796.79	7,244.95	7,203.05	7,244.95	135.65	249.73	-90.00	-1,697.55	-4,799.02	2,831.00	2,445.73	385.27	7.348 CC		
11,800.00	7,244.94	7,203.06	7,244.94	135.74	249.74	-90.00	-1,697.55	-4,799.02	2,831.00	2,445.65	385.35	7.346		
11,900.00	7,244.52	7,203.48	7,244.52	138.50	249.75	-89.99	-1,697.55	-4,799.02	2,832.88	2,445.02	387.86	7.304 ES		
12,000.00	7,244.10	7,203.90	7,244.10	141.27	249.76	-89.98	-1,697.55	-4,799.02	2,838.28	2,448.08	390.21	7.274		
12,100.00	7,243.68	7,204.32	7,243.68	144.04	249.78	-89.97	-1,697.55	-4,799.02	2,847.19	2,454.81	392.38	7.256		
12,200.00	7,243.26	7,204.74	7,243.26	146.82	249.79	-89.97	-1,697.55	-4,799.02	2,859.57	2,465.19	394.37	7.251 SF		
12,300.00	7,242.84	7,205.16	7,242.84	149.60	249.81	-89.96	-1,697.55	-4,799.02	2,875.37	2,479.18	396.19	7.258		
12,400.00	7,242.42	7,205.58	7,242.42	152.38	249.82	-89.95	-1,697.55	-4,799.02	2,894.55	2,496.72	397.82	7.276		
12,500.00	7,242.00	7,206.00	7,242.00	155.16	249.84	-89.94	-1,697.55	-4,799.02	2,917.03	2,517.75	399.28	7.306		
12,600.00	7,241.58	7,206.42	7,241.58	157.95	249.85	-89.93	-1,697.55	-4,799.02	2,942.73	2,542.18	400.56	7.347		
12,700.00	7,241.16	7,206.84	7,241.16	160.74	249.87	-89.92	-1,697.55	-4,799.02	2,971.58	2,569.93	401.66	7.398		
12,800.00	7,240.74	7,207.26	7,240.74	163.53	249.88	-89.91	-1,697.55	-4,799.02	3,003.49	2,600.89	402.60	7.460		
12,900.00	7,240.32	7,207.69	7,240.32	166.32	249.90	-89.91	-1,697.55	-4,799.02	3,038.35	2,634.98	403.37	7.532		
13,000.00	7,239.89	7,208.11	7,239.89	169.12	249.91	-89.90	-1,697.55	-4,799.02	3,076.07	2,672.08	404.00	7.614		
13,100.00	7,239.47	7,208.53	7,239.47	171.92	249.93	-89.89	-1,697.55	-4,799.02	3,116.55	2,712.07	404.48	7.705		
13,200.00	7,239.05	7,208.95	7,239.05	174.72	249.94	-89.88	-1,697.55	-4,799.02	3,159.67	2,754.84	404.82	7.805		
13,300.00	7,238.63	7,209.37	7,238.63	177.52	249.96	-89.87	-1,697.55	-4,799.02	3,205.33	2,800.28	405.05	7.914		
13,400.00	7,238.21	7,209.79	7,238.21	180.32	249.97	-89.86	-1,697.55	-4,799.02	3,253.43	2,848.27	405.15	8.030		
13,500.00	7,237.79	7,209.79	7,237.79	183.13	249.27	-89.86	-1,697.55	-4,799.02	3,303.85	2,899.41	404.44	8.169		
13,600.00	7,237.37	7,209.79	7,237.37	185.93	249.26	-89.85	-1,697.55	-4,799.02	3,356.49	2,952.18	404.32	8.302		
13,700.00	7,236.95	7,209.79	7,236.95	188.74	249.24	-89.84	-1,697.55	-4,799.02	3,411.26	3,007.15	404.10	8.442		
13,800.00	7,236.53	7,209.79	7,236.53	191.55	249.23	-89.83	-1,697.55	-4,799.02	3,468.04	3,064.23	403.81	8.588		
13,900.00	7,236.11	7,209.79	7,236.11	194.36	249.21	-89.82	-1,697.55	-4,799.02	3,526.75	3,123.29	403.46	8.741		
14,000.00	7,235.69	7,209.79	7,235.69	197.17	249.20	-89.81	-1,697.55	-4,799.02	3,587.28	3,184.25	403.03	8.901		
14,100.00	7,235.27	7,209.79	7,235.27	199.98	249.18	-89.80	-1,697.55	-4,799.02	3,649.55	3,246.99	402.56	9.066		
14,200.00	7,234.85	7,209.79	7,234.85	202.80	249.17	-89.80	-1,697.55	-4,799.02	3,713.47	3,311.43	402.04	9.237		
14,300.00	7,234.43	7,209.79	7,234.43	205.61	249.15	-89.79	-1,697.55	-4,799.02	3,778.95	3,377.48	401.47	9.413		
14,400.00	7,234.01	7,209.79	7,234.01	208.43	249.14	-89.78	-1,697.55	-4,799.02	3,845.92	3,445.05	400.87	9.594		
14,500.00	7,233.59	7,209.79	7,233.59	211.25	249.13	-89.77	-1,697.55	-4,799.02	3,914.30	3,514.06	400.24	9.780		
14,600.00	7,233.17	7,209.79	7,233.17	214.06	249.11	-89.76	-1,697.55	-4,799.02	3,984.02	3,584.43	399.59	9.970		
14,700.00	7,232.75	7,209.79	7,232.75	216.88	249.10	-89.75	-1,697.55	-4,799.02	4,055.00	3,656.09	398.91	10.165		
14,800.00	7,232.33	7,209.79	7,232.33	219.70	249.08	-89.74	-1,697.55	-4,799.02	4,127.18	3,728.97	398.22	10.364		
14,900.00	7,231.91	7,209.79	7,231.91	222.52	249.07	-89.74	-1,697.55	-4,799.02	4,200.51	3,803.00	397.51	10.567		
15,000.00	7,231.49	7,209.79	7,231.49	225.35	249.05	-89.73	-1,697.55	-4,799.02	4,274.92	3,878.12	396.80	10.774		
15,100.00	7,231.07	7,209.79	7,231.07	228.17	249.04	-89.72	-1,697.55	-4,799.02	4,350.35	3,954.28	396.07	10.984		
15,116.21	7,231.00	7,209.79	7,231.00	228.63	249.04	-89.72	-1,697.55	-4,799.02	4,362.67	3,966.72	395.95	11.018		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	51.00	0.00	3.28	-123.65	-3,198.49	-4,804.88	5,772.33					
100.00	100.00	49.00	100.00	0.18	3.39	-123.65	-3,198.49	-4,804.88	5,772.10	5,768.54	3.57	1,619.003		
200.00	200.00	149.00	200.00	0.61	4.76	-123.65	-3,198.49	-4,804.88	5,772.10	5,766.72	5.38	1,073.072		
300.00	300.00	249.00	300.00	1.05	7.68	-123.65	-3,198.49	-4,804.88	5,772.10	5,763.37	8.74	660.761		
400.00	400.00	349.00	400.00	1.49	10.94	-123.65	-3,198.49	-4,804.88	5,772.10	5,759.67	12.43	464.251		
500.00	500.00	449.00	500.00	1.93	14.31	-123.65	-3,198.49	-4,804.88	5,772.10	5,755.86	16.24	355.410		
600.00	599.98	548.98	599.98	2.37	17.73	-115.91	-3,198.49	-4,804.88	5,772.86	5,752.77	20.09	287.287		
700.00	699.84	648.84	699.84	2.81	21.16	-115.91	-3,198.49	-4,804.88	5,775.15	5,751.18	23.97	240.948		
800.00	799.45	748.45	799.45	3.26	24.60	-115.92	-3,198.49	-4,804.88	5,778.97	5,751.12	27.85	207.508		
900.00	898.70	847.70	898.70	3.70	28.04	-115.93	-3,198.49	-4,804.88	5,784.33	5,752.61	31.73	182.302		
1,000.00	997.47	946.47	997.47	4.15	31.47	-115.94	-3,198.49	-4,804.88	5,791.25	5,755.64	35.60	162.662		
1,100.00	1,095.78	1,044.78	1,095.78	4.60	34.88	-116.06	-3,198.49	-4,804.88	5,799.37	5,759.91	39.47	146.932		
1,200.00	1,194.05	1,143.05	1,194.05	5.05	38.30	-116.22	-3,198.49	-4,804.88	5,807.63	5,764.29	43.34	133.996		
1,300.00	1,292.33	1,241.33	1,292.33	5.50	41.72	-116.38	-3,198.49	-4,804.88	5,815.93	5,768.71	47.22	123.168		
1,400.00	1,390.61	1,339.61	1,390.61	5.96	45.14	-116.54	-3,198.49	-4,804.88	5,824.28	5,773.18	51.10	113.974		
1,500.00	1,488.89	1,437.89	1,488.89	6.43	48.56	-116.70	-3,198.49	-4,804.88	5,832.68	5,777.69	54.99	106.073		
1,600.00	1,587.16	1,536.16	1,587.16	6.89	51.99	-116.86	-3,198.49	-4,804.88	5,841.12	5,782.25	58.88	99.212		
1,700.00	1,685.44	1,634.44	1,685.44	7.36	55.41	-117.02	-3,198.49	-4,804.88	5,849.61	5,786.85	62.77	93.198		
1,800.00	1,783.72	1,732.72	1,783.72	7.83	58.84	-117.18	-3,198.49	-4,804.88	5,858.15	5,791.49	66.66	87.884		
1,900.00	1,882.00	1,831.00	1,882.00	8.30	62.26	-117.34	-3,198.49	-4,804.88	5,866.73	5,796.18	70.55	83.155		
2,000.00	1,980.27	1,929.27	1,980.27	8.77	65.69	-117.50	-3,198.49	-4,804.88	5,875.36	5,800.91	74.45	78.921		
2,100.00	2,078.55	2,027.55	2,078.55	9.25	69.11	-117.65	-3,198.49	-4,804.88	5,884.03	5,805.69	78.34	75.107		
2,200.00	2,176.83	2,125.83	2,176.83	9.72	72.54	-117.81	-3,198.49	-4,804.88	5,892.74	5,810.51	82.24	71.654		
2,300.00	2,275.11	2,224.11	2,275.11	10.19	75.97	-117.97	-3,198.49	-4,804.88	5,901.51	5,815.37	86.14	68.514		
2,400.00	2,373.38	2,322.38	2,373.38	10.66	79.40	-118.12	-3,198.49	-4,804.88	5,910.31	5,820.28	90.03	65.645		
2,500.00	2,471.66	2,420.66	2,471.66	11.14	82.82	-118.28	-3,198.49	-4,804.88	5,919.17	5,825.23	93.93	63.015		
2,600.00	2,569.94	2,518.94	2,569.94	11.61	86.25	-118.43	-3,198.49	-4,804.88	5,928.06	5,830.23	97.83	60.594		
2,700.00	2,668.22	2,617.22	2,668.22	12.09	89.68	-118.59	-3,198.49	-4,804.88	5,937.00	5,835.27	101.73	58.360		
2,800.00	2,766.49	2,715.49	2,766.49	12.56	93.11	-118.74	-3,198.49	-4,804.88	5,945.99	5,840.35	105.63	56.290		
2,900.00	2,864.77	2,813.77	2,864.77	13.04	96.54	-118.90	-3,198.49	-4,804.88	5,955.01	5,845.48	109.53	54.368		
3,000.00	2,963.05	2,912.05	2,963.05	13.51	99.97	-119.05	-3,198.49	-4,804.88	5,964.09	5,850.65	113.43	52.579		
3,100.00	3,061.33	3,010.33	3,061.33	13.99	103.40	-119.20	-3,198.49	-4,804.88	5,973.20	5,855.87	117.33	50.908		
3,200.00	3,159.60	3,108.60	3,159.60	14.46	106.83	-119.36	-3,198.49	-4,804.88	5,982.36	5,861.13	121.23	49.346		
3,300.00	3,257.88	3,206.88	3,257.88	14.94	110.26	-119.51	-3,198.49	-4,804.88	5,991.56	5,866.43	125.13	47.881		
3,400.00	3,356.16	3,305.16	3,356.16	15.41	113.69	-119.66	-3,198.49	-4,804.88	6,000.80	5,871.77	129.04	46.505		
3,500.00	3,454.43	3,403.43	3,454.43	15.89	117.11	-119.81	-3,198.49	-4,804.88	6,010.09	5,877.15	132.94	45.210		
3,600.00	3,552.71	3,501.71	3,552.71	16.36	120.54	-119.96	-3,198.49	-4,804.88	6,019.42	5,882.58	136.84	43.989		
3,700.00	3,650.99	3,600.01	3,650.99	16.84	123.97	-120.11	-3,198.49	-4,804.88	6,028.79	5,888.05	140.74	42.836		
3,800.00	3,749.27	3,701.73	3,749.27	17.32	127.52	-120.26	-3,198.49	-4,804.88	6,038.20	5,893.44	144.76	41.711		
3,900.00	3,847.54	3,803.46	3,847.54	17.79	131.07	-120.41	-3,198.49	-4,804.88	6,047.66	5,898.88	148.78	40.647		
4,000.00	3,945.82	3,905.18	3,945.82	18.27	134.62	-120.56	-3,198.49	-4,804.88	6,057.16	5,904.35	152.81	39.640		
4,100.00	4,044.10	4,006.90	4,044.10	18.75	138.17	-120.71	-3,198.49	-4,804.88	6,066.69	5,909.87	156.83	38.684		
4,200.00	4,142.38	4,108.62	4,142.38	19.22	141.72	-120.86	-3,198.49	-4,804.88	6,076.27	5,915.42	160.85	37.776		
4,300.00	4,240.65	4,189.65	4,240.65	19.70	144.55	-121.00	-3,198.49	-4,804.88	6,085.89	5,921.74	164.15	37.075		
4,400.00	4,338.93	4,287.93	4,338.93	20.18	147.98	-121.15	-3,198.49	-4,804.88	6,095.56	5,927.50	168.05	36.272		
4,500.00	4,437.21	4,386.21	4,437.21	20.65	151.41	-121.30	-3,198.49	-4,804.88	6,105.26	5,933.30	171.95	35.505		
4,600.00	4,535.49	4,484.49	4,535.49	21.13	154.84	-121.44	-3,198.49	-4,804.88	6,115.00	5,939.14	175.86	34.773		
4,700.00	4,633.76	4,582.76	4,633.76	21.61	158.27	-121.59	-3,198.49	-4,804.88	6,124.78	5,945.02	179.76	34.073		
4,800.00	4,732.04	4,681.04	4,732.04	22.08	161.70	-121.73	-3,198.49	-4,804.88	6,134.60	5,950.95	183.66	33.402		
4,900.00	4,830.32	4,779.32	4,830.32	22.56	165.13	-121.88	-3,198.49	-4,804.88	6,144.47	5,956.91	187.56	32.760		
5,000.00	4,928.60	4,877.60	4,928.60	23.04	168.56	-122.02	-3,198.49	-4,804.88	6,154.37	5,962.91	191.46	32.144		
5,100.00	5,026.87	4,975.87	5,026.87	23.51	171.99	-122.17	-3,198.49	-4,804.88	6,164.31	5,968.95	195.36	31.553		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,074.15	5,125.15	23.99	175.42	-122.31	-3,198.49	-4,804.88	6,174.29	5,975.03	199.27	30.985		
5,300.00	5,223.43	5,172.43	5,223.43	24.47	178.85	-122.45	-3,198.49	-4,804.88	6,184.31	5,981.14	203.17	30.439		
5,400.00	5,321.71	5,270.71	5,321.71	24.94	182.28	-122.60	-3,198.49	-4,804.88	6,194.37	5,987.30	207.07	29.914		
5,500.00	5,419.98	5,368.98	5,419.98	25.42	185.72	-122.74	-3,198.49	-4,804.88	6,204.47	5,993.50	210.97	29.409		
5,600.00	5,518.26	5,467.26	5,518.26	25.90	189.15	-122.88	-3,198.49	-4,804.88	6,214.61	5,999.73	214.87	28.922		
5,700.00	5,616.54	5,565.54	5,616.54	26.38	192.58	-123.02	-3,198.49	-4,804.88	6,224.78	6,006.01	218.78	28.453		
5,800.00	5,714.82	5,663.82	5,714.82	26.85	196.01	-123.16	-3,198.49	-4,804.88	6,234.99	6,012.32	222.68	28.000		
5,900.00	5,813.09	5,762.09	5,813.09	27.33	199.44	-123.30	-3,198.49	-4,804.88	6,245.25	6,018.67	226.58	27.563		
6,000.00	5,911.37	5,860.37	5,911.37	27.81	202.87	-123.44	-3,198.49	-4,804.88	6,255.53	6,025.05	230.48	27.141		
6,100.00	6,009.65	5,958.65	6,009.65	28.28	206.30	-123.58	-3,198.49	-4,804.88	6,265.86	6,031.48	234.38	26.733		
6,200.00	6,107.93	6,056.93	6,107.93	28.76	209.73	-123.72	-3,198.49	-4,804.88	6,276.22	6,037.94	238.28	26.339		
6,300.00	6,206.20	6,155.20	6,206.20	29.24	213.16	-123.86	-3,198.49	-4,804.88	6,286.63	6,044.44	242.19	25.958		
6,400.00	6,304.48	6,253.48	6,304.48	29.72	216.59	-124.00	-3,198.49	-4,804.88	6,297.06	6,050.98	246.09	25.589		
6,500.00	6,402.76	6,351.76	6,402.76	30.19	220.02	-124.13	-3,198.49	-4,804.88	6,307.54	6,057.55	249.99	25.231		
6,600.00	6,501.04	6,450.04	6,501.04	30.67	223.45	-124.27	-3,198.49	-4,804.88	6,318.05	6,064.16	253.89	24.885		
6,700.00	6,599.31	6,548.31	6,599.31	31.15	226.88	-124.41	-3,198.49	-4,804.88	6,328.60	6,070.81	257.79	24.549		
6,800.00	6,697.59	6,646.59	6,697.59	31.63	230.31	-103.37	-3,198.49	-4,804.88	6,337.80	6,076.11	261.69	24.219		
6,900.00	6,794.18	6,743.18	6,794.18	32.10	233.68	-77.82	-3,198.49	-4,804.88	6,336.82	6,071.28	265.54	23.864		
7,000.00	6,886.96	6,835.96	6,886.96	32.55	236.92	-67.38	-3,198.49	-4,804.88	6,324.24	6,054.99	269.26	23.488		
7,100.00	6,973.57	6,922.57	6,973.57	32.99	239.94	-63.37	-3,198.49	-4,804.88	6,300.53	6,027.78	272.75	23.100		
7,200.00	7,051.87	7,000.87	7,051.87	33.41	242.68	-62.72	-3,198.49	-4,804.88	6,266.44	5,990.47	275.97	22.707		
7,300.00	7,119.93	7,068.93	7,119.93	33.85	245.05	-64.33	-3,198.49	-4,804.88	6,223.00	5,944.14	278.87	22.315		
7,400.00	7,176.09	7,125.09	7,176.09	34.39	247.01	-67.75	-3,198.49	-4,804.88	6,171.46	5,890.06	281.40	21.931		
7,500.00	7,218.95	7,167.95	7,218.95	35.09	248.51	-72.79	-3,198.49	-4,804.88	6,113.24	5,829.70	283.55	21.560		
7,600.00	7,247.46	7,203.54	7,247.46	35.98	249.75	-79.27	-3,198.49	-4,804.88	6,049.90	5,764.38	285.52	21.189		
7,700.00	7,260.92	7,209.92	7,260.92	37.04	249.97	-86.91	-3,198.49	-4,804.88	5,983.07	5,696.50	286.57	20.878		
7,800.00	7,261.75	7,210.75	7,261.75	38.23	250.00	-90.22	-3,198.49	-4,804.88	5,914.71	5,627.22	287.49	20.573		
7,900.00	7,261.33	7,210.33	7,261.33	39.59	249.99	-90.22	-3,198.49	-4,804.88	5,847.08	5,558.58	288.49	20.268		
8,000.00	7,260.91	7,209.91	7,260.91	41.10	249.97	-90.21	-3,198.49	-4,804.88	5,780.38	5,490.77	289.62	19.959		
8,100.00	7,260.49	7,209.49	7,260.49	42.75	249.96	-90.21	-3,198.49	-4,804.88	5,714.66	5,423.80	290.86	19.647		
8,200.00	7,260.07	7,209.07	7,260.07	44.53	249.95	-90.20	-3,198.49	-4,804.88	5,649.94	5,357.72	292.22	19.334		
8,300.00	7,259.65	7,208.65	7,259.65	46.41	249.93	-90.20	-3,198.49	-4,804.88	5,586.26	5,292.56	293.70	19.020		
8,400.00	7,259.23	7,208.23	7,259.23	48.39	249.92	-90.19	-3,198.49	-4,804.88	5,523.66	5,228.37	295.29	18.706		
8,500.00	7,258.81	7,207.81	7,258.81	50.45	249.90	-90.18	-3,198.49	-4,804.88	5,462.17	5,165.19	296.99	18.392		
8,600.00	7,258.39	7,207.39	7,258.39	52.59	249.89	-90.18	-3,198.49	-4,804.88	5,401.84	5,103.05	298.79	18.079		
8,700.00	7,257.97	7,206.97	7,257.97	54.79	249.87	-90.17	-3,198.49	-4,804.88	5,342.69	5,042.00	300.69	17.768		
8,800.00	7,257.55	7,206.55	7,257.55	57.05	249.86	-90.17	-3,198.49	-4,804.88	5,284.78	4,982.09	302.69	17.459		
8,900.00	7,257.13	7,206.13	7,257.13	59.36	249.84	-90.16	-3,198.49	-4,804.88	5,228.13	4,923.35	304.78	17.154		
9,000.00	7,256.71	7,205.71	7,256.71	61.72	249.83	-90.16	-3,198.49	-4,804.88	5,172.80	4,865.84	306.96	16.852		
9,100.00	7,256.29	7,205.29	7,256.29	64.12	249.81	-90.15	-3,198.49	-4,804.88	5,118.82	4,809.60	309.22	16.554		
9,200.00	7,255.87	7,204.87	7,255.87	66.56	249.80	-90.15	-3,198.49	-4,804.88	5,066.25	4,754.68	311.56	16.261		
9,300.00	7,255.45	7,204.45	7,255.45	69.02	249.78	-90.14	-3,198.49	-4,804.88	5,015.11	4,701.13	313.98	15.973		
9,400.00	7,255.03	7,204.03	7,255.03	71.52	249.77	-90.13	-3,198.49	-4,804.88	4,965.47	4,648.99	316.47	15.690		
9,500.00	7,254.61	7,203.61	7,254.61	74.04	249.75	-90.13	-3,198.49	-4,804.88	4,917.35	4,598.32	319.03	15.413		
9,600.00	7,254.19	7,203.19	7,254.19	76.58	249.74	-90.12	-3,198.49	-4,804.88	4,870.82	4,549.16	321.66	15.143		
9,700.00	7,253.77	7,202.77	7,253.77	79.15	249.73	-90.12	-3,198.49	-4,804.88	4,825.90	4,501.57	324.34	14.879		
9,800.00	7,253.35	7,202.35	7,253.35	81.74	249.71	-90.11	-3,198.49	-4,804.88	4,782.66	4,455.59	327.07	14.623		
9,900.00	7,252.92	7,201.92	7,252.92	84.34	249.70	-90.11	-3,198.49	-4,804.88	4,741.13	4,411.27	329.86	14.373		
10,000.00	7,252.50	7,201.50	7,252.50	86.96	249.68	-90.10	-3,198.49	-4,804.88	4,701.37	4,368.68	332.69	14.131		
10,100.00	7,252.08	7,201.08	7,252.08	89.59	249.67	-90.10	-3,198.49	-4,804.88	4,663.41	4,327.84	335.56	13.897		
10,200.00	7,251.66	7,200.66	7,251.66	92.24	249.65	-90.09	-3,198.49	-4,804.88	4,627.29	4,288.82	338.47	13.671		
10,300.00	7,251.24	7,200.24	7,251.24	94.90	249.64	-90.08	-3,198.49	-4,804.88	4,593.08	4,251.67	341.41	13.453		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,200.18	7,250.82	97.57	249.63	-90.08	-3,198.49	-4,804.88	4,560.79	4,216.41	344.38	13.243		
10,500.00	7,250.40	7,200.60	7,250.40	100.25	249.65	-90.07	-3,198.49	-4,804.88	4,530.49	4,183.10	347.39	13.041		
10,600.00	7,249.98	7,201.02	7,249.98	102.93	249.66	-90.07	-3,198.49	-4,804.88	4,502.20	4,151.79	350.42	12.848		
10,700.00	7,249.56	7,201.44	7,249.56	105.63	249.68	-90.06	-3,198.49	-4,804.88	4,475.97	4,122.53	353.45	12.664		
10,800.00	7,249.14	7,201.86	7,249.14	108.34	249.69	-90.06	-3,198.49	-4,804.88	4,451.83	4,095.36	356.48	12.488		
10,900.00	7,248.72	7,202.28	7,248.72	111.05	249.71	-90.05	-3,198.49	-4,804.88	4,429.82	4,070.32	359.50	12.322		
11,000.00	7,248.30	7,202.70	7,248.30	113.77	249.72	-90.05	-3,198.49	-4,804.88	4,409.97	4,047.45	362.52	12.165		
11,100.00	7,247.88	7,203.12	7,247.88	116.50	249.74	-90.04	-3,198.49	-4,804.88	4,392.30	4,026.79	365.52	12.017		
11,200.00	7,247.46	7,203.54	7,247.46	119.23	249.75	-90.03	-3,198.49	-4,804.88	4,376.85	4,008.36	368.49	11.878		
11,300.00	7,247.04	7,203.96	7,247.04	121.97	249.77	-90.03	-3,198.49	-4,804.88	4,363.63	3,992.20	371.43	11.748		
11,400.00	7,246.62	7,204.38	7,246.62	124.72	249.78	-90.02	-3,198.49	-4,804.88	4,352.68	3,978.34	374.34	11.628		
11,500.00	7,246.20	7,204.80	7,246.20	127.46	249.80	-90.02	-3,198.49	-4,804.88	4,343.99	3,966.79	377.21	11.516		
11,600.00	7,245.78	7,205.22	7,245.78	130.22	249.81	-90.01	-3,198.49	-4,804.88	4,337.60	3,957.58	380.02	11.414		
11,700.00	7,245.36	7,205.64	7,245.36	132.98	249.83	-90.01	-3,198.49	-4,804.88	4,333.51	3,950.72	382.79	11.321		
11,800.00	7,244.94	7,206.06	7,244.94	135.74	249.84	-90.00	-3,198.49	-4,804.88	4,331.72	3,946.22	385.50	11.237		
11,827.54	7,244.82	7,206.18	7,244.82	136.50	249.84	-90.00	-3,198.49	-4,804.88	4,331.63	3,945.40	386.23	11.215 CC		
11,900.00	7,244.52	7,206.48	7,244.52	138.50	249.85	-90.00	-3,198.49	-4,804.88	4,332.23	3,944.09	388.14	11.162 ES		
12,000.00	7,244.10	7,206.90	7,244.10	141.27	249.87	-89.99	-3,198.49	-4,804.88	4,335.06	3,944.34	390.72	11.095		
12,100.00	7,243.68	7,207.32	7,243.68	144.04	249.88	-89.98	-3,198.49	-4,804.88	4,340.19	3,946.97	393.22	11.038		
12,200.00	7,243.26	7,207.74	7,243.26	146.82	249.90	-89.98	-3,198.49	-4,804.88	4,347.61	3,951.96	395.65	10.989		
12,300.00	7,242.84	7,208.16	7,242.84	149.60	249.91	-89.97	-3,198.49	-4,804.88	4,357.32	3,959.32	398.00	10.948		
12,400.00	7,242.42	7,208.58	7,242.42	152.38	249.93	-89.97	-3,198.49	-4,804.88	4,369.29	3,969.03	400.26	10.916		
12,500.00	7,242.00	7,209.00	7,242.00	155.16	249.94	-89.96	-3,198.49	-4,804.88	4,383.51	3,981.07	402.45	10.892		
12,600.00	7,241.58	7,209.42	7,241.58	157.95	249.96	-89.96	-3,198.49	-4,804.88	4,399.96	3,995.42	404.54	10.876		
12,700.00	7,241.16	7,209.84	7,241.16	160.74	249.97	-89.95	-3,198.49	-4,804.88	4,418.62	4,012.07	406.55	10.869 SF		
12,800.00	7,240.74	7,209.74	7,240.74	163.53	249.27	-89.95	-3,198.49	-4,804.88	4,439.44	4,031.69	407.75	10.888		
12,900.00	7,240.32	7,189.32	7,240.32	166.32	249.26	-89.94	-3,198.49	-4,804.88	4,462.42	4,052.87	409.55	10.896		
13,000.00	7,239.89	7,188.89	7,239.89	169.12	249.24	-89.93	-3,198.49	-4,804.88	4,487.50	4,076.24	411.26	10.912		
13,100.00	7,239.47	7,188.47	7,239.47	171.92	249.23	-89.93	-3,198.49	-4,804.88	4,514.66	4,101.78	412.88	10.935		
13,200.00	7,239.05	7,188.05	7,239.05	174.72	249.21	-89.92	-3,198.49	-4,804.88	4,543.85	4,129.45	414.41	10.965		
13,300.00	7,238.63	7,187.63	7,238.63	177.52	249.20	-89.92	-3,198.49	-4,804.88	4,575.05	4,159.20	415.85	11.002		
13,400.00	7,238.21	7,187.21	7,238.21	180.32	249.18	-89.91	-3,198.49	-4,804.88	4,608.21	4,191.00	417.20	11.045		
13,500.00	7,237.79	7,186.79	7,237.79	183.13	249.17	-89.91	-3,198.49	-4,804.88	4,643.28	4,224.81	418.47	11.096		
13,600.00	7,237.37	7,186.37	7,237.37	185.93	249.15	-89.90	-3,198.49	-4,804.88	4,680.23	4,260.57	419.66	11.152		
13,700.00	7,236.95	7,185.95	7,236.95	188.74	249.14	-89.90	-3,198.49	-4,804.88	4,719.01	4,298.25	420.76	11.215		
13,800.00	7,236.53	7,185.53	7,236.53	191.55	249.12	-89.89	-3,198.49	-4,804.88	4,759.57	4,337.79	421.78	11.284		
13,900.00	7,236.11	7,185.11	7,236.11	194.36	249.11	-89.88	-3,198.49	-4,804.88	4,801.88	4,379.14	422.73	11.359		
14,000.00	7,235.69	7,184.69	7,235.69	197.17	249.09	-89.88	-3,198.49	-4,804.88	4,845.87	4,422.27	423.60	11.440		
14,100.00	7,235.27	7,184.27	7,235.27	199.98	249.08	-89.87	-3,198.49	-4,804.88	4,891.52	4,467.12	424.40	11.526		
14,200.00	7,234.85	7,183.85	7,234.85	202.80	249.06	-89.87	-3,198.49	-4,804.88	4,938.77	4,513.64	425.13	11.617		
14,300.00	7,234.43	7,183.43	7,234.43	205.61	249.05	-89.86	-3,198.49	-4,804.88	4,987.58	4,561.78	425.80	11.714		
14,400.00	7,234.01	7,183.01	7,234.01	208.43	249.04	-89.86	-3,198.49	-4,804.88	5,037.90	4,611.50	426.40	11.815		
14,500.00	7,233.59	7,182.59	7,233.59	211.25	249.02	-89.85	-3,198.49	-4,804.88	5,089.69	4,662.75	426.94	11.921		
14,600.00	7,233.17	7,182.17	7,233.17	214.06	249.01	-89.85	-3,198.49	-4,804.88	5,142.90	4,715.48	427.42	12.032		
14,700.00	7,232.75	7,181.75	7,232.75	216.88	248.99	-89.84	-3,198.49	-4,804.88	5,197.49	4,769.64	427.84	12.148		
14,800.00	7,232.33	7,181.33	7,232.33	219.70	248.98	-89.83	-3,198.49	-4,804.88	5,253.41	4,825.19	428.22	12.268		
14,900.00	7,231.91	7,180.91	7,231.91	222.52	248.96	-89.83	-3,198.49	-4,804.88	5,310.63	4,882.09	428.54	12.392		
15,000.00	7,231.49	7,180.49	7,231.49	225.35	248.95	-89.82	-3,198.49	-4,804.88	5,369.11	4,940.29	428.82	12.521		
15,100.00	7,231.07	7,180.07	7,231.07	228.17	248.93	-89.82	-3,198.49	-4,804.88	5,428.79	4,999.74	429.05	12.653		
15,116.21	7,231.00	7,180.00	7,231.00	228.63	248.93	-89.82	-3,198.49	-4,804.88	5,438.58	5,009.49	429.09	12.675		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	69.00	0.00	3.28	-143.19	-4,369.60	-3,269.52	5,457.83					
100.00	100.00	925.52	963.98	0.18	5.25	-143.40	-4,318.77	-3,207.48	5,448.50	5,442.25	6.25	871.799		
200.00	200.00	1,025.83	1,061.31	0.61	5.68	-143.44	-4,308.55	-3,195.02	5,432.64	5,425.91	6.73	807.195		
300.00	300.00	1,127.17	1,158.64	1.05	6.13	-143.48	-4,298.34	-3,182.56	5,416.79	5,409.44	7.35	736.872		
400.00	400.00	1,228.52	1,255.98	1.49	6.60	-143.53	-4,288.12	-3,170.09	5,400.94	5,392.88	8.06	670.278		
500.00	500.00	1,320.14	1,353.31	1.93	7.04	-143.57	-4,277.91	-3,157.63	5,385.09	5,376.32	8.78	613.500		
600.00	599.98	1,431.07	1,450.77	2.37	7.58	-136.08	-4,267.68	-3,145.15	5,370.49	5,360.89	9.60	559.231		
700.00	699.84	1,532.11	1,548.40	2.81	8.07	-136.33	-4,257.43	-3,132.64	5,358.39	5,347.97	10.41	514.623		
800.00	799.45	1,616.92	1,646.09	3.26	8.50	-136.57	-4,247.18	-3,120.13	5,348.81	5,337.63	11.17	478.644		
900.00	898.70	1,715.88	1,743.72	3.70	9.00	-136.80	-4,236.94	-3,107.63	5,341.78	5,329.76	12.01	444.606		
1,000.00	997.47	1,814.65	1,841.17	4.15	9.50	-137.02	-4,226.71	-3,095.15	5,337.32	5,324.45	12.87	414.715		
1,100.00	1,095.78	1,913.21	1,938.41	4.60	10.01	-137.21	-4,216.50	-3,082.70	5,334.89	5,321.15	13.74	388.322		
1,200.00	1,194.05	2,011.75	2,035.62	5.05	10.52	-137.39	-4,206.30	-3,070.25	5,332.64	5,318.02	14.62	364.808		
1,300.00	1,292.33	2,110.29	2,132.84	5.50	11.03	-137.57	-4,196.10	-3,057.80	5,330.44	5,314.94	15.50	343.799		
1,400.00	1,390.61	2,208.83	2,230.05	5.96	11.55	-137.75	-4,185.90	-3,045.35	5,328.30	5,311.91	16.40	324.944		
1,500.00	1,488.89	2,307.36	2,327.27	6.43	12.07	-137.93	-4,175.69	-3,032.91	5,326.22	5,308.92	17.30	307.947		
1,600.00	1,587.16	2,405.90	2,424.48	6.89	12.59	-138.11	-4,165.49	-3,020.46	5,324.18	5,305.98	18.20	292.561		
1,700.00	1,685.44	2,504.44	2,521.70	7.36	13.11	-138.29	-4,155.29	-3,008.01	5,322.20	5,303.10	19.10	278.577		
1,800.00	1,783.72	2,602.98	2,618.91	7.83	13.63	-138.47	-4,145.09	-2,995.56	5,320.28	5,300.26	20.01	265.818		
1,900.00	1,882.00	2,701.52	2,716.13	8.30	14.16	-138.65	-4,134.89	-2,983.11	5,318.40	5,297.48	20.93	254.137		
2,000.00	1,980.27	2,800.06	2,813.34	8.77	14.68	-138.83	-4,124.68	-2,970.66	5,316.59	5,294.74	21.84	243.405		
2,100.00	2,078.55	2,901.40	2,910.56	9.25	15.23	-139.01	-4,114.48	-2,958.21	5,314.82	5,292.05	22.77	233.384		
2,200.00	2,176.83	2,997.14	3,007.77	9.72	15.74	-139.19	-4,104.28	-2,945.76	5,313.11	5,289.43	23.68	224.375		
2,300.00	2,275.11	3,095.67	3,104.99	10.19	16.27	-139.37	-4,094.08	-2,933.31	5,311.45	5,286.85	24.60	215.903		
2,400.00	2,373.38	3,194.21	3,202.21	10.66	16.80	-139.55	-4,083.87	-2,920.86	5,309.85	5,284.33	25.52	208.031		
2,500.00	2,471.66	3,292.75	3,299.42	11.14	17.33	-139.73	-4,073.67	-2,908.41	5,308.30	5,281.86	26.45	200.699		
2,600.00	2,569.94	3,391.29	3,396.64	11.61	17.86	-139.91	-4,063.47	-2,895.96	5,306.81	5,279.44	27.38	193.854		
2,700.00	2,668.22	3,489.83	3,493.85	12.09	18.39	-140.09	-4,053.27	-2,883.52	5,305.37	5,277.07	28.30	187.450		
2,800.00	2,766.49	3,588.37	3,591.07	12.56	18.92	-140.27	-4,043.06	-2,871.07	5,303.99	5,274.75	29.23	181.446		
2,900.00	2,864.77	3,686.91	3,688.28	13.04	19.46	-140.45	-4,032.86	-2,858.62	5,302.65	5,272.49	30.16	175.807		
3,000.00	2,963.05	3,785.45	3,785.50	13.51	19.99	-140.63	-4,022.66	-2,846.17	5,301.38	5,270.29	31.09	170.501		
3,100.00	3,061.33	3,883.98	3,882.71	13.99	20.52	-140.81	-4,012.46	-2,833.72	5,300.16	5,268.13	32.03	165.499		
3,200.00	3,159.60	3,982.52	3,979.93	14.46	21.06	-140.99	-4,002.25	-2,821.27	5,298.99	5,266.03	32.96	160.777		
3,300.00	3,257.88	4,081.06	4,077.14	14.94	21.59	-141.17	-3,992.05	-2,808.82	5,297.88	5,263.98	33.89	156.313		
3,400.00	3,356.16	4,179.60	4,174.36	15.41	22.13	-141.36	-3,981.85	-2,796.37	5,296.82	5,261.99	34.83	152.085		
3,500.00	3,454.43	4,278.14	4,271.57	15.89	22.66	-141.54	-3,971.65	-2,783.92	5,295.81	5,260.05	35.76	148.077		
3,600.00	3,552.71	4,376.68	4,368.79	16.36	23.20	-141.72	-3,961.44	-2,771.47	5,294.86	5,258.16	36.70	144.271		
3,700.00	3,650.99	4,475.22	4,466.00	16.84	23.73	-141.90	-3,951.24	-2,759.02	5,293.97	5,256.33	37.64	140.653		
3,800.00	3,749.27	4,573.76	4,563.22	17.32	24.27	-142.08	-3,941.04	-2,746.57	5,293.13	5,254.55	38.58	137.209		
3,900.00	3,847.54	4,672.29	4,660.44	17.79	24.81	-142.26	-3,930.84	-2,734.13	5,292.34	5,252.83	39.52	133.928		
4,000.00	3,945.82	4,770.83	4,757.65	18.27	25.34	-142.44	-3,920.64	-2,721.68	5,291.61	5,251.16	40.46	130.798		
4,100.00	4,044.10	4,869.37	4,854.87	18.75	25.88	-142.63	-3,910.43	-2,709.23	5,290.94	5,249.54	41.40	127.810		
4,200.00	4,142.38	4,967.91	4,952.08	19.22	26.42	-142.81	-3,900.23	-2,696.78	5,290.32	5,247.98	42.34	124.953		
4,300.00	4,240.65	5,066.45	5,049.30	19.70	26.95	-142.99	-3,890.03	-2,684.33	5,289.75	5,246.47	43.28	122.220		
4,400.00	4,338.93	5,164.99	5,146.51	20.18	27.49	-143.17	-3,879.83	-2,671.88	5,289.24	5,245.01	44.22	119.603		
4,500.00	4,437.21	5,263.53	5,243.73	20.65	28.03	-143.35	-3,869.62	-2,659.43	5,288.78	5,243.61	45.17	117.094		
4,600.00	4,535.49	5,362.07	5,340.94	21.13	28.56	-143.53	-3,859.42	-2,646.98	5,288.38	5,242.27	46.11	114.688		
4,700.00	4,633.76	5,460.60	5,438.16	21.61	29.10	-143.72	-3,849.22	-2,634.53	5,288.03	5,240.98	47.06	112.378		
4,800.00	4,732.04	5,559.14	5,535.37	22.08	29.64	-143.90	-3,839.02	-2,622.08	5,287.74	5,239.74	48.00	110.158		
4,900.00	4,830.32	5,657.68	5,632.59	22.56	30.18	-144.08	-3,828.81	-2,609.63	5,287.50	5,238.55	48.95	108.024		
5,000.00	4,928.60	5,756.22	5,729.80	23.04	30.72	-144.26	-3,818.61	-2,597.19	5,287.32	5,237.42	49.89	105.971		
5,100.00	5,026.87	5,854.76	5,827.02	23.51	31.25	-144.44	-3,808.41	-2,584.74	5,287.19	5,236.35	50.84	103.994		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,953.30	5,924.23	23.99	31.79	-144.63	-3,798.21	-2,572.29	5,287.12	5,235.33	51.79	102.089		
5,282.88	5,206.61	6,034.97	6,004.81	24.39	32.24	-144.78	-3,789.75	-2,561.97	5,287.10	5,234.52	52.58	100.563		
5,300.00	5,223.43	6,051.84	6,021.45	24.47	32.33	-144.81	-3,788.00	-2,559.84	5,287.10	5,234.36	52.74	100.253		
5,400.00	5,321.71	6,150.38	6,118.67	24.94	32.87	-144.99	-3,777.80	-2,547.39	5,287.14	5,233.45	53.69	98.482		
5,500.00	5,419.98	6,248.91	6,215.88	25.42	33.41	-145.17	-3,767.60	-2,534.94	5,287.23	5,232.59	54.64	96.772		
5,600.00	5,518.26	6,277.89	6,244.49	25.90	33.56	-145.22	-3,764.60	-2,531.52	5,287.95	5,232.69	55.26	95.693		
5,700.00	5,616.54	6,300.00	6,266.41	26.38	33.68	-145.25	-3,762.33	-2,529.71	5,290.18	5,234.34	55.84	94.741		
5,800.00	5,714.82	6,325.01	6,291.27	26.85	33.79	-145.28	-3,759.76	-2,528.59	5,293.94	5,237.53	56.41	93.846		
5,900.00	5,813.09	6,338.06	6,304.24	27.33	33.85	-145.29	-3,758.44	-2,528.40	5,299.17	5,242.25	56.91	93.109		
6,000.00	5,911.37	6,350.00	6,316.12	27.81	33.90	-145.30	-3,757.23	-2,528.45	5,305.95	5,248.55	57.40	92.446		
6,100.00	6,009.65	6,378.42	6,344.38	28.28	34.00	-145.31	-3,754.37	-2,529.49	5,314.16	5,256.23	57.93	91.738		
6,200.00	6,107.93	6,400.00	6,365.79	28.76	34.08	-145.31	-3,752.22	-2,531.12	5,323.89	5,265.48	58.42	91.135		
6,300.00	6,206.20	6,425.01	6,390.52	29.24	34.16	-145.29	-3,749.76	-2,533.92	5,335.13	5,276.22	58.90	90.576		
6,400.00	6,304.48	6,438.53	6,403.83	29.72	34.19	-145.28	-3,748.45	-2,535.84	5,347.80	5,288.48	59.32	90.151		
6,500.00	6,402.76	6,450.00	6,415.10	30.19	34.23	-145.27	-3,747.34	-2,537.69	5,361.99	5,302.28	59.71	89.795		
6,600.00	6,501.04	6,477.86	6,442.31	30.67	34.29	-145.24	-3,744.69	-2,543.03	5,377.58	5,317.43	60.16	89.392		
6,700.00	6,599.31	6,500.00	6,463.76	31.15	34.34	-145.21	-3,742.61	-2,548.13	5,394.67	5,334.10	60.56	89.076		
6,800.00	6,697.50	6,525.01	6,487.76	31.63	34.39	-123.54	-3,740.32	-2,554.78	5,412.37	5,351.40	60.96	88.779		
6,900.00	6,794.18	6,535.73	6,497.95	32.10	34.41	-96.71	-3,739.35	-2,557.92	5,424.95	5,363.65	61.31	88.490		
7,000.00	6,886.96	6,550.00	6,511.46	32.55	34.44	-84.72	-3,738.07	-2,562.37	5,431.31	5,369.64	61.67	88.076		
7,100.00	6,973.57	6,574.55	6,534.43	32.99	34.47	-78.88	-3,735.92	-2,570.72	5,431.22	5,369.14	62.08	87.481		
7,200.00	7,051.87	6,600.00	6,557.91	33.41	34.51	-76.06	-3,733.74	-2,580.32	5,424.77	5,362.22	62.55	86.726		
7,300.00	7,119.93	6,611.83	6,568.69	33.85	34.52	-75.00	-3,732.75	-2,585.10	5,412.06	5,349.03	63.04	85.858		
7,400.00	7,176.09	6,625.01	6,580.58	34.39	34.53	-75.20	-3,731.67	-2,590.66	5,393.48	5,329.83	63.65	84.739		
7,500.00	7,218.95	6,650.00	6,602.82	35.09	34.55	-76.49	-3,729.65	-2,601.88	5,369.44	5,304.97	64.47	83.285		
7,600.00	7,247.46	6,650.00	6,602.82	35.98	34.55	-78.46	-3,729.65	-2,601.88	5,340.59	5,275.23	65.37	81.704		
7,700.00	7,260.92	6,673.33	6,623.18	37.04	34.57	-81.38	-3,727.83	-2,613.14	5,307.53	5,241.00	66.53	79.772		
7,800.00	7,261.75	6,700.00	6,645.92	38.23	34.58	-82.92	-3,725.83	-2,626.91	5,272.08	5,204.21	67.87	77.681		
7,900.00	7,261.33	6,700.00	6,645.92	39.59	34.58	-82.92	-3,725.83	-2,626.91	5,237.61	5,168.36	69.26	75.626		
8,000.00	7,260.91	6,709.10	6,653.54	41.10	34.58	-83.01	-3,725.16	-2,631.82	5,204.81	5,133.97	70.84	73.478		
8,100.00	7,260.49	6,725.01	6,666.72	42.75	34.59	-83.16	-3,724.02	-2,640.69	5,173.60	5,101.02	72.58	71.280		
8,200.00	7,260.07	6,736.79	6,676.32	44.53	34.59	-83.27	-3,723.20	-2,647.45	5,143.99	5,069.55	74.44	69.103		
8,300.00	7,259.65	6,750.00	6,686.94	46.41	34.59	-83.39	-3,722.29	-2,655.25	5,116.00	5,039.58	76.42	66.946		
8,400.00	7,259.23	6,768.36	6,701.43	48.39	34.59	-83.56	-3,721.07	-2,666.46	5,089.63	5,011.11	78.52	64.816		
8,500.00	7,258.81	6,800.00	6,725.63	50.45	34.59	-83.83	-3,719.06	-2,686.74	5,064.97	4,984.21	80.76	62.713		
8,600.00	7,258.39	6,800.00	6,725.63	52.59	34.59	-83.83	-3,719.06	-2,686.74	5,041.81	4,958.83	82.98	60.760		
8,700.00	7,257.97	6,825.01	6,744.03	54.79	34.59	-84.05	-3,717.57	-2,703.61	5,020.33	4,934.98	85.35	58.818		
8,800.00	7,257.55	6,850.00	6,761.75	57.05	34.59	-84.25	-3,716.16	-2,721.18	5,000.49	4,912.70	87.79	56.958		
8,900.00	7,257.13	6,868.97	6,774.73	59.36	34.58	-84.40	-3,715.16	-2,734.97	4,982.25	4,891.98	90.27	55.191		
9,000.00	7,256.71	6,900.00	6,795.07	61.72	34.58	-84.64	-3,713.61	-2,758.35	4,965.63	4,872.79	92.84	53.487		
9,100.00	7,256.29	6,925.01	6,810.63	64.12	34.57	-84.82	-3,712.47	-2,777.90	4,950.56	4,855.13	95.43	51.876		
9,200.00	7,255.87	6,950.00	6,825.40	66.56	34.57	-84.99	-3,711.43	-2,798.03	4,937.03	4,838.97	98.06	50.345		
9,300.00	7,255.45	6,978.44	6,841.24	69.02	34.58	-85.17	-3,710.35	-2,821.62	4,925.02	4,824.27	100.75	48.883		
9,400.00	7,255.03	7,010.59	6,857.86	71.52	34.59	-85.37	-3,709.28	-2,849.12	4,914.49	4,811.01	103.48	47.491		
9,500.00	7,254.61	7,050.00	6,876.32	74.04	34.62	-85.58	-3,708.19	-2,883.91	4,905.40	4,799.11	106.29	46.151		
9,600.00	7,254.19	7,080.84	6,889.26	76.58	34.66	-85.73	-3,707.51	-2,911.89	4,897.67	4,788.58	109.09	44.896		
9,700.00	7,253.77	7,125.01	6,905.41	79.15	34.74	-85.92	-3,706.80	-2,952.99	4,891.30	4,779.31	112.00	43.673		
9,800.00	7,253.35	7,150.00	6,913.27	81.74	34.81	-86.02	-3,706.54	-2,976.70	4,886.23	4,771.43	114.80	42.563		
9,900.00	7,252.92	7,200.00	6,926.21	84.34	35.00	-86.17	-3,706.32	-3,024.99	4,882.37	4,764.53	117.84	41.434		
10,000.00	7,252.50	7,242.50	6,934.21	86.96	35.23	-86.26	-3,706.46	-3,066.72	4,879.74	4,758.89	120.85	40.380		
10,100.00	7,252.08	7,286.02	6,939.52	89.59	35.53	-86.33	-3,706.90	-3,109.91	4,878.29	4,754.39	123.90	39.372		
10,170.91	7,251.79	7,317.25	6,941.51	91.47	35.78	-86.35	-3,707.41	-3,141.06	4,877.96	4,751.88	126.08	38.689 CC		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,330.11	6,941.89	92.24	35.90	-86.36	-3,707.67	-3,153.91	4,877.99	4,751.01	126.98	38.416		
10,300.00	7,251.24	7,411.12	6,941.73	94.90	36.76	-86.36	-3,709.53	-3,234.90	4,878.59	4,748.00	130.58	37.360		
10,400.00	7,250.82	7,511.12	6,941.32	97.57	38.13	-86.36	-3,711.86	-3,334.87	4,879.25	4,744.58	134.67	36.231		
10,500.00	7,250.40	7,611.12	6,940.90	100.25	39.77	-86.36	-3,714.18	-3,434.84	4,879.92	4,740.92	139.00	35.109		
10,600.00	7,249.98	7,711.11	6,940.48	102.93	41.64	-86.36	-3,716.51	-3,534.81	4,880.59	4,737.05	143.53	34.004		
10,700.00	7,249.56	7,811.11	6,940.06	105.63	43.68	-86.36	-3,718.83	-3,634.78	4,881.25	4,733.00	148.25	32.925		
10,800.00	7,249.14	7,911.11	6,939.65	108.34	45.87	-86.36	-3,721.16	-3,734.75	4,881.92	4,728.78	153.13	31.880		
10,900.00	7,248.72	8,011.11	6,939.23	111.05	48.20	-86.36	-3,723.48	-3,834.72	4,882.58	4,724.43	158.15	30.872		
11,000.00	7,248.30	8,111.10	6,938.81	113.77	50.64	-86.36	-3,725.81	-3,934.69	4,883.25	4,719.95	163.29	29.905		
11,100.00	7,247.88	8,211.10	6,938.40	116.50	53.17	-86.37	-3,728.13	-4,034.66	4,883.91	4,715.37	168.54	28.978		
11,200.00	7,247.46	8,311.10	6,937.98	119.23	55.78	-86.37	-3,730.46	-4,134.63	4,884.58	4,710.70	173.87	28.093		
11,300.00	7,247.04	8,411.10	6,937.56	121.97	58.47	-86.37	-3,732.78	-4,234.60	4,885.24	4,705.95	179.29	27.248		
11,400.00	7,246.62	8,511.10	6,937.14	124.72	61.22	-86.37	-3,735.11	-4,334.57	4,885.91	4,701.14	184.77	26.443		
11,500.00	7,246.20	8,611.09	6,936.73	127.46	64.02	-86.37	-3,737.43	-4,434.54	4,886.57	4,696.26	190.31	25.676		
11,600.00	7,245.78	8,711.09	6,936.31	130.22	66.87	-86.37	-3,739.76	-4,534.51	4,887.24	4,691.33	195.91	24.946		
11,700.00	7,245.36	8,811.09	6,935.89	132.98	69.76	-86.37	-3,742.08	-4,634.48	4,887.90	4,686.35	201.55	24.251		
11,800.00	7,244.94	8,911.09	6,935.48	135.74	72.69	-86.37	-3,744.41	-4,734.45	4,888.57	4,681.33	207.24	23.589		
11,900.00	7,244.52	9,011.08	6,935.06	138.50	75.65	-86.37	-3,746.74	-4,834.42	4,889.23	4,676.28	212.96	22.959		
12,000.00	7,244.10	9,111.08	6,934.64	141.27	78.64	-86.37	-3,749.06	-4,934.39	4,889.90	4,671.19	218.71	22.358		
12,100.00	7,243.68	9,211.08	6,934.22	144.04	81.66	-86.37	-3,751.39	-5,034.36	4,890.56	4,666.07	224.49	21.785		
12,200.00	7,243.26	9,311.08	6,933.81	146.82	84.69	-86.37	-3,753.71	-5,134.33	4,891.23	4,660.93	230.30	21.238		
12,300.00	7,242.84	9,411.08	6,933.39	149.60	87.75	-86.37	-3,756.04	-5,234.30	4,891.89	4,655.76	236.13	20.717		
12,400.00	7,242.42	9,511.07	6,932.97	152.38	90.83	-86.37	-3,758.36	-5,334.27	4,892.56	4,650.57	241.99	20.218		
12,500.00	7,242.00	9,611.07	6,932.56	155.16	93.93	-86.37	-3,760.69	-5,434.24	4,893.22	4,645.36	247.86	19.742		
12,600.00	7,241.58	9,711.07	6,932.14	157.95	97.04	-86.37	-3,763.01	-5,534.21	4,893.89	4,640.14	253.75	19.286		
12,700.00	7,241.16	9,811.07	6,931.72	160.74	100.16	-86.37	-3,765.34	-5,634.18	4,894.55	4,634.90	259.66	18.850		
12,800.00	7,240.74	9,911.06	6,931.30	163.53	103.30	-86.37	-3,767.66	-5,734.15	4,895.22	4,629.64	265.58	18.432		
12,900.00	7,240.32	10,011.06	6,930.89	166.32	106.44	-86.37	-3,769.99	-5,834.12	4,895.89	4,624.37	271.51	18.032		
13,000.00	7,239.89	10,111.06	6,930.47	169.12	109.60	-86.38	-3,772.31	-5,934.09	4,896.55	4,619.09	277.46	17.648		
13,100.00	7,239.47	10,211.06	6,930.05	171.92	112.77	-86.38	-3,774.64	-6,034.06	4,897.22	4,613.79	283.42	17.279		
13,200.00	7,239.05	10,311.06	6,929.64	174.72	115.95	-86.38	-3,776.96	-6,134.03	4,897.88	4,608.49	289.39	16.925		
13,300.00	7,238.63	10,411.05	6,929.22	177.52	119.13	-86.38	-3,779.29	-6,234.00	4,898.55	4,603.18	295.37	16.584		
13,400.00	7,238.21	10,481.67	6,928.92	180.32	121.38	-86.38	-3,780.96	-6,304.60	4,899.33	4,598.99	300.35	16.312		
13,500.00	7,237.79	10,509.75	6,928.81	183.13	122.28	-86.38	-3,781.99	-6,332.65	4,901.33	4,597.52	303.82	16.133		
13,600.00	7,237.37	10,569.28	6,928.56	185.93	124.17	-86.38	-3,785.03	-6,392.10	4,904.66	4,596.30	308.36	15.906		
13,700.00	7,236.95	10,669.21	6,928.14	188.74	127.36	-86.38	-3,790.25	-6,491.90	4,908.21	4,593.86	314.35	15.614		
13,800.00	7,236.53	10,725.53	6,927.91	191.55	129.16	-86.38	-3,793.19	-6,548.14	4,911.96	4,593.20	318.76	15.410		
13,900.00	7,236.11	10,765.75	6,927.74	194.36	130.44	-86.38	-3,795.71	-6,588.28	4,916.83	4,594.29	322.54	15.244		
14,000.00	7,235.69	10,800.00	6,927.60	197.17	131.53	-86.39	-3,798.53	-6,622.41	4,923.23	4,597.18	326.05	15.100		
14,100.00	7,235.27	10,825.02	6,927.49	199.98	132.32	-86.39	-3,800.97	-6,647.32	4,931.06	4,601.93	329.13	14.982		
14,200.00	7,234.85	10,825.02	6,927.49	202.80	132.32	-86.39	-3,800.97	-6,647.32	4,940.56	4,609.43	331.13	14.920		
14,300.00	7,234.43	10,900.00	6,927.18	205.61	134.68	-86.39	-3,810.24	-6,721.71	4,951.27	4,615.18	336.09	14.732		
14,400.00	7,234.01	10,900.00	6,927.18	208.43	134.68	-86.39	-3,810.24	-6,721.71	4,963.26	4,625.35	337.92	14.688		
14,500.00	7,233.59	10,925.02	6,927.07	211.25	135.46	-86.40	-3,813.98	-6,746.45	4,976.88	4,636.19	340.68	14.608		
14,600.00	7,233.17	11,831.82	6,923.29	214.06	164.45	-86.43	-3,879.69	-7,648.14	4,975.91	4,598.55	377.36	13.186		
14,700.00	7,232.75	11,931.80	6,922.87	216.88	167.72	-86.43	-3,879.67	-7,748.13	4,974.24	4,590.81	383.43	12.973		
14,800.00	7,232.33	12,031.79	6,922.45	219.70	170.99	-86.43	-3,879.66	-7,848.11	4,972.57	4,583.06	389.51	12.766		
14,900.00	7,231.91	12,131.77	6,922.04	222.52	174.25	-86.43	-3,879.65	-7,948.10	4,970.90	4,575.31	395.59	12.566		
15,000.00	7,231.49	12,231.76	6,921.62	225.35	177.53	-86.43	-3,879.63	-8,048.08	4,969.23	4,567.56	401.67	12.371		
15,100.00	7,231.07	12,331.75	6,921.20	228.17	180.80	-86.43	-3,879.62	-8,148.07	4,967.56	4,559.80	407.76	12.183		
15,116.21	7,231.00	12,347.95	6,921.13	228.63	181.33	-86.43	-3,879.62	-8,164.28	4,967.29	4,558.55	408.75	12.153 ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	69.00	0.00	0.00	-143.32	-4,389.64	-3,269.52	5,473.89					
100.00	100.00	56.00	100.00	0.18	0.07	-143.32	-4,389.64	-3,269.52	5,473.46	5,473.21	0.24	N/A		
200.00	200.00	902.75	943.27	0.61	3.85	-143.55	-4,359.91	-3,220.25	5,470.94	5,466.02	4.93	1,110.520		
300.00	300.00	1,001.67	1,041.11	1.05	4.35	-143.61	-4,352.40	-3,207.82	5,457.36	5,451.71	5.65	966.404		
400.00	400.00	1,100.58	1,138.96	1.49	4.86	-143.67	-4,344.90	-3,195.39	5,443.78	5,437.34	6.44	845.465		
500.00	500.00	1,199.50	1,236.81	1.93	5.37	-143.73	-4,337.40	-3,182.96	5,430.21	5,422.94	7.27	747.109		
600.00	599.98	1,301.50	1,334.73	2.37	5.90	-136.22	-4,329.90	-3,170.52	5,417.89	5,409.76	8.13	666.456		
700.00	699.84	1,402.42	1,432.74	2.81	6.43	-136.46	-4,322.38	-3,158.07	5,408.09	5,399.09	9.00	600.931		
800.00	799.45	1,496.62	1,530.71	3.26	6.92	-136.68	-4,314.87	-3,145.63	5,400.83	5,390.98	9.85	548.151		
900.00	898.70	1,595.51	1,628.53	3.70	7.44	-136.90	-4,307.37	-3,133.20	5,396.14	5,385.40	10.74	502.451		
1,000.00	997.47	1,694.11	1,726.06	4.15	7.96	-137.10	-4,299.90	-3,120.81	5,394.03	5,382.40	11.64	463.557		
1,092.80	1,088.77	1,785.39	1,816.35	4.57	8.44	-137.27	-4,292.98	-3,109.34	5,393.67	5,381.20	12.48	432.348		
1,100.00	1,095.78	1,792.43	1,823.31	4.60	8.47	-137.29	-4,292.44	-3,108.46	5,393.96	5,381.42	12.54	430.106		
1,200.00	1,194.05	1,890.71	1,920.54	5.05	8.99	-137.48	-4,284.99	-3,096.11	5,394.08	5,380.63	13.45	400.973		
1,300.00	1,292.33	1,989.00	2,017.76	5.50	9.51	-137.67	-4,277.54	-3,083.76	5,394.27	5,379.90	14.37	375.419		
1,400.00	1,390.61	2,087.29	2,114.98	5.96	10.02	-137.87	-4,270.08	-3,071.41	5,394.52	5,379.23	15.29	352.846		
1,500.00	1,488.89	2,185.58	2,212.21	6.43	10.54	-138.06	-4,262.63	-3,059.06	5,394.84	5,378.62	16.21	332.776		
1,600.00	1,587.16	2,283.87	2,309.43	6.89	11.06	-138.25	-4,255.18	-3,046.71	5,395.21	5,378.08	17.14	314.826		
1,700.00	1,685.44	2,382.16	2,406.66	7.36	11.58	-138.44	-4,247.73	-3,034.36	5,395.65	5,377.59	18.06	298.683		
1,800.00	1,783.72	2,480.45	2,503.88	7.83	12.10	-138.64	-4,240.27	-3,022.01	5,396.15	5,377.16	18.99	284.093		
1,900.00	1,882.00	2,578.74	2,601.11	8.30	12.62	-138.83	-4,232.82	-3,009.66	5,396.72	5,376.79	19.93	270.845		
2,000.00	1,980.27	2,677.03	2,698.33	8.77	13.14	-139.02	-4,225.37	-2,997.31	5,397.35	5,376.49	20.86	258.766		
2,100.00	2,078.55	2,775.31	2,795.56	9.25	13.66	-139.21	-4,217.91	-2,984.96	5,398.04	5,376.24	21.79	247.709		
2,200.00	2,176.83	2,873.60	2,892.78	9.72	14.18	-139.40	-4,210.46	-2,972.61	5,398.79	5,376.06	22.73	237.552		
2,300.00	2,275.11	2,971.89	2,990.01	10.19	14.70	-139.60	-4,203.01	-2,960.26	5,399.60	5,375.94	23.66	228.190		
2,400.00	2,373.38	3,070.18	3,087.23	10.66	15.22	-139.79	-4,195.55	-2,947.91	5,400.48	5,375.88	24.60	219.535		
2,500.00	2,471.66	3,168.47	3,184.46	11.14	15.74	-139.98	-4,188.10	-2,935.56	5,401.42	5,375.89	25.54	211.510		
2,600.00	2,569.94	3,266.76	3,281.68	11.61	16.26	-140.17	-4,180.65	-2,923.21	5,402.43	5,375.95	26.48	204.049		
2,700.00	2,668.22	3,365.05	3,378.91	12.09	16.78	-140.36	-4,173.20	-2,910.86	5,403.49	5,376.08	27.42	197.096		
2,800.00	2,766.49	3,463.34	3,476.13	12.56	17.30	-140.55	-4,165.74	-2,898.51	5,404.62	5,376.27	28.36	190.601		
2,900.00	2,864.77	3,561.63	3,573.36	13.04	17.82	-140.75	-4,158.29	-2,886.16	5,405.81	5,376.52	29.30	184.521		
3,000.00	2,963.05	3,659.91	3,670.58	13.51	18.34	-140.94	-4,150.84	-2,873.81	5,407.07	5,376.83	30.24	178.817		
3,100.00	3,061.33	3,758.20	3,767.80	13.99	18.86	-141.13	-4,143.38	-2,861.46	5,408.39	5,377.21	31.18	173.456		
3,200.00	3,159.60	3,856.49	3,865.03	14.46	19.38	-141.32	-4,135.93	-2,849.11	5,409.76	5,377.64	32.12	168.409		
3,300.00	3,257.88	3,954.78	3,962.25	14.94	19.90	-141.51	-4,128.48	-2,836.76	5,411.21	5,378.14	33.07	163.648		
3,400.00	3,356.16	4,053.07	4,059.48	15.41	20.42	-141.70	-4,121.02	-2,824.41	5,412.71	5,378.70	34.01	159.150		
3,500.00	3,454.43	4,151.36	4,156.70	15.89	20.94	-141.89	-4,113.57	-2,812.06	5,414.27	5,379.32	34.95	154.895		
3,600.00	3,552.71	4,249.65	4,253.93	16.36	21.46	-142.08	-4,106.12	-2,799.71	5,415.90	5,380.00	35.90	150.863		
3,700.00	3,650.99	4,347.94	4,351.15	16.84	21.98	-142.27	-4,098.67	-2,787.36	5,417.59	5,380.75	36.85	147.037		
3,800.00	3,749.27	4,446.23	4,448.38	17.32	22.50	-142.47	-4,091.21	-2,775.01	5,419.34	5,381.55	37.79	143.402		
3,900.00	3,847.54	4,544.51	4,545.60	17.79	23.02	-142.66	-4,083.76	-2,762.66	5,421.16	5,382.42	38.74	139.945		
4,000.00	3,945.82	4,642.80	4,642.83	18.27	23.54	-142.85	-4,076.31	-2,750.31	5,423.03	5,383.35	39.68	136.653		
4,100.00	4,044.10	4,741.09	4,740.05	18.75	24.06	-143.04	-4,068.85	-2,737.96	5,424.97	5,384.34	40.63	133.513		
4,200.00	4,142.38	4,839.38	4,837.28	19.22	24.58	-143.23	-4,061.40	-2,725.61	5,426.97	5,385.39	41.58	130.517		
4,300.00	4,240.65	4,937.67	4,934.50	19.70	25.11	-143.42	-4,053.95	-2,713.26	5,429.03	5,386.51	42.53	127.655		
4,400.00	4,338.93	5,035.96	5,031.73	20.18	25.63	-143.61	-4,046.49	-2,700.91	5,431.16	5,387.68	43.48	124.917		
4,500.00	4,437.21	5,134.25	5,128.95	20.65	26.15	-143.80	-4,039.04	-2,688.56	5,433.34	5,388.91	44.43	122.297		
4,600.00	4,535.49	5,232.54	5,226.18	21.13	26.67	-143.99	-4,031.59	-2,676.21	5,435.59	5,390.21	45.38	119.786		
4,700.00	4,633.76	5,330.83	5,323.40	21.61	27.19	-144.17	-4,024.14	-2,663.86	5,437.90	5,391.57	46.33	117.379		
4,800.00	4,732.04	5,429.11	5,420.62	22.08	27.71	-144.36	-4,016.68	-2,651.51	5,440.27	5,392.99	47.28	115.068		
4,900.00	4,830.32	5,527.40	5,517.85	22.56	28.23	-144.55	-4,009.23	-2,639.16	5,442.70	5,394.47	48.23	112.849		
5,000.00	4,928.60	5,625.69	5,615.07	23.04	28.75	-144.74	-4,001.78	-2,626.81	5,445.19	5,396.01	49.18	110.716		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	5,723.98	5,712.30	23.51	29.27	-144.93	-3,994.32	-2,614.46	5,447.74	5,397.61	50.13	108.664		
5,200.00	5,125.15	5,827.75	5,809.52	23.99	29.82	-145.12	-3,986.87	-2,602.11	5,450.36	5,399.24	51.11	106.634		
5,300.00	5,223.43	5,929.46	5,906.75	24.47	30.36	-145.31	-3,979.42	-2,589.76	5,453.03	5,400.95	52.08	104.701		
5,400.00	5,321.71	6,031.18	6,003.97	24.94	30.90	-145.50	-3,971.96	-2,577.42	5,455.77	5,402.71	53.05	102.838		
5,500.00	5,419.98	6,117.14	6,101.20	25.42	31.36	-145.68	-3,964.51	-2,565.07	5,458.56	5,404.62	53.95	101.184		
5,600.00	5,518.26	6,215.43	6,198.42	25.90	31.88	-145.87	-3,957.06	-2,552.72	5,461.42	5,406.52	54.90	99.477		
5,700.00	5,616.54	6,313.72	6,295.65	26.38	32.40	-146.06	-3,949.61	-2,540.37	5,464.34	5,408.48	55.86	97.829		
5,800.00	5,714.82	6,374.99	6,356.26	26.85	32.72	-146.18	-3,944.96	-2,532.67	5,467.44	5,410.81	56.63	96.543		
5,900.00	5,813.09	6,400.00	6,381.05	27.33	32.85	-146.22	-3,943.07	-2,530.01	5,471.69	5,414.47	57.22	95.623		
6,000.00	5,911.37	6,425.01	6,405.94	27.81	32.97	-146.25	-3,941.20	-2,528.34	5,477.43	5,419.64	57.79	94.777		
6,100.00	6,009.65	6,450.00	6,430.85	28.28	33.08	-146.28	-3,939.34	-2,527.64	5,484.65	5,426.30	58.35	94.004		
6,200.00	6,107.93	6,450.00	6,430.85	28.76	33.08	-146.28	-3,939.34	-2,527.64	5,493.33	5,434.57	58.77	93.474		
6,300.00	6,206.20	6,500.00	6,480.68	29.24	33.26	-146.30	-3,935.71	-2,529.19	5,503.48	5,444.09	59.39	92.662		
6,400.00	6,304.48	6,500.00	6,480.68	29.72	33.26	-146.30	-3,935.71	-2,529.19	5,514.86	5,455.08	59.79	92.243		
6,500.00	6,402.76	6,525.01	6,505.52	30.19	33.34	-146.30	-3,933.93	-2,531.44	5,527.80	5,467.54	60.27	91.722		
6,600.00	6,501.04	6,550.00	6,530.24	30.67	33.41	-146.29	-3,932.18	-2,534.66	5,542.18	5,481.45	60.73	91.259		
6,700.00	6,599.31	6,550.00	6,530.24	31.15	33.41	-146.29	-3,932.18	-2,534.66	5,557.99	5,496.92	61.07	91.007		
6,800.00	6,697.50	6,600.00	6,579.23	31.63	33.53	-124.67	-3,928.79	-2,544.01	5,574.40	5,512.80	61.61	90.482		
6,900.00	6,794.18	6,600.00	6,579.23	32.10	33.53	-97.94	-3,928.79	-2,544.01	5,585.73	5,523.79	61.94	90.181		
7,000.00	6,886.96	6,625.01	6,603.42	32.55	33.58	-86.04	-3,927.14	-2,550.13	5,591.16	5,528.79	62.37	89.638		
7,100.00	6,973.57	6,650.00	6,627.34	32.99	33.63	-80.28	-3,925.54	-2,557.18	5,590.47	5,527.65	62.82	88.986		
7,200.00	7,051.87	6,650.00	6,627.34	33.41	33.63	-77.42	-3,925.54	-2,557.18	5,583.66	5,520.45	63.21	88.336		
7,300.00	7,119.93	6,678.19	6,653.96	33.85	33.67	-76.45	-3,923.79	-2,566.26	5,570.88	5,507.09	63.79	87.336		
7,400.00	7,176.09	6,700.00	6,674.28	34.39	33.70	-76.71	-3,922.47	-2,574.09	5,552.57	5,488.11	64.46	86.141		
7,500.00	7,218.95	6,711.06	6,684.47	35.09	33.71	-77.89	-3,921.82	-2,578.33	5,529.12	5,463.87	65.24	84.749		
7,600.00	7,247.46	6,725.01	6,697.23	35.98	33.73	-79.92	-3,921.01	-2,583.93	5,501.14	5,434.93	66.21	83.085		
7,700.00	7,260.92	6,737.19	6,708.25	37.04	33.74	-82.65	-3,920.32	-2,589.04	5,469.35	5,402.01	67.34	81.218		
7,800.00	7,261.75	6,750.00	6,719.75	38.23	33.75	-84.01	-3,919.60	-2,594.64	5,435.25	5,366.63	68.62	79.203		
7,900.00	7,261.33	6,750.00	6,719.75	39.59	33.75	-84.01	-3,919.60	-2,594.64	5,402.37	5,332.35	70.02	77.155		
8,000.00	7,260.91	6,769.43	6,736.97	41.10	33.77	-84.20	-3,918.53	-2,603.58	5,371.01	5,299.37	71.64	74.973		
8,100.00	7,260.49	6,781.64	6,747.65	42.75	33.78	-84.32	-3,917.88	-2,609.47	5,341.26	5,267.89	73.37	72.798		
8,200.00	7,260.07	6,800.00	6,763.49	44.53	33.79	-84.49	-3,916.93	-2,618.70	5,313.12	5,237.87	75.25	70.606		
8,300.00	7,259.65	6,808.86	6,771.04	46.41	33.80	-84.58	-3,916.48	-2,623.33	5,286.57	5,209.36	77.21	68.470		
8,400.00	7,259.23	6,825.01	6,784.63	48.39	33.81	-84.73	-3,915.68	-2,632.01	5,261.65	5,182.35	79.30	66.355		
8,500.00	7,258.81	6,840.50	6,797.45	50.45	33.81	-84.87	-3,914.93	-2,640.67	5,238.36	5,156.89	81.47	64.298		
8,600.00	7,258.39	6,850.00	6,805.21	52.59	33.82	-84.96	-3,914.49	-2,646.13	5,216.72	5,133.01	83.71	62.322		
8,700.00	7,257.97	6,877.52	6,827.22	54.79	33.83	-85.20	-3,913.25	-2,662.59	5,196.66	5,110.59	86.07	60.379		
8,800.00	7,257.55	6,900.00	6,844.66	57.05	33.84	-85.40	-3,912.29	-2,676.74	5,178.24	5,089.77	88.47	58.529		
8,900.00	7,257.13	6,925.01	6,863.47	59.36	33.84	-85.61	-3,911.28	-2,693.20	5,161.42	5,070.48	90.94	56.757		
9,000.00	7,256.71	6,950.00	6,881.60	61.72	33.85	-85.81	-3,910.34	-2,710.37	5,146.19	5,052.74	93.45	55.067		
9,100.00	7,256.29	6,972.55	6,897.38	64.12	33.86	-85.99	-3,909.55	-2,726.46	5,132.51	5,036.50	96.00	53.462		
9,200.00	7,255.87	7,000.00	6,915.80	66.56	33.88	-86.19	-3,908.66	-2,746.78	5,120.35	5,021.75	98.60	51.931		
9,300.00	7,255.45	7,033.42	6,937.03	69.02	33.90	-86.43	-3,907.70	-2,772.57	5,109.67	5,008.42	101.25	50.465		
9,400.00	7,255.03	7,067.82	6,957.44	71.52	33.94	-86.66	-3,906.83	-2,800.25	5,100.42	4,996.48	103.94	49.069		
9,500.00	7,254.61	7,100.00	6,975.16	74.04	33.98	-86.86	-3,906.15	-2,827.10	5,092.55	4,985.90	106.65	47.750		
9,600.00	7,254.19	7,150.00	6,999.94	76.58	34.08	-87.14	-3,905.32	-2,870.50	5,085.98	4,976.50	109.48	46.454		
9,700.00	7,253.77	7,188.26	7,016.58	79.15	34.20	-87.33	-3,904.89	-2,904.95	5,080.65	4,968.35	112.30	45.241		
9,800.00	7,253.35	7,234.12	7,033.75	81.74	34.37	-87.53	-3,904.61	-2,947.46	5,076.49	4,961.28	115.20	44.066		
9,900.00	7,252.92	7,282.54	7,048.52	84.34	34.62	-87.70	-3,904.59	-2,993.55	5,073.42	4,955.24	118.18	42.930		
10,000.00	7,252.50	7,333.13	7,060.17	86.96	34.95	-87.83	-3,904.87	-3,042.77	5,071.38	4,950.16	121.22	41.838		
10,100.00	7,252.08	7,385.38	7,068.08	89.59	35.37	-87.92	-3,905.48	-3,094.40	5,070.32	4,945.99	124.33	40.780		
10,163.28	7,251.82	7,419.01	7,070.93	91.27	35.68	-87.96	-3,906.04	-3,127.90	5,070.13	4,943.80	126.33	40.134 CC		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,438.65	7,071.78	92.24	35.87	-87.97	-3,906.44	-3,147.52	5,070.19	4,942.69	127.50	39.766		
10,300.00	7,251.24	7,520.05	7,071.65	94.90	36.79	-87.97	-3,908.33	-3,228.89	5,070.83	4,939.73	131.10	38.679		
10,400.00	7,250.82	7,629.98	7,071.05	97.57	38.33	-87.97	-3,910.68	-3,328.86	5,071.53	4,936.20	135.33	37.475		
10,500.00	7,250.40	7,729.98	7,070.44	100.25	39.99	-87.96	-3,913.04	-3,428.83	5,072.23	4,932.57	139.67	36.317		
10,600.00	7,249.98	7,829.99	7,069.84	102.93	41.85	-87.96	-3,915.40	-3,528.80	5,072.94	4,928.73	144.21	35.177		
10,700.00	7,249.56	7,929.99	7,069.24	105.63	43.89	-87.96	-3,917.75	-3,628.77	5,073.64	4,924.70	148.94	34.065		
10,800.00	7,249.14	8,029.99	7,068.64	108.34	46.07	-87.96	-3,920.11	-3,728.73	5,074.35	4,920.52	153.83	32.987		
10,900.00	7,248.72	8,130.00	7,068.03	111.05	48.39	-87.96	-3,922.47	-3,828.70	5,075.05	4,916.20	158.85	31.948		
11,000.00	7,248.30	8,230.00	7,067.43	113.77	50.83	-87.96	-3,924.82	-3,928.67	5,075.75	4,911.76	164.00	30.950		
11,100.00	7,247.88	8,330.00	7,066.83	116.50	53.35	-87.95	-3,927.18	-4,028.64	5,076.46	4,907.21	169.25	29.994		
11,200.00	7,247.46	8,430.01	7,066.23	119.23	55.96	-87.95	-3,929.54	-4,128.60	5,077.16	4,902.58	174.59	29.081		
11,300.00	7,247.04	8,530.01	7,065.63	121.97	58.65	-87.95	-3,931.89	-4,228.57	5,077.87	4,897.86	180.01	28.209		
11,400.00	7,246.62	8,630.01	7,065.02	124.72	61.39	-87.95	-3,934.25	-4,328.54	5,078.57	4,893.08	185.49	27.379		
11,500.00	7,246.20	8,730.01	7,064.42	127.46	64.19	-87.95	-3,936.61	-4,428.51	5,079.28	4,888.24	191.04	26.588		
11,600.00	7,245.78	8,830.02	7,063.82	130.22	67.04	-87.95	-3,938.96	-4,528.48	5,079.98	4,883.34	196.64	25.834		
11,700.00	7,245.36	8,930.02	7,063.22	132.98	69.93	-87.94	-3,941.32	-4,628.44	5,080.68	4,878.40	202.29	25.116		
11,800.00	7,244.94	9,030.02	7,062.62	135.74	72.86	-87.94	-3,943.68	-4,728.41	5,081.39	4,873.41	207.97	24.433		
11,900.00	7,244.52	9,120.01	7,062.01	138.50	75.52	-87.94	-3,946.03	-4,828.38	5,082.09	4,868.69	213.40	23.815		
12,000.00	7,244.10	9,230.03	7,061.41	141.27	78.80	-87.94	-3,948.39	-4,928.35	5,082.80	4,863.34	219.46	23.161		
12,100.00	7,243.68	9,330.03	7,060.81	144.04	81.82	-87.94	-3,950.75	-5,028.31	5,083.50	4,858.26	225.24	22.569		
12,200.00	7,243.26	9,430.04	7,060.21	146.82	84.86	-87.93	-3,953.10	-5,128.28	5,084.21	4,853.15	231.06	22.004		
12,300.00	7,242.84	9,530.04	7,059.61	149.60	87.92	-87.93	-3,955.46	-5,228.25	5,084.91	4,848.02	236.89	21.465		
12,400.00	7,242.42	9,630.04	7,059.00	152.38	90.99	-87.93	-3,957.82	-5,328.22	5,085.61	4,842.86	242.75	20.950		
12,500.00	7,242.00	9,730.04	7,058.40	155.16	94.09	-87.93	-3,960.17	-5,428.19	5,086.32	4,837.69	248.63	20.458		
12,600.00	7,241.58	9,830.05	7,057.80	157.95	97.20	-87.93	-3,962.53	-5,528.15	5,087.02	4,832.50	254.52	19.986		
12,700.00	7,241.16	9,930.05	7,057.20	160.74	100.32	-87.93	-3,964.89	-5,628.12	5,087.73	4,827.29	260.44	19.535		
12,800.00	7,240.74	10,030.05	7,056.59	163.53	103.46	-87.92	-3,967.24	-5,728.09	5,088.43	4,822.07	266.36	19.103		
12,900.00	7,240.32	10,130.06	7,055.99	166.32	106.61	-87.92	-3,969.60	-5,828.06	5,089.14	4,816.83	272.30	18.689		
13,000.00	7,239.89	10,219.98	7,055.39	169.12	109.44	-87.92	-3,971.96	-5,928.03	5,089.84	4,811.90	277.94	18.313		
13,100.00	7,239.47	10,330.06	7,054.79	171.92	112.93	-87.92	-3,974.31	-6,027.99	5,090.54	4,806.33	284.22	17.911		
13,200.00	7,239.05	10,430.07	7,054.19	174.72	116.11	-87.92	-3,976.67	-6,127.96	5,091.25	4,801.05	290.19	17.544		
13,300.00	7,238.63	10,530.07	7,053.58	177.52	119.29	-87.92	-3,979.03	-6,227.93	5,091.95	4,795.77	296.18	17.192		
13,400.00	7,238.21	10,630.07	7,052.98	180.32	122.49	-87.91	-3,981.38	-6,327.90	5,092.66	4,790.48	302.17	16.853		
13,500.00	7,237.79	10,730.07	7,052.38	183.13	125.69	-87.91	-3,983.74	-6,427.86	5,093.36	4,785.19	308.18	16.527		
13,600.00	7,237.37	10,830.08	7,051.78	185.93	128.89	-87.91	-3,986.10	-6,527.83	5,094.07	4,779.88	314.19	16.214		
13,700.00	7,236.95	10,930.08	7,051.18	188.74	132.10	-87.91	-3,988.45	-6,627.80	5,094.77	4,774.57	320.20	15.911		
13,800.00	7,236.53	11,030.08	7,050.57	191.55	135.32	-87.91	-3,990.81	-6,727.77	5,095.47	4,769.25	326.23	15.619		
13,900.00	7,236.11	11,130.09	7,049.97	194.36	138.54	-87.91	-3,993.16	-6,827.74	5,096.18	4,763.92	332.26	15.338		
14,000.00	7,235.69	11,230.09	7,049.37	197.17	141.77	-87.90	-3,995.52	-6,927.70	5,096.88	4,758.59	338.30	15.066		
14,100.00	7,235.27	11,330.09	7,048.77	199.98	145.00	-87.90	-3,997.88	-7,027.67	5,097.59	4,753.25	344.34	14.804		
14,200.00	7,234.85	11,430.10	7,048.16	202.80	148.24	-87.90	-4,000.23	-7,127.64	5,098.29	4,747.91	350.39	14.551		
14,300.00	7,234.43	11,530.10	7,047.56	205.61	151.48	-87.90	-4,002.59	-7,227.61	5,099.00	4,742.56	356.44	14.305		
14,400.00	7,234.01	11,630.10	7,046.96	208.43	154.72	-87.90	-4,004.95	-7,327.57	5,099.70	4,737.20	362.50	14.068		
14,500.00	7,233.59	11,730.10	7,046.36	211.25	157.97	-87.89	-4,007.30	-7,427.54	5,100.41	4,731.85	368.56	13.839		
14,600.00	7,233.17	11,830.11	7,045.76	214.06	161.22	-87.89	-4,009.66	-7,527.51	5,101.11	4,726.49	374.62	13.617		
14,700.00	7,232.75	11,930.11	7,045.15	216.88	164.47	-87.89	-4,012.02	-7,627.48	5,101.81	4,721.12	380.69	13.401		
14,800.00	7,232.33	12,030.11	7,044.55	219.70	167.73	-87.89	-4,014.37	-7,727.45	5,102.52	4,715.75	386.77	13.193		
14,900.00	7,231.91	12,130.12	7,043.95	222.52	170.99	-87.89	-4,016.73	-7,827.41	5,103.22	4,710.38	392.85	12.990		
15,000.00	7,231.49	12,230.12	7,043.35	225.35	174.25	-87.89	-4,019.09	-7,927.38	5,103.93	4,705.00	398.93	12.794		
15,100.00	7,231.07	12,330.12	7,042.75	228.17	177.52	-87.88	-4,021.44	-8,027.35	5,104.63	4,699.62	405.01	12.604		
15,116.21	7,231.00	12,336.14	7,042.65	228.63	177.71	-87.88	-4,021.83	-8,043.56	5,104.75	4,699.08	405.66	12.584 ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	15,788.79	7,244.40	0.00	247.76	0.61	1,983.49	21.26	7,511.06				
100.00	100.00	15,789.03	7,244.40	0.18	247.77	0.61	1,983.49	21.02	7,414.66	7,298.96	115.70	64.086	
200.00	200.00	15,789.28	7,244.40	0.61	247.78	0.60	1,983.49	20.77	7,318.35	7,202.27	116.08	63.048	
300.00	300.00	15,789.52	7,244.40	1.05	247.78	0.59	1,983.49	20.53	7,222.14	7,105.67	116.47	62.006	
400.00	400.00	15,789.77	7,244.40	1.49	247.79	0.59	1,983.49	20.28	7,126.04	7,009.15	116.89	60.962	
500.00	500.00	15,790.01	7,244.40	1.93	247.80	0.58	1,983.49	20.04	7,030.05	6,912.71	117.34	59.914	
600.00	599.98	15,809.57	7,244.40	2.37	248.35	9.42	1,983.49	19.56	6,933.70	6,815.69	118.01	58.757	
700.00	699.84	15,808.61	7,244.41	2.81	248.32	10.83	1,983.50	18.60	6,836.57	6,718.18	118.39	57.748	
800.00	799.45	15,807.18	7,244.41	3.26	248.28	12.69	1,983.50	17.16	6,738.74	6,620.04	118.71	56.768	
900.00	898.70	15,805.27	7,244.41	3.70	248.23	15.29	1,983.50	15.26	6,640.32	6,521.36	118.96	55.818	
1,000.00	997.47	15,802.89	7,244.42	4.15	248.16	19.16	1,983.51	12.88	6,541.40	6,422.24	119.15	54.900	
1,100.00	1,095.78	15,800.15	7,244.43	4.60	248.08	20.73	1,983.51	10.14	6,442.15	6,322.86	119.29	54.006	
1,200.00	1,194.05	15,802.67	7,244.43	5.05	248.15	20.53	1,983.52	7.38	6,342.90	6,223.42	119.49	53.085	
1,300.00	1,292.33	15,805.44	7,244.44	5.50	248.23	20.33	1,983.52	4.61	6,243.68	6,123.98	119.70	52.160	
1,400.00	1,390.61	15,808.20	7,244.45	5.96	248.31	20.14	1,983.53	1.85	6,144.48	6,024.55	119.93	51.233	
1,500.00	1,488.89	15,810.97	7,244.45	6.43	248.39	19.94	1,983.53	-0.92	6,045.31	5,925.13	120.17	50.305	
1,600.00	1,587.16	15,813.73	7,244.46	6.89	248.47	19.74	1,983.54	-3.68	5,946.16	5,825.73	120.43	49.374	
1,700.00	1,685.44	15,816.49	7,244.47	7.36	248.55	19.54	1,983.54	-6.44	5,847.04	5,726.34	120.70	48.442	
1,800.00	1,783.72	15,819.26	7,244.47	7.83	248.62	19.34	1,983.55	-9.21	5,747.95	5,626.96	120.99	47.508	
1,900.00	1,882.00	15,822.02	7,244.48	8.30	248.70	19.14	1,983.55	-11.97	5,648.89	5,527.59	121.29	46.572	
2,000.00	1,980.27	15,824.79	7,244.49	8.77	248.78	18.94	1,983.56	-14.74	5,549.86	5,428.24	121.62	45.634	
2,100.00	2,078.55	15,827.55	7,244.49	9.25	248.86	18.74	1,983.56	-17.50	5,450.87	5,328.91	121.96	44.694	
2,200.00	2,176.83	15,830.32	7,244.50	9.72	248.94	18.54	1,983.57	-20.27	5,351.91	5,229.59	122.32	43.753	
2,300.00	2,275.11	15,833.08	7,244.51	10.19	249.01	18.34	1,983.57	-23.03	5,252.99	5,130.29	122.70	42.810	
2,400.00	2,373.38	15,835.84	7,244.51	10.66	249.09	18.14	1,983.58	-25.79	5,154.11	5,031.00	123.11	41.865	
2,500.00	2,471.66	15,838.61	7,244.52	11.14	249.17	17.94	1,983.58	-28.56	5,055.27	4,931.73	123.54	40.919	
2,600.00	2,569.94	15,841.37	7,244.53	11.61	249.25	17.74	1,983.59	-31.32	4,956.48	4,832.48	124.00	39.971	
2,700.00	2,668.22	15,844.14	7,244.53	12.09	249.33	17.54	1,983.59	-34.09	4,857.74	4,733.25	124.49	39.022	
2,800.00	2,766.49	15,846.90	7,244.54	12.56	249.41	17.34	1,983.60	-36.85	4,759.05	4,634.04	125.00	38.072	
2,900.00	2,864.77	15,849.66	7,244.55	13.04	249.48	17.14	1,983.60	-39.61	4,660.41	4,534.86	125.55	37.120	
3,000.00	2,963.05	15,852.43	7,244.55	13.51	249.56	16.94	1,983.61	-42.38	4,561.83	4,435.69	126.13	36.167	
3,100.00	3,061.33	15,855.19	7,244.56	13.99	249.64	16.73	1,983.61	-45.14	4,463.31	4,336.55	126.75	35.213	
3,200.00	3,159.60	15,857.96	7,244.57	14.46	249.72	16.53	1,983.62	-47.91	4,364.85	4,237.44	127.41	34.258	
3,300.00	3,257.88	15,860.72	7,244.57	14.94	249.80	16.33	1,983.62	-50.67	4,266.47	4,138.36	128.11	33.303	
3,400.00	3,356.16	15,863.49	7,244.58	15.41	249.87	16.13	1,983.63	-53.44	4,168.16	4,039.30	128.85	32.348	
3,500.00	3,454.43	15,866.25	7,244.59	15.89	249.95	15.92	1,983.63	-56.20	4,069.93	3,940.28	129.65	31.392	
3,600.00	3,552.71	15,869.01	7,244.59	16.36	250.03	15.72	1,983.64	-58.96	3,971.79	3,841.30	130.49	30.437	
3,700.00	3,650.99	15,871.78	7,244.60	16.84	250.11	15.52	1,983.64	-61.73	3,873.74	3,742.35	131.39	29.483	
3,800.00	3,749.27	15,874.54	7,244.61	17.32	250.19	15.31	1,983.65	-64.49	3,775.79	3,643.44	132.35	28.529	
3,900.00	3,847.54	15,877.31	7,244.62	17.79	250.27	15.11	1,983.65	-67.26	3,677.95	3,544.58	133.37	27.577	
4,000.00	3,945.82	15,880.07	7,244.62	18.27	250.34	14.91	1,983.66	-70.02	3,580.23	3,445.77	134.46	26.628	
4,100.00	4,044.10	15,882.84	7,244.63	18.75	250.42	14.70	1,983.66	-72.78	3,482.63	3,347.02	135.62	25.680	
4,200.00	4,142.38	15,885.60	7,244.64	19.22	250.50	14.50	1,983.67	-75.55	3,385.17	3,248.32	136.85	24.736	
4,300.00	4,240.65	15,888.36	7,244.64	19.70	250.58	14.29	1,983.67	-78.31	3,287.87	3,149.69	138.18	23.795	
4,400.00	4,338.93	15,908.94	7,244.65	20.18	251.16	14.09	1,983.68	-81.08	3,190.72	3,050.87	139.85	22.816	
4,500.00	4,437.21	15,906.17	7,244.66	20.65	251.08	13.88	1,983.68	-83.84	3,093.76	2,952.48	141.28	21.898	
4,600.00	4,535.49	15,903.41	7,244.66	21.13	251.00	13.68	1,983.69	-86.61	2,996.99	2,854.17	142.82	20.985	
4,700.00	4,633.76	15,900.64	7,244.67	21.61	250.93	13.47	1,983.69	-89.37	2,900.44	2,755.97	144.47	20.076	
4,800.00	4,732.04	15,902.18	7,244.68	22.08	250.97	13.27	1,983.70	-92.13	2,804.13	2,657.81	146.32	19.165	
4,900.00	4,830.32	15,904.95	7,244.68	22.56	251.05	13.06	1,983.70	-94.90	2,708.08	2,559.77	148.32	18.259	
5,000.00	4,928.60	15,907.71	7,244.69	23.04	251.13	12.86	1,983.71	-97.66	2,612.33	2,461.86	150.47	17.361	
5,100.00	5,026.87	15,910.48	7,244.70	23.51	251.20	12.65	1,983.71	-100.43	2,516.90	2,364.11	152.79	16.473	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	15,913.24	7,244.70	23.99	251.28	12.45	1,983.71	-103.19	2,421.84	2,266.55	155.29	15.595		
5,300.00	5,223.43	15,916.01	7,244.71	24.47	251.36	12.24	1,983.72	-105.96	2,327.20	2,169.19	158.00	14.729		
5,400.00	5,321.71	15,918.77	7,244.72	24.94	251.44	12.03	1,983.72	-108.72	2,233.01	2,072.07	160.94	13.875		
5,500.00	5,419.98	15,921.53	7,244.72	25.42	251.52	11.83	1,983.73	-111.48	2,139.35	1,975.22	164.13	13.035		
5,600.00	5,518.26	15,924.30	7,244.73	25.90	251.60	11.62	1,983.73	-114.25	2,046.28	1,878.68	167.60	12.209		
5,700.00	5,616.54	15,927.06	7,244.74	26.38	251.67	11.42	1,983.74	-117.01	1,953.90	1,782.52	171.38	11.401		
5,800.00	5,714.82	15,929.83	7,244.74	26.85	251.75	11.21	1,983.74	-119.78	1,862.30	1,686.79	175.51	10.611		
5,900.00	5,813.09	15,932.59	7,244.75	27.33	251.83	11.00	1,983.75	-122.54	1,771.60	1,591.57	180.03	9.840		
6,000.00	5,911.37	15,935.36	7,244.76	27.81	251.91	10.80	1,983.75	-125.30	1,681.96	1,496.97	184.99	9.092		
6,100.00	6,009.65	15,938.12	7,244.76	28.28	251.99	10.59	1,983.76	-128.07	1,593.54	1,403.11	190.42	8.368		
6,200.00	6,107.93	15,940.88	7,244.77	28.76	252.06	10.38	1,983.76	-130.83	1,506.56	1,310.17	196.39	7.671		
6,300.00	6,206.20	15,943.65	7,244.78	29.24	252.14	10.18	1,983.77	-133.60	1,421.30	1,218.36	202.94	7.004		
6,400.00	6,304.48	15,946.41	7,244.78	29.72	252.22	9.97	1,983.77	-136.36	1,338.07	1,127.96	210.11	6.368		
6,500.00	6,402.76	15,949.18	7,244.79	30.19	252.30	9.76	1,983.78	-139.13	1,257.28	1,039.34	217.94	5.769		
6,600.00	6,501.04	15,951.94	7,244.80	30.67	252.38	9.55	1,983.78	-141.89	1,179.43	953.00	226.44	5.209		
6,700.00	6,599.31	15,954.70	7,244.80	31.15	252.46	9.35	1,983.79	-144.65	1,105.15	869.61	235.54	4.692		
6,800.00	6,697.59	15,959.31	7,244.82	31.63	252.59	34.05	1,983.80	-149.26	1,035.29	790.11	245.18	4.223		
6,900.00	6,794.18	15,977.42	7,244.86	32.10	253.10	65.88	1,983.83	-167.36	971.87	716.61	255.26	3.807		
7,000.00	6,886.96	16,010.67	7,244.94	32.55	254.04	80.90	1,983.89	-200.61	917.07	651.82	265.25	3.457		
7,100.00	6,973.57	16,058.24	7,245.06	32.99	255.38	88.23	1,983.98	-248.19	872.29	597.80	274.49	3.178		
7,200.00	7,051.87	16,118.97	7,245.21	33.41	257.10	91.47	1,984.08	-308.92	838.02	555.55	282.47	2.967		
7,300.00	7,119.93	16,208.71	7,245.38	33.85	259.64	92.32	1,984.21	-381.30	813.70	524.25	289.45	2.811		
7,400.00	7,176.09	16,273.61	7,245.58	34.39	261.48	91.81	1,984.36	-463.56	797.96	503.84	294.13	2.713		
7,500.00	7,218.95	16,363.73	7,245.80	35.09	264.03	90.71	1,984.52	-553.67	788.97	490.58	298.39	2.644		
7,600.00	7,247.46	16,459.47	7,246.04	35.98	266.74	89.62	1,984.70	-649.42	784.87	482.62	302.26	2.597		
7,671.23	7,258.62	16,529.80	7,246.21	36.73	268.74	89.09	1,984.82	-719.75	784.12	479.11	305.02	2.571 CC		
7,700.00	7,260.92	16,558.48	7,246.28	37.04	269.55	88.95	1,984.87	-748.43	784.24	478.10	306.14	2.562		
7,800.00	7,261.75	16,658.45	7,246.52	38.23	272.38	88.89	1,985.05	-848.40	785.85	475.67	310.19	2.533		
7,900.00	7,261.33	16,758.43	7,246.77	39.59	275.21	88.94	1,985.23	-948.38	787.68	473.27	314.41	2.505		
8,000.00	7,260.91	16,858.41	7,247.01	41.10	278.05	88.99	1,985.41	-1,048.36	789.50	470.72	318.79	2.477		
8,100.00	7,260.49	16,958.39	7,247.26	42.75	280.88	89.04	1,985.59	-1,148.34	791.33	468.03	323.30	2.448		
8,200.00	7,260.07	17,058.37	7,247.50	44.53	283.72	89.09	1,985.77	-1,248.32	793.16	465.23	327.93	2.419		
8,300.00	7,259.65	17,158.36	7,247.75	46.41	286.55	89.14	1,985.95	-1,348.30	794.98	462.31	332.67	2.390		
8,400.00	7,259.23	17,258.34	7,247.99	48.39	289.39	89.19	1,986.13	-1,448.28	796.81	459.31	337.50	2.361		
8,500.00	7,258.81	17,358.32	7,248.23	50.45	292.23	89.24	1,986.31	-1,548.26	798.64	456.22	342.42	2.332		
8,600.00	7,258.39	17,458.30	7,248.48	52.59	295.06	89.29	1,986.49	-1,648.24	800.47	453.06	347.41	2.304		
8,700.00	7,257.97	17,558.28	7,248.72	54.79	297.90	89.34	1,986.67	-1,748.22	802.30	449.83	352.47	2.276		
8,800.00	7,257.55	17,658.26	7,248.97	57.05	300.74	89.38	1,986.85	-1,848.20	804.13	446.55	357.58	2.249		
8,900.00	7,257.13	17,758.24	7,249.21	59.36	303.58	89.43	1,987.03	-1,948.18	805.96	443.22	362.75	2.222		
9,000.00	7,256.71	17,858.22	7,249.46	61.72	306.41	89.48	1,987.21	-2,048.16	807.79	439.84	367.95	2.195		
9,100.00	7,256.29	17,958.20	7,249.70	64.12	309.25	89.53	1,987.39	-2,148.14	809.63	436.42	373.20	2.169		
9,200.00	7,255.87	18,058.18	7,249.94	66.56	312.09	89.58	1,987.56	-2,248.12	811.46	432.97	378.49	2.144		
9,300.00	7,255.45	18,158.16	7,250.19	69.02	314.93	89.63	1,987.74	-2,348.10	813.29	429.49	383.80	2.119		
9,400.00	7,255.03	18,258.15	7,250.43	71.52	317.77	89.67	1,987.92	-2,448.08	815.13	425.98	389.15	2.095		
9,500.00	7,254.61	18,358.13	7,250.68	74.04	320.61	89.72	1,988.10	-2,548.06	816.96	422.45	394.52	2.071		
9,600.00	7,254.19	18,458.11	7,250.92	76.58	323.45	89.77	1,988.28	-2,648.04	818.80	418.89	399.91	2.047		
9,700.00	7,253.77	18,558.09	7,251.17	79.15	326.30	89.81	1,988.46	-2,748.03	820.63	415.31	405.32	2.025		
9,800.00	7,253.35	18,658.07	7,251.41	81.74	329.14	89.86	1,988.64	-2,848.01	822.47	411.71	410.76	2.002		
9,900.00	7,252.92	18,758.05	7,251.65	84.34	331.98	89.91	1,988.82	-2,947.99	824.31	408.10	416.21	1.981		
10,000.00	7,252.50	18,858.03	7,251.90	86.96	334.82	89.95	1,989.00	-3,047.97	826.14	404.47	421.67	1.959		
10,100.00	7,252.08	18,958.01	7,252.14	89.59	337.66	90.00	1,989.18	-3,147.95	827.98	400.83	427.15	1.938		
10,200.00	7,251.66	19,057.99	7,252.39	92.24	340.51	90.05	1,989.36	-3,247.93	829.82	397.17	432.65	1.918		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	19,118.26	7,252.53	94.90	342.22	90.07	1,989.47	-3,308.19	832.61	395.76	436.85	1.906 ES, SF		
10,400.00	7,250.82	19,118.26	7,252.53	97.57	342.22	90.07	1,989.47	-3,308.19	845.12	410.18	434.94	1.943		
10,500.00	7,250.40	19,118.26	7,252.53	100.25	342.22	90.07	1,989.47	-3,308.19	869.04	441.40	427.64	2.032		
10,600.00	7,249.98	19,118.26	7,252.53	102.93	342.22	90.07	1,989.47	-3,308.19	903.46	487.41	416.05	2.172		
10,700.00	7,249.56	19,118.26	7,252.53	105.63	342.22	90.07	1,989.47	-3,308.19	947.23	545.73	401.49	2.359		
10,800.00	7,249.14	19,118.26	7,252.53	108.34	342.22	90.07	1,989.47	-3,308.19	999.12	613.89	385.23	2.594		
10,900.00	7,248.72	19,118.26	7,252.53	111.05	342.22	90.07	1,989.47	-3,308.19	1,057.94	689.65	368.29	2.873		
11,000.00	7,248.30	19,118.26	7,252.53	113.77	342.22	90.07	1,989.47	-3,308.19	1,122.60	771.18	351.42	3.194		
11,100.00	7,247.88	19,118.26	7,252.53	116.50	342.22	90.07	1,989.47	-3,308.19	1,192.16	857.03	335.13	3.557		
11,200.00	7,247.46	19,118.26	7,252.53	119.23	342.22	90.07	1,989.47	-3,308.19	1,265.80	946.10	319.70	3.959		
11,300.00	7,247.04	19,118.26	7,252.53	121.97	342.22	90.07	1,989.47	-3,308.19	1,342.85	1,037.57	305.28	4.399		
11,400.00	7,246.62	19,118.26	7,252.53	124.72	342.22	90.07	1,989.47	-3,308.19	1,422.76	1,130.84	291.91	4.874		
11,500.00	7,246.20	19,118.26	7,252.53	127.46	342.22	90.07	1,989.47	-3,308.19	1,505.07	1,225.47	279.60	5.383		
11,600.00	7,245.78	19,118.26	7,252.53	130.22	342.22	90.07	1,989.47	-3,308.19	1,589.42	1,321.13	268.28	5.924		
11,700.00	7,245.36	19,118.26	7,252.53	132.98	342.22	90.07	1,989.47	-3,308.19	1,675.48	1,417.58	257.90	6.497		
11,800.00	7,244.94	19,118.26	7,252.53	135.74	342.22	90.07	1,989.47	-3,308.19	1,763.02	1,514.64	248.38	7.098		
11,900.00	7,244.52	19,118.26	7,252.53	138.50	342.22	90.07	1,989.47	-3,308.19	1,851.82	1,612.18	239.64	7.727		
12,000.00	7,244.10	19,118.26	7,252.53	141.27	342.22	90.07	1,989.47	-3,308.19	1,941.71	1,710.09	231.63	8.383		
12,100.00	7,243.68	19,118.26	7,252.53	144.04	342.22	90.07	1,989.47	-3,308.19	2,032.55	1,808.29	224.25	9.064		
12,200.00	7,243.26	19,118.26	7,252.53	146.82	342.22	90.07	1,989.47	-3,308.19	2,124.20	1,906.74	217.47	9.768		
12,300.00	7,242.84	19,118.26	7,252.53	149.60	342.22	90.07	1,989.47	-3,308.19	2,216.58	2,005.38	211.21	10.495		
12,400.00	7,242.42	19,118.26	7,252.53	152.38	342.22	90.07	1,989.47	-3,308.19	2,309.60	2,104.17	205.43	11.243		
12,500.00	7,242.00	19,118.26	7,252.53	155.16	342.22	90.07	1,989.47	-3,308.19	2,403.17	2,203.10	200.08	12.011		
12,600.00	7,241.58	19,118.26	7,252.53	157.95	342.22	90.07	1,989.47	-3,308.19	2,497.25	2,302.13	195.12	12.798		
12,700.00	7,241.16	19,118.26	7,252.53	160.74	342.22	90.07	1,989.47	-3,308.19	2,591.77	2,401.25	190.52	13.604		
12,800.00	7,240.74	19,118.26	7,252.53	163.53	342.22	90.07	1,989.47	-3,308.19	2,686.68	2,500.44	186.24	14.426		
12,900.00	7,240.32	19,118.26	7,252.53	166.32	342.22	90.07	1,989.47	-3,308.19	2,781.95	2,599.70	182.25	15.265		
13,000.00	7,239.89	19,118.26	7,252.53	169.12	342.22	90.07	1,989.47	-3,308.19	2,877.54	2,699.01	178.53	16.118		
13,100.00	7,239.47	19,118.26	7,252.53	171.92	342.22	90.07	1,989.47	-3,308.19	2,973.42	2,798.37	175.05	16.986		
13,200.00	7,239.05	19,118.26	7,252.53	174.72	342.22	90.07	1,989.47	-3,308.19	3,069.57	2,897.77	171.80	17.868		
13,300.00	7,238.63	19,118.26	7,252.53	177.52	342.22	90.07	1,989.47	-3,308.19	3,165.95	2,997.21	168.74	18.762		
13,400.00	7,238.21	19,118.26	7,252.53	180.32	342.22	90.07	1,989.47	-3,308.19	3,262.55	3,096.67	165.88	19.668		
13,500.00	7,237.79	19,118.26	7,252.53	183.13	342.22	90.07	1,989.47	-3,308.19	3,359.35	3,196.16	163.19	20.585		
13,600.00	7,237.37	19,118.26	7,252.53	185.93	342.22	90.07	1,989.47	-3,308.19	3,456.33	3,295.68	160.66	21.514		
13,700.00	7,236.95	19,118.26	7,252.53	188.74	342.22	90.07	1,989.47	-3,308.19	3,553.48	3,395.21	158.27	22.452		
13,800.00	7,236.53	19,118.26	7,252.53	191.55	342.22	90.07	1,989.47	-3,308.19	3,650.79	3,494.76	156.02	23.399		
13,900.00	7,236.11	19,118.26	7,252.53	194.36	342.22	90.07	1,989.47	-3,308.19	3,748.23	3,594.33	153.90	24.355		
14,000.00	7,235.69	19,118.26	7,252.53	197.17	342.22	90.07	1,989.47	-3,308.19	3,845.81	3,693.92	151.89	25.320		
14,100.00	7,235.27	19,118.26	7,252.53	199.98	342.22	90.07	1,989.47	-3,308.19	3,943.51	3,793.52	149.99	26.292		
14,200.00	7,234.85	19,118.26	7,252.53	202.80	342.22	90.07	1,989.47	-3,308.19	4,041.32	3,893.13	148.19	27.271		
14,300.00	7,234.43	19,118.26	7,252.53	205.61	342.22	90.07	1,989.47	-3,308.19	4,139.23	3,992.75	146.48	28.257		
14,400.00	7,234.01	19,118.26	7,252.53	208.43	342.22	90.07	1,989.47	-3,308.19	4,237.25	4,092.38	144.86	29.250		
14,500.00	7,233.59	19,118.26	7,252.53	211.25	342.22	90.07	1,989.47	-3,308.19	4,335.35	4,192.02	143.33	30.248		
14,600.00	7,233.17	19,118.26	7,252.53	214.06	342.22	90.07	1,989.47	-3,308.19	4,433.54	4,291.67	141.87	31.252		
14,700.00	7,232.75	19,118.26	7,252.53	216.88	342.22	90.07	1,989.47	-3,308.19	4,531.81	4,391.33	140.48	32.261		
14,800.00	7,232.33	19,118.26	7,252.53	219.70	342.22	90.07	1,989.47	-3,308.19	4,630.15	4,490.99	139.15	33.274		
14,900.00	7,231.91	19,118.26	7,252.53	222.52	342.22	90.07	1,989.47	-3,308.19	4,728.56	4,590.67	137.89	34.292		
15,000.00	7,231.49	19,118.26	7,252.53	225.35	342.22	90.07	1,989.47	-3,308.19	4,827.03	4,690.34	136.69	35.314		
15,100.00	7,231.07	19,118.26	7,252.53	228.17	342.22	90.07	1,989.47	-3,308.19	4,925.57	4,790.03	135.54	36.340		
15,116.21	7,231.00	19,118.26	7,252.53	228.63	342.22	90.07	1,989.47	-3,308.19	4,941.55	4,806.19	135.36	36.506		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	15,712.56	7,136.44	0.00	247.92	-0.04	1,823.26	-1.25	7,365.67					
100.00	100.00	15,712.81	7,136.44	0.18	247.93	-0.05	1,823.26	-1.49	7,268.82	7,154.98	113.84	63.851		
200.00	200.00	15,713.05	7,136.44	0.61	247.94	-0.05	1,823.26	-1.74	7,172.06	7,057.88	114.18	62.814		
300.00	300.00	15,713.29	7,136.44	1.05	247.94	-0.06	1,823.25	-1.98	7,075.39	6,960.86	114.54	61.772		
400.00	400.00	15,713.54	7,136.44	1.49	247.95	-0.07	1,823.25	-2.22	6,978.82	6,863.90	114.92	60.728		
500.00	500.00	15,713.78	7,136.44	1.93	247.96	-0.08	1,823.25	-2.47	6,882.34	6,767.02	115.32	59.680		
600.00	599.98	15,714.25	7,136.45	2.37	247.97	8.76	1,823.24	-2.93	6,785.52	6,669.80	115.72	58.638		
700.00	699.84	15,715.14	7,136.45	2.81	248.00	10.19	1,823.23	-3.83	6,687.97	6,571.90	116.08	57.617		
800.00	799.45	15,716.47	7,136.45	3.26	248.03	12.13	1,823.22	-5.16	6,589.78	6,473.40	116.39	56.620		
900.00	898.70	15,718.23	7,136.46	3.70	248.08	14.96	1,823.20	-6.92	6,491.05	6,374.40	116.64	55.649		
1,000.00	997.47	15,720.42	7,136.46	4.15	248.15	19.42	1,823.18	-9.11	6,391.86	6,275.02	116.84	54.706		
1,100.00	1,095.78	15,722.94	7,136.47	4.60	248.22	21.33	1,823.15	-11.63	6,292.39	6,175.40	116.99	53.785		
1,200.00	1,194.05	15,725.49	7,136.47	5.05	248.29	21.11	1,823.13	-14.17	6,192.93	6,075.78	117.14	52.866		
1,300.00	1,292.33	15,728.03	7,136.48	5.50	248.36	20.89	1,823.10	-16.72	6,093.48	5,976.17	117.31	51.945		
1,400.00	1,390.61	15,730.58	7,136.49	5.96	248.43	20.67	1,823.08	-19.26	5,994.04	5,876.56	117.48	51.022		
1,500.00	1,488.89	15,733.12	7,136.49	6.43	248.50	20.45	1,823.05	-21.80	5,894.63	5,776.96	117.66	50.097		
1,600.00	1,587.16	15,735.66	7,136.50	6.89	248.58	20.23	1,823.02	-24.35	5,795.23	5,677.37	117.86	49.170		
1,700.00	1,685.44	15,738.21	7,136.50	7.36	248.65	20.01	1,823.00	-26.89	5,695.86	5,577.78	118.07	48.241		
1,800.00	1,783.72	15,740.75	7,136.51	7.83	248.72	19.79	1,822.97	-29.43	5,596.50	5,478.21	118.29	47.310		
1,900.00	1,882.00	15,743.29	7,136.52	8.30	248.79	19.56	1,822.95	-31.98	5,497.17	5,378.64	118.53	46.377		
2,000.00	1,980.27	15,745.84	7,136.52	8.77	248.86	19.34	1,822.92	-34.52	5,397.86	5,279.07	118.78	45.443		
2,100.00	2,078.55	15,748.38	7,136.53	9.25	248.94	19.12	1,822.89	-37.06	5,298.57	5,179.52	119.05	44.506		
2,200.00	2,176.83	15,750.92	7,136.54	9.72	249.01	18.90	1,822.87	-39.61	5,199.31	5,079.97	119.34	43.567		
2,300.00	2,275.11	15,753.47	7,136.54	10.19	249.08	18.67	1,822.84	-42.15	5,100.08	4,980.44	119.64	42.627		
2,400.00	2,373.38	15,756.01	7,136.55	10.66	249.15	18.45	1,822.82	-44.69	5,000.88	4,880.91	119.97	41.685		
2,500.00	2,471.66	15,758.55	7,136.55	11.14	249.22	18.22	1,822.79	-47.24	4,901.71	4,781.39	120.32	40.740		
2,600.00	2,569.94	15,761.10	7,136.56	11.61	249.30	18.00	1,822.76	-49.78	4,802.57	4,681.89	120.68	39.795		
2,700.00	2,668.22	15,763.64	7,136.57	12.09	249.37	17.77	1,822.74	-52.32	4,703.47	4,582.39	121.08	38.847		
2,800.00	2,766.49	15,766.19	7,136.57	12.56	249.44	17.55	1,822.71	-54.87	4,604.40	4,482.91	121.50	37.898		
2,900.00	2,864.77	15,768.73	7,136.58	13.04	249.51	17.32	1,822.69	-57.41	4,505.38	4,383.44	121.94	36.947		
3,000.00	2,963.05	15,771.27	7,136.58	13.51	249.58	17.10	1,822.66	-59.95	4,406.40	4,283.98	122.42	35.994		
3,100.00	3,061.33	15,773.82	7,136.59	13.99	249.65	16.87	1,822.63	-62.50	4,307.46	4,184.53	122.93	35.040		
3,200.00	3,159.60	15,776.36	7,136.60	14.46	249.73	16.64	1,822.61	-65.04	4,208.57	4,085.10	123.47	34.085		
3,300.00	3,257.88	15,778.90	7,136.60	14.94	249.80	16.42	1,822.58	-67.58	4,109.73	3,985.68	124.06	33.128		
3,400.00	3,356.16	15,781.45	7,136.61	15.41	249.87	16.19	1,822.55	-70.13	4,010.95	3,886.28	124.68	32.171		
3,500.00	3,454.43	15,783.99	7,136.62	15.89	249.94	15.96	1,822.53	-72.67	3,912.23	3,786.89	125.34	31.212		
3,600.00	3,552.71	15,786.53	7,136.62	16.36	250.01	15.73	1,822.50	-75.21	3,813.58	3,687.52	126.05	30.254		
3,700.00	3,650.99	15,789.08	7,136.63	16.84	250.09	15.50	1,822.48	-77.76	3,714.99	3,588.18	126.82	29.294		
3,800.00	3,749.27	15,808.44	7,136.63	17.32	250.63	15.28	1,822.45	-80.30	3,616.49	3,488.63	127.85	28.286		
3,900.00	3,847.54	15,805.90	7,136.64	17.79	250.56	15.05	1,822.42	-82.84	3,518.06	3,389.40	128.66	27.344		
4,000.00	3,945.82	15,803.36	7,136.65	18.27	250.49	14.82	1,822.40	-85.39	3,419.72	3,290.19	129.53	26.401		
4,100.00	4,044.10	15,800.81	7,136.65	18.75	250.42	14.59	1,822.37	-87.93	3,321.48	3,191.01	130.47	25.458		
4,200.00	4,142.38	15,801.79	7,136.66	19.22	250.44	14.36	1,822.35	-90.47	3,223.35	3,091.82	131.52	24.508		
4,300.00	4,240.65	15,804.34	7,136.67	19.70	250.52	14.13	1,822.32	-93.02	3,125.33	2,992.65	132.68	23.555		
4,400.00	4,338.93	15,806.88	7,136.67	20.18	250.59	13.90	1,822.29	-95.56	3,027.44	2,893.51	133.93	22.605		
4,500.00	4,437.21	15,809.43	7,136.68	20.65	250.66	13.67	1,822.27	-98.10	2,929.69	2,794.43	135.27	21.659		
4,600.00	4,535.49	15,811.97	7,136.68	21.13	250.73	13.44	1,822.24	-100.65	2,832.10	2,695.39	136.71	20.716		
4,700.00	4,633.76	15,814.51	7,136.69	21.61	250.80	13.21	1,822.22	-103.19	2,734.68	2,596.41	138.27	19.778		
4,800.00	4,732.04	15,817.06	7,136.70	22.08	250.88	12.98	1,822.19	-105.73	2,637.44	2,497.49	139.95	18.846		
4,900.00	4,830.32	15,819.60	7,136.70	22.56	250.95	12.75	1,822.16	-108.28	2,540.42	2,398.65	141.77	17.919		
5,000.00	4,928.60	15,822.14	7,136.71	23.04	251.02	12.51	1,822.14	-110.82	2,443.64	2,299.90	143.74	17.000		
5,100.00	5,026.87	15,824.69	7,136.72	23.51	251.09	12.28	1,822.11	-113.37	2,347.12	2,201.24	145.89	16.089		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	5,125.15	15,827.23	7,136.72	23.99	251.16	12.05	1,822.09	-115.91	2,250.91	2,102.69	148.22	15.186		
5,300.00	5,223.43	15,829.77	7,136.73	24.47	251.24	11.82	1,822.06	-118.45	2,155.04	2,004.27	150.77	14.294		
5,400.00	5,321.71	15,832.32	7,136.73	24.94	251.31	11.59	1,822.03	-121.00	2,059.55	1,906.00	153.56	13.412		
5,500.00	5,419.98	15,834.86	7,136.74	25.42	251.38	11.35	1,822.01	-123.54	1,964.52	1,807.90	156.62	12.544		
5,600.00	5,518.26	15,837.40	7,136.75	25.90	251.45	11.12	1,821.98	-126.08	1,870.00	1,710.01	159.98	11.689		
5,700.00	5,616.54	15,839.95	7,136.75	26.38	251.52	10.89	1,821.96	-128.63	1,776.07	1,612.37	163.70	10.849		
5,800.00	5,714.82	15,842.49	7,136.76	26.85	251.59	10.66	1,821.93	-131.17	1,682.84	1,515.02	167.82	10.028		
5,900.00	5,813.09	15,845.04	7,136.77	27.33	251.67	10.43	1,821.90	-133.71	1,590.43	1,418.04	172.39	9.226		
6,000.00	5,911.37	15,847.58	7,136.77	27.81	251.74	10.19	1,821.88	-136.26	1,498.99	1,321.50	177.49	8.446		
6,100.00	6,009.65	15,850.12	7,136.78	28.28	251.81	9.96	1,821.85	-138.80	1,408.70	1,225.53	183.18	7.690		
6,200.00	6,107.93	15,852.67	7,136.78	28.76	251.88	9.73	1,821.82	-141.34	1,319.82	1,130.27	189.55	6.963		
6,300.00	6,206.20	15,855.21	7,136.79	29.24	251.95	9.49	1,821.80	-143.89	1,232.63	1,035.94	196.69	6.267		
6,400.00	6,304.48	15,857.75	7,136.80	29.72	252.03	9.26	1,821.77	-146.43	1,147.53	942.84	204.70	5.606		
6,500.00	6,402.76	15,860.30	7,136.80	30.19	252.10	9.03	1,821.75	-148.97	1,065.02	851.39	213.63	4.985		
6,600.00	6,501.04	15,862.84	7,136.81	30.67	252.17	8.79	1,821.72	-151.52	985.74	762.19	223.55	4.409		
6,700.00	6,599.31	15,865.38	7,136.81	31.15	252.24	8.56	1,821.69	-154.06	910.55	676.14	234.40	3.885		
6,800.00	6,697.50	15,869.77	7,136.83	31.63	252.37	8.32	1,821.65	-158.44	840.60	594.57	246.04	3.417		
6,900.00	6,794.18	15,887.66	7,136.87	32.10	252.87	84.57	1,821.47	-176.33	778.23	520.10	258.13	3.015		
7,000.00	6,886.96	15,920.71	7,136.95	32.55	253.81	78.76	1,821.13	-209.38	725.97	456.25	269.72	2.692		
7,100.00	6,973.57	15,968.09	7,137.07	32.99	255.14	84.92	1,820.64	-256.76	685.45	405.78	279.67	2.451		
7,200.00	7,051.87	16,028.65	7,137.21	33.41	256.86	86.76	1,820.02	-317.32	656.95	369.83	287.12	2.288		
7,300.00	7,119.93	16,100.89	7,137.39	33.85	258.90	86.06	1,819.28	-389.56	639.31	347.43	291.88	2.190		
7,400.00	7,176.09	16,183.04	7,137.59	34.39	261.22	84.05	1,818.44	-471.70	630.22	335.65	294.57	2.139		
7,500.00	7,218.95	16,273.07	7,137.81	35.09	263.77	81.69	1,817.52	-561.72	626.81	330.53	296.28	2.116		
7,572.60	7,241.12	16,342.11	7,137.98	35.73	265.72	80.20	1,816.81	-630.76	626.33	328.76	297.57	2.105 CC		
7,600.00	7,247.46	16,368.76	7,138.04	35.98	266.47	79.74	1,816.54	-657.41	626.38	328.24	298.13	2.101		
7,700.00	7,260.92	16,467.76	7,138.29	37.04	269.28	78.72	1,815.52	-756.40	626.90	325.93	300.96	2.083		
7,800.00	7,261.75	16,567.74	7,138.53	38.23	272.10	78.67	1,814.50	-856.38	627.40	322.48	304.92	2.058		
7,900.00	7,261.33	16,667.73	7,138.78	39.59	274.94	78.74	1,813.47	-956.37	627.89	318.75	309.14	2.031		
8,000.00	7,260.91	16,767.73	7,139.02	41.10	277.77	78.81	1,812.45	-1,056.36	628.39	314.88	313.51	2.004		
8,100.00	7,260.49	16,867.73	7,139.26	42.75	280.60	78.88	1,811.42	-1,156.35	628.88	310.87	318.01	1.978		
8,200.00	7,260.07	16,967.72	7,139.51	44.53	283.43	78.95	1,810.40	-1,256.34	629.37	306.74	322.63	1.951		
8,300.00	7,259.65	17,067.72	7,139.75	46.41	286.26	79.03	1,809.37	-1,356.33	629.87	302.51	327.36	1.924		
8,400.00	7,259.23	17,167.71	7,140.00	48.39	289.09	79.10	1,808.35	-1,456.32	630.37	298.19	332.17	1.898		
8,500.00	7,258.81	17,267.71	7,140.24	50.45	291.93	79.17	1,807.32	-1,556.31	630.86	293.79	337.07	1.872		
8,600.00	7,258.39	17,367.70	7,140.49	52.59	294.76	79.24	1,806.30	-1,656.30	631.36	289.32	342.04	1.846		
8,700.00	7,257.97	17,467.70	7,140.73	54.79	297.60	79.31	1,805.27	-1,756.29	631.86	284.78	347.08	1.820		
8,800.00	7,257.55	17,567.70	7,140.97	57.05	300.43	79.38	1,804.25	-1,856.28	632.36	280.19	352.18	1.796		
8,900.00	7,257.13	17,667.69	7,141.22	59.36	303.27	79.45	1,803.23	-1,956.27	632.86	275.54	357.32	1.771		
9,000.00	7,256.71	17,767.69	7,141.46	61.72	306.10	79.51	1,802.20	-2,056.26	633.36	270.85	362.51	1.747		
9,100.00	7,256.29	17,867.68	7,141.71	64.12	308.94	79.58	1,801.18	-2,156.25	633.87	266.12	367.75	1.724		
9,200.00	7,255.87	17,967.68	7,141.95	66.56	311.77	79.65	1,800.15	-2,256.24	634.37	261.36	373.02	1.701		
9,300.00	7,255.45	18,067.67	7,142.20	69.02	314.61	79.72	1,799.13	-2,356.23	634.88	256.56	378.32	1.678		
9,400.00	7,255.03	18,167.67	7,142.44	71.52	317.45	79.79	1,798.10	-2,456.22	635.38	251.73	383.65	1.656		
9,500.00	7,254.61	18,267.67	7,142.68	74.04	320.28	79.86	1,797.08	-2,556.21	635.89	246.88	389.01	1.635		
9,600.00	7,254.19	18,367.66	7,142.93	76.58	323.12	79.93	1,796.05	-2,656.20	636.40	242.00	394.39	1.614		
9,700.00	7,253.77	18,467.66	7,143.17	79.15	325.96	80.00	1,795.03	-2,756.19	636.90	237.10	399.80	1.593		
9,800.00	7,253.35	18,567.65	7,143.42	81.74	328.80	80.07	1,794.00	-2,856.18	637.41	232.18	405.23	1.573		
9,900.00	7,252.92	18,667.65	7,143.66	84.34	331.64	80.14	1,792.98	-2,956.17	637.92	227.25	410.67	1.553		
10,000.00	7,252.50	18,767.64	7,143.91	86.96	334.48	80.20	1,791.95	-3,056.16	638.43	222.30	416.14	1.534		
10,100.00	7,252.08	18,867.64	7,144.15	89.59	337.32	80.27	1,790.93	-3,156.15	638.95	217.33	421.62	1.515		
10,200.00	7,251.66	18,967.64	7,144.40	92.24	340.16	80.34	1,789.90	-3,256.14	639.46	212.35	427.11	1.497 Level 3		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	19,018.34	7,144.52	94.90	341.60	80.38	1,789.38	-3,306.84	641.87	211.26	430.61	1.491	Level 3, ES, SF	
10,400.00	7,250.82	19,018.34	7,144.52	97.57	341.60	80.38	1,789.38	-3,306.84	657.66	232.83	424.83	1.548		
10,500.00	7,250.40	19,018.34	7,144.52	100.25	341.60	80.38	1,789.38	-3,306.84	687.77	276.81	410.97	1.674		
10,600.00	7,249.98	19,018.34	7,144.52	102.93	341.60	80.38	1,789.38	-3,306.84	730.44	338.69	391.75	1.865		
10,700.00	7,249.56	19,018.34	7,144.52	105.63	341.60	80.38	1,789.38	-3,306.84	783.62	413.71	369.91	2.118		
10,800.00	7,249.14	19,018.34	7,144.52	108.34	341.60	80.38	1,789.38	-3,306.84	845.33	497.77	347.55	2.432		
10,900.00	7,248.72	19,018.34	7,144.52	111.05	341.60	80.38	1,789.38	-3,306.84	913.84	587.83	326.01	2.803		
11,000.00	7,248.30	19,018.34	7,144.52	113.77	341.60	80.38	1,789.38	-3,306.84	987.73	681.76	305.97	3.228		
11,100.00	7,247.88	19,018.34	7,144.52	116.50	341.60	80.38	1,789.38	-3,306.84	1,065.89	778.17	287.72	3.705		
11,200.00	7,247.46	19,018.34	7,144.52	119.23	341.60	80.38	1,789.38	-3,306.84	1,147.45	876.16	271.30	4.230		
11,300.00	7,247.04	19,018.34	7,144.52	121.97	341.60	80.38	1,789.38	-3,306.84	1,231.73	975.13	256.60	4.800		
11,400.00	7,246.62	19,018.34	7,144.52	124.72	341.60	80.38	1,789.38	-3,306.84	1,318.21	1,074.72	243.49	5.414		
11,500.00	7,246.20	19,018.34	7,144.52	127.46	341.60	80.38	1,789.38	-3,306.84	1,406.48	1,174.69	231.79	6.068		
11,600.00	7,245.78	19,018.34	7,144.52	130.22	341.60	80.38	1,789.38	-3,306.84	1,496.23	1,274.89	221.34	6.760		
11,700.00	7,245.36	19,018.34	7,144.52	132.98	341.60	80.38	1,789.38	-3,306.84	1,587.21	1,375.22	211.98	7.487		
11,800.00	7,244.94	19,018.34	7,144.52	135.74	341.60	80.38	1,789.38	-3,306.84	1,679.21	1,475.63	203.58	8.248		
11,900.00	7,244.52	19,018.34	7,144.52	138.50	341.60	80.38	1,789.38	-3,306.84	1,772.08	1,576.06	196.02	9.040		
12,000.00	7,244.10	19,018.34	7,144.52	141.27	341.60	80.38	1,789.38	-3,306.84	1,865.68	1,676.49	189.19	9.861		
12,100.00	7,243.68	19,018.34	7,144.52	144.04	341.60	80.38	1,789.38	-3,306.84	1,959.92	1,776.91	183.01	10.709		
12,200.00	7,243.26	19,018.34	7,144.52	146.82	341.60	80.38	1,789.38	-3,306.84	2,054.71	1,877.31	177.39	11.583		
12,300.00	7,242.84	19,018.34	7,144.52	149.60	341.60	80.38	1,789.38	-3,306.84	2,149.96	1,977.68	172.28	12.479		
12,400.00	7,242.42	19,018.34	7,144.52	152.38	341.60	80.38	1,789.38	-3,306.84	2,245.63	2,078.02	167.61	13.398		
12,500.00	7,242.00	19,018.34	7,144.52	155.16	341.60	80.38	1,789.38	-3,306.84	2,341.66	2,178.33	163.33	14.337		
12,600.00	7,241.58	19,018.34	7,144.52	157.95	341.60	80.38	1,789.38	-3,306.84	2,438.01	2,278.61	159.40	15.295		
12,700.00	7,241.16	19,018.34	7,144.52	160.74	341.60	80.38	1,789.38	-3,306.84	2,534.64	2,378.85	155.79	16.270		
12,800.00	7,240.74	19,018.34	7,144.52	163.53	341.60	80.38	1,789.38	-3,306.84	2,631.52	2,479.07	152.45	17.261		
12,900.00	7,240.32	19,018.34	7,144.52	166.32	341.60	80.38	1,789.38	-3,306.84	2,728.63	2,579.26	149.37	18.267		
13,000.00	7,239.89	19,018.34	7,144.52	169.12	341.60	80.38	1,789.38	-3,306.84	2,825.94	2,679.42	146.52	19.287		
13,100.00	7,239.47	19,018.34	7,144.52	171.92	341.60	80.38	1,789.38	-3,306.84	2,923.43	2,779.56	143.87	20.320		
13,200.00	7,239.05	19,018.34	7,144.52	174.72	341.60	80.38	1,789.38	-3,306.84	3,021.09	2,879.68	141.41	21.364		
13,300.00	7,238.63	19,018.34	7,144.52	177.52	341.60	80.38	1,789.38	-3,306.84	3,118.89	2,979.78	139.12	22.419		
13,400.00	7,238.21	19,018.34	7,144.52	180.32	341.60	80.38	1,789.38	-3,306.84	3,216.83	3,079.85	136.98	23.484		
13,500.00	7,237.79	19,018.34	7,144.52	183.13	341.60	80.38	1,789.38	-3,306.84	3,314.90	3,179.91	134.98	24.558		
13,600.00	7,237.37	19,018.34	7,144.52	185.93	341.60	80.38	1,789.38	-3,306.84	3,413.07	3,279.96	133.11	25.640		
13,700.00	7,236.95	19,018.34	7,144.52	188.74	341.60	80.38	1,789.38	-3,306.84	3,511.35	3,379.98	131.36	26.730		
13,800.00	7,236.53	19,018.34	7,144.52	191.55	341.60	80.38	1,789.38	-3,306.84	3,609.72	3,480.00	129.72	27.827		
13,900.00	7,236.11	19,018.34	7,144.52	194.36	341.60	80.38	1,789.38	-3,306.84	3,708.18	3,580.00	128.18	28.929		
14,000.00	7,235.69	19,018.34	7,144.52	197.17	341.60	80.38	1,789.38	-3,306.84	3,806.72	3,679.99	126.73	30.038		
14,100.00	7,235.27	19,018.34	7,144.52	199.98	341.60	80.38	1,789.38	-3,306.84	3,905.33	3,779.97	125.37	31.151		
14,200.00	7,234.85	19,018.34	7,144.52	202.80	341.60	80.38	1,789.38	-3,306.84	4,004.02	3,879.93	124.08	32.269		
14,300.00	7,234.43	19,018.34	7,144.52	205.61	341.60	80.38	1,789.38	-3,306.84	4,102.76	3,979.89	122.87	33.391		
14,400.00	7,234.01	19,018.34	7,144.52	208.43	341.60	80.38	1,789.38	-3,306.84	4,201.57	4,079.84	121.73	34.516		
14,500.00	7,233.59	19,018.34	7,144.52	211.25	341.60	80.38	1,789.38	-3,306.84	4,300.43	4,179.78	120.65	35.645		
14,600.00	7,233.17	19,018.34	7,144.52	214.06	341.60	80.38	1,789.38	-3,306.84	4,399.34	4,279.72	119.62	36.776		
14,700.00	7,232.75	19,018.34	7,144.52	216.88	341.60	80.38	1,789.38	-3,306.84	4,498.30	4,379.65	118.66	37.910		
14,800.00	7,232.33	19,018.34	7,144.52	219.70	341.60	80.38	1,789.38	-3,306.84	4,597.31	4,479.57	117.74	39.046		
14,900.00	7,231.91	19,018.34	7,144.52	222.52	341.60	80.38	1,789.38	-3,306.84	4,696.36	4,579.48	116.87	40.184		
15,000.00	7,231.49	19,018.34	7,144.52	225.35	341.60	80.38	1,789.38	-3,306.84	4,795.44	4,679.40	116.05	41.323		
15,100.00	7,231.07	19,018.34	7,144.52	228.17	341.60	80.38	1,789.38	-3,306.84	4,894.57	4,779.30	115.27	42.463		
15,116.21	7,231.00	19,018.34	7,144.52	228.63	341.60	80.38	1,789.38	-3,306.84	4,910.64	4,795.50	115.14	42.648		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1,507.75	1,557.01	0.00	8.10	-119.27	-4,214.73	-7,519.91	8,759.98					
100.00	100.00	1,584.00	1,632.02	0.18	8.51	-119.24	-4,204.43	-7,510.99	8,742.96	8,734.09	8.86	986.311		
200.00	200.00	1,584.00	1,632.02	0.61	8.51	-119.24	-4,204.43	-7,510.99	8,725.99	8,717.09	8.90	980.115		
300.00	300.00	300.00	1,711.16	1.05	3.41	-119.20	-4,193.33	-7,502.31	8,709.77	8,704.78	4.98	1,747.483		
400.00	400.00	1,735.39	1,781.05	1.49	9.29	-119.17	-4,183.39	-7,494.72	8,693.61	8,683.53	10.08	862.548		
500.00	500.00	1,801.90	1,846.62	1.93	9.64	-119.14	-4,174.64	-7,487.74	8,677.98	8,667.27	10.71	810.056		
600.00	599.98	1,892.21	1,935.68	2.37	10.11	-111.65	-4,163.35	-7,477.98	8,663.06	8,651.58	11.48	754.433		
700.00	699.84	1,963.00	2,005.52	2.81	10.47	-111.89	-4,154.20	-7,470.85	8,649.82	8,637.63	12.18	710.124		
800.00	799.45	800.00	2,270.61	3.26	4.71	-112.18	-4,120.19	-7,439.99	8,636.59	8,628.62	7.97	1,083.249		
900.00	898.70	2,492.41	2,526.34	3.70	13.35	-112.55	-4,085.87	-7,405.22	8,622.74	8,607.33	15.41	559.713		
1,000.00	997.47	2,548.81	2,581.68	4.15	13.67	-112.82	-4,078.43	-7,397.34	8,609.93	8,593.85	16.08	535.608		
1,100.00	1,095.78	2,883.27	2,909.06	4.60	15.62	-113.16	-4,030.54	-7,348.72	8,597.21	8,579.16	18.05	476.260		
1,200.00	1,194.05	2,929.53	2,954.23	5.05	15.90	-113.20	-4,023.45	-7,341.68	8,583.38	8,564.68	18.70	458.939		
1,300.00	1,292.33	1,300.00	3,047.34	5.50	6.62	-113.27	-4,009.75	-7,327.50	8,570.29	8,558.44	11.85	723.119		
1,400.00	1,390.61	3,139.05	3,159.11	5.96	17.15	-113.37	-3,993.87	-7,309.35	8,556.64	8,536.07	20.56	416.111		
1,500.00	1,488.89	3,170.89	3,190.26	6.43	17.34	-113.40	-3,989.62	-7,304.34	8,543.39	8,522.22	21.16	403.658		
1,600.00	1,587.16	3,241.58	3,259.55	6.89	17.76	-113.47	-3,980.44	-7,293.73	8,530.91	8,508.96	21.95	388.705		
1,700.00	1,685.44	3,348.05	3,363.82	7.36	18.38	-113.56	-3,966.39	-7,277.40	8,518.11	8,495.22	22.89	372.065		
1,800.00	1,783.72	3,391.00	3,405.90	7.83	18.64	-113.60	-3,960.77	-7,270.95	8,505.78	8,482.23	23.56	361.077		
1,900.00	1,882.00	3,423.81	3,438.09	8.30	18.82	-113.63	-3,956.50	-7,266.27	8,494.19	8,470.01	24.18	351.360		
2,000.00	1,980.27	3,449.49	3,463.33	8.77	18.97	-113.65	-3,953.16	-7,262.90	8,483.47	8,458.71	24.76	342.585		
2,100.00	2,078.55	3,486.00	3,499.27	9.25	19.18	-113.68	-3,948.42	-7,258.53	8,473.65	8,448.25	25.40	333.592		
2,200.00	2,176.83	2,200.00	3,598.66	9.72	12.09	-113.76	-3,934.94	-7,246.78	8,464.09	8,444.10	19.99	423.476		
2,300.00	2,275.11	3,620.73	3,631.86	10.19	19.92	-113.79	-3,930.23	-7,243.04	8,454.85	8,427.89	26.96	313.572		
2,400.00	2,373.38	4,066.49	4,069.03	10.66	22.48	-114.06	-3,858.80	-7,194.21	8,446.16	8,416.66	29.50	286.292		
2,500.00	2,471.66	4,104.99	4,106.72	11.14	22.71	-114.09	-3,853.16	-7,188.76	8,433.73	8,403.57	30.16	279.639		
2,600.00	2,569.94	2,600.00	4,242.02	11.61	13.88	-114.22	-3,834.77	-7,168.23	8,421.47	8,397.83	23.64	356.209		
2,700.00	2,668.22	4,294.86	4,292.71	12.09	23.83	-114.26	-3,827.81	-7,160.23	8,408.91	8,376.93	31.98	262.954		
2,800.00	2,766.49	4,343.00	4,339.99	12.56	24.11	-114.31	-3,821.64	-7,153.57	8,397.51	8,364.83	32.68	256.959		
2,900.00	2,864.77	4,343.00	4,339.99	13.04	24.11	-114.31	-3,821.64	-7,153.57	8,386.73	8,353.56	33.17	252.865		
3,000.00	2,963.05	4,439.00	4,434.35	13.51	24.66	-114.39	-3,809.11	-7,141.13	8,376.31	8,342.23	34.08	245.768		
3,100.00	3,061.33	4,504.06	4,498.30	13.99	25.03	-114.44	-3,800.39	-7,133.01	8,366.21	8,331.35	34.86	239.993		
3,200.00	3,159.60	4,555.68	4,549.12	14.46	25.32	-114.49	-3,793.66	-7,126.90	8,356.78	8,321.21	35.58	234.894		
3,300.00	3,257.88	4,629.00	4,621.39	14.94	25.72	-114.55	-3,784.86	-7,118.19	8,347.86	8,311.47	36.39	229.410		
3,400.00	3,356.16	4,629.00	4,621.39	15.41	25.72	-114.55	-3,784.86	-7,118.19	8,339.62	8,302.75	36.87	226.182		
3,500.00	3,454.43	4,681.38	4,673.12	15.89	26.00	-114.60	-3,779.09	-7,112.27	8,332.00	8,294.41	37.58	221.688		
3,600.00	3,552.71	4,724.00	4,715.28	16.36	26.23	-114.64	-3,774.62	-7,108.00	8,325.39	8,287.14	38.25	217.639		
3,700.00	3,650.99	4,809.22	4,799.66	16.84	26.66	-114.72	-3,766.20	-7,099.58	8,319.35	8,280.24	39.11	212.726		
3,800.00	3,749.27	4,852.55	4,842.58	17.32	26.88	-114.76	-3,762.15	-7,095.16	8,313.44	8,273.67	39.78	209.006		
3,900.00	3,847.54	4,915.00	4,904.51	17.79	27.19	-114.82	-3,756.56	-7,089.44	8,308.43	8,267.91	40.53	205.008		
4,000.00	3,945.82	4,915.00	4,904.51	18.27	27.19	-114.82	-3,756.56	-7,089.44	8,303.97	8,262.98	41.00	202.544		
4,100.00	4,044.10	4,975.28	4,964.37	18.75	27.48	-114.88	-3,751.38	-7,084.53	8,300.27	8,258.53	41.74	198.879		
4,200.00	4,142.38	5,023.51	5,012.30	19.22	27.71	-114.93	-3,747.33	-7,080.93	8,297.21	8,254.79	42.42	195.609		
4,300.00	4,240.65	5,104.00	5,092.34	19.70	28.09	-115.00	-3,740.75	-7,075.58	8,294.91	8,251.66	43.24	191.817		
4,400.00	4,338.93	5,104.00	5,092.34	20.18	28.09	-115.00	-3,740.75	-7,075.58	8,293.01	8,249.30	43.70	189.752		
4,500.00	4,437.21	5,104.00	5,092.34	20.65	28.09	-115.00	-3,740.75	-7,075.58	8,292.31	8,248.15	44.16	187.783		
4,587.92	4,523.62	5,185.15	5,173.14	21.07	28.45	-115.08	-3,734.82	-7,071.02	8,291.63	8,246.70	44.92	184.571		
4,600.00	4,535.49	5,189.57	5,177.55	21.13	28.47	-115.08	-3,734.53	-7,070.80	8,291.63	8,246.63	45.00	184.265		
4,700.00	4,633.76	5,226.20	5,214.06	21.61	28.63	-115.12	-3,732.27	-7,069.04	8,292.11	8,246.49	45.61	181.788		
4,800.00	4,732.04	5,294.00	5,281.71	22.08	28.92	-115.19	-3,728.71	-7,066.24	8,293.51	8,247.14	46.37	178.852		
4,900.00	4,830.32	5,294.00	5,281.71	22.56	28.92	-115.19	-3,728.71	-7,066.24	8,295.37	8,248.56	46.81	177.205		
5,000.00	4,928.60	5,360.08	5,347.69	23.04	29.18	-115.26	-3,725.80	-7,063.93	8,297.99	8,250.44	47.55	174.509		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	5,417.68	5,405.21	23.51	29.41	-115.32	-3,723.53	-7,062.11	8,301.13	8,252.88	48.25	172.048		
5,200.00	5,125.15	5,475.22	5,462.69	23.99	29.64	-115.38	-3,721.50	-7,060.47	8,304.79	8,255.84	48.95	169.674		
5,300.00	5,223.43	5,532.71	5,520.14	24.47	29.87	-115.44	-3,719.72	-7,059.01	8,308.96	8,259.32	49.64	167.384		
5,400.00	5,321.71	5,579.00	5,566.40	24.94	30.05	-115.49	-3,718.46	-7,057.97	8,313.67	8,263.39	50.28	165.344		
5,500.00	5,419.98	5,649.16	5,636.52	25.42	30.31	-115.56	-3,716.81	-7,056.63	8,318.86	8,267.83	51.03	163.026		
5,600.00	5,518.26	5,707.86	5,695.21	25.90	30.53	-115.63	-3,715.63	-7,055.74	8,324.57	8,272.85	51.72	160.955		
5,700.00	5,616.54	5,766.52	5,753.85	26.38	30.74	-115.69	-3,714.65	-7,055.07	8,330.77	8,278.36	52.41	158.953		
5,800.00	5,714.82	5,864.00	5,851.32	26.85	31.11	-115.80	-3,713.44	-7,054.41	8,337.64	8,284.35	53.28	156.480		
5,900.00	5,813.09	5,888.60	5,875.92	27.33	31.19	-115.83	-3,713.20	-7,054.33	8,344.69	8,290.88	53.81	155.087		
6,000.00	5,911.37	5,961.75	5,949.07	27.81	31.45	-115.91	-3,712.51	-7,054.26	8,352.25	8,297.70	54.55	153.102		
6,100.00	6,009.65	6,034.90	6,022.21	28.28	31.70	-115.99	-3,711.86	-7,054.44	8,360.15	8,304.85	55.30	151.179		
6,200.00	6,107.93	6,108.04	6,095.36	28.76	31.96	-116.07	-3,711.24	-7,054.86	8,368.37	8,312.33	56.04	149.316		
6,300.00	6,206.20	6,198.35	6,185.65	29.24	32.28	-116.16	-3,710.51	-7,055.65	8,376.88	8,320.01	56.87	147.299		
6,400.00	6,304.48	6,313.12	6,300.42	29.72	32.68	-116.28	-3,709.42	-7,056.60	8,385.31	8,327.50	57.81	145.051		
6,500.00	6,402.76	6,427.96	6,415.25	30.19	33.08	-116.40	-3,708.12	-7,057.42	8,393.58	8,334.83	58.75	142.873		
6,600.00	6,501.04	6,518.03	6,505.31	30.67	33.40	-116.50	-3,706.98	-7,058.08	8,401.81	8,342.23	59.58	141.024		
6,700.00	6,599.31	6,606.00	6,593.27	31.15	33.72	-116.59	-3,705.82	-7,058.89	8,410.19	8,349.80	60.40	139.252		
6,800.00	6,697.50	6,693.94	6,681.19	31.63	34.04	-95.59	-3,704.61	-7,059.88	8,417.19	8,355.98	61.21	137.504		
6,900.00	6,794.18	6,764.63	6,751.87	32.10	34.28	-70.08	-3,703.63	-7,060.83	8,413.05	8,351.09	61.95	135.802		
7,000.00	6,886.96	6,824.93	6,812.16	32.55	34.50	-59.56	-3,702.91	-7,061.85	8,396.37	8,333.74	62.63	134.062		
7,100.00	6,973.57	6,881.54	6,868.75	32.99	34.69	-55.41	-3,702.34	-7,062.99	8,367.62	8,304.33	63.29	132.215		
7,200.00	7,051.87	6,933.14	6,920.33	33.41	34.87	-54.61	-3,701.91	-7,064.20	8,327.52	8,263.59	63.93	130.265		
7,300.00	7,119.93	7,010.00	6,997.17	33.85	35.14	-56.30	-3,701.43	-7,066.28	8,277.16	8,212.45	64.71	127.911		
7,400.00	7,176.09	7,023.55	7,010.70	34.39	35.19	-59.76	-3,701.36	-7,066.68	8,217.49	8,152.27	65.23	125.983		
7,500.00	7,218.95	7,085.46	7,072.59	35.09	35.41	-65.73	-3,700.80	-7,068.57	8,150.14	8,084.10	66.03	123.425		
7,600.00	7,247.46	7,128.52	7,115.62	35.98	35.56	-73.93	-3,700.20	-7,069.95	8,076.68	8,009.87	66.81	120.896		
7,700.00	7,260.92	7,151.41	7,138.49	37.04	35.64	-84.26	-3,699.81	-7,070.70	7,999.03	7,931.49	67.54	118.432		
7,800.00	7,261.75	7,157.09	7,144.18	38.23	35.66	-88.91	-3,699.70	-7,070.89	7,919.40	7,851.16	68.25	116.041		
7,900.00	7,261.33	7,161.09	7,148.17	39.59	35.67	-88.96	-3,699.63	-7,071.03	7,840.06	7,771.03	69.03	113.578		
8,000.00	7,260.91	7,165.12	7,152.20	41.10	35.69	-89.01	-3,699.55	-7,071.16	7,761.19	7,691.29	69.90	111.034		
8,100.00	7,260.49	7,169.18	7,156.26	42.75	35.70	-89.06	-3,699.47	-7,071.30	7,682.81	7,611.95	70.86	108.423		
8,200.00	7,260.07	7,173.27	7,160.34	44.53	35.72	-89.10	-3,699.39	-7,071.44	7,604.94	7,533.03	71.91	105.758		
8,300.00	7,259.65	7,177.40	7,164.46	46.41	35.73	-89.15	-3,699.31	-7,071.58	7,527.59	7,454.55	73.05	103.053		
8,400.00	7,259.23	7,181.55	7,168.61	48.39	35.75	-89.20	-3,699.22	-7,071.72	7,450.78	7,376.51	74.27	100.320		
8,500.00	7,258.81	7,185.73	7,172.79	50.45	35.76	-89.25	-3,699.14	-7,071.86	7,374.52	7,298.94	75.58	97.574		
8,600.00	7,258.39	7,189.95	7,177.01	52.59	35.78	-89.30	-3,699.05	-7,072.01	7,298.84	7,221.86	76.97	94.824		
8,700.00	7,257.97	7,194.20	7,181.26	54.79	35.79	-89.35	-3,698.95	-7,072.16	7,223.74	7,145.29	78.45	92.083		
8,800.00	7,257.55	7,198.49	7,185.54	57.05	35.81	-89.41	-3,698.86	-7,072.30	7,149.25	7,069.25	80.01	89.360		
8,900.00	7,257.13	7,202.80	7,189.85	59.36	35.82	-89.46	-3,698.76	-7,072.45	7,075.39	6,993.75	81.64	86.664		
9,000.00	7,256.71	7,207.15	7,194.20	61.72	35.84	-89.51	-3,698.66	-7,072.61	7,002.18	6,918.82	83.36	84.002		
9,100.00	7,256.29	7,211.54	7,198.58	64.12	35.85	-89.56	-3,698.56	-7,072.76	6,929.63	6,844.48	85.15	81.382		
9,200.00	7,255.87	7,215.96	7,202.99	66.56	35.87	-89.61	-3,698.45	-7,072.91	6,857.77	6,770.76	87.02	78.810		
9,300.00	7,255.45	7,220.41	7,207.44	69.02	35.88	-89.67	-3,698.35	-7,073.07	6,786.63	6,697.67	88.96	76.290		
9,400.00	7,255.03	7,224.90	7,211.93	71.52	35.90	-89.72	-3,698.24	-7,073.23	6,716.21	6,625.24	90.97	73.826		
9,500.00	7,254.61	7,229.43	7,216.45	74.04	35.91	-89.78	-3,698.12	-7,073.39	6,646.55	6,553.49	93.06	71.422		
9,600.00	7,254.19	7,233.99	7,221.01	76.58	35.93	-89.83	-3,698.01	-7,073.55	6,577.68	6,482.46	95.22	69.080		
9,700.00	7,253.77	7,238.59	7,225.60	79.15	35.95	-89.88	-3,697.89	-7,073.72	6,509.61	6,412.16	97.45	66.803		
9,800.00	7,253.35	7,243.23	7,230.23	81.74	35.96	-89.94	-3,697.77	-7,073.88	6,442.37	6,342.62	99.74	64.591		
9,900.00	7,252.92	7,247.90	7,234.90	84.34	35.98	-90.00	-3,697.64	-7,074.05	6,375.98	6,273.88	102.10	62.445		
10,000.00	7,252.50	7,252.61	7,239.61	86.96	36.00	-90.05	-3,697.51	-7,074.22	6,310.48	6,205.95	104.53	60.367		
10,100.00	7,252.08	7,257.36	7,244.36	89.59	36.01	-90.11	-3,697.38	-7,074.39	6,245.90	6,138.86	107.03	58.356		
10,200.00	7,251.66	7,262.15	7,249.14	92.24	36.03	-90.17	-3,697.25	-7,074.57	6,182.25	6,072.66	109.59	56.412		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,266.98	7,253.96	94.90	36.05	-90.22	-3,697.11	-7,074.75	6,119.57	6,007.36	112.21	54.535		
10,400.00	7,250.82	7,271.85	7,258.83	97.57	36.06	-90.28	-3,696.97	-7,074.92	6,057.89	5,942.99	114.90	52.723		
10,500.00	7,250.40	7,276.76	7,263.73	100.25	36.08	-90.34	-3,696.83	-7,075.11	5,997.25	5,879.60	117.65	50.976		
10,600.00	7,249.98	7,281.71	7,268.68	102.93	36.10	-90.40	-3,696.68	-7,075.29	5,937.66	5,817.21	120.45	49.294		
10,700.00	7,249.56	7,286.70	7,273.66	105.63	36.12	-90.46	-3,696.53	-7,075.47	5,879.17	5,755.85	123.32	47.674		
10,800.00	7,249.14	7,291.74	7,278.69	108.34	36.13	-90.52	-3,696.37	-7,075.66	5,821.81	5,695.57	126.24	46.116		
10,900.00	7,248.72	7,296.81	7,283.76	111.05	36.15	-90.58	-3,696.21	-7,075.85	5,765.61	5,636.39	129.22	44.619		
11,000.00	7,248.30	7,301.93	7,288.87	113.77	36.17	-90.64	-3,696.05	-7,076.04	5,710.60	5,578.35	132.25	43.180		
11,100.00	7,247.88	7,307.09	7,294.03	116.50	36.19	-90.70	-3,695.89	-7,076.24	5,656.82	5,521.49	135.34	41.799		
11,200.00	7,247.46	7,312.30	7,299.23	119.23	36.21	-90.77	-3,695.72	-7,076.44	5,604.31	5,465.84	138.47	40.474		
11,300.00	7,247.04	7,317.55	7,304.48	121.97	36.23	-90.83	-3,695.54	-7,076.64	5,553.10	5,411.45	141.65	39.203		
11,400.00	7,246.62	7,322.85	7,309.77	124.72	36.24	-90.89	-3,695.37	-7,076.84	5,503.23	5,358.35	144.88	37.986		
11,500.00	7,246.20	7,328.19	7,315.10	127.46	36.26	-90.96	-3,695.18	-7,077.04	5,454.73	5,306.58	148.15	36.820		
11,600.00	7,245.78	7,333.58	7,320.49	130.22	36.28	-91.02	-3,695.00	-7,077.25	5,407.64	5,256.19	151.45	35.705		
11,700.00	7,245.36	7,339.02	7,325.92	132.98	36.30	-91.08	-3,694.81	-7,077.46	5,362.00	5,207.20	154.80	34.638		
11,800.00	7,244.94	7,344.51	7,331.39	135.74	36.32	-91.15	-3,694.61	-7,077.67	5,317.85	5,159.67	158.18	33.619		
11,900.00	7,244.52	7,350.04	7,336.92	138.50	36.34	-91.22	-3,694.41	-7,077.89	5,275.22	5,113.63	161.59	32.646		
12,000.00	7,244.10	7,318.01	7,304.94	141.27	36.23	-90.83	-3,695.59	-7,076.63	5,234.28	5,069.42	164.86	31.750		
12,100.00	7,243.68	7,319.91	7,306.83	144.04	36.24	-90.86	-3,695.54	-7,076.70	5,194.83	5,026.53	168.30	30.866		
12,200.00	7,243.26	7,321.79	7,308.71	146.82	36.24	-90.88	-3,695.49	-7,076.77	5,157.02	4,985.25	171.76	30.024		
12,300.00	7,242.84	7,323.66	7,310.58	149.60	36.25	-90.90	-3,695.43	-7,076.84	5,120.88	4,945.64	175.24	29.222		
12,400.00	7,242.42	7,325.52	7,312.44	152.38	36.26	-90.92	-3,695.39	-7,076.90	5,086.45	4,907.72	178.73	28.459		
12,500.00	7,242.00	7,327.36	7,314.28	155.16	36.26	-90.95	-3,695.34	-7,076.97	5,053.77	4,871.55	182.22	27.735		
12,600.00	7,241.58	7,329.20	7,316.11	157.95	36.27	-90.97	-3,695.29	-7,077.03	5,022.86	4,837.15	185.71	27.047		
12,700.00	7,241.16	7,331.02	7,317.93	160.74	36.28	-90.99	-3,695.24	-7,077.10	4,993.76	4,804.56	189.19	26.395		
12,800.00	7,240.74	7,332.83	7,319.74	163.53	36.28	-91.01	-3,695.19	-7,077.16	4,966.50	4,773.83	192.67	25.777		
12,900.00	7,240.32	7,334.63	7,321.54	166.32	36.29	-91.03	-3,695.15	-7,077.23	4,941.12	4,744.99	196.13	25.193		
13,000.00	7,239.89	7,336.42	7,323.33	169.12	36.30	-91.05	-3,695.10	-7,077.29	4,917.64	4,718.07	199.57	24.642		
13,100.00	7,239.47	7,338.20	7,325.11	171.92	36.30	-91.07	-3,695.06	-7,077.35	4,896.08	4,693.11	202.98	24.121		
13,200.00	7,239.05	7,339.97	7,326.87	174.72	36.31	-91.10	-3,695.02	-7,077.41	4,876.49	4,670.13	206.36	23.631		
13,300.00	7,238.63	7,341.72	7,328.62	177.52	36.31	-91.12	-3,694.97	-7,077.47	4,858.87	4,649.17	209.70	23.171		
13,400.00	7,238.21	7,343.47	7,330.37	180.32	36.32	-91.14	-3,694.93	-7,077.54	4,843.25	4,630.26	212.99	22.739		
13,500.00	7,237.79	7,345.20	7,332.10	183.13	36.33	-91.16	-3,694.89	-7,077.60	4,829.65	4,613.41	216.24	22.335		
13,600.00	7,237.37	7,346.92	7,333.82	185.93	36.33	-91.18	-3,694.85	-7,077.66	4,818.08	4,598.65	219.43	21.957		
13,700.00	7,236.95	7,358.00	7,344.89	188.74	36.37	-91.31	-3,694.61	-7,078.03	4,808.59	4,585.98	222.60	21.602		
13,800.00	7,236.53	7,358.00	7,344.89	191.55	36.37	-91.31	-3,694.61	-7,078.03	4,801.13	4,575.47	225.66	21.276		
13,900.00	7,236.11	7,358.00	7,344.89	194.36	36.37	-91.31	-3,694.61	-7,078.03	4,795.75	4,567.10	228.65	20.974		
14,000.00	7,235.69	7,358.00	7,344.89	197.17	36.37	-91.31	-3,694.61	-7,078.03	4,792.45	4,560.89	231.57	20.696		
14,100.00	7,235.27	7,362.65	7,340.24	199.98	36.39	-91.26	-3,694.70	-7,077.88	4,791.24	4,556.82	234.41	20.439		
14,108.05	7,235.24	7,362.41	7,340.48	200.21	36.39	-91.26	-3,694.70	-7,077.89	4,791.23	4,556.59	234.64	20.420 CC		
14,200.00	7,234.85	7,359.71	7,343.18	202.80	36.38	-91.29	-3,694.64	-7,077.98	4,792.11	4,554.95	237.16	20.206 ES		
14,300.00	7,234.43	7,359.23	7,346.12	205.61	36.38	-91.33	-3,694.58	-7,078.08	4,795.07	4,555.25	239.82	19.994		
14,400.00	7,234.01	7,362.17	7,349.05	208.43	36.39	-91.36	-3,694.52	-7,078.18	4,800.11	4,557.70	242.41	19.802		
14,500.00	7,233.59	7,365.11	7,351.99	211.25	36.40	-91.40	-3,694.45	-7,078.28	4,807.22	4,562.32	244.90	19.629		
14,600.00	7,233.17	7,368.05	7,354.93	214.06	36.41	-91.43	-3,694.39	-7,078.38	4,816.40	4,569.10	247.30	19.476		
14,700.00	7,232.75	7,370.99	7,357.86	216.88	36.42	-91.47	-3,694.33	-7,078.48	4,827.63	4,578.03	249.60	19.341		
14,800.00	7,232.33	7,373.93	7,360.80	219.70	36.43	-91.50	-3,694.26	-7,078.58	4,840.89	4,589.09	251.80	19.225		
14,900.00	7,231.91	7,376.86	7,363.74	222.52	36.44	-91.54	-3,694.20	-7,078.68	4,856.18	4,602.28	253.90	19.126		
15,000.00	7,231.49	7,379.80	7,366.67	225.35	36.45	-91.57	-3,694.14	-7,078.78	4,873.48	4,617.58	255.90	19.045		
15,100.00	7,231.07	7,382.74	7,369.61	228.17	36.46	-91.61	-3,694.08	-7,078.87	4,892.75	4,634.96	257.79	18.980		
15,116.21	7,231.00	7,383.22	7,370.09	228.63	36.46	-91.61	-3,694.07	-7,078.89	4,896.06	4,637.97	258.09	18.970 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	69.00	0.00	3.28	-119.70	-4,370.83	-7,664.02	8,823.04					
100.00	100.00	31.00	100.00	0.18	3.32	-119.70	-4,370.83	-7,664.02	8,822.77	8,819.27	3.50	2,520.887		
200.00	200.00	131.00	200.00	0.61	4.33	-119.70	-4,370.83	-7,664.02	8,822.77	8,817.83	4.94	1,784.213		
300.00	300.00	231.00	300.00	1.05	7.12	-119.70	-4,370.83	-7,664.02	8,822.77	8,814.60	8.17	1,079.587		
400.00	400.00	331.00	400.00	1.49	10.34	-119.70	-4,370.83	-7,664.02	8,822.77	8,810.94	11.84	745.458		
500.00	500.00	431.00	500.00	1.93	13.70	-119.70	-4,370.83	-7,664.02	8,822.77	8,807.14	15.63	564.485		
600.00	599.98	530.98	599.98	2.37	17.11	-111.95	-4,370.83	-7,664.02	8,823.43	8,803.95	19.48	453.014		
700.00	699.84	630.84	699.84	2.81	20.54	-111.94	-4,370.83	-7,664.02	8,825.39	8,802.04	23.35	378.002		
800.00	799.45	730.45	799.45	3.26	23.98	-111.93	-4,370.83	-7,664.02	8,828.65	8,801.43	27.23	324.274		
900.00	898.70	829.70	898.70	3.70	27.42	-111.92	-4,370.83	-7,664.02	8,833.23	8,802.13	31.10	283.989		
1,000.00	997.47	928.47	997.47	4.15	30.84	-111.91	-4,370.83	-7,664.02	8,839.13	8,804.16	34.98	252.716		
1,100.00	1,095.78	1,026.78	1,095.78	4.60	34.26	-111.97	-4,370.83	-7,664.02	8,846.07	8,807.23	38.84	227.741		
1,200.00	1,194.05	1,125.05	1,194.05	5.05	37.67	-112.08	-4,370.83	-7,664.02	8,853.10	8,810.39	42.71	207.260		
1,300.00	1,292.33	1,223.33	1,292.33	5.50	41.09	-112.19	-4,370.83	-7,664.02	8,860.17	8,813.58	46.59	190.161		
1,400.00	1,390.61	1,321.61	1,390.61	5.96	44.51	-112.30	-4,370.83	-7,664.02	8,867.27	8,816.80	50.48	175.675		
1,500.00	1,488.89	1,419.89	1,488.89	6.43	47.94	-112.41	-4,370.83	-7,664.02	8,874.41	8,820.05	54.36	163.248		
1,600.00	1,587.16	1,518.16	1,587.16	6.89	51.36	-112.52	-4,370.83	-7,664.02	8,881.57	8,823.32	58.25	152.472		
1,700.00	1,685.44	1,616.44	1,685.44	7.36	54.78	-112.63	-4,370.83	-7,664.02	8,888.77	8,826.63	62.14	143.041		
1,800.00	1,783.72	1,714.72	1,783.72	7.83	58.21	-112.73	-4,370.83	-7,664.02	8,896.01	8,829.97	66.03	134.718		
1,900.00	1,882.00	1,813.00	1,882.00	8.30	61.63	-112.84	-4,370.83	-7,664.02	8,903.27	8,833.34	69.93	127.319		
2,000.00	1,980.27	1,911.27	1,980.27	8.77	65.06	-112.95	-4,370.83	-7,664.02	8,910.57	8,836.74	73.82	120.699		
2,100.00	2,078.55	2,009.55	2,078.55	9.25	68.49	-113.06	-4,370.83	-7,664.02	8,917.90	8,840.17	77.72	114.742		
2,200.00	2,176.83	2,107.83	2,176.83	9.72	71.91	-113.17	-4,370.83	-7,664.02	8,925.26	8,843.64	81.62	109.353		
2,300.00	2,275.11	2,206.11	2,275.11	10.19	75.34	-113.27	-4,370.83	-7,664.02	8,932.65	8,847.13	85.52	104.454		
2,400.00	2,373.38	2,304.38	2,373.38	10.66	78.77	-113.38	-4,370.83	-7,664.02	8,940.08	8,850.66	89.42	99.982		
2,500.00	2,471.66	2,402.66	2,471.66	11.14	82.20	-113.49	-4,370.83	-7,664.02	8,947.53	8,854.22	93.32	95.884		
2,600.00	2,569.94	2,500.94	2,569.94	11.61	85.63	-113.59	-4,370.83	-7,664.02	8,955.02	8,857.81	97.22	92.114		
2,700.00	2,668.22	2,600.78	2,668.22	12.09	89.11	-113.70	-4,370.83	-7,664.02	8,962.55	8,861.37	101.17	88.587		
2,800.00	2,766.49	2,702.51	2,766.49	12.56	92.66	-113.81	-4,370.83	-7,664.02	8,970.10	8,864.91	105.19	85.273		
2,900.00	2,864.77	2,804.23	2,864.77	13.04	96.21	-113.91	-4,370.83	-7,664.02	8,977.68	8,868.47	109.21	82.202		
3,000.00	2,963.05	2,905.95	2,963.05	13.51	99.76	-114.02	-4,370.83	-7,664.02	8,985.30	8,872.06	113.24	79.350		
3,100.00	3,061.33	3,007.67	3,061.33	13.99	103.30	-114.13	-4,370.83	-7,664.02	8,992.95	8,875.69	117.26	76.693		
3,200.00	3,159.60	3,109.40	3,159.60	14.46	106.85	-114.23	-4,370.83	-7,664.02	9,000.63	8,879.35	121.28	74.213		
3,300.00	3,257.88	3,188.88	3,257.88	14.94	109.63	-114.34	-4,370.83	-7,664.02	9,008.34	8,883.81	124.53	72.340		
3,400.00	3,356.16	3,287.16	3,356.16	15.41	113.06	-114.44	-4,370.83	-7,664.02	9,016.08	8,887.65	128.43	70.202		
3,500.00	3,454.43	3,385.43	3,454.43	15.89	116.49	-114.55	-4,370.83	-7,664.02	9,023.85	8,891.52	132.33	68.190		
3,600.00	3,552.71	3,483.71	3,552.71	16.36	119.92	-114.65	-4,370.83	-7,664.02	9,031.66	8,895.42	136.24	66.294		
3,700.00	3,650.99	3,581.99	3,650.99	16.84	123.35	-114.76	-4,370.83	-7,664.02	9,039.49	8,899.36	140.14	64.504		
3,800.00	3,749.27	3,680.27	3,749.27	17.32	126.78	-114.86	-4,370.83	-7,664.02	9,047.36	8,903.32	144.04	62.810		
3,900.00	3,847.54	3,778.54	3,847.54	17.79	130.21	-114.97	-4,370.83	-7,664.02	9,055.26	8,907.31	147.95	61.207		
4,000.00	3,945.82	3,876.82	3,945.82	18.27	133.63	-115.07	-4,370.83	-7,664.02	9,063.19	8,911.34	151.85	59.685		
4,100.00	4,044.10	3,975.10	4,044.10	18.75	137.06	-115.18	-4,370.83	-7,664.02	9,071.15	8,915.39	155.75	58.241		
4,200.00	4,142.38	4,073.38	4,142.38	19.22	140.49	-115.28	-4,370.83	-7,664.02	9,079.14	8,919.48	159.66	56.867		
4,300.00	4,240.65	4,171.65	4,240.65	19.70	143.92	-115.38	-4,370.83	-7,664.02	9,087.16	8,923.60	163.56	55.559		
4,400.00	4,338.93	4,269.93	4,338.93	20.18	147.35	-115.49	-4,370.83	-7,664.02	9,095.21	8,927.74	167.46	54.312		
4,500.00	4,437.21	4,368.21	4,437.21	20.65	150.78	-115.59	-4,370.83	-7,664.02	9,103.29	8,931.92	171.37	53.122		
4,600.00	4,535.49	4,466.49	4,535.49	21.13	154.21	-115.70	-4,370.83	-7,664.02	9,111.40	8,936.13	175.27	51.985		
4,700.00	4,633.76	4,564.76	4,633.76	21.61	157.64	-115.80	-4,370.83	-7,664.02	9,119.54	8,940.37	179.17	50.898		
4,800.00	4,732.04	4,663.04	4,732.04	22.08	161.08	-115.90	-4,370.83	-7,664.02	9,127.71	8,944.63	183.08	49.857		
4,900.00	4,830.32	4,761.32	4,830.32	22.56	164.51	-116.00	-4,370.83	-7,664.02	9,135.91	8,948.93	186.98	48.860		
5,000.00	4,928.60	4,859.60	4,928.60	23.04	167.94	-116.11	-4,370.83	-7,664.02	9,144.15	8,953.26	190.89	47.904		
5,100.00	5,026.87	4,957.87	5,026.87	23.51	171.37	-116.21	-4,370.83	-7,664.02	9,152.41	8,957.62	194.79	46.986		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,056.15	5,125.15	23.99	174.80	-116.31	-4,370.83	-7,664.02	9,160.70	8,962.00	198.69	46.105		
5,300.00	5,223.43	5,154.43	5,223.43	24.47	178.23	-116.41	-4,370.83	-7,664.02	9,169.02	8,966.42	202.60	45.257		
5,400.00	5,321.71	5,252.71	5,321.71	24.94	181.66	-116.52	-4,370.83	-7,664.02	9,177.37	8,970.87	206.50	44.442		
5,500.00	5,419.98	5,350.98	5,419.98	25.42	185.09	-116.62	-4,370.83	-7,664.02	9,185.75	8,975.35	210.41	43.657		
5,600.00	5,518.26	5,449.26	5,518.26	25.90	188.52	-116.72	-4,370.83	-7,664.02	9,194.16	8,979.85	214.31	42.901		
5,700.00	5,616.54	5,547.54	5,616.54	26.38	191.95	-116.82	-4,370.83	-7,664.02	9,202.60	8,984.39	218.21	42.173		
5,800.00	5,714.82	5,645.82	5,714.82	26.85	195.38	-116.92	-4,370.83	-7,664.02	9,211.07	8,988.95	222.12	41.469		
5,900.00	5,813.09	5,744.09	5,813.09	27.33	198.81	-117.02	-4,370.83	-7,664.02	9,219.57	8,993.55	226.02	40.791		
6,000.00	5,911.37	5,842.37	5,911.37	27.81	202.24	-117.12	-4,370.83	-7,664.02	9,228.10	8,998.17	229.92	40.135		
6,100.00	6,009.65	5,940.65	6,009.65	28.28	205.67	-117.22	-4,370.83	-7,664.02	9,236.65	9,002.82	233.83	39.502		
6,200.00	6,107.93	6,038.93	6,107.93	28.76	209.10	-117.32	-4,370.83	-7,664.02	9,245.24	9,007.50	237.73	38.889		
6,300.00	6,206.20	6,137.20	6,206.20	29.24	212.53	-117.42	-4,370.83	-7,664.02	9,253.85	9,012.21	241.64	38.297		
6,400.00	6,304.48	6,235.48	6,304.48	29.72	215.96	-117.52	-4,370.83	-7,664.02	9,262.49	9,016.95	245.54	37.723		
6,500.00	6,402.76	6,333.76	6,402.76	30.19	219.39	-117.62	-4,370.83	-7,664.02	9,271.17	9,021.72	249.44	37.167		
6,600.00	6,501.04	6,432.04	6,501.04	30.67	222.82	-117.72	-4,370.83	-7,664.02	9,279.87	9,026.52	253.35	36.629		
6,700.00	6,599.31	6,530.31	6,599.31	31.15	226.25	-117.82	-4,370.83	-7,664.02	9,288.60	9,031.34	257.25	36.107		
6,800.00	6,697.59	6,628.59	6,697.59	31.63	229.68	-96.83	-4,370.83	-7,664.02	9,295.84	9,034.69	261.15	35.595		
6,900.00	6,794.18	6,725.18	6,794.18	32.10	233.05	-71.35	-4,370.83	-7,664.02	9,291.93	9,026.92	265.01	35.063		
7,000.00	6,886.96	6,817.96	6,886.96	32.55	236.29	-60.92	-4,370.83	-7,664.02	9,275.31	9,006.59	268.72	34.517		
7,100.00	6,973.57	6,904.57	6,973.57	32.99	239.32	-56.91	-4,370.83	-7,664.02	9,246.49	8,974.28	272.21	33.969		
7,200.00	7,051.87	6,982.87	7,051.87	33.41	242.05	-56.29	-4,370.83	-7,664.02	9,206.26	8,930.85	275.41	33.427		
7,300.00	7,119.93	7,050.93	7,119.93	33.85	244.43	-58.04	-4,370.83	-7,664.02	9,155.70	8,877.43	278.27	32.902		
7,400.00	7,176.09	7,107.09	7,176.09	34.39	246.39	-61.87	-4,370.83	-7,664.02	9,096.16	8,815.41	280.75	32.400		
7,500.00	7,218.95	7,149.95	7,218.95	35.09	247.88	-67.79	-4,370.83	-7,664.02	9,029.16	8,746.35	282.81	31.927		
7,600.00	7,247.46	7,178.46	7,247.46	35.98	248.88	-75.84	-4,370.83	-7,664.02	8,956.40	8,671.98	284.42	31.490		
7,700.00	7,260.92	7,208.08	7,260.92	37.04	249.91	-85.85	-4,370.83	-7,664.02	8,879.70	8,593.59	286.12	31.035		
7,800.00	7,261.75	7,207.25	7,261.75	38.23	249.88	-90.30	-4,370.83	-7,664.02	8,801.19	8,514.39	286.80	30.687		
7,900.00	7,261.33	7,207.67	7,261.33	39.59	249.90	-90.30	-4,370.83	-7,664.02	8,722.94	8,435.33	287.61	30.329		
8,000.00	7,260.91	7,208.09	7,260.91	41.10	249.91	-90.30	-4,370.83	-7,664.02	8,645.15	8,356.64	288.51	29.965		
8,100.00	7,260.49	7,208.51	7,260.49	42.75	249.93	-90.29	-4,370.83	-7,664.02	8,567.82	8,278.32	289.49	29.596		
8,200.00	7,260.07	7,208.93	7,260.07	44.53	249.94	-90.29	-4,370.83	-7,664.02	8,490.96	8,200.39	290.57	29.222		
8,300.00	7,259.65	7,209.35	7,259.65	46.41	249.95	-90.28	-4,370.83	-7,664.02	8,414.58	8,122.86	291.73	28.844		
8,400.00	7,259.23	7,209.77	7,259.23	48.39	249.97	-90.28	-4,370.83	-7,664.02	8,338.71	8,045.74	292.97	28.463		
8,500.00	7,258.81	7,189.81	7,258.81	50.45	249.27	-90.27	-4,370.83	-7,664.02	8,263.35	7,969.77	293.58	28.146		
8,600.00	7,258.39	7,189.39	7,258.39	52.59	249.26	-90.27	-4,370.83	-7,664.02	8,188.52	7,893.56	294.96	27.761		
8,700.00	7,257.97	7,188.97	7,257.97	54.79	249.24	-90.27	-4,370.83	-7,664.02	8,114.23	7,817.82	296.41	27.375		
8,800.00	7,257.55	7,188.55	7,257.55	57.05	249.23	-90.26	-4,370.83	-7,664.02	8,040.50	7,742.55	297.94	26.987		
8,900.00	7,257.13	7,188.13	7,257.13	59.36	249.21	-90.26	-4,370.83	-7,664.02	7,967.34	7,667.79	299.55	26.598		
9,000.00	7,256.71	7,187.71	7,256.71	61.72	249.20	-90.25	-4,370.83	-7,664.02	7,894.76	7,593.54	301.22	26.209		
9,100.00	7,256.29	7,187.29	7,256.29	64.12	249.18	-90.25	-4,370.83	-7,664.02	7,822.80	7,519.83	302.97	25.820		
9,200.00	7,255.87	7,186.87	7,255.87	66.56	249.17	-90.24	-4,370.83	-7,664.02	7,751.45	7,446.67	304.78	25.433		
9,300.00	7,255.45	7,186.45	7,255.45	69.02	249.16	-90.24	-4,370.83	-7,664.02	7,680.75	7,374.08	306.67	25.046		
9,400.00	7,255.03	7,186.03	7,255.03	71.52	249.14	-90.23	-4,370.83	-7,664.02	7,610.70	7,302.08	308.62	24.661		
9,500.00	7,254.61	7,185.61	7,254.61	74.04	249.13	-90.23	-4,370.83	-7,664.02	7,541.33	7,230.70	310.63	24.277		
9,600.00	7,254.19	7,185.19	7,254.19	76.58	249.11	-90.23	-4,370.83	-7,664.02	7,472.65	7,159.94	312.71	23.897		
9,700.00	7,253.77	7,184.77	7,253.77	79.15	249.10	-90.22	-4,370.83	-7,664.02	7,404.69	7,089.84	314.85	23.518		
9,800.00	7,253.35	7,184.35	7,253.35	81.74	249.08	-90.22	-4,370.83	-7,664.02	7,337.45	7,020.41	317.05	23.143		
9,900.00	7,252.92	7,183.92	7,252.92	84.34	249.07	-90.21	-4,370.83	-7,664.02	7,270.98	6,951.67	319.31	22.771		
10,000.00	7,252.50	7,183.50	7,252.50	86.96	249.05	-90.21	-4,370.83	-7,664.02	7,205.27	6,883.65	321.62	22.403		
10,100.00	7,252.08	7,183.08	7,252.08	89.59	249.04	-90.20	-4,370.83	-7,664.02	7,140.37	6,816.37	324.00	22.038		
10,200.00	7,251.66	7,182.66	7,251.66	92.24	249.02	-90.20	-4,370.83	-7,664.02	7,076.28	6,749.84	326.43	21.678		
10,300.00	7,251.24	7,182.24	7,251.24	94.90	249.01	-90.19	-4,370.83	-7,664.02	7,013.03	6,684.11	328.92	21.321		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,181.82	7,250.82	97.57	248.99	-90.19	-4,370.83	-7,664.02	6,950.64	6,619.18	331.46	20.970		
10,500.00	7,250.40	7,181.40	7,250.40	100.25	248.98	-90.19	-4,370.83	-7,664.02	6,889.14	6,555.08	334.06	20.623		
10,600.00	7,249.98	7,180.98	7,249.98	102.93	248.96	-90.18	-4,370.83	-7,664.02	6,828.55	6,491.85	336.71	20.280		
10,700.00	7,249.56	7,180.56	7,249.56	105.63	248.95	-90.18	-4,370.83	-7,664.02	6,768.90	6,429.49	339.40	19.943		
10,800.00	7,249.14	7,180.14	7,249.14	108.34	248.94	-90.17	-4,370.83	-7,664.02	6,710.21	6,368.05	342.15	19.612		
10,900.00	7,248.72	7,179.72	7,248.72	111.05	248.92	-90.17	-4,370.83	-7,664.02	6,652.50	6,307.55	344.95	19.285		
11,000.00	7,248.30	7,179.30	7,248.30	113.77	248.91	-90.16	-4,370.83	-7,664.02	6,595.80	6,248.00	347.80	18.964		
11,100.00	7,247.88	7,178.88	7,247.88	116.50	248.89	-90.16	-4,370.83	-7,664.02	6,540.14	6,189.45	350.69	18.649		
11,200.00	7,247.46	7,178.46	7,247.46	119.23	248.88	-90.15	-4,370.83	-7,664.02	6,485.55	6,131.92	353.63	18.340		
11,300.00	7,247.04	7,178.04	7,247.04	121.97	248.86	-90.15	-4,370.83	-7,664.02	6,432.04	6,075.43	356.61	18.037		
11,400.00	7,246.62	7,177.62	7,246.62	124.72	248.85	-90.15	-4,370.83	-7,664.02	6,379.66	6,020.03	359.63	17.740		
11,500.00	7,246.20	7,177.20	7,246.20	127.46	248.83	-90.14	-4,370.83	-7,664.02	6,328.42	5,965.73	362.69	17.448		
11,600.00	7,245.78	7,176.78	7,245.78	130.22	248.82	-90.14	-4,370.83	-7,664.02	6,278.36	5,912.56	365.79	17.164		
11,700.00	7,245.36	7,176.36	7,245.36	132.98	248.80	-90.13	-4,370.83	-7,664.02	6,229.49	5,860.56	368.93	16.885		
11,800.00	7,244.94	7,175.94	7,244.94	135.74	248.79	-90.13	-4,370.83	-7,664.02	6,181.87	5,809.76	372.10	16.613		
11,900.00	7,244.52	7,175.52	7,244.52	138.50	248.77	-90.12	-4,370.83	-7,664.02	6,135.50	5,760.19	375.31	16.348		
12,000.00	7,244.10	7,175.10	7,244.10	141.27	248.76	-90.12	-4,370.83	-7,664.02	6,090.42	5,711.88	378.54	16.089		
12,100.00	7,243.68	7,174.68	7,243.68	144.04	248.74	-90.12	-4,370.83	-7,664.02	6,046.65	5,664.86	381.80	15.837		
12,200.00	7,243.26	7,174.26	7,243.26	146.82	248.73	-90.11	-4,370.83	-7,664.02	6,004.24	5,619.15	385.08	15.592		
12,300.00	7,242.84	7,173.84	7,242.84	149.60	248.72	-90.11	-4,370.83	-7,664.02	5,963.20	5,574.81	388.39	15.354		
12,400.00	7,242.42	7,173.42	7,242.42	152.38	248.70	-90.10	-4,370.83	-7,664.02	5,923.56	5,531.84	391.72	15.122		
12,500.00	7,242.00	7,173.00	7,242.00	155.16	248.69	-90.10	-4,370.83	-7,664.02	5,885.36	5,490.30	395.06	14.897		
12,600.00	7,241.58	7,172.58	7,241.58	157.95	248.67	-90.09	-4,370.83	-7,664.02	5,848.62	5,450.20	398.42	14.680		
12,700.00	7,241.16	7,172.16	7,241.16	160.74	248.66	-90.09	-4,370.83	-7,664.02	5,813.36	5,411.58	401.78	14.469		
12,800.00	7,240.74	7,171.74	7,240.74	163.53	248.64	-90.08	-4,370.83	-7,664.02	5,779.62	5,374.47	405.15	14.265		
12,900.00	7,240.32	7,171.32	7,240.32	166.32	248.63	-90.08	-4,370.83	-7,664.02	5,747.42	5,338.90	408.52	14.069		
13,000.00	7,239.89	7,170.89	7,239.89	169.12	248.61	-90.08	-4,370.83	-7,664.02	5,716.79	5,304.90	411.90	13.879		
13,100.00	7,239.47	7,170.47	7,239.47	171.92	248.60	-90.07	-4,370.83	-7,664.02	5,687.76	5,272.49	415.26	13.697		
13,200.00	7,239.05	7,170.05	7,239.05	174.72	248.58	-90.07	-4,370.83	-7,664.02	5,660.34	5,241.72	418.62	13.521		
13,300.00	7,238.63	7,169.63	7,238.63	177.52	248.57	-90.06	-4,370.83	-7,664.02	5,634.56	5,212.59	421.97	13.353		
13,400.00	7,238.21	7,169.21	7,238.21	180.32	248.55	-90.06	-4,370.83	-7,664.02	5,610.45	5,185.15	425.29	13.192		
13,500.00	7,237.79	7,168.79	7,237.79	183.13	248.54	-90.05	-4,370.83	-7,664.02	5,588.02	5,159.42	428.60	13.038		
13,600.00	7,237.37	7,168.37	7,237.37	185.93	248.52	-90.05	-4,370.83	-7,664.02	5,567.30	5,135.42	431.88	12.891		
13,700.00	7,236.95	7,167.95	7,236.95	188.74	248.51	-90.04	-4,370.83	-7,664.02	5,548.31	5,113.17	435.14	12.751		
13,800.00	7,236.53	7,167.53	7,236.53	191.55	248.50	-90.04	-4,370.83	-7,664.02	5,531.05	5,092.70	438.36	12.618		
13,900.00	7,236.11	7,167.11	7,236.11	194.36	248.48	-90.04	-4,370.83	-7,664.02	5,515.56	5,074.02	441.54	12.492		
14,000.00	7,235.69	7,166.69	7,235.69	197.17	248.47	-90.03	-4,370.83	-7,664.02	5,501.84	5,057.16	444.68	12.373		
14,100.00	7,235.27	7,166.27	7,235.27	199.98	248.45	-90.03	-4,370.83	-7,664.02	5,489.91	5,042.13	447.77	12.260		
14,200.00	7,234.85	7,165.85	7,234.85	202.80	248.44	-90.02	-4,370.83	-7,664.02	5,479.78	5,028.95	450.82	12.155		
14,300.00	7,234.43	7,165.43	7,234.43	205.61	248.42	-90.02	-4,370.83	-7,664.02	5,471.45	5,017.64	453.81	12.057		
14,400.00	7,234.01	7,165.01	7,234.01	208.43	248.41	-90.01	-4,370.83	-7,664.02	5,464.95	5,008.20	456.75	11.965		
14,500.00	7,233.59	7,164.59	7,233.59	211.25	248.39	-90.01	-4,370.83	-7,664.02	5,460.26	5,000.64	459.62	11.880		
14,600.00	7,233.17	7,164.17	7,233.17	214.06	248.38	-90.00	-4,370.83	-7,664.02	5,457.41	4,994.97	462.44	11.801		
14,700.00	7,232.75	7,163.75	7,232.75	216.88	248.36	-90.00	-4,370.83	-7,664.02	5,456.39	4,991.21	465.18	11.730		
14,705.76	7,232.73	7,163.73	7,232.73	217.05	248.36	-90.00	-4,370.83	-7,664.02	5,456.39	4,991.05	465.34	11.726 CC		
14,800.00	7,232.33	7,163.33	7,232.33	219.70	248.35	-90.00	-4,370.83	-7,664.02	5,457.20	4,989.34	467.86	11.664 ES		
14,900.00	7,231.91	7,162.91	7,231.91	222.52	248.33	-89.99	-4,370.83	-7,664.02	5,459.84	4,989.38	470.46	11.605		
15,000.00	7,231.49	7,162.49	7,231.49	225.35	248.32	-89.99	-4,370.83	-7,664.02	5,464.31	4,991.33	472.99	11.553		
15,100.00	7,231.07	7,162.07	7,231.07	228.17	248.30	-89.98	-4,370.83	-7,664.02	5,470.61	4,995.17	475.44	11.506		
15,116.21	7,231.00	7,162.00	7,231.00	228.63	248.30	-89.98	-4,370.83	-7,664.02	5,471.80	4,995.97	475.83	11.500 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	54.00	0.00	3.28	-108.81	-3,053.42	-8,964.34	9,470.25				
100.00	100.00	46.00	100.00	0.18	3.38	-108.81	-3,053.42	-8,964.34	9,470.10	9,466.55	3.55	2,665.841	
200.00	200.00	146.00	200.00	0.61	4.69	-108.81	-3,053.42	-8,964.34	9,470.10	9,464.80	5.30	1,785.587	
300.00	300.00	246.00	300.00	1.05	7.59	-108.81	-3,053.42	-8,964.34	9,470.10	9,461.46	8.64	1,095.954	
400.00	400.00	346.00	400.00	1.49	10.84	-108.81	-3,053.42	-8,964.34	9,470.10	9,457.77	12.33	767.850	
500.00	500.00	446.00	500.00	1.93	14.21	-108.81	-3,053.42	-8,964.34	9,470.10	9,453.96	16.14	586.792	
600.00	599.98	545.98	599.98	2.37	17.62	-101.07	-3,053.42	-8,964.34	9,470.43	9,450.44	19.99	473.731	
700.00	699.84	645.84	699.84	2.81	21.06	-101.08	-3,053.42	-8,964.34	9,471.44	9,447.58	23.86	396.900	
800.00	799.45	745.45	799.45	3.26	24.50	-101.10	-3,053.42	-8,964.34	9,473.12	9,445.38	27.74	341.463	
900.00	898.70	844.70	898.70	3.70	27.94	-101.12	-3,053.42	-8,964.34	9,475.49	9,443.87	31.62	299.657	
1,000.00	997.47	943.47	997.47	4.15	31.36	-101.15	-3,053.42	-8,964.34	9,478.55	9,443.05	35.49	267.050	
1,100.00	1,095.78	1,041.78	1,095.78	4.60	34.78	-101.24	-3,053.42	-8,964.34	9,482.16	9,442.80	39.36	240.908	
1,200.00	1,194.05	1,140.05	1,194.05	5.05	38.19	-101.35	-3,053.42	-8,964.34	9,485.84	9,442.60	43.23	219.408	
1,300.00	1,292.33	1,238.33	1,292.33	5.50	41.61	-101.45	-3,053.42	-8,964.34	9,489.55	9,442.44	47.11	201.420	
1,400.00	1,390.61	1,336.61	1,390.61	5.96	45.04	-101.56	-3,053.42	-8,964.34	9,493.30	9,442.30	51.00	186.153	
1,500.00	1,488.89	1,434.89	1,488.89	6.43	48.46	-101.67	-3,053.42	-8,964.34	9,497.08	9,442.20	54.88	173.037	
1,600.00	1,587.16	1,533.16	1,587.16	6.89	51.88	-101.78	-3,053.42	-8,964.34	9,500.90	9,442.12	58.78	161.648	
1,700.00	1,685.44	1,631.44	1,685.44	7.36	55.31	-101.88	-3,053.42	-8,964.34	9,504.75	9,442.08	62.67	151.669	
1,800.00	1,783.72	1,729.72	1,783.72	7.83	58.73	-101.99	-3,053.42	-8,964.34	9,508.64	9,442.07	66.56	142.854	
1,900.00	1,882.00	1,828.00	1,882.00	8.30	62.16	-102.10	-3,053.42	-8,964.34	9,512.56	9,442.10	70.46	135.010	
2,000.00	1,980.27	1,926.27	1,980.27	8.77	65.58	-102.20	-3,053.42	-8,964.34	9,516.51	9,442.16	74.36	127.987	
2,100.00	2,078.55	2,024.55	2,078.55	9.25	69.01	-102.31	-3,053.42	-8,964.34	9,520.50	9,442.25	78.25	121.662	
2,200.00	2,176.83	2,122.83	2,176.83	9.72	72.44	-102.42	-3,053.42	-8,964.34	9,524.52	9,442.37	82.15	115.936	
2,300.00	2,275.11	2,221.11	2,275.11	10.19	75.86	-102.52	-3,053.42	-8,964.34	9,528.58	9,442.53	86.05	110.729	
2,400.00	2,373.38	2,319.38	2,373.38	10.66	79.29	-102.63	-3,053.42	-8,964.34	9,532.67	9,442.72	89.95	105.973	
2,500.00	2,471.66	2,417.66	2,471.66	11.14	82.72	-102.74	-3,053.42	-8,964.34	9,536.80	9,442.94	93.86	101.611	
2,600.00	2,569.94	2,515.94	2,569.94	11.61	86.15	-102.84	-3,053.42	-8,964.34	9,540.96	9,443.20	97.76	97.598	
2,700.00	2,668.22	2,614.22	2,668.22	12.09	89.58	-102.95	-3,053.42	-8,964.34	9,545.15	9,443.49	101.66	93.893	
2,800.00	2,766.49	2,712.49	2,766.49	12.56	93.01	-103.06	-3,053.42	-8,964.34	9,549.38	9,443.82	105.56	90.462	
2,900.00	2,864.77	2,810.77	2,864.77	13.04	96.43	-103.16	-3,053.42	-8,964.34	9,553.64	9,444.18	109.47	87.275	
3,000.00	2,963.05	2,909.05	2,963.05	13.51	99.86	-103.27	-3,053.42	-8,964.34	9,557.94	9,444.57	113.37	84.308	
3,100.00	3,061.33	3,007.33	3,061.33	13.99	103.29	-103.37	-3,053.42	-8,964.34	9,562.27	9,444.99	117.27	81.538	
3,200.00	3,159.60	3,105.60	3,159.60	14.46	106.72	-103.48	-3,053.42	-8,964.34	9,566.63	9,445.45	121.18	78.947	
3,300.00	3,257.88	3,203.88	3,257.88	14.94	110.15	-103.59	-3,053.42	-8,964.34	9,571.02	9,445.94	125.08	76.518	
3,400.00	3,356.16	3,302.16	3,356.16	15.41	113.58	-103.69	-3,053.42	-8,964.34	9,575.45	9,446.47	128.99	74.236	
3,500.00	3,454.43	3,400.43	3,454.43	15.89	117.01	-103.80	-3,053.42	-8,964.34	9,579.92	9,447.03	132.89	72.089	
3,600.00	3,552.71	3,501.29	3,552.71	16.36	120.53	-103.90	-3,053.42	-8,964.34	9,584.42	9,447.53	136.89	70.018	
3,700.00	3,650.99	3,603.01	3,650.99	16.84	124.08	-104.01	-3,053.42	-8,964.34	9,588.95	9,448.04	140.91	68.050	
3,800.00	3,749.27	3,704.73	3,749.27	17.32	127.63	-104.11	-3,053.42	-8,964.34	9,593.51	9,448.57	144.94	66.191	
3,900.00	3,847.54	3,806.46	3,847.54	17.79	131.18	-104.22	-3,053.42	-8,964.34	9,598.11	9,449.15	148.96	64.433	
4,000.00	3,945.82	3,908.18	3,945.82	18.27	134.73	-104.32	-3,053.42	-8,964.34	9,602.74	9,449.75	152.99	62.768	
4,100.00	4,044.10	4,009.90	4,044.10	18.75	138.28	-104.43	-3,053.42	-8,964.34	9,607.40	9,450.39	157.01	61.189	
4,200.00	4,142.38	4,088.38	4,142.38	19.22	141.02	-104.53	-3,053.42	-8,964.34	9,612.10	9,451.87	160.23	59.990	
4,300.00	4,240.65	4,186.65	4,240.65	19.70	144.45	-104.64	-3,053.42	-8,964.34	9,616.83	9,452.70	164.13	58.592	
4,400.00	4,338.93	4,284.93	4,338.93	20.18	147.88	-104.74	-3,053.42	-8,964.34	9,621.60	9,453.56	168.04	57.258	
4,500.00	4,437.21	4,383.21	4,437.21	20.65	151.31	-104.85	-3,053.42	-8,964.34	9,626.39	9,454.45	171.94	55.985	
4,600.00	4,535.49	4,481.49	4,535.49	21.13	154.74	-104.95	-3,053.42	-8,964.34	9,631.22	9,455.37	175.85	54.769	
4,700.00	4,633.76	4,579.76	4,633.76	21.61	158.17	-105.06	-3,053.42	-8,964.34	9,636.09	9,456.33	179.76	53.606	
4,800.00	4,732.04	4,678.04	4,732.04	22.08	161.60	-105.16	-3,053.42	-8,964.34	9,640.98	9,457.32	183.66	52.493	
4,900.00	4,830.32	4,776.32	4,830.32	22.56	165.03	-105.27	-3,053.42	-8,964.34	9,645.91	9,458.34	187.57	51.426	
5,000.00	4,928.60	4,874.60	4,928.60	23.04	168.46	-105.37	-3,053.42	-8,964.34	9,650.87	9,459.40	191.47	50.403	
5,100.00	5,026.87	4,972.87	5,026.87	23.51	171.89	-105.48	-3,053.42	-8,964.34	9,655.87	9,460.49	195.38	49.421	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,071.15	5,125.15	23.99	175.32	-105.58	-3,053.42	-8,964.34	9,660.90	9,461.61	199.29	48.477		
5,300.00	5,223.43	5,169.43	5,223.43	24.47	178.75	-105.68	-3,053.42	-8,964.34	9,665.96	9,462.76	203.19	47.570		
5,400.00	5,321.71	5,267.71	5,321.71	24.94	182.18	-105.79	-3,053.42	-8,964.34	9,671.05	9,463.95	207.10	46.698		
5,500.00	5,419.98	5,365.98	5,419.98	25.42	185.61	-105.89	-3,053.42	-8,964.34	9,676.17	9,465.17	211.01	45.858		
5,600.00	5,518.26	5,464.26	5,518.26	25.90	189.04	-105.99	-3,053.42	-8,964.34	9,681.33	9,466.42	214.91	45.048		
5,700.00	5,616.54	5,562.54	5,616.54	26.38	192.47	-106.10	-3,053.42	-8,964.34	9,686.52	9,467.71	218.82	44.268		
5,800.00	5,714.82	5,660.82	5,714.82	26.85	195.90	-106.20	-3,053.42	-8,964.34	9,691.75	9,469.02	222.72	43.515		
5,900.00	5,813.09	5,759.09	5,813.09	27.33	199.33	-106.30	-3,053.42	-8,964.34	9,697.00	9,470.37	226.63	42.788		
6,000.00	5,911.37	5,857.37	5,911.37	27.81	202.76	-106.41	-3,053.42	-8,964.34	9,702.29	9,471.75	230.54	42.086		
6,100.00	6,009.65	5,955.65	6,009.65	28.28	206.19	-106.51	-3,053.42	-8,964.34	9,707.61	9,473.17	234.44	41.407		
6,200.00	6,107.93	6,053.93	6,107.93	28.76	209.62	-106.61	-3,053.42	-8,964.34	9,712.96	9,474.61	238.35	40.751		
6,300.00	6,206.20	6,152.20	6,206.20	29.24	213.05	-106.72	-3,053.42	-8,964.34	9,718.35	9,476.09	242.25	40.116		
6,400.00	6,304.48	6,250.48	6,304.48	29.72	216.48	-106.82	-3,053.42	-8,964.34	9,723.76	9,477.60	246.16	39.502		
6,500.00	6,402.76	6,348.76	6,402.76	30.19	219.91	-106.92	-3,053.42	-8,964.34	9,729.21	9,479.15	250.07	38.906		
6,600.00	6,501.04	6,447.04	6,501.04	30.67	223.35	-107.02	-3,053.42	-8,964.34	9,734.69	9,480.72	253.97	38.330		
6,700.00	6,599.31	6,545.31	6,599.31	31.15	226.78	-107.13	-3,053.42	-8,964.34	9,740.21	9,482.33	257.88	37.770		
6,800.00	6,697.59	6,643.59	6,697.59	31.63	230.20	-86.24	-3,053.42	-8,964.34	9,744.07	9,482.28	261.78	37.222		
6,900.00	6,794.18	6,740.18	6,794.18	32.10	233.58	-60.86	-3,053.42	-8,964.34	9,735.55	9,469.91	265.64	36.650		
7,000.00	6,886.96	6,832.96	6,886.96	32.55	236.82	-50.40	-3,053.42	-8,964.34	9,713.00	9,443.66	269.34	36.062		
7,100.00	6,973.57	6,919.57	6,973.57	32.99	239.84	-46.27	-3,053.42	-8,964.34	9,677.02	9,404.21	272.81	35.471		
7,200.00	7,051.87	7,002.13	7,051.87	33.41	242.72	-45.48	-3,053.42	-8,964.34	9,628.55	9,352.42	276.13	34.870		
7,300.00	7,119.93	7,065.93	7,119.93	33.85	244.95	-47.16	-3,053.42	-8,964.34	9,568.83	9,290.04	278.78	34.324		
7,400.00	7,176.09	7,122.09	7,176.09	34.39	246.91	-51.24	-3,053.42	-8,964.34	9,499.36	9,218.19	281.17	33.785		
7,500.00	7,218.95	7,164.95	7,218.95	35.09	248.40	-58.19	-3,053.42	-8,964.34	9,421.89	9,138.80	283.09	33.282		
7,600.00	7,247.46	7,206.54	7,247.46	35.98	249.86	-68.78	-3,053.42	-8,964.34	9,338.35	9,053.36	284.98	32.768		
7,700.00	7,260.92	7,206.92	7,260.92	37.04	249.87	-83.54	-3,053.42	-8,964.34	9,250.77	8,965.33	285.44	32.408		
7,800.00	7,261.75	7,207.75	7,261.75	38.23	249.90	-90.48	-3,053.42	-8,964.34	9,161.46	8,875.53	285.93	32.041		
7,900.00	7,261.33	7,207.33	7,261.33	39.59	249.88	-90.47	-3,053.42	-8,964.34	9,072.24	8,785.82	286.42	31.675		
8,000.00	7,260.91	7,206.91	7,260.91	41.10	249.87	-90.47	-3,053.42	-8,964.34	8,983.25	8,696.28	286.96	31.305		
8,100.00	7,260.49	7,206.49	7,260.49	42.75	249.86	-90.46	-3,053.42	-8,964.34	8,894.49	8,606.93	287.56	30.931		
8,200.00	7,260.07	7,206.07	7,260.07	44.53	249.84	-90.46	-3,053.42	-8,964.34	8,805.97	8,517.75	288.22	30.553		
8,300.00	7,259.65	7,205.65	7,259.65	46.41	249.83	-90.45	-3,053.42	-8,964.34	8,717.71	8,428.77	288.93	30.172		
8,400.00	7,259.23	7,205.23	7,259.23	48.39	249.81	-90.44	-3,053.42	-8,964.34	8,629.69	8,339.99	289.70	29.788		
8,500.00	7,258.81	7,204.81	7,258.81	50.45	249.80	-90.44	-3,053.42	-8,964.34	8,541.94	8,251.41	290.53	29.401		
8,600.00	7,258.39	7,204.39	7,258.39	52.59	249.78	-90.43	-3,053.42	-8,964.34	8,454.47	8,163.05	291.42	29.012		
8,700.00	7,257.97	7,203.97	7,257.97	54.79	249.77	-90.43	-3,053.42	-8,964.34	8,367.27	8,074.91	292.36	28.620		
8,800.00	7,257.55	7,203.55	7,257.55	57.05	249.75	-90.42	-3,053.42	-8,964.34	8,280.37	7,987.00	293.36	28.226		
8,900.00	7,257.13	7,203.13	7,257.13	59.36	249.74	-90.41	-3,053.42	-8,964.34	8,193.76	7,899.34	294.42	27.830		
9,000.00	7,256.71	7,202.71	7,256.71	61.72	249.72	-90.41	-3,053.42	-8,964.34	8,107.46	7,811.92	295.54	27.433		
9,100.00	7,256.29	7,202.29	7,256.29	64.12	249.71	-90.40	-3,053.42	-8,964.34	8,021.48	7,724.76	296.72	27.034		
9,200.00	7,255.87	7,201.87	7,255.87	66.56	249.69	-90.40	-3,053.42	-8,964.34	7,935.82	7,637.87	297.95	26.635		
9,300.00	7,255.45	7,201.45	7,255.45	69.02	249.68	-90.39	-3,053.42	-8,964.34	7,850.51	7,551.27	299.25	26.234		
9,400.00	7,255.03	7,201.03	7,255.03	71.52	249.66	-90.39	-3,053.42	-8,964.34	7,765.55	7,464.95	300.60	25.834		
9,500.00	7,254.61	7,200.61	7,254.61	74.04	249.65	-90.38	-3,053.42	-8,964.34	7,680.95	7,378.94	302.01	25.433		
9,600.00	7,254.19	7,200.19	7,254.19	76.58	249.64	-90.37	-3,053.42	-8,964.34	7,596.72	7,293.24	303.48	25.032		
9,700.00	7,253.77	7,200.23	7,253.77	79.15	249.64	-90.37	-3,053.42	-8,964.34	7,512.88	7,207.86	305.02	24.630		
9,800.00	7,253.35	7,200.66	7,253.35	81.74	249.65	-90.36	-3,053.42	-8,964.34	7,429.44	7,122.80	306.64	24.228		
9,900.00	7,252.92	7,201.08	7,252.92	84.34	249.67	-90.36	-3,053.42	-8,964.34	7,346.41	7,038.09	308.32	23.827		
10,000.00	7,252.50	7,201.50	7,252.50	86.96	249.68	-90.35	-3,053.42	-8,964.34	7,263.81	6,953.76	310.05	23.428		
10,100.00	7,252.08	7,201.92	7,252.08	89.59	249.70	-90.34	-3,053.42	-8,964.34	7,181.66	6,869.81	311.85	23.029		
10,200.00	7,251.66	7,202.34	7,251.66	92.24	249.71	-90.34	-3,053.42	-8,964.34	7,099.96	6,786.25	313.71	22.632		
10,300.00	7,251.24	7,202.76	7,251.24	94.90	249.72	-90.33	-3,053.42	-8,964.34	7,018.73	6,703.11	315.62	22.238		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,203.18	7,250.82	97.57	249.74	-90.33	-3,053.42	-8,964.34	6,938.00	6,620.40	317.60	21.845		
10,500.00	7,250.40	7,203.60	7,250.40	100.25	249.75	-90.32	-3,053.42	-8,964.34	6,857.77	6,538.13	319.64	21.455		
10,600.00	7,249.98	7,204.02	7,249.98	102.93	249.77	-90.31	-3,053.42	-8,964.34	6,778.07	6,456.33	321.74	21.067		
10,700.00	7,249.56	7,204.44	7,249.56	105.63	249.78	-90.31	-3,053.42	-8,964.34	6,698.91	6,375.01	323.91	20.682		
10,800.00	7,249.14	7,204.86	7,249.14	108.34	249.80	-90.30	-3,053.42	-8,964.34	6,620.32	6,294.19	326.13	20.300		
10,900.00	7,248.72	7,205.28	7,248.72	111.05	249.81	-90.30	-3,053.42	-8,964.34	6,542.31	6,213.89	328.42	19.920		
11,000.00	7,248.30	7,205.70	7,248.30	113.77	249.83	-90.29	-3,053.42	-8,964.34	6,464.91	6,134.13	330.78	19.545		
11,100.00	7,247.88	7,206.12	7,247.88	116.50	249.84	-90.29	-3,053.42	-8,964.34	6,388.13	6,054.94	333.19	19.172		
11,200.00	7,247.46	7,206.54	7,247.46	119.23	249.86	-90.28	-3,053.42	-8,964.34	6,312.01	5,976.33	335.68	18.804		
11,300.00	7,247.04	7,206.96	7,247.04	121.97	249.87	-90.27	-3,053.42	-8,964.34	6,236.56	5,898.33	338.22	18.439		
11,400.00	7,246.62	7,207.38	7,246.62	124.72	249.89	-90.27	-3,053.42	-8,964.34	6,161.81	5,820.97	340.84	18.078		
11,500.00	7,246.20	7,207.80	7,246.20	127.46	249.90	-90.26	-3,053.42	-8,964.34	6,087.78	5,744.26	343.52	17.722		
11,600.00	7,245.78	7,208.22	7,245.78	130.22	249.92	-90.26	-3,053.42	-8,964.34	6,014.51	5,668.24	346.26	17.370		
11,700.00	7,245.36	7,208.64	7,245.36	132.98	249.93	-90.25	-3,053.42	-8,964.34	5,942.01	5,592.93	349.08	17.022		
11,800.00	7,244.94	7,209.06	7,244.94	135.74	249.94	-90.24	-3,053.42	-8,964.34	5,870.32	5,518.36	351.96	16.679		
11,900.00	7,244.52	7,209.48	7,244.52	138.50	249.96	-90.24	-3,053.42	-8,964.34	5,799.47	5,444.57	354.91	16.341		
12,000.00	7,244.10	7,209.90	7,244.10	141.27	249.97	-90.23	-3,053.42	-8,964.34	5,729.49	5,371.57	357.92	16.008		
12,100.00	7,243.68	7,189.68	7,243.68	144.04	249.27	-90.23	-3,053.42	-8,964.34	5,660.41	5,300.13	360.29	15.711		
12,200.00	7,243.26	7,189.26	7,243.26	146.82	249.25	-90.22	-3,053.42	-8,964.34	5,592.27	5,228.86	363.41	15.388		
12,300.00	7,242.84	7,188.84	7,242.84	149.60	249.24	-90.22	-3,053.42	-8,964.34	5,525.10	5,158.50	366.59	15.071		
12,400.00	7,242.42	7,188.42	7,242.42	152.38	249.22	-90.21	-3,053.42	-8,964.34	5,458.93	5,089.08	369.85	14.760		
12,500.00	7,242.00	7,188.00	7,242.00	155.16	249.21	-90.20	-3,053.42	-8,964.34	5,393.80	5,020.63	373.17	14.454		
12,600.00	7,241.58	7,187.58	7,241.58	157.95	249.19	-90.20	-3,053.42	-8,964.34	5,329.75	4,953.20	376.55	14.154		
12,700.00	7,241.16	7,187.16	7,241.16	160.74	249.18	-90.19	-3,053.42	-8,964.34	5,266.83	4,886.83	380.00	13.860		
12,800.00	7,240.74	7,186.74	7,240.74	163.53	249.17	-90.19	-3,053.42	-8,964.34	5,205.06	4,821.55	383.51	13.572		
12,900.00	7,240.32	7,186.32	7,240.32	166.32	249.15	-90.18	-3,053.42	-8,964.34	5,144.50	4,757.42	387.08	13.290		
13,000.00	7,239.89	7,185.89	7,239.89	169.12	249.14	-90.17	-3,053.42	-8,964.34	5,085.18	4,694.47	390.71	13.015		
13,100.00	7,239.47	7,185.47	7,239.47	171.92	249.12	-90.17	-3,053.42	-8,964.34	5,027.15	4,632.75	394.40	12.746		
13,200.00	7,239.05	7,185.05	7,239.05	174.72	249.11	-90.16	-3,053.42	-8,964.34	4,970.46	4,572.32	398.14	12.484		
13,300.00	7,238.63	7,184.63	7,238.63	177.52	249.09	-90.16	-3,053.42	-8,964.34	4,915.15	4,513.21	401.93	12.229		
13,400.00	7,238.21	7,184.21	7,238.21	180.32	249.08	-90.15	-3,053.42	-8,964.34	4,861.26	4,455.49	405.77	11.980		
13,500.00	7,237.79	7,183.79	7,237.79	183.13	249.06	-90.15	-3,053.42	-8,964.34	4,808.85	4,399.19	409.66	11.739		
13,600.00	7,237.37	7,183.37	7,237.37	185.93	249.05	-90.14	-3,053.42	-8,964.34	4,757.97	4,344.39	413.58	11.504		
13,700.00	7,236.95	7,182.95	7,236.95	188.74	249.03	-90.13	-3,053.42	-8,964.34	4,708.66	4,291.12	417.54	11.277		
13,800.00	7,236.53	7,182.53	7,236.53	191.55	249.02	-90.13	-3,053.42	-8,964.34	4,660.97	4,239.44	421.53	11.057		
13,900.00	7,236.11	7,182.11	7,236.11	194.36	249.00	-90.12	-3,053.42	-8,964.34	4,614.96	4,189.41	425.55	10.845		
14,000.00	7,235.69	7,181.69	7,235.69	197.17	248.99	-90.12	-3,053.42	-8,964.34	4,570.67	4,141.09	429.58	10.640		
14,100.00	7,235.27	7,181.27	7,235.27	199.98	248.97	-90.11	-3,053.42	-8,964.34	4,528.16	4,094.53	433.63	10.442		
14,200.00	7,234.85	7,180.85	7,234.85	202.80	248.96	-90.10	-3,053.42	-8,964.34	4,487.47	4,049.79	437.68	10.253		
14,300.00	7,234.43	7,180.43	7,234.43	205.61	248.95	-90.10	-3,053.42	-8,964.34	4,448.67	4,006.93	441.73	10.071		
14,400.00	7,234.01	7,180.01	7,234.01	208.43	248.93	-90.09	-3,053.42	-8,964.34	4,411.78	3,966.01	445.78	9.897		
14,500.00	7,233.59	7,179.59	7,233.59	211.25	248.92	-90.09	-3,053.42	-8,964.34	4,376.87	3,927.07	449.80	9.731		
14,600.00	7,233.17	7,179.17	7,233.17	214.06	248.90	-90.08	-3,053.42	-8,964.34	4,343.98	3,890.18	453.80	9.572		
14,700.00	7,232.75	7,178.75	7,232.75	216.88	248.89	-90.08	-3,053.42	-8,964.34	4,313.16	3,855.39	457.77	9.422		
14,800.00	7,232.33	7,178.33	7,232.33	219.70	248.87	-90.07	-3,053.42	-8,964.34	4,284.46	3,822.76	461.70	9.280		
14,900.00	7,231.91	7,177.91	7,231.91	222.52	248.86	-90.06	-3,053.42	-8,964.34	4,257.91	3,792.34	465.57	9.146		
15,000.00	7,231.49	7,177.49	7,231.49	225.35	248.84	-90.06	-3,053.42	-8,964.34	4,233.55	3,764.17	469.38	9.019		
15,100.00	7,231.07	7,177.07	7,231.07	228.17	248.83	-90.05	-3,053.42	-8,964.34	4,211.43	3,738.31	473.12	8.901		
15,116.21	7,231.00	7,177.00	7,231.00	228.63	248.83	-90.05	-3,053.42	-8,964.34	4,208.06	3,734.34	473.72	8.883 CC, ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-23-18(PR_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 121-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	37.00	0.00	3.28	-108.56	-3,020.27	-8,996.59	9,490.11					
100.00	100.00	0.00	37.00	0.18	3.28	-108.56	-3,020.27	-8,996.59	9,490.24	9,486.78	3.46	2,741.595		
200.00	200.00	72.36	109.36	0.61	3.28	-108.56	-3,020.66	-8,996.83	9,490.81	9,486.91	3.90	2,433.045		
300.00	300.00	121.00	157.99	1.05	3.29	-108.56	-3,021.35	-8,997.25	9,492.06	9,487.72	4.35	2,184.117		
400.00	400.00	162.08	199.06	1.49	3.31	-108.57	-3,022.07	-8,997.82	9,493.89	9,489.09	4.80	1,976.185		
500.00	500.00	208.00	244.97	1.93	3.34	-108.57	-3,022.81	-8,998.73	9,496.29	9,491.02	5.28	1,800.158		
600.00	599.98	208.00	244.97	2.37	3.34	-100.75	-3,022.81	-8,998.73	9,499.83	9,494.11	5.72	1,661.412		
700.00	699.84	255.95	292.88	2.81	3.39	-100.67	-3,023.40	-9,000.30	9,504.57	9,498.37	6.20	1,532.697		
800.00	799.45	300.00	336.88	3.26	3.44	-100.57	-3,023.70	-9,002.52	9,510.96	9,504.27	6.69	1,421.115		
900.00	898.70	300.00	336.88	3.70	3.44	-100.42	-3,023.70	-9,002.52	9,518.62	9,511.48	7.14	1,333.672		
1,000.00	997.47	300.00	336.88	4.15	3.44	-100.23	-3,023.70	-9,002.52	9,527.94	9,520.35	7.59	1,255.991		
1,100.00	1,095.78	354.36	391.10	4.60	3.52	-100.22	-3,023.62	-9,006.32	9,538.18	9,530.06	8.11	1,175.721		
1,200.00	1,194.05	391.00	427.60	5.05	3.59	-100.25	-3,023.23	-9,009.53	9,549.42	9,540.80	8.63	1,106.954		
1,300.00	1,292.33	391.00	427.60	5.50	3.59	-100.25	-3,023.23	-9,009.53	9,561.43	9,552.35	9.09	1,052.368		
1,400.00	1,390.61	431.00	467.38	5.96	3.67	-100.28	-3,022.47	-9,013.63	9,574.15	9,564.53	9.62	995.462		
1,500.00	1,488.89	481.00	517.00	6.43	3.78	-100.32	-3,021.01	-9,019.62	9,587.78	9,577.60	10.18	941.946		
1,600.00	1,587.16	481.00	517.00	6.89	3.78	-100.32	-3,021.01	-9,019.62	9,601.94	9,591.30	10.64	902.467		
1,700.00	1,685.44	481.00	517.00	7.36	3.78	-100.32	-3,021.01	-9,019.62	9,617.12	9,606.02	11.10	866.375		
1,800.00	1,783.72	538.79	574.19	7.83	3.93	-100.35	-3,018.78	-9,027.63	9,632.71	9,621.01	11.69	823.715		
1,900.00	1,882.00	572.00	606.97	8.30	4.02	-100.37	-3,017.31	-9,032.71	9,649.19	9,636.95	12.24	788.575		
2,000.00	1,980.27	572.00	606.97	8.77	4.02	-100.37	-3,017.31	-9,032.71	9,666.47	9,653.78	12.69	761.499		
2,100.00	2,078.55	572.00	606.97	9.25	4.02	-100.37	-3,017.31	-9,032.71	9,684.76	9,671.61	13.15	736.467		
2,200.00	2,176.83	634.79	668.77	9.72	4.23	-100.40	-3,014.29	-9,043.41	9,703.15	9,689.37	13.78	704.006		
2,300.00	2,275.11	693.00	725.80	10.19	4.44	-100.42	-3,011.32	-9,054.68	9,722.97	9,708.55	14.41	674.553		
2,400.00	2,373.38	693.00	725.80	10.66	4.44	-100.42	-3,011.32	-9,054.68	9,743.01	9,728.15	14.86	655.448		
2,500.00	2,471.66	693.00	725.80	11.14	4.44	-100.42	-3,011.32	-9,054.68	9,764.04	9,748.73	15.31	637.626		
2,600.00	2,569.94	726.98	758.98	11.61	4.58	-100.44	-3,009.61	-9,061.79	9,785.81	9,769.94	15.87	616.494		
2,700.00	2,668.22	761.00	792.15	12.09	4.72	-100.45	-3,008.08	-9,069.21	9,808.34	9,791.91	16.44	596.777		
2,800.00	2,766.49	785.66	816.14	12.56	4.83	-100.46	-3,006.94	-9,074.77	9,831.54	9,814.56	16.97	579.249		
2,900.00	2,864.77	826.12	855.42	13.04	5.02	-100.47	-3,004.70	-9,084.23	9,855.32	9,837.75	17.57	561.043		
3,000.00	2,963.05	855.00	883.38	13.51	5.16	-100.48	-3,002.81	-9,091.22	9,879.68	9,861.57	18.11	545.515		
3,100.00	3,061.33	855.00	883.38	13.99	5.16	-100.48	-3,002.81	-9,091.22	9,904.89	9,886.34	18.54	534.146		
3,200.00	3,159.60	908.71	935.17	14.46	5.45	-100.49	-2,999.00	-9,104.91	9,930.44	9,911.24	19.20	517.238		
3,300.00	3,257.88	949.00	973.84	14.94	5.67	-100.50	-2,996.06	-9,115.83	9,956.95	9,937.14	19.81	502.658		
3,400.00	3,356.16	966.12	990.23	15.41	5.78	-100.50	-2,994.75	-9,120.60	9,984.04	9,963.72	20.31	491.518		
8,700.00	7,257.97	7,298.66	6,920.43	54.79	57.61	-85.10	-2,448.49	-11,007.30	9,950.69	9,867.27	83.42	119.285		
8,800.00	7,257.55	7,299.59	6,921.36	57.05	57.62	-85.11	-2,448.52	-11,007.32	9,857.11	9,773.00	84.11	117.187		
8,900.00	7,257.13	7,300.52	6,922.29	59.36	57.62	-85.13	-2,448.54	-11,007.34	9,763.66	9,678.81	84.85	115.075		
9,000.00	7,256.71	7,301.46	6,923.24	61.72	57.62	-85.14	-2,448.57	-11,007.37	9,670.34	9,584.72	85.62	112.951		
9,100.00	7,256.29	7,302.42	6,924.19	64.12	57.62	-85.16	-2,448.59	-11,007.40	9,577.15	9,490.73	86.42	110.817		
9,200.00	7,255.87	7,303.38	6,925.15	66.56	57.62	-85.18	-2,448.62	-11,007.42	9,484.10	9,396.83	87.27	108.675		
9,300.00	7,255.45	7,304.35	6,926.12	69.02	57.63	-85.19	-2,448.64	-11,007.45	9,391.20	9,303.04	88.16	106.530		
9,400.00	7,255.03	7,305.33	6,927.10	71.52	57.63	-85.21	-2,448.67	-11,007.47	9,298.44	9,209.36	89.08	104.381		
9,500.00	7,254.61	7,306.32	6,928.09	74.04	57.63	-85.22	-2,448.70	-11,007.50	9,205.83	9,115.78	90.05	102.233		
9,600.00	7,254.19	7,307.32	6,929.09	76.58	57.63	-85.24	-2,448.72	-11,007.53	9,113.38	9,022.33	91.05	100.088		
9,700.00	7,253.77	7,308.33	6,930.10	79.15	57.64	-85.26	-2,448.75	-11,007.55	9,021.09	8,928.99	92.10	97.947		
9,800.00	7,253.35	7,309.35	6,931.12	81.74	57.64	-85.27	-2,448.78	-11,007.58	8,928.96	8,835.77	93.19	95.814		
9,900.00	7,252.92	7,310.38	6,932.15	84.34	57.64	-85.29	-2,448.81	-11,007.61	8,837.01	8,742.69	94.32	93.689		
10,000.00	7,252.50	7,311.42	6,933.18	86.96	57.64	-85.31	-2,448.83	-11,007.64	8,745.23	8,649.74	95.50	91.576		
10,100.00	7,252.08	7,312.47	6,934.23	89.59	57.65	-85.32	-2,448.86	-11,007.67	8,653.64	8,556.92	96.72	89.476		
10,200.00	7,251.66	7,313.53	6,935.29	92.24	57.65	-85.34	-2,448.89	-11,007.70	8,562.23	8,464.25	97.98	87.390		
10,300.00	7,251.24	7,314.60	6,936.36	94.90	57.65	-85.36	-2,448.92	-11,007.73	8,471.02	8,371.73	99.28	85.322		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-23-18(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 121-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,315.68	6,937.45	97.57	57.65	-85.38	-2,448.95	-11,007.76	8,380.00	8,279.37	100.63	83.272		
10,500.00	7,250.40	7,316.78	6,938.54	100.25	57.66	-85.39	-2,448.98	-11,007.79	8,289.20	8,187.16	102.03	81.241		
10,600.00	7,249.98	7,317.88	6,939.64	102.93	57.66	-85.41	-2,449.01	-11,007.82	8,198.60	8,095.13	103.48	79.232		
10,700.00	7,249.56	7,319.00	6,940.76	105.63	57.66	-85.43	-2,449.05	-11,007.85	8,108.23	8,003.26	104.97	77.246		
10,800.00	7,249.14	7,320.13	6,941.88	108.34	57.67	-85.45	-2,449.08	-11,007.88	8,018.09	7,911.58	106.51	75.283		
10,900.00	7,248.72	7,321.26	6,943.02	111.05	57.67	-85.47	-2,449.11	-11,007.92	7,928.18	7,820.08	108.09	73.346		
11,000.00	7,248.30	7,322.42	6,944.17	113.77	57.67	-85.49	-2,449.14	-11,007.95	7,838.51	7,728.78	109.73	71.434		
11,100.00	7,247.88	7,323.58	6,945.34	116.50	57.67	-85.51	-2,449.18	-11,007.98	7,749.10	7,637.68	111.42	69.549		
11,200.00	7,247.46	7,324.76	6,946.51	119.23	57.68	-85.53	-2,449.21	-11,008.02	7,659.95	7,546.79	113.16	67.692		
11,300.00	7,247.04	7,325.94	6,947.70	121.97	57.68	-85.54	-2,449.25	-11,008.05	7,571.07	7,456.12	114.95	65.864		
11,400.00	7,246.62	7,327.14	6,948.90	124.72	57.68	-85.56	-2,449.28	-11,008.09	7,482.47	7,365.68	116.80	64.065		
11,500.00	7,246.20	7,328.36	6,950.11	127.46	57.69	-85.58	-2,449.32	-11,008.12	7,394.17	7,275.47	118.70	62.295		
11,600.00	7,245.78	7,329.59	6,951.34	130.22	57.69	-85.60	-2,449.35	-11,008.16	7,306.16	7,185.51	120.65	60.557		
11,700.00	7,245.36	7,330.83	6,952.57	132.98	57.69	-85.62	-2,449.39	-11,008.20	7,218.46	7,095.80	122.66	58.848		
11,800.00	7,244.94	7,332.08	6,953.83	135.74	57.69	-85.65	-2,449.43	-11,008.23	7,131.09	7,006.36	124.73	57.171		
11,900.00	7,244.52	7,333.35	6,955.09	138.50	57.70	-85.67	-2,449.46	-11,008.27	7,044.05	6,917.19	126.86	55.526		
12,000.00	7,244.10	7,334.63	6,956.37	141.27	57.70	-85.69	-2,449.50	-11,008.31	6,957.36	6,828.31	129.05	53.913		
12,100.00	7,243.68	7,335.92	6,957.67	144.04	57.70	-85.71	-2,449.54	-11,008.35	6,871.04	6,739.74	131.30	52.331		
12,200.00	7,243.26	7,337.23	6,958.98	146.82	57.71	-85.73	-2,449.58	-11,008.39	6,785.08	6,651.47	133.61	50.782		
12,300.00	7,242.84	7,338.56	6,960.30	149.60	57.71	-85.75	-2,449.62	-11,008.43	6,699.52	6,563.53	135.99	49.265		
12,400.00	7,242.42	7,339.90	6,961.64	152.38	57.71	-85.77	-2,449.66	-11,008.47	6,614.36	6,475.93	138.43	47.780		
12,500.00	7,242.00	7,341.26	6,963.00	155.16	57.72	-85.80	-2,449.70	-11,008.51	6,529.62	6,388.68	140.94	46.328		
12,600.00	7,241.58	7,342.63	6,964.36	157.95	57.72	-85.82	-2,449.74	-11,008.56	6,445.32	6,301.80	143.52	44.908		
12,700.00	7,241.16	7,344.01	6,965.75	160.74	57.72	-85.84	-2,449.79	-11,008.60	6,361.47	6,215.30	146.17	43.520		
12,800.00	7,240.74	7,345.42	6,967.15	163.53	57.73	-85.86	-2,449.83	-11,008.64	6,278.10	6,129.20	148.89	42.165		
12,900.00	7,240.32	7,346.83	6,968.57	166.32	57.73	-85.89	-2,449.88	-11,008.69	6,195.21	6,043.53	151.69	40.842		
13,000.00	7,239.89	7,348.27	6,970.00	169.12	57.73	-85.91	-2,449.92	-11,008.73	6,112.84	5,958.29	154.55	39.551		
13,100.00	7,239.47	7,349.72	6,971.45	171.92	57.74	-85.93	-2,449.97	-11,008.78	6,031.00	5,873.50	157.50	38.292		
13,200.00	7,239.05	7,386.00	7,007.69	174.72	57.82	-86.53	-2,451.19	-11,010.01	5,949.91	5,789.28	160.63	37.040		
13,300.00	7,238.63	7,386.00	7,007.69	177.52	57.82	-86.53	-2,451.19	-11,010.01	5,869.19	5,705.46	163.73	35.846		
13,400.00	7,238.21	7,386.00	7,007.69	180.32	57.82	-86.53	-2,451.19	-11,010.01	5,789.07	5,622.16	166.91	34.684		
13,500.00	7,237.79	7,386.00	7,007.69	183.13	57.82	-86.53	-2,451.19	-11,010.01	5,709.57	5,539.40	170.17	33.552		
13,600.00	7,237.37	7,386.00	7,007.69	185.93	57.82	-86.53	-2,451.19	-11,010.01	5,630.73	5,457.22	173.51	32.451		
13,700.00	7,236.95	7,386.00	7,007.69	188.74	57.82	-86.53	-2,451.19	-11,010.01	5,552.57	5,375.63	176.94	31.381		
13,800.00	7,236.53	7,386.00	7,007.69	191.55	57.82	-86.53	-2,451.19	-11,010.01	5,475.13	5,294.67	180.46	30.341		
13,900.00	7,236.11	7,386.00	7,007.69	194.36	57.82	-86.53	-2,451.19	-11,010.01	5,398.42	5,214.36	184.06	29.330		
14,000.00	7,235.69	7,386.00	7,007.69	197.17	57.82	-86.53	-2,451.19	-11,010.01	5,322.49	5,134.74	187.75	28.350		
14,100.00	7,235.27	7,386.00	7,007.69	199.98	57.82	-86.53	-2,451.19	-11,010.01	5,247.36	5,055.84	191.52	27.398		
14,200.00	7,234.85	7,386.00	7,007.69	202.80	57.82	-86.53	-2,451.19	-11,010.01	5,173.08	4,977.69	195.39	26.476		
14,300.00	7,234.43	7,386.00	7,007.69	205.61	57.82	-86.53	-2,451.19	-11,010.01	5,099.67	4,900.32	199.35	25.582		
14,400.00	7,234.01	7,386.00	7,007.69	208.43	57.82	-86.53	-2,451.19	-11,010.01	5,027.18	4,823.79	203.39	24.717		
14,500.00	7,233.59	7,386.00	7,007.69	211.25	57.82	-86.53	-2,451.19	-11,010.01	4,955.65	4,748.12	207.53	23.879		
14,600.00	7,233.17	7,386.00	7,007.69	214.06	57.82	-86.53	-2,451.19	-11,010.01	4,885.12	4,673.36	211.76	23.069		
14,700.00	7,232.75	7,386.00	7,007.69	216.88	57.82	-86.53	-2,451.19	-11,010.01	4,815.63	4,599.56	216.07	22.287		
14,800.00	7,232.33	7,386.00	7,007.69	219.70	57.82	-86.53	-2,451.19	-11,010.01	4,747.24	4,526.76	220.48	21.532		
14,900.00	7,231.91	7,386.00	7,007.69	222.52	57.82	-86.53	-2,451.19	-11,010.01	4,679.98	4,455.01	224.97	20.803		
15,000.00	7,231.49	7,386.00	7,007.69	225.35	57.82	-86.53	-2,451.19	-11,010.01	4,613.90	4,384.36	229.54	20.100		
15,100.00	7,231.07	7,386.00	7,007.69	228.17	57.82	-86.53	-2,451.19	-11,010.01	4,549.07	4,314.87	234.20	19.424		
15,116.21	7,231.00	7,386.00	7,007.69	228.63	57.82	-86.53	-2,451.19	-11,010.01	4,538.68	4,303.72	234.96	19.317	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	37.00	0.00	3.28	-108.57	-3,011.17	-8,964.05	9,456.35					
100.00	100.00	0.00	37.00	0.18	3.28	-108.57	-3,011.17	-8,964.05	9,456.49	9,453.03	3.46	2,731.811		
200.00	200.00	56.01	93.01	0.61	3.28	-108.57	-3,011.52	-8,964.26	9,457.20	9,453.30	3.90	2,424.233		
300.00	300.00	577.00	613.23	1.05	3.96	-108.49	-2,996.97	-8,963.14	9,456.10	9,451.05	5.04	1,875.634		
400.00	400.00	608.01	644.00	1.49	4.04	-108.47	-2,993.18	-8,963.46	9,453.17	9,447.62	5.55	1,704.525		
500.00	500.00	667.00	702.45	1.93	4.21	-108.42	-2,985.32	-8,964.86	9,451.02	9,444.88	6.14	1,538.058		
600.00	599.98	706.53	741.54	2.37	4.33	-100.67	-2,979.59	-8,966.18	9,449.68	9,442.97	6.70	1,410.127		
700.00	699.84	913.48	945.41	2.81	5.09	-100.54	-2,944.76	-8,973.27	9,448.56	9,440.66	7.90	1,196.070		
800.00	799.45	1,020.93	1,050.51	3.26	5.56	-100.48	-2,922.89	-8,977.49	9,447.48	9,438.67	8.81	1,072.704		
900.00	898.70	1,140.88	1,166.87	3.70	6.16	-100.40	-2,894.38	-8,983.45	9,446.95	9,437.11	9.84	960.008		
931.63	930.00	1,160.41	1,185.71	3.85	6.27	-100.39	-2,889.34	-8,984.55	9,446.91	9,436.82	10.09	936.275		
1,000.00	997.47	1,209.77	1,233.17	4.15	6.54	-100.35	-2,876.13	-8,987.55	9,447.13	9,436.46	10.67	885.708		
1,100.00	1,095.78	1,307.61	1,326.55	4.60	7.12	-100.27	-2,847.75	-8,994.36	9,447.98	9,436.28	11.70	807.460		
1,200.00	1,194.05	1,402.09	1,415.72	5.05	7.75	-100.19	-2,817.44	-9,001.90	9,448.87	9,436.10	12.78	739.501		
1,300.00	1,292.33	1,447.98	1,458.68	5.50	8.07	-100.14	-2,801.83	-9,005.96	9,450.06	9,436.50	13.56	697.023		
1,400.00	1,390.61	1,484.85	1,493.08	5.96	8.33	-100.10	-2,789.08	-9,009.56	9,451.92	9,437.63	14.28	661.693		
1,500.00	1,488.89	1,531.59	1,536.56	6.43	8.68	-100.04	-2,772.65	-9,014.55	9,454.44	9,439.34	15.09	626.409		
1,600.00	1,587.16	1,607.00	1,606.40	6.89	9.25	-99.95	-2,745.53	-9,023.04	9,457.34	9,441.21	16.14	586.129		
1,700.00	1,685.44	1,661.71	1,656.82	7.36	9.69	-99.88	-2,725.32	-9,029.57	9,460.63	9,443.59	17.04	555.153		
1,800.00	1,783.72	1,716.62	1,707.16	7.83	10.14	-99.80	-2,704.52	-9,036.55	9,464.41	9,446.45	17.96	526.996		
1,900.00	1,882.00	1,771.24	1,756.94	8.30	10.60	-99.73	-2,683.30	-9,043.92	9,468.68	9,449.78	18.89	501.192		
2,000.00	1,980.27	1,929.47	1,899.89	8.77	12.02	-99.48	-2,619.17	-9,066.00	9,472.98	9,452.20	20.78	455.837		
2,100.00	2,078.55	2,007.44	1,969.87	9.25	12.74	-99.35	-2,586.57	-9,076.91	9,477.02	9,455.04	21.98	431.224		
2,200.00	2,176.83	2,057.42	2,014.66	9.72	13.21	-99.27	-2,565.60	-9,084.14	9,481.51	9,458.60	22.92	413.700		
2,300.00	2,275.11	2,194.57	2,137.42	10.19	14.53	-99.04	-2,507.86	-9,104.33	9,486.36	9,461.65	24.71	383.907		
2,400.00	2,373.38	2,252.13	2,188.85	10.66	15.09	-98.94	-2,483.43	-9,112.81	9,491.08	9,465.33	25.74	368.682		
2,500.00	2,471.66	2,312.60	2,242.84	11.14	15.68	-98.84	-2,457.75	-9,121.89	9,496.18	9,469.38	26.81	354.250		
2,600.00	2,569.94	2,369.00	2,293.24	11.61	16.24	-98.75	-2,433.98	-9,130.55	9,501.76	9,473.93	27.83	341.410		
2,700.00	2,668.22	2,410.95	2,330.76	12.09	16.65	-98.68	-2,416.41	-9,137.17	9,507.89	9,479.17	28.71	331.154		
2,800.00	2,766.49	2,464.00	2,378.22	12.56	17.18	-98.59	-2,394.37	-9,145.85	9,514.66	9,484.96	29.70	320.332		
2,900.00	2,864.77	2,540.78	2,446.96	13.04	17.94	-98.46	-2,362.64	-9,158.63	9,521.86	9,490.92	30.93	307.824		
3,000.00	2,963.05	2,610.92	2,509.84	13.51	18.64	-98.35	-2,333.84	-9,170.30	9,529.22	9,497.13	32.09	296.915		
3,100.00	3,061.33	2,671.10	2,742.35	13.99	21.26	-97.92	-2,225.03	-9,212.46	9,536.19	9,500.97	35.21	270.821		
3,200.00	3,159.60	2,937.00	2,800.61	14.46	21.95	-97.80	-2,196.09	-9,223.01	9,542.40	9,506.03	36.37	262.375		
3,300.00	3,257.88	2,998.33	2,855.12	14.94	22.58	-97.70	-2,169.76	-9,232.88	9,549.02	9,511.56	37.46	254.887		
3,400.00	3,356.16	3,221.00	3,054.39	15.41	24.85	-97.33	-2,076.27	-9,266.43	9,554.73	9,514.52	40.21	237.605		
3,500.00	3,454.43	3,269.16	3,097.29	15.89	25.34	-97.25	-2,055.63	-9,273.69	9,560.60	9,519.43	41.17	232.215		
3,600.00	3,552.71	3,316.00	3,139.23	16.36	25.82	-97.17	-2,036.03	-9,280.89	9,567.06	9,524.95	42.11	227.166		
3,700.00	3,650.99	3,450.75	3,260.36	16.84	27.18	-96.96	-1,980.57	-9,301.09	9,573.31	9,529.37	43.94	217.862		
3,800.00	3,749.27	3,503.00	3,307.45	17.32	27.70	-96.88	-1,959.35	-9,309.00	9,580.00	9,535.07	44.93	213.236		
3,900.00	3,847.54	3,580.44	3,377.19	17.79	28.48	-96.76	-1,927.90	-9,320.99	9,587.07	9,540.90	46.17	207.656		
4,000.00	3,945.82	3,714.19	3,497.47	18.27	29.82	-96.55	-1,873.17	-9,341.63	9,594.10	9,546.12	47.99	199.936		
4,100.00	4,044.10	3,808.85	3,582.91	18.75	30.77	-96.40	-1,835.04	-9,355.99	9,601.10	9,551.70	49.40	194.360		
4,200.00	4,142.38	3,914.01	3,677.44	19.22	31.84	-96.24	-1,791.78	-9,371.87	9,607.89	9,556.96	50.93	188.639		
4,300.00	4,240.65	3,976.00	3,732.52	19.70	32.49	-96.13	-1,765.12	-9,381.76	9,615.13	9,563.09	52.04	184.769		
4,400.00	4,338.93	4,015.02	3,766.89	20.18	32.91	-96.06	-1,747.85	-9,388.29	9,622.88	9,569.96	52.92	181.840		
4,500.00	4,437.21	4,071.00	3,815.84	20.65	33.53	-95.96	-1,722.50	-9,398.03	9,631.18	9,577.19	53.99	178.399		
4,600.00	4,535.49	4,135.33	3,871.58	21.13	34.26	-95.83	-1,692.55	-9,409.63	9,639.92	9,584.75	55.17	174.721		
4,700.00	4,633.76	4,189.92	3,918.52	21.61	34.89	-95.72	-1,666.57	-9,419.74	9,649.05	9,592.79	56.25	171.535		
4,800.00	4,732.04	4,232.60	3,955.11	22.08	35.39	-95.63	-1,646.16	-9,427.89	9,658.76	9,601.57	57.19	168.880		
4,900.00	4,830.32	4,313.95	4,024.96	22.56	36.33	-95.47	-1,607.61	-9,443.74	9,669.02	9,610.44	58.58	165.049		
5,000.00	4,928.60	4,615.02	4,292.42	23.04	39.52	-94.96	-1,479.51	-9,495.17	9,677.58	9,615.30	62.28	155.399		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	4,735.41	4,402.23	23.51	40.69	-94.80	-1,433.75	-9,513.57	9,685.91	9,622.01	63.90	151.571		
5,200.00	5,125.15	4,801.27	4,462.65	23.99	41.31	-94.71	-1,409.45	-9,523.45	9,694.23	9,629.25	64.98	149.198		
5,300.00	5,223.43	5,415.09	5,042.89	24.47	46.19	-94.20	-1,223.21	-9,592.19	9,700.80	9,630.43	70.36	137.864		
5,400.00	5,321.71	5,528.30	5,152.78	24.94	46.90	-94.17	-1,197.14	-9,599.83	9,703.98	9,632.43	71.55	135.617		
5,500.00	5,419.98	5,642.27	5,264.27	25.42	47.56	-94.15	-1,174.50	-9,606.65	9,707.08	9,634.40	72.68	133.553		
5,600.00	5,518.26	5,925.69	5,544.46	25.90	48.88	-94.21	-1,133.79	-9,616.81	9,708.68	9,634.20	74.47	130.362		
5,700.00	5,616.54	5,982.88	5,601.40	26.38	49.09	-94.24	-1,128.62	-9,617.89	9,710.03	9,634.85	75.17	129.166		
5,800.00	5,714.82	6,062.96	5,681.25	26.85	49.36	-94.30	-1,122.80	-9,619.35	9,711.68	9,635.75	75.93	127.901		
5,900.00	5,813.09	6,174.35	5,792.44	27.33	49.71	-94.38	-1,116.33	-9,621.04	9,713.36	9,636.60	76.76	126.535		
6,000.00	5,911.37	6,261.56	5,879.55	27.81	49.97	-94.45	-1,112.18	-9,622.21	9,715.11	9,637.60	77.51	125.341		
6,100.00	6,009.65	6,395.21	6,013.08	28.28	50.36	-94.56	-1,106.84	-9,623.40	9,716.56	9,638.19	78.37	123.977		
6,200.00	6,107.93	6,469.85	6,087.68	28.76	50.56	-94.63	-1,104.37	-9,624.00	9,718.14	9,639.08	79.06	122.915		
6,300.00	6,206.20	6,538.45	6,156.25	29.24	50.74	-94.69	-1,102.48	-9,624.67	9,720.04	9,640.31	79.73	121.910		
6,400.00	6,304.48	6,606.95	6,224.73	29.72	50.93	-94.75	-1,100.93	-9,625.49	9,722.27	9,641.87	80.40	120.928		
6,500.00	6,402.76	6,690.74	6,308.50	30.19	51.14	-94.84	-1,099.48	-9,626.61	9,724.78	9,643.68	81.09	119.919		
6,600.00	6,501.04	6,783.29	6,401.03	30.67	51.38	-94.93	-1,098.27	-9,627.84	9,727.39	9,645.58	81.81	118.900		
6,700.00	6,599.31	6,875.91	6,493.64	31.15	51.61	-95.02	-1,097.43	-9,629.03	9,730.10	9,647.57	82.52	117.907		
6,800.00	6,697.50	6,968.54	6,586.26	31.63	51.83	-74.17	-1,096.81	-9,630.24	9,731.09	9,647.86	83.23	116.913		
6,900.00	6,794.18	7,062.94	6,680.65	32.10	52.06	-48.69	-1,096.34	-9,631.48	9,718.88	9,634.94	83.95	115.776		
7,000.00	6,886.96	7,156.23	6,773.93	32.55	52.29	-37.88	-1,095.89	-9,632.70	9,691.71	9,607.07	84.64	114.509		
7,100.00	6,973.57	7,243.52	6,861.22	32.99	52.51	-33.11	-1,095.47	-9,633.84	9,650.26	9,564.97	85.29	113.146		
7,200.00	7,051.87	7,322.68	6,940.36	33.41	52.71	-31.40	-1,095.09	-9,634.88	9,595.55	9,509.66	85.89	111.715		
7,300.00	7,119.93	7,392.74	7,010.41	33.85	52.88	-31.85	-1,094.76	-9,635.80	9,528.96	9,442.52	86.44	110.238		
7,400.00	7,176.09	7,470.64	7,088.31	34.39	53.08	-34.58	-1,094.39	-9,636.73	9,452.05	9,365.08	86.97	108.680		
7,500.00	7,218.95	7,530.08	7,147.75	35.09	53.23	-40.51	-1,094.13	-9,637.31	9,366.72	9,279.30	87.42	107.148		
7,600.00	7,247.46	7,569.77	7,187.43	35.98	53.33	-52.33	-1,093.95	-9,637.64	9,275.13	9,187.35	87.78	105.665		
7,700.00	7,260.92	7,588.92	7,206.58	37.04	53.38	-75.79	-1,093.87	-9,637.79	9,179.58	9,091.52	88.05	104.251		
7,800.00	7,261.75	7,590.99	7,208.66	38.23	53.38	-89.57	-1,093.86	-9,637.80	9,082.46	8,994.20	88.26	102.905		
7,900.00	7,261.33	7,591.38	7,209.04	39.59	53.39	-89.58	-1,093.86	-9,637.80	8,985.33	8,896.85	88.48	101.555		
8,000.00	7,260.91	7,591.76	7,209.43	41.10	53.39	-89.59	-1,093.85	-9,637.81	8,888.26	8,799.54	88.71	100.190		
8,100.00	7,260.49	7,592.14	7,209.81	42.75	53.39	-89.60	-1,093.85	-9,637.81	8,791.25	8,702.28	88.97	98.811		
8,200.00	7,260.07	7,592.52	7,210.18	44.53	53.39	-89.61	-1,093.85	-9,637.81	8,694.32	8,605.07	89.25	97.418		
8,300.00	7,259.65	7,592.89	7,210.56	46.41	53.39	-89.62	-1,093.85	-9,637.82	8,597.45	8,507.90	89.55	96.012		
8,400.00	7,259.23	7,593.27	7,210.93	48.39	53.39	-89.63	-1,093.85	-9,637.82	8,500.65	8,410.79	89.87	94.592		
8,500.00	7,258.81	7,593.63	7,211.30	50.45	53.39	-89.64	-1,093.85	-9,637.82	8,403.93	8,313.72	90.21	93.159		
8,600.00	7,258.39	7,594.00	7,211.67	52.59	53.39	-89.65	-1,093.84	-9,637.82	8,307.29	8,216.71	90.58	91.713		
8,700.00	7,257.97	7,594.36	7,212.03	54.79	53.39	-89.66	-1,093.84	-9,637.83	8,210.73	8,119.76	90.97	90.256		
8,800.00	7,257.55	7,594.73	7,212.39	57.05	53.39	-89.67	-1,093.84	-9,637.83	8,114.25	8,022.86	91.39	88.787		
8,900.00	7,257.13	7,595.08	7,212.75	59.36	53.39	-89.68	-1,093.84	-9,637.83	8,017.86	7,926.03	91.83	87.307		
9,000.00	7,256.71	7,595.44	7,213.10	61.72	53.40	-89.69	-1,093.84	-9,637.83	7,921.56	7,829.25	92.31	85.817		
9,100.00	7,256.29	7,595.79	7,213.46	64.12	53.40	-89.70	-1,093.84	-9,637.84	7,825.35	7,732.54	92.81	84.317		
9,200.00	7,255.87	7,596.14	7,213.81	66.56	53.40	-89.71	-1,093.83	-9,637.84	7,729.24	7,635.90	93.34	82.809		
9,300.00	7,255.45	7,596.49	7,214.15	69.02	53.40	-89.72	-1,093.83	-9,637.84	7,633.22	7,539.32	93.90	81.292		
9,400.00	7,255.03	7,596.83	7,214.50	71.52	53.40	-89.73	-1,093.83	-9,637.84	7,537.31	7,442.82	94.49	79.768		
9,500.00	7,254.61	7,597.18	7,214.84	74.04	53.40	-89.74	-1,093.83	-9,637.85	7,441.51	7,346.40	95.11	78.237		
9,600.00	7,254.19	7,597.52	7,215.18	76.58	53.40	-89.75	-1,093.83	-9,637.85	7,345.82	7,250.05	95.77	76.701		
9,700.00	7,253.77	7,597.85	7,215.52	79.15	53.40	-89.76	-1,093.83	-9,637.85	7,250.25	7,153.78	96.46	75.160		
9,800.00	7,253.35	7,598.19	7,215.85	81.74	53.40	-89.77	-1,093.83	-9,637.85	7,154.79	7,057.60	97.19	73.616		
9,900.00	7,252.92	7,598.52	7,216.19	84.34	53.40	-89.77	-1,093.82	-9,637.86	7,059.47	6,961.51	97.95	72.069		
10,000.00	7,252.50	7,598.85	7,216.52	86.96	53.40	-89.78	-1,093.82	-9,637.86	6,964.27	6,865.51	98.76	70.520		
10,100.00	7,252.08	7,599.18	7,216.84	89.59	53.41	-89.79	-1,093.82	-9,637.86	6,869.21	6,769.61	99.60	68.971		
10,200.00	7,251.66	7,599.50	7,217.17	92.24	53.41	-89.80	-1,093.82	-9,637.86	6,774.29	6,673.82	100.48	67.421		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,599.83	7,217.49	94.90	53.41	-89.81	-1,093.82	-9,637.86	6,679.52	6,578.12	101.40	65.874		
10,400.00	7,250.82	7,600.15	7,217.81	97.57	53.41	-89.82	-1,093.82	-9,637.87	6,584.91	6,482.55	102.36	64.329		
10,500.00	7,250.40	7,600.46	7,218.13	100.25	53.41	-89.83	-1,093.82	-9,637.87	6,490.46	6,387.08	103.37	62.787		
10,600.00	7,249.98	7,600.78	7,218.45	102.93	53.41	-89.83	-1,093.81	-9,637.87	6,396.17	6,291.75	104.43	61.250		
10,700.00	7,249.56	7,601.09	7,218.76	105.63	53.41	-89.84	-1,093.81	-9,637.87	6,302.06	6,196.54	105.53	59.719		
10,800.00	7,249.14	7,601.41	7,219.07	108.34	53.41	-89.85	-1,093.81	-9,637.88	6,208.14	6,101.46	106.68	58.195		
10,900.00	7,248.72	7,601.72	7,219.38	111.05	53.41	-89.86	-1,093.81	-9,637.88	6,114.41	6,006.53	107.88	56.678		
11,000.00	7,248.30	7,602.02	7,219.69	113.77	53.41	-89.87	-1,093.81	-9,637.88	6,020.88	5,911.75	109.13	55.171		
11,100.00	7,247.88	7,602.33	7,219.99	116.50	53.41	-89.88	-1,093.81	-9,637.88	5,927.56	5,817.12	110.44	53.673		
11,200.00	7,247.46	7,602.63	7,220.30	119.23	53.41	-89.88	-1,093.81	-9,637.88	5,834.46	5,722.66	111.80	52.187		
11,300.00	7,247.04	7,602.93	7,220.60	121.97	53.41	-89.89	-1,093.81	-9,637.89	5,741.60	5,628.38	113.22	50.712		
11,400.00	7,246.62	7,603.23	7,220.90	124.72	53.42	-89.90	-1,093.80	-9,637.89	5,648.98	5,534.28	114.70	49.251		
11,500.00	7,246.20	7,603.53	7,221.19	127.46	53.42	-89.91	-1,093.80	-9,637.89	5,556.61	5,440.37	116.24	47.803		
11,600.00	7,245.78	7,603.82	7,221.49	130.22	53.42	-89.92	-1,093.80	-9,637.89	5,464.52	5,346.67	117.84	46.371		
11,700.00	7,245.36	7,604.11	7,221.78	132.98	53.42	-89.92	-1,093.80	-9,637.89	5,372.70	5,253.19	119.52	44.954		
11,800.00	7,244.94	7,604.41	7,222.07	135.74	53.42	-89.93	-1,093.80	-9,637.90	5,281.19	5,159.93	121.26	43.554		
11,900.00	7,244.52	7,604.69	7,222.36	138.50	53.42	-89.94	-1,093.80	-9,637.90	5,189.98	5,066.92	123.07	42.172		
12,000.00	7,244.10	7,604.98	7,222.65	141.27	53.42	-89.95	-1,093.80	-9,637.90	5,099.11	4,974.16	124.95	40.808		
12,100.00	7,243.68	7,605.27	7,222.93	144.04	53.42	-89.95	-1,093.80	-9,637.90	5,008.58	4,881.67	126.92	39.464		
12,200.00	7,243.26	7,605.55	7,223.21	146.82	53.42	-89.96	-1,093.79	-9,637.90	4,918.42	4,789.47	128.96	38.140		
12,300.00	7,242.84	7,605.83	7,223.49	149.60	53.42	-89.97	-1,093.79	-9,637.91	4,828.65	4,697.57	131.08	36.836		
12,400.00	7,242.42	7,606.11	7,223.77	152.38	53.42	-89.98	-1,093.79	-9,637.91	4,739.29	4,605.99	133.30	35.554		
12,500.00	7,242.00	7,606.39	7,224.05	155.16	53.42	-89.98	-1,093.79	-9,637.91	4,650.36	4,514.76	135.60	34.295		
12,600.00	7,241.58	7,606.66	7,224.33	157.95	53.42	-89.99	-1,093.79	-9,637.91	4,561.89	4,423.90	137.99	33.058		
12,700.00	7,241.16	7,606.94	7,224.60	160.74	53.42	-90.00	-1,093.79	-9,637.91	4,473.91	4,333.42	140.49	31.846		
12,800.00	7,240.74	7,607.21	7,224.87	163.53	53.43	-90.01	-1,093.79	-9,637.91	4,386.44	4,243.36	143.08	30.657		
12,900.00	7,240.32	7,607.48	7,225.14	166.32	53.43	-90.01	-1,093.79	-9,637.92	4,299.52	4,153.74	145.78	29.493		
13,000.00	7,239.89	7,607.75	7,225.41	169.12	53.43	-90.02	-1,093.78	-9,637.92	4,213.17	4,064.59	148.59	28.355		
13,100.00	7,239.47	7,608.01	7,225.68	171.92	53.43	-90.03	-1,093.78	-9,637.92	4,127.45	3,975.94	151.50	27.243		
13,200.00	7,239.05	7,608.28	7,225.94	174.72	53.43	-90.03	-1,093.78	-9,637.92	4,042.38	3,887.83	154.54	26.157		
13,300.00	7,238.63	7,604.58	7,222.25	177.52	53.42	-89.94	-1,093.80	-9,637.91	3,958.02	3,800.33	157.68	25.101		
13,400.00	7,238.21	7,604.91	7,222.58	180.32	53.42	-89.94	-1,093.80	-9,637.91	3,874.39	3,713.42	160.97	24.069		
13,500.00	7,237.79	7,605.24	7,222.90	183.13	53.42	-89.95	-1,093.80	-9,637.91	3,791.55	3,627.17	164.38	23.066		
13,600.00	7,237.37	7,605.57	7,223.23	185.93	53.42	-89.96	-1,093.80	-9,637.92	3,709.56	3,541.64	167.93	22.090		
13,700.00	7,236.95	7,605.90	7,223.56	188.74	53.42	-89.97	-1,093.80	-9,637.92	3,628.48	3,456.87	171.61	21.144		
13,800.00	7,236.53	7,606.23	7,223.89	191.55	53.42	-89.98	-1,093.79	-9,637.92	3,548.36	3,372.92	175.43	20.226		
13,900.00	7,236.11	7,606.56	7,224.22	194.36	53.42	-89.99	-1,093.79	-9,637.92	3,469.27	3,289.87	179.40	19.338		
14,000.00	7,235.69	7,606.89	7,224.55	197.17	53.42	-90.00	-1,093.79	-9,637.93	3,391.29	3,207.77	183.52	18.479		
14,100.00	7,235.27	7,607.22	7,224.89	199.98	53.43	-90.01	-1,093.79	-9,637.93	3,314.48	3,126.70	187.79	17.650		
14,200.00	7,234.85	7,607.55	7,225.22	202.80	53.43	-90.01	-1,093.79	-9,637.93	3,238.95	3,046.75	192.20	16.852		
14,300.00	7,234.43	7,607.88	7,225.55	205.61	53.43	-90.02	-1,093.79	-9,637.93	3,164.77	2,968.00	196.77	16.083		
14,400.00	7,234.01	7,608.22	7,225.88	208.43	53.43	-90.03	-1,093.79	-9,637.94	3,092.05	2,890.56	201.49	15.346		
14,500.00	7,233.59	7,608.55	7,226.21	211.25	53.43	-90.04	-1,093.79	-9,637.94	3,020.89	2,814.53	206.36	14.639		
14,600.00	7,233.17	7,608.88	7,226.55	214.06	53.43	-90.05	-1,093.78	-9,637.94	2,951.40	2,740.03	211.37	13.963		
14,700.00	7,232.75	7,609.22	7,226.88	216.88	53.43	-90.06	-1,093.78	-9,637.94	2,883.70	2,667.18	216.52	13.319		
14,800.00	7,232.33	7,609.55	7,227.21	219.70	53.43	-90.07	-1,093.78	-9,637.95	2,817.93	2,596.13	221.79	12.705		
14,900.00	7,231.91	7,609.88	7,227.55	222.52	53.43	-90.08	-1,093.78	-9,637.95	2,754.21	2,527.03	227.19	12.123		
15,000.00	7,231.49	7,610.22	7,227.88	225.35	53.43	-90.09	-1,093.78	-9,637.95	2,692.71	2,460.02	232.69	11.572		
15,100.00	7,231.07	7,610.55	7,228.22	228.17	53.43	-90.09	-1,093.78	-9,637.96	2,633.57	2,395.30	238.27	11.053		
15,116.21	7,231.00	7,610.61	7,228.27	228.63	53.43	-90.10	-1,093.78	-9,637.96	2,624.21	2,385.03	239.18	10.972	CC, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD												Offset Site Error:	0.00 ft
Survey Program: 57-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	2,248.42	2,179.76	0.00	15.76	-105.60	-2,441.35	-8,746.64	9,338.91				
100.00	100.00	2,302.00	2,228.88	0.18	16.24	-105.48	-2,420.86	-8,740.37	9,315.94	9,299.52	16.42	567.449	
200.00	200.00	2,347.67	2,270.81	0.61	16.64	-105.38	-2,403.51	-8,735.20	9,293.48	9,276.66	16.83	552.357	
300.00	300.00	2,539.71	2,446.65	1.05	18.37	-104.97	-2,329.84	-8,712.22	9,270.33	9,251.75	18.58	498.849	
400.00	400.00	2,585.00	2,487.87	1.49	18.78	-104.87	-2,311.81	-8,707.02	9,247.48	9,228.29	19.19	481.992	
500.00	500.00	2,662.04	2,557.95	1.93	19.49	-104.69	-2,280.94	-8,698.51	9,225.07	9,204.94	20.13	458.280	
600.00	599.98	2,887.73	2,762.49	2.37	21.60	-96.91	-2,189.27	-8,672.29	9,202.25	9,179.85	22.40	410.786	
700.00	699.84	2,940.61	2,810.41	2.81	22.10	-97.26	-2,167.84	-8,665.88	9,179.61	9,156.40	23.20	395.615	
800.00	799.45	3,006.42	2,870.37	3.26	22.71	-97.59	-2,141.91	-8,657.92	9,157.85	9,133.72	24.13	379.586	
900.00	898.70	3,089.31	2,946.46	3.70	23.46	-97.91	-2,110.68	-8,647.58	9,136.81	9,111.62	25.20	362.633	
1,000.00	997.47	3,190.83	3,039.50	4.15	24.38	-98.20	-2,072.06	-8,635.07	9,116.31	9,089.88	26.43	344.936	
1,100.00	1,095.78	3,269.57	3,111.63	4.60	25.09	-98.25	-2,042.01	-8,625.36	9,096.19	9,068.70	27.49	330.891	
1,200.00	1,194.05	3,315.26	3,153.72	5.05	25.50	-98.21	-2,025.15	-8,619.77	9,076.57	9,048.28	28.29	320.837	
1,300.00	1,292.33	3,346.00	3,182.19	5.50	25.77	-98.18	-2,014.15	-8,616.04	9,057.54	9,028.56	28.98	312.526	
1,400.00	1,390.61	3,396.68	3,229.30	5.96	26.20	-98.14	-1,996.42	-8,610.09	9,039.11	9,009.29	29.82	303.088	
1,500.00	1,488.89	3,440.00	3,269.68	6.43	26.57	-98.10	-1,981.51	-8,605.28	9,021.37	8,990.75	30.61	294.673	
1,600.00	1,587.16	3,554.45	3,376.74	6.89	27.53	-98.02	-1,943.18	-8,592.34	9,003.74	8,971.81	31.93	281.991	
1,700.00	1,685.44	3,824.00	3,629.20	7.36	29.76	-97.84	-1,855.06	-8,558.51	8,985.20	8,950.85	34.35	261.598	
1,800.00	1,783.72	3,953.27	3,749.30	7.83	30.87	-97.74	-1,810.51	-8,541.17	8,965.23	8,929.44	35.79	250.480	
1,900.00	1,882.00	4,015.00	3,806.31	8.30	31.42	-97.68	-1,788.13	-8,533.49	8,945.70	8,908.94	36.75	243.407	
2,000.00	1,980.27	4,077.96	3,864.36	8.77	31.98	-97.62	-1,764.90	-8,526.04	8,926.57	8,888.83	37.74	236.557	
2,100.00	2,078.55	4,153.09	3,933.55	9.25	32.65	-97.54	-1,736.95	-8,517.32	8,907.64	8,868.82	38.82	229.469	
2,200.00	2,176.83	4,667.50	4,401.13	9.72	37.50	-96.95	-1,533.85	-8,450.90	8,887.63	8,844.11	43.52	204.201	
2,300.00	2,275.11	4,711.74	4,440.48	10.19	37.94	-96.89	-1,514.63	-8,444.70	8,864.64	8,820.22	44.42	199.563	
2,400.00	2,373.38	4,774.00	4,496.17	10.66	38.57	-96.80	-1,488.06	-8,436.39	8,842.41	8,796.94	45.47	194.454	
2,500.00	2,471.66	4,774.00	4,496.17	11.14	38.57	-96.80	-1,488.06	-8,436.39	8,820.69	8,774.71	45.99	191.809	
2,600.00	2,569.94	4,819.32	4,537.01	11.61	39.00	-96.74	-1,469.27	-8,430.64	8,799.73	8,752.85	46.88	187.708	
2,700.00	2,668.22	4,869.00	4,582.16	12.09	39.48	-96.68	-1,449.45	-8,424.57	8,779.54	8,731.73	47.81	183.634	
2,800.00	2,766.49	4,911.67	4,621.19	12.56	39.87	-96.63	-1,432.98	-8,419.45	8,759.91	8,711.25	48.66	180.005	
2,900.00	2,864.77	5,022.37	4,722.85	13.04	40.88	-96.51	-1,391.31	-8,405.95	8,740.57	8,690.51	50.06	174.594	
3,000.00	2,963.05	5,090.31	4,785.02	13.51	41.50	-96.44	-1,365.17	-8,397.69	8,721.09	8,669.96	51.12	170.598	
3,100.00	3,061.33	5,152.00	4,841.75	13.99	42.06	-96.37	-1,342.03	-8,390.53	8,702.28	8,650.15	52.13	166.935	
3,200.00	3,159.60	5,152.00	4,841.75	14.46	42.06	-96.37	-1,342.03	-8,390.53	8,684.07	8,631.42	52.65	164.953	
3,300.00	3,257.88	5,212.18	4,897.47	14.94	42.59	-96.31	-1,320.25	-8,383.92	8,666.46	8,612.84	53.62	161.617	
3,400.00	3,356.16	5,247.00	4,929.86	15.41	42.89	-96.28	-1,308.04	-8,380.25	8,649.58	8,595.18	54.40	158.985	
3,500.00	3,454.43	5,291.37	4,971.35	15.89	43.26	-96.24	-1,292.93	-8,375.76	8,633.38	8,578.14	55.24	156.282	
3,600.00	3,552.71	5,342.00	5,018.93	16.36	43.68	-96.20	-1,276.36	-8,370.88	8,617.88	8,561.75	56.12	153.548	
3,700.00	3,650.99	5,342.00	5,018.93	16.84	43.68	-96.20	-1,276.36	-8,370.88	8,603.14	8,546.51	56.63	151.916	
3,800.00	3,749.27	5,388.29	5,062.75	17.32	44.03	-96.17	-1,262.04	-8,366.74	8,589.09	8,531.64	57.45	149.501	
3,900.00	3,847.54	5,437.00	5,109.25	17.79	44.40	-96.14	-1,248.06	-8,362.82	8,576.04	8,517.76	58.29	147.134	
4,000.00	3,945.82	5,437.00	5,109.25	18.27	44.40	-96.14	-1,248.06	-8,362.82	8,563.64	8,504.86	58.78	145.682	
4,100.00	4,044.10	5,476.87	5,147.56	18.75	44.67	-96.13	-1,237.40	-8,359.90	8,552.12	8,492.59	59.53	143.670	
4,200.00	4,142.38	5,531.00	5,199.87	19.22	45.04	-96.11	-1,223.97	-8,356.28	8,541.45	8,481.09	60.36	141.516	
4,300.00	4,240.65	5,560.96	5,228.94	19.70	45.22	-96.10	-1,216.99	-8,354.37	8,531.36	8,470.34	61.02	139.822	
4,400.00	4,338.93	5,626.00	5,292.24	20.18	45.63	-96.10	-1,202.68	-8,350.07	8,521.68	8,459.80	61.88	137.717	
4,500.00	4,437.21	5,678.32	5,343.39	20.65	45.93	-96.10	-1,192.22	-8,346.62	8,512.49	8,449.86	62.64	135.906	
4,600.00	4,535.49	5,724.58	5,388.80	21.13	46.19	-96.11	-1,183.93	-8,343.69	8,503.98	8,440.63	63.35	134.228	
4,700.00	4,633.76	5,814.00	5,476.81	21.61	46.66	-96.13	-1,169.27	-8,337.78	8,495.62	8,431.36	64.27	132.195	
4,800.00	4,732.04	5,852.75	5,515.04	22.08	46.85	-96.15	-1,163.47	-8,335.25	8,487.80	8,422.88	64.91	130.760	
4,900.00	4,830.32	5,909.00	5,570.71	22.56	47.12	-96.17	-1,156.05	-8,332.16	8,481.01	8,415.38	65.63	129.220	
5,000.00	4,928.60	5,909.00	5,570.71	23.04	47.12	-96.17	-1,156.05	-8,332.16	8,474.73	8,408.64	66.09	128.224	
5,100.00	5,026.87	5,976.02	5,637.20	23.51	47.41	-96.21	-1,148.23	-8,328.95	8,469.24	8,402.41	66.83	126.721	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD													Offset Site Error: 0.00 ft	
Survey Program: 57-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	5,125.15	6,034.03	5,694.80	23.99	47.66	-96.25	-1,141.94	-8,326.28	8,464.16	8,396.64	67.53	125.344		
5,300.00	5,223.43	6,097.00	5,757.41	24.47	47.92	-96.29	-1,135.75	-8,323.64	8,459.66	8,391.43	68.23	123.981		
5,400.00	5,321.71	6,131.15	5,791.40	24.94	48.05	-96.31	-1,132.63	-8,322.36	8,455.73	8,386.92	68.81	122.880		
5,500.00	5,419.98	6,192.00	5,851.98	25.42	48.28	-96.36	-1,127.32	-8,320.45	8,452.52	8,383.02	69.50	121.627		
5,600.00	5,518.26	6,235.12	5,894.93	25.90	48.45	-96.39	-1,123.62	-8,319.34	8,449.83	8,379.72	70.11	120.531		
5,700.00	5,616.54	6,303.44	5,962.96	26.38	48.71	-96.44	-1,117.57	-8,317.82	8,447.57	8,376.76	70.81	119.291		
5,800.00	5,714.82	6,369.66	6,028.94	26.85	48.95	-96.48	-1,112.10	-8,316.51	8,445.71	8,374.19	71.51	118.101		
5,900.00	5,813.09	6,439.33	6,098.41	27.33	49.20	-96.54	-1,106.96	-8,315.25	8,444.23	8,372.02	72.21	116.937		
6,000.00	5,911.37	6,510.71	6,169.62	27.81	49.45	-96.60	-1,102.25	-8,314.07	8,443.11	8,370.20	72.91	115.804		
6,100.00	6,009.65	6,570.00	6,228.81	28.28	49.65	-96.65	-1,098.76	-8,313.16	8,442.34	8,368.79	73.55	114.779		
6,189.60	6,097.71	6,621.00	6,279.74	28.71	49.81	-96.70	-1,096.07	-8,312.55	8,442.08	8,367.97	74.11	113.908		
6,200.00	6,107.93	6,625.92	6,284.65	28.76	49.83	-96.70	-1,095.83	-8,312.50	8,442.08	8,367.91	74.17	113.814		
6,300.00	6,206.20	6,677.42	6,336.09	29.24	49.99	-96.75	-1,093.43	-8,312.17	8,442.46	8,367.68	74.77	112.906		
6,400.00	6,304.48	6,748.69	6,407.30	29.72	50.20	-96.82	-1,090.59	-8,311.89	8,443.28	8,367.84	75.44	111.923		
6,500.00	6,402.76	6,842.59	6,501.15	30.19	50.47	-96.92	-1,087.66	-8,311.52	8,444.34	8,368.16	76.17	110.859		
6,600.00	6,501.04	6,938.33	6,596.86	30.67	50.74	-97.03	-1,085.26	-8,311.01	8,445.45	8,368.54	76.90	109.817		
6,700.00	6,599.31	7,033.77	6,692.28	31.15	51.01	-97.13	-1,083.06	-8,310.49	8,446.63	8,368.99	77.63	108.799		
6,800.00	6,697.50	7,125.48	6,783.96	31.63	51.26	-76.30	-1,081.17	-8,309.98	8,446.11	8,367.76	78.35	107.802		
6,900.00	6,794.18	7,215.21	6,873.68	32.10	51.51	-50.91	-1,079.64	-8,309.48	8,432.55	8,353.51	79.05	106.678		
7,000.00	6,886.96	7,300.88	6,959.34	32.55	51.74	-40.23	-1,078.45	-8,309.01	8,404.29	8,324.59	79.70	105.443		
7,100.00	6,973.57	7,380.65	7,039.11	32.99	51.95	-35.68	-1,077.53	-8,308.58	8,362.04	8,281.73	80.31	104.117		
7,200.00	7,051.87	7,466.38	7,124.83	33.41	52.19	-34.34	-1,076.72	-8,308.10	8,306.81	8,225.90	80.91	102.663		
7,300.00	7,119.93	7,556.47	7,214.91	33.85	52.43	-35.38	-1,075.87	-8,307.39	8,239.80	8,158.30	81.50	101.103		
7,400.00	7,176.09	7,614.44	7,272.88	34.39	52.59	-38.80	-1,075.27	-8,306.84	8,162.73	8,080.78	81.95	99.604		
7,500.00	7,218.95	7,652.96	7,311.39	35.09	52.69	-45.63	-1,074.80	-8,306.51	8,077.66	7,995.35	82.32	98.130		
7,600.00	7,247.46	7,679.83	7,338.26	35.98	52.77	-58.43	-1,074.43	-8,306.30	7,986.67	7,904.05	82.62	96.668		
7,700.00	7,260.92	7,692.53	7,350.96	37.04	52.80	-81.15	-1,074.26	-8,306.20	7,891.96	7,809.10	82.86	95.246		
7,800.00	7,261.75	7,692.56	7,350.99	38.23	52.80	-93.21	-1,074.26	-8,306.20	7,795.87	7,712.83	83.05	93.874		
7,900.00	7,261.33	7,691.34	7,349.76	39.59	52.80	-93.18	-1,074.28	-8,306.21	7,699.81	7,616.56	83.25	92.491		
8,000.00	7,260.91	7,690.11	7,348.54	41.10	52.80	-93.15	-1,074.29	-8,306.22	7,603.85	7,520.37	83.48	91.089		
8,100.00	7,260.49	7,688.89	7,347.32	42.75	52.79	-93.12	-1,074.31	-8,306.23	7,508.00	7,424.27	83.73	89.668		
8,200.00	7,260.07	7,687.66	7,346.09	44.53	52.79	-93.08	-1,074.33	-8,306.24	7,412.25	7,328.24	84.01	88.228		
8,300.00	7,259.65	7,686.44	7,344.87	46.41	52.79	-93.05	-1,074.34	-8,306.25	7,316.62	7,232.30	84.32	86.771		
8,400.00	7,259.23	7,685.22	7,343.65	48.39	52.78	-93.02	-1,074.36	-8,306.26	7,221.11	7,136.45	84.66	85.295		
8,500.00	7,258.81	7,683.99	7,342.42	50.45	52.78	-92.99	-1,074.38	-8,306.27	7,125.72	7,040.69	85.03	83.803		
8,600.00	7,258.39	7,682.77	7,341.20	52.59	52.78	-92.95	-1,074.39	-8,306.28	7,030.45	6,945.02	85.43	82.294		
8,700.00	7,257.97	7,681.55	7,339.98	54.79	52.77	-92.92	-1,074.41	-8,306.29	6,935.32	6,849.46	85.86	80.770		
8,800.00	7,257.55	7,680.32	7,338.75	57.05	52.77	-92.89	-1,074.43	-8,306.30	6,840.33	6,754.00	86.33	79.231		
8,900.00	7,257.13	7,679.10	7,337.53	59.36	52.77	-92.86	-1,074.44	-8,306.31	6,745.48	6,658.65	86.84	77.678		
9,000.00	7,256.71	7,677.87	7,336.30	61.72	52.76	-92.82	-1,074.46	-8,306.32	6,650.79	6,563.41	87.38	76.113		
9,100.00	7,256.29	7,676.65	7,335.08	64.12	52.76	-92.79	-1,074.48	-8,306.33	6,556.25	6,468.29	87.96	74.536		
9,200.00	7,255.87	7,675.43	7,333.86	66.56	52.76	-92.76	-1,074.49	-8,306.34	6,461.88	6,373.30	88.58	72.949		
9,300.00	7,255.45	7,674.20	7,332.63	69.02	52.75	-92.73	-1,074.51	-8,306.34	6,367.67	6,278.43	89.24	71.353		
9,400.00	7,255.03	7,672.98	7,331.41	71.52	52.75	-92.69	-1,074.53	-8,306.35	6,273.65	6,183.70	89.95	69.749		
9,500.00	7,254.61	7,671.75	7,330.19	74.04	52.75	-92.66	-1,074.54	-8,306.36	6,179.81	6,089.12	90.70	68.138		
9,600.00	7,254.19	7,670.53	7,328.96	76.58	52.74	-92.63	-1,074.56	-8,306.37	6,086.17	5,994.68	91.49	66.523		
9,700.00	7,253.77	7,669.31	7,327.74	79.15	52.74	-92.60	-1,074.58	-8,306.38	5,992.74	5,900.41	92.33	64.905		
9,800.00	7,253.35	7,668.08	7,326.51	81.74	52.74	-92.56	-1,074.59	-8,306.39	5,899.52	5,806.30	93.22	63.285		
9,900.00	7,252.92	7,666.86	7,325.29	84.34	52.73	-92.53	-1,074.61	-8,306.40	5,806.53	5,712.36	94.16	61.664		
10,000.00	7,252.50	7,665.64	7,324.07	86.96	52.73	-92.50	-1,074.63	-8,306.41	5,713.77	5,618.61	95.16	60.045		
10,100.00	7,252.08	7,664.41	7,322.84	89.59	52.73	-92.47	-1,074.64	-8,306.42	5,621.26	5,525.05	96.21	58.429		
10,200.00	7,251.66	7,663.19	7,321.62	92.24	52.72	-92.43	-1,074.66	-8,306.43	5,529.01	5,431.70	97.31	56.817		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD													Offset Site Error:	0.00 ft
Survey Program: 57-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,664.04	7,320.40	94.90	52.72	-92.40	-1,074.68	-8,306.44	5,437.03	5,338.55	98.48	55.209		
10,400.00	7,250.82	7,665.26	7,319.17	97.57	52.73	-92.37	-1,074.69	-8,306.45	5,345.34	5,245.63	99.71	53.607		
10,500.00	7,250.40	7,666.48	7,317.95	100.25	52.73	-92.34	-1,074.71	-8,306.46	5,253.96	5,152.95	101.01	52.016		
10,600.00	7,249.98	7,667.71	7,316.72	102.93	52.73	-92.30	-1,074.73	-8,306.47	5,162.89	5,060.53	102.37	50.436		
10,700.00	7,249.56	7,667.15	7,315.58	105.63	52.71	-92.27	-1,074.74	-8,306.48	5,072.16	4,968.41	103.76	48.886		
10,800.00	7,249.14	7,665.93	7,314.36	108.34	52.70	-92.24	-1,074.76	-8,306.49	4,981.79	4,876.55	105.24	47.336		
10,900.00	7,248.72	7,654.70	7,313.13	111.05	52.70	-92.21	-1,074.78	-8,306.50	4,891.79	4,784.99	106.80	45.801		
11,000.00	7,248.30	7,653.46	7,311.89	113.77	52.70	-92.17	-1,074.79	-8,306.51	4,802.18	4,693.74	108.44	44.284		
11,100.00	7,247.88	7,652.22	7,310.65	116.50	52.69	-92.14	-1,074.81	-8,306.52	4,713.00	4,602.84	110.15	42.786		
11,200.00	7,247.46	7,650.97	7,309.40	119.23	52.69	-92.11	-1,074.82	-8,306.53	4,624.25	4,512.30	111.95	41.307		
11,300.00	7,247.04	7,649.71	7,308.15	121.97	52.68	-92.07	-1,074.84	-8,306.54	4,535.98	4,422.15	113.83	39.849		
11,400.00	7,246.62	7,648.45	7,306.89	124.72	52.68	-92.04	-1,074.86	-8,306.55	4,448.19	4,332.40	115.79	38.415		
11,500.00	7,246.20	7,647.19	7,305.62	127.46	52.68	-92.01	-1,074.87	-8,306.56	4,360.94	4,243.09	117.85	37.003		
11,600.00	7,245.78	7,645.91	7,304.35	130.22	52.67	-91.97	-1,074.89	-8,306.57	4,274.24	4,154.24	120.00	35.617		
11,700.00	7,245.36	7,644.63	7,303.07	132.98	52.67	-91.94	-1,074.91	-8,306.58	4,188.14	4,065.88	122.25	34.257		
11,800.00	7,244.94	7,643.35	7,301.78	135.74	52.67	-91.91	-1,074.92	-8,306.59	4,102.66	3,978.05	124.61	32.925		
11,900.00	7,244.52	7,642.05	7,300.49	138.50	52.66	-91.87	-1,074.94	-8,306.60	4,017.86	3,890.79	127.07	31.620		
12,000.00	7,244.10	7,640.75	7,299.19	141.27	52.66	-91.84	-1,074.96	-8,306.61	3,933.77	3,804.13	129.64	30.345		
12,100.00	7,243.68	7,639.45	7,297.88	144.04	52.66	-91.80	-1,074.97	-8,306.62	3,850.43	3,718.12	132.32	29.100		
12,200.00	7,243.26	7,638.14	7,296.57	146.82	52.65	-91.77	-1,074.99	-8,306.63	3,767.91	3,632.79	135.12	27.886		
12,300.00	7,242.84	7,636.82	7,295.25	149.60	52.65	-91.73	-1,075.00	-8,306.65	3,686.26	3,548.21	138.05	26.703		
12,400.00	7,242.42	7,635.49	7,293.93	152.38	52.65	-91.70	-1,075.02	-8,306.66	3,605.53	3,464.43	141.10	25.553		
12,500.00	7,242.00	7,634.16	7,292.59	155.16	52.64	-91.66	-1,075.04	-8,306.67	3,525.78	3,381.50	144.28	24.437		
12,600.00	7,241.58	7,632.82	7,291.25	157.95	52.64	-91.62	-1,075.05	-8,306.68	3,447.10	3,299.49	147.60	23.354		
12,700.00	7,241.16	7,631.47	7,289.91	160.74	52.63	-91.59	-1,075.07	-8,306.69	3,369.54	3,218.48	151.06	22.306		
12,800.00	7,240.74	7,630.12	7,288.56	163.53	52.63	-91.55	-1,075.09	-8,306.70	3,293.19	3,138.52	154.67	21.292		
12,900.00	7,240.32	7,628.76	7,287.20	166.32	52.63	-91.52	-1,075.10	-8,306.71	3,218.14	3,059.72	158.41	20.315		
13,000.00	7,239.89	7,627.39	7,285.83	169.12	52.62	-91.48	-1,075.12	-8,306.73	3,144.47	2,982.16	162.31	19.373		
13,100.00	7,239.47	7,626.02	7,284.45	171.92	52.62	-91.44	-1,075.14	-8,306.74	3,072.30	2,905.94	166.36	18.468		
13,200.00	7,239.05	7,624.64	7,283.07	174.72	52.62	-91.41	-1,075.15	-8,306.75	3,001.72	2,831.16	170.56	17.599		
13,300.00	7,238.63	7,623.25	7,281.68	177.52	52.61	-91.37	-1,075.17	-8,306.76	2,932.85	2,757.94	174.91	16.768		
13,400.00	7,238.21	7,621.85	7,280.29	180.32	52.61	-91.33	-1,075.19	-8,306.78	2,865.81	2,686.40	179.41	15.973		
13,500.00	7,237.79	7,620.45	7,278.89	183.13	52.60	-91.30	-1,075.20	-8,306.79	2,800.74	2,616.68	184.06	15.216		
13,600.00	7,237.37	7,619.04	7,277.48	185.93	52.60	-91.26	-1,075.22	-8,306.80	2,737.78	2,548.93	188.85	14.497		
13,700.00	7,236.95	7,617.62	7,276.06	188.74	52.60	-91.22	-1,075.23	-8,306.81	2,677.08	2,483.30	193.77	13.816		
13,800.00	7,236.53	7,616.19	7,274.63	191.55	52.59	-91.18	-1,075.25	-8,306.83	2,618.78	2,419.96	198.82	13.172		
13,900.00	7,236.11	7,614.76	7,273.20	194.36	52.59	-91.14	-1,075.27	-8,306.84	2,563.06	2,359.09	203.97	12.566		
14,000.00	7,235.69	7,613.32	7,271.76	197.17	52.58	-91.11	-1,075.28	-8,306.85	2,510.09	2,300.87	209.22	11.997		
14,100.00	7,235.27	7,611.87	7,270.31	199.98	52.58	-91.07	-1,075.30	-8,306.86	2,460.04	2,245.50	214.54	11.466		
14,200.00	7,234.85	7,610.42	7,268.86	202.80	52.58	-91.03	-1,075.32	-8,306.88	2,413.10	2,193.19	219.91	10.973		
14,300.00	7,234.43	7,608.95	7,267.39	205.61	52.57	-90.99	-1,075.33	-8,306.89	2,369.46	2,144.15	225.30	10.517		
14,400.00	7,234.01	7,607.48	7,265.92	208.43	52.57	-90.95	-1,075.35	-8,306.91	2,329.29	2,098.61	230.68	10.097		
14,500.00	7,233.59	7,606.00	7,264.44	211.25	52.56	-90.91	-1,075.37	-8,306.92	2,292.78	2,056.77	236.01	9.715		
14,600.00	7,233.17	7,604.51	7,262.95	214.06	52.56	-90.87	-1,075.38	-8,306.93	2,260.10	2,018.86	241.25	9.368		
14,700.00	7,232.75	7,603.02	7,261.46	216.88	52.56	-90.83	-1,075.40	-8,306.95	2,231.43	1,985.09	246.35	9.058		
14,800.00	7,232.33	7,601.52	7,259.95	219.70	52.55	-90.79	-1,075.41	-8,306.96	2,206.93	1,955.66	251.27	8.783		
14,900.00	7,231.91	7,600.00	7,258.44	222.52	52.55	-90.75	-1,075.43	-8,306.97	2,186.73	1,930.76	255.96	8.543		
15,000.00	7,231.49	7,598.48	7,256.92	225.35	52.54	-90.71	-1,075.45	-8,306.99	2,170.94	1,910.56	260.38	8.338		
15,100.00	7,231.07	7,596.95	7,255.39	228.17	52.54	-90.67	-1,075.46	-8,307.00	2,159.68	1,895.21	264.47	8.166		
15,116.21	7,231.00	7,596.71	7,255.15	228.63	52.54	-90.66	-1,075.47	-8,307.01	2,158.28	1,893.18	265.10	8.141	CC, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 168-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	37.00	0.00	3.28	-108.87	-3,077.09	-9,005.24	9,516.52				
100.00	100.00	36.77	73.76	0.18	3.28	-108.86	-3,077.01	-9,005.32	9,516.54	9,513.08	3.46	2,752.476	
200.00	200.00	95.12	132.11	0.61	3.29	-108.86	-3,076.57	-9,005.78	9,517.03	9,513.13	3.90	2,439.096	
300.00	300.00	168.00	204.98	1.05	3.30	-108.85	-3,075.45	-9,006.92	9,517.98	9,513.63	4.35	2,186.728	
400.00	400.00	168.00	204.98	1.49	3.30	-108.85	-3,075.45	-9,006.92	9,519.51	9,514.71	4.80	1,985.261	
500.00	500.00	213.10	250.05	1.93	3.33	-108.85	-3,074.58	-9,008.14	9,521.67	9,516.40	5.26	1,809.470	
600.00	599.98	259.00	295.90	2.37	3.37	-101.03	-3,073.71	-9,010.05	9,525.10	9,519.36	5.74	1,659.403	
700.00	699.84	259.00	295.90	2.81	3.37	-100.94	-3,073.71	-9,010.05	9,529.82	9,523.63	6.18	1,541.449	
800.00	799.45	292.77	329.62	3.26	3.40	-100.83	-3,073.17	-9,011.83	9,536.03	9,529.37	6.66	1,432.085	
900.00	898.70	350.00	386.74	3.70	3.48	-100.71	-3,072.69	-9,015.44	9,543.82	9,536.65	7.17	1,330.306	
1,000.00	997.47	350.00	386.74	4.15	3.48	-100.54	-3,072.69	-9,015.44	9,552.68	9,545.06	7.62	1,253.157	
1,100.00	1,095.78	406.95	443.54	4.60	3.58	-100.52	-3,072.53	-9,019.50	9,562.80	9,554.64	8.16	1,171.488	
1,200.00	1,194.05	481.62	518.00	5.05	3.73	-100.60	-3,072.38	-9,025.08	9,573.33	9,564.57	8.76	1,093.182	
1,300.00	1,292.33	532.00	568.24	5.50	3.84	-100.64	-3,072.22	-9,028.92	9,584.10	9,574.77	9.32	1,027.996	
1,400.00	1,390.61	583.56	619.63	5.96	3.97	-100.69	-3,072.17	-9,033.07	9,595.37	9,585.46	9.90	968.843	
1,500.00	1,488.89	644.00	679.83	6.43	4.14	-100.75	-3,072.50	-9,038.45	9,607.43	9,596.91	10.52	913.397	
1,600.00	1,587.16	663.49	699.23	6.89	4.20	-100.77	-3,072.68	-9,040.29	9,619.96	9,608.93	11.03	872.001	
1,700.00	1,685.44	737.61	773.01	7.36	4.42	-100.84	-3,073.53	-9,047.39	9,633.01	9,621.31	11.70	823.121	
1,800.00	1,783.72	854.62	889.48	7.83	4.82	-100.95	-3,075.00	-9,058.44	9,646.00	9,633.48	12.52	770.140	
1,900.00	1,882.00	1,000.00	1,082.89	8.30	9.11	-101.13	-3,075.64	-9,076.71	9,658.86	9,641.83	17.03	567.170	
2,000.00	1,980.27	1,096.00	1,129.81	8.77	5.72	-101.17	-3,075.63	-9,080.85	9,671.03	9,656.75	14.28	677.161	
2,100.00	2,078.55	1,150.51	1,184.09	9.25	5.93	-101.22	-3,075.49	-9,085.81	9,683.52	9,668.57	14.94	647.954	
2,200.00	2,176.83	1,190.00	1,223.36	9.72	6.09	-101.25	-3,075.26	-9,090.02	9,696.96	9,681.41	15.55	623.448	
2,300.00	2,275.11	1,190.00	1,223.36	10.19	6.09	-101.25	-3,075.26	-9,090.02	9,711.10	9,695.09	16.01	606.498	
2,400.00	2,373.38	1,237.26	1,270.29	10.66	6.29	-101.29	-3,074.94	-9,095.60	9,725.91	9,709.26	16.65	584.054	
2,500.00	2,471.66	1,285.00	1,317.63	11.14	6.50	-101.33	-3,074.63	-9,101.74	9,741.47	9,724.17	17.30	563.208	
2,600.00	2,569.94	1,285.00	1,317.63	11.61	6.50	-101.33	-3,074.63	-9,101.74	9,757.67	9,739.92	17.75	549.768	
2,700.00	2,668.22	1,333.24	1,365.42	12.09	6.72	-101.37	-3,074.59	-9,108.36	9,774.50	9,756.11	18.39	531.375	
2,800.00	2,766.49	1,379.00	1,410.70	12.56	6.92	-101.41	-3,075.03	-9,114.94	9,792.09	9,773.05	19.03	514.520	
2,900.00	2,864.77	1,379.00	1,410.70	13.04	6.92	-101.41	-3,075.03	-9,114.94	9,810.33	9,790.85	19.48	503.687	
3,000.00	2,963.05	1,439.55	1,470.52	13.51	7.21	-101.46	-3,075.62	-9,124.26	9,829.09	9,808.91	20.18	487.154	
3,100.00	3,061.33	1,475.00	1,505.49	13.99	7.38	-101.48	-3,075.69	-9,130.09	9,848.50	9,827.73	20.77	474.180	
3,200.00	3,159.60	1,514.34	1,544.25	14.46	7.57	-101.51	-3,075.73	-9,136.83	9,868.52	9,847.14	21.38	461.568	
3,300.00	3,257.88	1,570.00	1,599.02	14.94	7.85	-101.55	-3,076.05	-9,146.74	9,889.21	9,867.15	22.06	448.216	
3,400.00	3,356.16	1,591.28	1,619.93	15.41	7.96	-101.57	-3,076.22	-9,150.64	9,910.40	9,887.81	22.59	438.651	
3,500.00	3,454.43	1,637.76	1,665.59	15.89	8.20	-101.60	-3,076.55	-9,159.37	9,932.16	9,908.93	23.24	427.460	
3,600.00	3,552.71	1,665.00	1,692.32	16.36	8.34	-101.62	-3,076.71	-9,164.61	9,954.47	9,930.68	23.79	418.458	
3,700.00	3,650.99	1,708.33	1,734.78	16.84	8.58	-101.65	-3,076.92	-9,173.25	9,977.35	9,952.94	24.42	408.624	
8,200.00	7,260.07	7,093.84	6,979.53	44.53	40.94	-86.67	-3,117.58	-10,251.38	9,984.36	9,913.24	71.12	140.382	
8,300.00	7,259.65	7,094.68	6,980.37	46.41	40.95	-86.68	-3,117.61	-10,251.40	9,893.58	9,821.81	71.76	137.866	
8,400.00	7,259.23	7,095.52	6,981.20	48.39	40.95	-86.69	-3,117.64	-10,251.41	9,802.97	9,730.52	72.45	135.309	
8,500.00	7,258.81	7,096.35	6,982.04	50.45	40.95	-86.70	-3,117.66	-10,251.42	9,712.55	9,639.37	73.18	132.716	
8,600.00	7,258.39	7,097.19	6,982.88	52.59	40.96	-86.71	-3,117.69	-10,251.43	9,622.32	9,548.35	73.96	130.093	
8,700.00	7,257.97	7,098.02	6,983.71	54.79	40.96	-86.72	-3,117.72	-10,251.45	9,532.28	9,457.49	74.79	127.445	
8,800.00	7,257.55	7,098.86	6,984.54	57.05	40.96	-86.73	-3,117.75	-10,251.46	9,442.45	9,366.77	75.67	124.779	
8,900.00	7,257.13	7,099.69	6,985.38	59.36	40.96	-86.75	-3,117.77	-10,251.47	9,352.82	9,276.21	76.60	122.098	
9,000.00	7,256.71	7,100.52	6,986.21	61.72	40.97	-86.76	-3,117.80	-10,251.49	9,263.40	9,185.82	77.58	119.409	
9,100.00	7,256.29	7,101.35	6,987.04	64.12	40.97	-86.77	-3,117.83	-10,251.50	9,174.20	9,095.60	78.60	116.717	
9,200.00	7,255.87	7,102.18	6,987.87	66.56	40.97	-86.78	-3,117.86	-10,251.51	9,085.22	9,005.55	79.68	114.027	
9,300.00	7,255.45	7,103.01	6,988.69	69.02	40.98	-86.79	-3,117.88	-10,251.53	8,996.48	8,915.68	80.80	111.343	
9,400.00	7,255.03	7,103.84	6,989.52	71.52	40.98	-86.80	-3,117.91	-10,251.54	8,907.98	8,826.00	81.97	108.670	
9,500.00	7,254.61	7,104.66	6,990.35	74.04	40.98	-86.81	-3,117.94	-10,251.55	8,819.72	8,736.52	83.20	106.012	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
9,600.00	7,254.19	7,105.49	6,991.17	76.58	40.98	-86.83	-3,117.97	-10,251.56	8,731.71	8,647.24	84.47	103.373		
9,700.00	7,253.77	7,106.31	6,991.99	79.15	40.99	-86.84	-3,118.00	-10,251.58	8,643.97	8,558.18	85.79	100.757		
9,800.00	7,253.35	7,107.14	6,992.82	81.74	40.99	-86.85	-3,118.02	-10,251.59	8,556.49	8,469.33	87.16	98.166		
9,900.00	7,252.92	7,107.96	6,993.64	84.34	40.99	-86.86	-3,118.05	-10,251.60	8,469.29	8,380.70	88.59	95.605		
10,000.00	7,252.50	7,108.78	6,994.46	86.96	40.99	-86.87	-3,118.08	-10,251.61	8,382.38	8,292.32	90.06	93.075		
10,100.00	7,252.08	7,109.60	6,995.28	89.59	41.00	-86.88	-3,118.11	-10,251.63	8,295.76	8,204.17	91.59	90.579		
10,200.00	7,251.66	7,110.42	6,996.10	92.24	41.00	-86.89	-3,118.14	-10,251.64	8,209.44	8,116.28	93.16	88.120		
10,300.00	7,251.24	7,111.23	6,996.91	94.90	41.00	-86.90	-3,118.16	-10,251.65	8,123.44	8,028.65	94.79	85.699		
10,400.00	7,250.82	7,112.05	6,997.73	97.57	41.01	-86.92	-3,118.19	-10,251.67	8,037.76	7,941.29	96.47	83.317		
10,500.00	7,250.40	7,112.87	6,998.54	100.25	41.01	-86.93	-3,118.22	-10,251.68	7,952.42	7,854.22	98.21	80.978		
10,600.00	7,249.98	7,113.68	6,999.36	102.93	41.01	-86.94	-3,118.25	-10,251.69	7,867.42	7,767.43	99.99	78.681		
10,700.00	7,249.56	7,114.49	7,000.17	105.63	41.01	-86.95	-3,118.28	-10,251.70	7,782.78	7,680.95	101.83	76.428		
10,800.00	7,249.14	7,115.31	7,000.98	108.34	41.02	-86.96	-3,118.31	-10,251.72	7,698.51	7,594.78	103.73	74.219		
10,900.00	7,248.72	7,116.12	7,001.79	111.05	41.02	-86.97	-3,118.33	-10,251.73	7,614.62	7,508.94	105.68	72.056		
11,000.00	7,248.30	7,116.93	7,002.60	113.77	41.02	-86.98	-3,118.36	-10,251.74	7,531.12	7,423.44	107.68	69.939		
11,100.00	7,247.88	7,117.74	7,003.41	116.50	41.02	-86.99	-3,118.39	-10,251.75	7,448.02	7,338.28	109.74	67.868		
11,200.00	7,247.46	7,118.54	7,004.22	119.23	41.03	-87.00	-3,118.42	-10,251.77	7,365.35	7,253.49	111.86	65.843		
11,300.00	7,247.04	7,119.35	7,005.02	121.97	41.03	-87.02	-3,118.45	-10,251.78	7,283.11	7,169.08	114.04	63.866		
11,400.00	7,246.62	7,120.16	7,005.83	124.72	41.03	-87.03	-3,118.48	-10,251.79	7,201.32	7,085.05	116.27	61.935		
11,500.00	7,246.20	7,120.96	7,006.63	127.46	41.03	-87.04	-3,118.51	-10,251.80	7,120.00	7,001.43	118.57	60.051		
11,600.00	7,245.78	7,121.76	7,007.43	130.22	41.04	-87.05	-3,118.53	-10,251.82	7,039.16	6,918.24	120.92	58.214		
11,700.00	7,245.36	7,122.57	7,008.24	132.98	41.04	-87.06	-3,118.56	-10,251.83	6,958.81	6,835.48	123.33	56.422		
11,800.00	7,244.94	7,123.37	7,009.04	135.74	41.04	-87.07	-3,118.59	-10,251.84	6,878.98	6,753.17	125.81	54.678		
11,900.00	7,244.52	7,124.17	7,009.84	138.50	41.05	-87.08	-3,118.62	-10,251.85	6,799.69	6,671.34	128.35	52.978		
12,000.00	7,244.10	7,124.97	7,010.64	141.27	41.05	-87.09	-3,118.65	-10,251.86	6,720.94	6,589.99	130.95	51.324		
12,100.00	7,243.68	7,125.77	7,011.43	144.04	41.05	-87.10	-3,118.68	-10,251.88	6,642.77	6,509.15	133.62	49.715		
12,200.00	7,243.26	7,126.56	7,012.23	146.82	41.05	-87.12	-3,118.71	-10,251.89	6,565.19	6,428.84	136.35	48.151		
12,300.00	7,242.84	7,127.36	7,013.03	149.60	41.06	-87.13	-3,118.74	-10,251.90	6,488.22	6,349.08	139.14	46.630		
12,400.00	7,242.42	7,128.16	7,013.82	152.38	41.06	-87.14	-3,118.76	-10,251.91	6,411.89	6,269.88	142.00	45.153		
12,500.00	7,242.00	7,128.95	7,014.61	155.16	41.06	-87.15	-3,118.79	-10,251.93	6,336.22	6,191.28	144.93	43.718		
12,600.00	7,241.58	7,129.74	7,015.41	157.95	41.06	-87.16	-3,118.82	-10,251.94	6,261.22	6,113.29	147.93	42.325		
12,700.00	7,241.16	7,130.53	7,016.20	160.74	41.07	-87.17	-3,118.85	-10,251.95	6,186.94	6,035.94	151.00	40.974		
12,800.00	7,240.74	7,131.33	7,016.99	163.53	41.07	-87.18	-3,118.88	-10,251.96	6,113.39	5,959.26	154.13	39.664		
12,900.00	7,240.32	7,132.12	7,017.78	166.32	41.07	-87.19	-3,118.91	-10,251.97	6,040.60	5,883.27	157.34	38.393		
13,000.00	7,239.89	7,132.90	7,018.57	169.12	41.07	-87.20	-3,118.94	-10,251.99	5,968.60	5,807.99	160.61	37.162		
13,100.00	7,239.47	7,133.69	7,019.35	171.92	41.08	-87.21	-3,118.97	-10,252.00	5,897.41	5,733.46	163.95	35.970		
13,200.00	7,239.05	7,134.48	7,020.14	174.72	41.08	-87.22	-3,119.00	-10,252.01	5,827.07	5,659.71	167.37	34.817		
13,300.00	7,238.63	7,135.27	7,020.92	177.52	41.08	-87.23	-3,119.03	-10,252.02	5,757.61	5,586.76	170.85	33.700		
13,400.00	7,238.21	7,136.05	7,021.71	180.32	41.08	-87.25	-3,119.06	-10,252.03	5,689.06	5,514.65	174.40	32.620		
13,500.00	7,237.79	7,136.83	7,022.49	183.13	41.09	-87.26	-3,119.09	-10,252.05	5,621.45	5,443.42	178.02	31.577		
13,600.00	7,237.37	7,137.62	7,023.27	185.93	41.09	-87.27	-3,119.12	-10,252.06	5,554.81	5,373.10	181.72	30.569		
13,700.00	7,236.95	7,138.40	7,024.06	188.74	41.09	-87.28	-3,119.15	-10,252.07	5,489.19	5,303.72	185.48	29.595		
13,800.00	7,236.53	7,139.18	7,024.84	191.55	41.10	-87.29	-3,119.18	-10,252.08	5,424.62	5,235.32	189.30	28.656		
13,900.00	7,236.11	7,139.96	7,025.61	194.36	41.10	-87.30	-3,119.20	-10,252.09	5,361.14	5,167.94	193.20	27.749		
14,000.00	7,235.69	7,140.74	7,026.39	197.17	41.10	-87.31	-3,119.23	-10,252.10	5,298.78	5,101.63	197.16	26.876		
14,100.00	7,235.27	7,141.52	7,027.17	199.98	41.10	-87.32	-3,119.26	-10,252.12	5,237.59	5,036.42	201.18	26.035		
14,200.00	7,234.85	7,142.29	7,027.95	202.80	41.11	-87.33	-3,119.29	-10,252.13	5,177.61	4,972.35	205.26	25.225		
14,300.00	7,234.43	7,143.07	7,028.72	205.61	41.11	-87.34	-3,119.32	-10,252.14	5,118.88	4,909.48	209.40	24.446		
14,400.00	7,234.01	7,143.84	7,029.50	208.43	41.11	-87.35	-3,119.35	-10,252.15	5,061.44	4,847.85	213.59	23.697		
14,500.00	7,233.59	7,144.62	7,030.27	211.25	41.11	-87.36	-3,119.38	-10,252.16	5,005.35	4,787.51	217.84	22.977		
14,600.00	7,233.17	7,145.39	7,031.04	214.06	41.12	-87.37	-3,119.41	-10,252.17	4,950.63	4,728.50	222.13	22.287		
14,700.00	7,232.75	7,146.16	7,031.81	216.88	41.12	-87.38	-3,119.44	-10,252.19	4,897.35	4,670.88	226.47	21.624		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 168-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
14,800.00	7,232.33	7,146.93	7,032.58	219.70	41.12	-87.40	-3,119.47	-10,252.20	4,845.55	4,614.70	230.85	20.990	
14,900.00	7,231.91	7,147.70	7,033.35	222.52	41.12	-87.41	-3,119.50	-10,252.21	4,795.27	4,560.00	235.26	20.382	
15,000.00	7,231.49	7,148.47	7,034.12	225.35	41.13	-87.42	-3,119.53	-10,252.22	4,746.56	4,506.86	239.71	19.802	
15,100.00	7,231.07	7,149.24	7,034.89	228.17	41.13	-87.43	-3,119.56	-10,252.23	4,699.48	4,455.31	244.17	19.247	
15,116.21	7,231.00	7,149.36	7,035.01	228.63	41.13	-87.43	-3,119.57	-10,252.23	4,692.00	4,447.11	244.90	19.159 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	37.00	0.00	3.28	-108.59	-3,009.35	-8,949.30	9,441.80					
100.00	100.00	36.76	73.76	0.18	3.28	-108.59	-3,009.28	-8,949.38	9,441.81	9,438.36	3.46	2,730.910		
200.00	200.00	95.10	132.09	0.61	3.29	-108.58	-3,008.84	-8,949.83	9,442.31	9,438.41	3.90	2,420.249		
300.00	300.00	468.53	505.37	1.05	3.73	-108.53	-2,999.21	-8,948.76	9,440.22	9,435.43	4.79	1,970.462		
400.00	400.00	739.25	775.88	1.49	4.42	-108.49	-2,990.54	-8,943.15	9,437.40	9,431.47	5.93	1,590.760		
500.00	500.00	796.37	832.93	1.93	4.59	-108.48	-2,988.12	-8,941.64	9,433.59	9,427.06	6.53	1,443.955		
600.00	599.98	850.00	886.47	2.37	4.76	-100.78	-2,985.15	-8,940.83	9,430.68	9,423.55	7.13	1,322.089		
700.00	699.84	891.41	927.79	2.81	4.90	-100.81	-2,982.38	-8,940.61	9,428.97	9,421.27	7.70	1,224.227		
797.92	797.39	945.00	981.22	3.25	5.08	-100.83	-2,978.24	-8,940.79	9,428.45	9,420.14	8.31	1,134.604		
800.00	799.45	945.00	981.22	3.26	5.08	-100.83	-2,978.24	-8,940.79	9,428.45	9,420.13	8.32	1,133.374		
900.00	898.70	1,028.23	1,064.03	3.70	5.38	-100.83	-2,970.02	-8,941.96	9,428.93	9,419.88	9.06	1,041.118		
1,000.00	997.47	1,179.53	1,213.98	4.15	5.97	-100.83	-2,950.17	-8,945.21	9,429.66	9,419.57	10.09	934.478		
1,100.00	1,095.78	1,857.93	1,875.58	4.60	9.39	-100.70	-2,803.02	-8,955.61	9,426.88	9,412.95	13.93	676.716		
1,200.00	1,194.05	2,031.68	2,042.36	5.05	10.46	-100.61	-2,754.33	-8,955.44	9,421.08	9,405.65	15.43	610.638		
1,300.00	1,292.33	2,081.00	2,089.61	5.50	10.77	-100.58	-2,740.19	-8,955.63	9,415.69	9,399.50	16.19	581.496		
1,400.00	1,390.61	2,119.76	2,126.70	5.96	11.02	-100.56	-2,728.95	-8,956.06	9,410.89	9,393.99	16.90	556.786		
1,500.00	1,488.89	2,175.00	2,179.46	6.43	11.38	-100.52	-2,712.59	-8,957.10	9,406.65	9,388.93	17.72	530.826		
1,600.00	1,587.16	2,403.96	2,397.37	6.89	12.94	-100.36	-2,642.44	-8,960.59	9,401.59	9,381.88	19.71	476.973		
1,700.00	1,685.44	2,518.33	2,506.12	7.36	13.74	-100.27	-2,607.06	-8,961.77	9,396.19	9,375.23	20.96	448.382		
1,800.00	1,783.72	2,625.12	2,607.92	7.83	14.49	-100.20	-2,574.78	-8,962.36	9,390.57	9,368.41	22.15	423.881		
1,900.00	1,882.00	2,787.45	2,761.67	8.30	15.66	-100.07	-2,522.72	-8,963.51	9,384.45	9,360.68	23.77	394.816		
2,000.00	1,980.27	2,838.00	2,809.42	8.77	16.04	-100.03	-2,506.15	-8,963.93	9,378.38	9,353.77	24.61	381.075		
2,100.00	2,078.55	2,901.74	2,869.98	9.25	16.49	-99.98	-2,486.28	-8,964.40	9,372.75	9,347.22	25.53	367.126		
2,200.00	2,176.83	2,959.31	2,925.15	9.72	16.90	-99.95	-2,469.84	-8,964.70	9,367.67	9,341.26	26.40	354.789		
2,300.00	2,275.11	2,300.00	3,044.46	10.19	12.33	-99.87	-2,433.88	-8,965.65	9,362.76	9,340.35	22.41	417.812		
2,400.00	2,373.38	3,208.33	3,163.81	10.66	18.63	-99.80	-2,398.80	-8,965.66	9,357.31	9,328.27	29.04	322.244		
2,500.00	2,471.66	3,343.68	3,293.79	11.14	19.56	-99.73	-2,361.06	-8,964.98	9,351.43	9,321.01	30.42	307.405		
2,600.00	2,569.94	3,409.00	3,356.40	11.61	20.02	-99.70	-2,342.44	-8,965.08	9,345.99	9,314.65	31.34	298.169		
2,700.00	2,668.22	3,472.69	3,417.46	12.09	20.46	-99.66	-2,324.32	-8,965.41	9,340.93	9,308.67	32.26	289.556		
2,800.00	2,766.49	3,563.90	3,504.98	12.56	21.10	-99.61	-2,298.64	-8,965.78	9,335.94	9,302.57	33.36	279.837		
2,900.00	2,864.77	3,645.44	3,583.04	13.04	21.68	-99.56	-2,275.11	-8,966.44	9,331.12	9,296.71	34.41	271.207		
3,000.00	2,963.05	3,750.74	3,683.63	13.51	22.44	-99.49	-2,243.98	-8,967.70	9,326.46	9,290.83	35.63	261.762		
3,100.00	3,061.33	3,867.07	3,794.01	13.99	23.30	-99.40	-2,207.31	-8,969.54	9,321.58	9,284.62	36.96	252.218		
3,200.00	3,159.60	3,983.34	3,904.15	14.46	24.18	-99.31	-2,170.08	-8,971.39	9,316.57	9,278.27	38.30	243.252		
3,300.00	3,257.88	4,047.68	3,965.17	14.94	24.67	-99.25	-2,149.70	-8,972.41	9,311.68	9,272.43	39.26	237.190		
3,400.00	3,356.16	4,101.48	4,016.28	15.41	25.07	-99.21	-2,132.97	-8,973.37	9,307.20	9,267.07	40.14	231.893		
3,500.00	3,454.43	4,166.00	4,077.76	15.89	25.55	-99.17	-2,113.44	-8,974.82	9,303.32	9,262.23	41.09	226.427		
3,600.00	3,552.71	4,588.87	4,478.28	16.36	28.77	-98.83	-1,978.00	-8,977.96	9,296.92	9,252.24	44.68	208.075		
3,700.00	3,650.99	4,639.00	4,525.56	16.84	29.16	-98.78	-1,961.34	-8,977.89	9,289.98	9,244.42	45.55	203.929		
3,800.00	3,749.27	4,677.42	4,561.92	17.32	29.45	-98.75	-1,948.95	-8,977.96	9,283.62	9,237.29	46.33	200.381		
3,900.00	3,847.54	4,736.00	4,617.68	17.79	29.89	-98.71	-1,930.97	-8,978.16	9,277.89	9,230.64	47.25	196.360		
4,000.00	3,945.82	4,770.32	4,650.46	18.27	30.14	-98.69	-1,920.84	-8,978.36	9,272.70	9,224.72	47.98	193.251		
4,100.00	4,044.10	4,830.00	4,707.59	18.75	30.57	-98.65	-1,903.58	-8,978.91	9,268.09	9,219.19	48.89	189.564		
4,200.00	4,142.38	4,878.11	4,753.84	19.22	30.90	-98.62	-1,890.33	-8,979.40	9,263.96	9,214.26	49.70	186.393		
4,300.00	4,240.65	4,938.06	4,811.84	19.70	31.31	-98.60	-1,875.17	-8,979.84	9,260.28	9,209.69	50.58	183.070		
4,400.00	4,338.93	4,998.48	4,870.50	20.18	31.70	-98.58	-1,860.73	-8,980.30	9,257.02	9,205.57	51.45	179.926		
4,500.00	4,437.21	5,059.47	4,929.86	20.65	32.08	-98.57	-1,846.72	-8,980.87	9,254.20	9,201.89	52.31	176.913		
4,600.00	4,535.49	5,114.00	4,983.06	21.13	32.42	-98.56	-1,834.75	-8,981.43	9,251.79	9,198.67	53.12	174.153		
4,700.00	4,633.76	5,181.53	5,049.17	21.61	32.82	-98.55	-1,821.01	-8,982.11	9,249.80	9,195.81	53.99	171.309		
4,800.00	4,732.04	5,241.14	5,107.77	22.08	33.16	-98.55	-1,810.11	-8,982.62	9,248.24	9,193.44	54.80	168.753		
4,900.00	4,830.32	5,304.00	5,169.80	22.56	33.49	-98.56	-1,799.93	-8,983.07	9,247.13	9,191.52	55.62	166.270		
5,000.00	4,928.60	5,362.96	5,228.12	23.04	33.79	-98.58	-1,791.31	-8,983.48	9,246.44	9,190.05	56.38	163.989		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,100.00	5,026.87	5,421.52	5,286.14	23.51	34.08	-98.59	-1,783.39	-8,983.94	9,246.16	9,189.02	57.14	161.813		
5,108.36	5,035.09	5,425.90	5,290.49	23.55	34.10	-98.60	-1,782.84	-8,983.97	9,246.15	9,188.95	57.20	161.644		
5,200.00	5,125.15	5,473.85	5,338.12	23.99	34.32	-98.62	-1,777.39	-8,984.30	9,246.37	9,188.52	57.85	159.826		
5,300.00	5,223.43	5,531.72	5,395.73	24.47	34.57	-98.65	-1,771.89	-8,984.67	9,247.09	9,188.51	58.57	157.870		
5,400.00	5,321.71	5,607.46	5,471.20	24.94	34.88	-98.70	-1,765.50	-8,985.26	9,248.22	9,188.86	59.36	155.796		
5,500.00	5,419.98	5,500.00	5,637.02	25.42	34.49	-98.82	-1,754.26	-8,984.89	9,248.83	9,189.38	59.45	155.578		
5,600.00	5,518.26	5,829.64	5,692.92	25.90	35.74	-98.87	-1,751.53	-8,984.39	9,249.49	9,188.33	61.16	151.230		
5,700.00	5,616.54	5,872.00	5,735.24	26.38	35.89	-98.91	-1,749.73	-8,984.22	9,250.77	9,189.00	61.78	149.740		
5,800.00	5,714.82	5,919.91	5,783.12	26.85	36.06	-98.95	-1,748.01	-8,984.22	9,252.65	9,190.25	62.41	148.261		
5,900.00	5,813.09	5,966.00	5,829.19	27.33	36.21	-98.99	-1,746.73	-8,984.39	9,255.12	9,192.09	63.03	146.843		
6,000.00	5,911.37	6,044.86	5,908.03	27.81	36.47	-99.07	-1,744.93	-8,984.88	9,258.00	9,194.25	63.76	145.206		
6,100.00	6,009.65	6,147.62	6,010.76	28.28	36.81	-99.17	-1,742.78	-8,985.58	9,261.02	9,196.45	64.57	143.422		
6,200.00	6,107.93	6,246.86	6,109.99	28.76	37.14	-99.27	-1,740.88	-8,986.11	9,263.98	9,198.61	65.37	141.706		
6,300.00	6,206.20	6,325.53	6,188.64	29.24	37.40	-99.35	-1,739.31	-8,986.67	9,267.11	9,201.00	66.11	140.185		
6,400.00	6,304.48	6,404.36	6,267.44	29.72	37.67	-99.43	-1,737.60	-8,987.44	9,270.48	9,203.64	66.84	138.699		
6,500.00	6,402.76	6,483.38	6,346.44	30.19	37.93	-99.51	-1,735.93	-8,988.39	9,274.08	9,206.51	67.57	137.242		
6,600.00	6,501.04	6,571.81	6,434.84	30.67	38.23	-99.59	-1,734.15	-8,989.60	9,277.90	9,209.56	68.35	135.751		
6,700.00	6,599.31	6,680.11	6,543.12	31.15	38.60	-99.70	-1,732.04	-8,991.01	9,281.72	9,212.53	69.19	134.148		
6,800.00	6,697.50	6,762.17	6,625.15	31.63	38.87	-78.82	-1,730.49	-8,992.09	9,283.82	9,213.88	69.94	132.743		
6,900.00	6,794.18	6,839.01	6,701.97	32.10	39.13	-53.37	-1,729.09	-8,993.25	9,273.15	9,202.48	70.66	131.228		
7,000.00	6,886.96	6,934.81	6,797.74	32.55	39.47	-42.72	-1,727.20	-8,994.87	9,247.88	9,176.43	71.45	129.429		
7,100.00	6,973.57	7,030.58	6,893.47	32.99	39.80	-38.25	-1,724.88	-8,996.57	9,208.51	9,136.29	72.22	127.509		
7,200.00	7,051.87	7,122.85	6,985.69	33.41	40.13	-37.02	-1,722.58	-8,998.10	9,155.98	9,083.03	72.95	125.504		
7,300.00	7,119.93	7,192.49	7,055.30	33.85	40.37	-38.08	-1,720.93	-8,999.15	9,091.66	9,018.08	73.58	123.569		
7,400.00	7,176.09	7,238.90	7,101.70	34.39	40.53	-41.48	-1,719.93	-8,999.87	9,017.27	8,943.19	74.09	121.715		
7,500.00	7,218.95	7,274.71	7,137.50	35.09	40.66	-48.06	-1,719.23	-9,000.44	8,934.66	8,860.12	74.54	119.871		
7,600.00	7,247.46	7,299.02	7,161.81	35.98	40.74	-59.65	-1,718.79	-9,000.83	8,845.81	8,770.88	74.93	118.061		
7,700.00	7,260.92	7,311.22	7,174.00	37.04	40.78	-78.88	-1,718.58	-9,001.03	8,752.88	8,677.63	75.25	116.311		
7,800.00	7,261.75	7,313.21	7,175.99	38.23	40.79	-88.94	-1,718.55	-9,001.06	8,658.24	8,582.70	75.54	114.623		
7,900.00	7,261.33	7,314.19	7,176.97	39.59	40.79	-88.96	-1,718.53	-9,001.08	8,563.60	8,487.76	75.84	112.915		
8,000.00	7,260.91	7,315.17	7,177.95	41.10	40.80	-88.98	-1,718.51	-9,001.10	8,469.09	8,392.92	76.18	111.176		
8,100.00	7,260.49	7,316.16	7,178.94	42.75	40.80	-89.00	-1,718.50	-9,001.11	8,374.71	8,298.16	76.55	109.406		
8,200.00	7,260.07	7,317.14	7,179.92	44.53	40.81	-89.02	-1,718.48	-9,001.13	8,280.46	8,203.51	76.95	107.607		
8,300.00	7,259.65	7,318.13	7,180.91	46.41	40.81	-89.04	-1,718.47	-9,001.15	8,186.34	8,108.95	77.39	105.781		
8,400.00	7,259.23	7,319.12	7,181.90	48.39	40.81	-89.07	-1,718.45	-9,001.16	8,092.37	8,014.50	77.86	103.929		
8,500.00	7,258.81	7,320.11	7,182.89	50.45	40.82	-89.09	-1,718.43	-9,001.18	7,998.54	7,920.16	78.38	102.053		
8,600.00	7,258.39	7,321.11	7,183.88	52.59	40.82	-89.11	-1,718.42	-9,001.20	7,904.86	7,825.93	78.93	100.154		
8,700.00	7,257.97	7,322.10	7,184.88	54.79	40.82	-89.13	-1,718.40	-9,001.21	7,811.34	7,731.82	79.52	98.235		
8,800.00	7,257.55	7,323.10	7,185.88	57.05	40.83	-89.15	-1,718.38	-9,001.23	7,717.98	7,637.83	80.15	96.297		
8,900.00	7,257.13	7,324.10	7,186.88	59.36	40.83	-89.17	-1,718.37	-9,001.25	7,624.79	7,543.97	80.82	94.344		
9,000.00	7,256.71	7,325.10	7,187.88	61.72	40.83	-89.19	-1,718.35	-9,001.26	7,531.78	7,450.24	81.53	92.377		
9,100.00	7,256.29	7,326.11	7,188.88	64.12	40.84	-89.21	-1,718.33	-9,001.28	7,438.94	7,356.65	82.29	90.399		
9,200.00	7,255.87	7,327.11	7,189.89	66.56	40.84	-89.23	-1,718.32	-9,001.30	7,346.29	7,263.20	83.09	88.412		
9,300.00	7,255.45	7,328.12	7,190.90	69.02	40.84	-89.25	-1,718.30	-9,001.31	7,253.84	7,169.90	83.94	86.418		
9,400.00	7,255.03	7,329.14	7,191.91	71.52	40.85	-89.27	-1,718.28	-9,001.33	7,161.59	7,076.76	84.83	84.421		
9,500.00	7,254.61	7,330.15	7,192.92	74.04	40.85	-89.29	-1,718.27	-9,001.35	7,069.56	6,983.78	85.77	82.422		
9,600.00	7,254.19	7,331.16	7,193.94	76.58	40.85	-89.31	-1,718.25	-9,001.36	6,977.74	6,890.97	86.76	80.424		
9,700.00	7,253.77	7,332.18	7,194.96	79.15	40.86	-89.33	-1,718.24	-9,001.38	6,886.14	6,798.34	87.80	78.430		
9,800.00	7,253.35	7,333.20	7,195.98	81.74	40.86	-89.36	-1,718.22	-9,001.40	6,794.79	6,705.90	88.89	76.441		
9,900.00	7,252.92	7,334.22	7,197.00	84.34	40.86	-89.38	-1,718.20	-9,001.42	6,703.68	6,613.65	90.03	74.460		
10,000.00	7,252.50	7,335.25	7,198.02	86.96	40.87	-89.40	-1,718.19	-9,001.43	6,612.83	6,521.61	91.22	72.490		
10,100.00	7,252.08	7,336.27	7,199.05	89.59	40.87	-89.42	-1,718.17	-9,001.45	6,522.25	6,429.77	92.47	70.533		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,337.30	7,200.08	92.24	40.88	-89.44	-1,718.15	-9,001.47	6,431.94	6,338.17	93.77	68.590		
10,300.00	7,251.24	7,338.33	7,201.11	94.90	40.88	-89.46	-1,718.14	-9,001.49	6,341.93	6,246.79	95.13	66.664		
10,400.00	7,250.82	7,339.37	7,202.14	97.57	40.88	-89.48	-1,718.12	-9,001.50	6,252.22	6,155.66	96.55	64.756		
10,500.00	7,250.40	7,340.40	7,203.18	100.25	40.89	-89.50	-1,718.11	-9,001.52	6,162.82	6,064.79	98.03	62.869		
10,600.00	7,249.98	7,341.44	7,204.21	102.93	40.89	-89.52	-1,718.09	-9,001.54	6,073.76	5,974.19	99.56	61.003		
10,700.00	7,249.56	7,342.48	7,205.25	105.63	40.89	-89.55	-1,718.07	-9,001.56	5,985.04	5,883.87	101.16	59.162		
10,800.00	7,249.14	7,343.52	7,206.29	108.34	40.90	-89.57	-1,718.06	-9,001.57	5,896.68	5,793.85	102.83	57.346		
10,900.00	7,248.72	7,344.57	7,207.34	111.05	40.90	-89.59	-1,718.04	-9,001.59	5,808.70	5,704.14	104.56	55.556		
11,000.00	7,248.30	7,345.61	7,208.39	113.77	40.90	-89.61	-1,718.02	-9,001.61	5,721.11	5,614.76	106.35	53.795		
11,100.00	7,247.88	7,346.66	7,209.43	116.50	40.91	-89.63	-1,718.01	-9,001.63	5,633.94	5,525.73	108.22	52.062		
11,200.00	7,247.46	7,347.72	7,210.49	119.23	40.91	-89.65	-1,717.99	-9,001.64	5,547.20	5,437.05	110.15	50.360		
11,300.00	7,247.04	7,348.77	7,211.54	121.97	40.92	-89.68	-1,717.98	-9,001.66	5,460.91	5,348.75	112.16	48.690		
11,400.00	7,246.62	7,349.83	7,212.59	124.72	40.92	-89.70	-1,717.96	-9,001.68	5,375.10	5,260.86	114.24	47.051		
11,500.00	7,246.20	7,350.88	7,213.65	127.46	40.92	-89.72	-1,717.94	-9,001.70	5,289.79	5,173.39	116.40	45.445		
11,600.00	7,245.78	7,351.94	7,214.71	130.22	40.93	-89.74	-1,717.93	-9,001.72	5,205.00	5,086.36	118.64	43.874		
11,700.00	7,245.36	7,353.01	7,215.78	132.98	40.93	-89.76	-1,717.91	-9,001.73	5,120.75	4,999.80	120.95	42.336		
11,800.00	7,244.94	7,354.07	7,216.84	135.74	40.93	-89.78	-1,717.90	-9,001.75	5,037.09	4,913.73	123.36	40.834		
11,900.00	7,244.52	7,355.14	7,217.91	138.50	40.94	-89.81	-1,717.88	-9,001.77	4,954.02	4,828.18	125.84	39.367		
12,000.00	7,244.10	7,356.21	7,218.98	141.27	40.94	-89.83	-1,717.86	-9,001.79	4,871.60	4,743.18	128.42	37.936		
12,100.00	7,243.68	7,357.35	7,220.12	144.04	40.95	-89.85	-1,717.85	-9,001.81	4,789.84	4,658.77	131.08	36.542		
12,200.00	7,243.26	7,358.67	7,221.43	146.82	40.95	-89.88	-1,717.83	-9,001.83	4,708.79	4,574.96	133.83	35.184		
12,300.00	7,242.84	7,359.98	7,222.74	149.60	40.95	-89.91	-1,717.81	-9,001.85	4,628.48	4,491.80	136.68	33.863		
12,400.00	7,242.42	7,361.28	7,224.05	152.38	40.96	-89.93	-1,717.79	-9,001.88	4,548.95	4,409.32	139.63	32.579		
12,500.00	7,242.00	7,362.58	7,225.35	155.16	40.96	-89.96	-1,717.77	-9,001.90	4,470.24	4,327.57	142.67	31.332		
12,600.00	7,241.58	7,363.88	7,226.64	157.95	40.97	-89.99	-1,717.75	-9,001.92	4,392.40	4,246.58	145.82	30.122		
12,700.00	7,241.16	7,365.16	7,227.93	160.74	40.97	-90.01	-1,717.73	-9,001.94	4,315.47	4,166.40	149.06	28.950		
12,800.00	7,240.74	7,366.44	7,229.21	163.53	40.98	-90.04	-1,717.71	-9,001.96	4,239.50	4,087.08	152.41	27.816		
12,900.00	7,240.32	7,367.72	7,230.48	166.32	40.98	-90.07	-1,717.69	-9,001.98	4,164.55	4,008.68	155.87	26.718		
13,000.00	7,239.89	7,368.99	7,231.75	169.12	40.99	-90.09	-1,717.67	-9,002.01	4,090.67	3,931.23	159.43	25.658		
13,100.00	7,239.47	7,370.25	7,233.02	171.92	40.99	-90.12	-1,717.66	-9,002.03	4,017.91	3,854.81	163.10	24.635		
13,200.00	7,239.05	7,371.51	7,234.27	174.72	40.99	-90.14	-1,717.64	-9,002.05	3,946.35	3,779.48	166.87	23.649		
13,300.00	7,238.63	7,372.76	7,235.53	177.52	41.00	-90.17	-1,717.62	-9,002.07	3,876.05	3,705.30	170.76	22.699		
13,400.00	7,238.21	7,374.01	7,236.77	180.32	41.00	-90.20	-1,717.60	-9,002.09	3,807.08	3,632.34	174.74	21.787		
13,500.00	7,237.79	7,375.25	7,238.01	183.13	41.01	-90.22	-1,717.58	-9,002.11	3,739.51	3,560.67	178.84	20.910		
13,600.00	7,237.37	7,376.48	7,239.25	185.93	41.01	-90.25	-1,717.56	-9,002.13	3,673.42	3,490.39	183.03	20.070		
13,700.00	7,236.95	7,377.71	7,240.47	188.74	41.02	-90.27	-1,717.55	-9,002.15	3,608.89	3,421.56	187.33	19.265		
13,800.00	7,236.53	7,378.94	7,241.70	191.55	41.02	-90.30	-1,717.53	-9,002.17	3,546.01	3,354.28	191.72	18.496		
13,900.00	7,236.11	7,380.15	7,242.92	194.36	41.02	-90.32	-1,717.51	-9,002.19	3,484.86	3,288.65	196.20	17.761		
14,000.00	7,235.69	7,381.37	7,244.13	197.17	41.03	-90.35	-1,717.49	-9,002.21	3,425.53	3,224.77	200.77	17.062		
14,100.00	7,235.27	7,382.57	7,245.34	199.98	41.03	-90.37	-1,717.48	-9,002.23	3,368.14	3,162.73	205.41	16.397		
14,200.00	7,234.85	7,383.78	7,246.54	202.80	41.04	-90.40	-1,717.46	-9,002.25	3,312.76	3,102.64	210.12	15.766		
14,300.00	7,234.43	7,384.97	7,247.73	205.61	41.04	-90.42	-1,717.44	-9,002.27	3,259.52	3,044.63	214.88	15.169		
14,400.00	7,234.01	7,386.16	7,248.92	208.43	41.04	-90.45	-1,717.42	-9,002.29	3,208.50	2,988.81	219.69	14.604		
14,500.00	7,233.59	7,387.35	7,250.11	211.25	41.05	-90.47	-1,717.41	-9,002.31	3,159.83	2,935.30	224.53	14.073		
14,600.00	7,233.17	7,388.53	7,251.29	214.06	41.05	-90.49	-1,717.39	-9,002.33	3,113.61	2,884.23	229.38	13.574		
14,700.00	7,232.75	7,389.70	7,252.46	216.88	41.06	-90.52	-1,717.37	-9,002.35	3,069.96	2,835.73	234.23	13.107		
14,800.00	7,232.33	7,390.88	7,253.63	219.70	41.06	-90.54	-1,717.36	-9,002.37	3,028.97	2,789.92	239.06	12.671		
14,900.00	7,231.91	7,392.04	7,254.80	222.52	41.06	-90.57	-1,717.34	-9,002.39	2,990.77	2,746.93	243.84	12.266		
15,000.00	7,231.49	7,393.20	7,255.96	225.35	41.07	-90.59	-1,717.32	-9,002.41	2,955.46	2,706.91	248.55	11.891		
15,100.00	7,231.07	7,394.35	7,257.11	228.17	41.07	-90.61	-1,717.31	-9,002.43	2,923.14	2,669.97	253.18	11.546		
15,116.21	7,231.00	7,394.54	7,257.30	228.63	41.07	-90.62	-1,717.30	-9,002.43	2,918.19	2,664.28	253.92	11.493 CC, ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	37.00	0.00	3.28	-108.56	-3,015.17	-8,980.18	9,472.92					
100.00	100.00	188.74	225.71	0.18	3.34	-108.54	-3,012.15	-8,979.81	9,472.37	9,468.84	3.53	2,680.413		
200.00	200.00	311.48	348.41	0.61	3.48	-108.53	-3,009.25	-8,978.85	9,470.87	9,466.77	4.10	2,311.464		
300.00	300.00	420.21	457.09	1.05	3.66	-108.51	-3,005.91	-8,978.17	9,469.30	9,464.58	4.72	2,006.827		
400.00	400.00	501.70	538.52	1.49	3.83	-108.49	-3,002.86	-8,977.79	9,467.68	9,462.35	5.33	1,777.001		
500.00	500.00	542.00	578.78	1.93	3.93	-108.48	-3,001.11	-8,977.79	9,466.45	9,460.59	5.86	1,615.556		
575.93	575.92	585.40	622.14	2.26	4.04	-100.73	-2,999.16	-8,978.05	9,466.04	9,459.74	6.30	1,502.385		
600.00	599.98	594.44	631.16	2.37	4.06	-100.73	-2,998.75	-8,978.15	9,466.08	9,459.65	6.43	1,472.287		
700.00	699.84	648.00	684.67	2.81	4.21	-100.72	-2,996.38	-8,979.02	9,467.10	9,460.08	7.01	1,350.279		
800.00	799.45	669.97	706.61	3.26	4.27	-100.68	-2,995.44	-8,979.52	9,469.34	9,461.83	7.51	1,260.605		
900.00	898.70	725.32	761.90	3.70	4.43	-100.64	-2,993.30	-8,981.01	9,472.89	9,464.78	8.11	1,167.640		
1,000.00	997.47	790.00	826.51	4.15	4.62	-100.59	-2,990.95	-8,982.81	9,477.36	9,468.61	8.76	1,082.481		
1,100.00	1,095.78	843.48	879.92	4.60	4.79	-100.60	-2,988.78	-8,984.62	9,482.78	9,473.40	9.38	1,011.308		
1,200.00	1,194.05	884.00	920.35	5.05	4.93	-100.63	-2,986.78	-8,986.39	9,488.85	9,478.89	9.97	952.146		
1,300.00	1,292.33	884.00	920.35	5.50	4.93	-100.63	-2,986.78	-8,986.39	9,495.77	9,485.35	10.43	910.842		
1,400.00	1,390.61	939.86	976.05	5.96	5.12	-100.67	-2,983.83	-8,989.53	9,503.14	9,492.07	11.08	858.018		
1,500.00	1,488.89	979.00	1,015.03	6.43	5.25	-100.69	-2,981.75	-8,992.27	9,511.46	9,499.78	11.67	814.763		
1,600.00	1,587.16	1,008.90	1,044.79	6.89	5.36	-100.71	-2,980.07	-8,994.62	9,520.44	9,508.19	12.24	777.571		
1,700.00	1,685.44	1,074.00	1,109.50	7.36	5.60	-100.75	-2,975.72	-9,000.25	9,529.97	9,517.03	12.95	736.149		
1,800.00	1,783.72	1,150.51	1,185.39	7.83	5.90	-100.78	-2,969.28	-9,007.57	9,539.83	9,526.12	13.71	696.033		
1,900.00	1,882.00	1,199.57	1,233.94	8.30	6.10	-100.80	-2,964.37	-9,012.62	9,549.92	9,535.56	14.37	664.674		
2,000.00	1,980.27	1,263.00	1,296.53	8.77	6.37	-100.81	-2,957.26	-9,020.00	9,560.74	9,545.64	15.10	633.332		
2,100.00	2,078.55	1,263.00	1,296.53	9.25	6.37	-100.81	-2,957.26	-9,020.00	9,572.04	9,556.48	15.56	615.321		
2,200.00	2,176.83	1,309.68	1,342.44	9.72	6.58	-100.82	-2,951.43	-9,026.12	9,584.04	9,567.82	16.22	590.746		
2,300.00	2,275.11	1,358.00	1,389.78	10.19	6.80	-100.82	-2,944.77	-9,033.14	9,596.76	9,579.86	16.90	567.830		
2,400.00	2,373.38	1,419.04	1,449.47	10.66	7.10	-100.82	-2,936.01	-9,042.42	9,609.97	9,592.32	17.65	544.552		
2,500.00	2,471.66	1,522.20	1,550.45	11.14	7.61	-100.82	-2,921.69	-9,057.91	9,623.23	9,604.63	18.60	517.240		
2,600.00	2,569.94	1,582.22	1,609.30	11.61	7.91	-100.82	-2,913.94	-9,066.78	9,636.62	9,617.26	19.36	497.830		
2,700.00	2,668.22	1,642.00	1,667.84	12.09	8.21	-100.82	-2,906.15	-9,076.05	9,650.55	9,630.44	20.11	479.863		
2,800.00	2,766.49	1,713.08	1,737.46	12.56	8.59	-100.83	-2,897.13	-9,087.24	9,664.85	9,643.92	20.93	461.865		
2,900.00	2,864.77	1,868.48	1,889.76	13.04	9.41	-100.84	-2,877.30	-9,110.84	9,678.48	9,656.29	22.19	436.193		
3,000.00	2,963.05	1,926.00	1,946.04	13.51	9.72	-100.84	-2,869.64	-9,119.92	9,692.56	9,669.62	22.95	422.395		
3,100.00	3,061.33	2,051.66	2,069.20	13.99	10.41	-100.85	-2,853.86	-9,139.22	9,706.57	9,682.49	24.07	403.249		
3,200.00	3,159.60	2,117.00	2,133.24	14.46	10.77	-100.85	-2,845.78	-9,149.38	9,720.75	9,695.88	24.87	390.824		
3,300.00	3,257.88	2,366.46	2,377.19	14.94	12.19	-100.85	-2,809.73	-9,186.90	9,733.28	9,706.56	26.72	364.234		
3,400.00	3,356.16	2,401.00	2,411.05	15.41	12.38	-100.85	-2,805.17	-9,191.95	9,746.34	9,718.97	27.37	356.109		
3,500.00	3,454.43	2,475.68	2,484.29	15.89	12.81	-100.85	-2,795.69	-9,203.09	9,759.88	9,731.65	28.23	345.676		
3,600.00	3,552.71	2,534.21	2,541.60	16.36	13.14	-100.86	-2,787.94	-9,212.07	9,773.68	9,744.67	29.01	336.867		
3,700.00	3,650.99	2,590.00	2,596.13	16.84	13.47	-100.86	-2,780.32	-9,221.02	9,787.96	9,758.18	29.78	328.689		
3,800.00	3,749.27	2,704.58	2,708.09	17.32	14.14	-100.85	-2,764.49	-9,239.56	9,802.34	9,771.45	30.89	317.328		
3,900.00	3,847.54	2,779.00	2,780.81	17.79	14.58	-100.85	-2,754.29	-9,251.64	9,816.79	9,785.02	31.77	309.010		
4,000.00	3,945.82	2,874.00	2,873.84	18.27	15.14	-100.86	-2,742.13	-9,266.57	9,831.08	9,798.32	32.76	300.103		
4,100.00	4,044.10	2,925.16	2,924.03	18.75	15.43	-100.86	-2,736.22	-9,274.53	9,845.75	9,812.26	33.49	294.001		
4,200.00	4,142.38	2,969.00	2,967.02	19.22	15.68	-100.87	-2,731.49	-9,281.72	9,861.20	9,827.02	34.18	288.545		
4,300.00	4,240.65	4,300.00	3,118.35	19.70	23.42	-100.89	-2,714.17	-9,307.37	9,876.97	9,835.11	41.86	235.963		
4,400.00	4,338.93	3,226.09	3,219.22	20.18	17.16	-100.91	-2,703.87	-9,323.09	9,891.75	9,855.24	36.51	270.925		
4,500.00	4,437.21	3,415.32	3,405.64	20.65	18.20	-100.97	-2,687.45	-9,351.15	9,906.70	9,868.72	37.98	260.846		
4,600.00	4,535.49	3,729.00	3,715.36	21.13	19.88	-101.06	-2,658.78	-9,391.53	9,918.89	9,878.79	40.11	247.318		
4,700.00	4,633.76	3,774.05	3,759.78	21.61	20.13	-101.07	-2,653.90	-9,397.29	9,931.11	9,890.30	40.81	243.377		
4,800.00	4,732.04	3,824.00	3,808.87	22.08	20.41	-101.08	-2,647.95	-9,404.29	9,943.98	9,902.45	41.53	239.437		
4,900.00	4,830.32	3,850.83	3,835.19	22.56	20.57	-101.08	-2,644.58	-9,408.28	9,957.42	9,915.29	42.13	236.350		
5,000.00	4,928.60	3,892.24	3,875.76	23.04	20.82	-101.09	-2,639.29	-9,414.68	9,971.45	9,928.64	42.81	232.909		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	3,946.97	3,929.30	23.51	21.14	-101.09	-2,632.19	-9,423.51	9,986.03	9,942.46	43.57	229.172		
7,300.00	7,119.93	6,907.28	6,860.87	33.85	35.38	-40.43	-2,417.88	-9,659.93	9,953.60	9,885.53	68.07	146.224		
7,400.00	7,176.09	6,944.00	6,897.57	34.39	35.52	-43.74	-2,417.59	-9,661.09	9,881.97	9,813.36	68.61	144.025		
7,500.00	7,218.95	6,975.95	6,929.50	35.09	35.65	-49.99	-2,417.33	-9,662.17	9,801.93	9,732.80	69.13	141.796		
7,600.00	7,247.46	6,994.80	6,948.33	35.98	35.73	-60.48	-2,417.16	-9,662.85	9,715.39	9,645.81	69.58	139.637		
7,700.00	7,260.92	7,004.97	6,958.50	37.04	35.77	-77.09	-2,417.06	-9,663.24	9,624.42	9,554.44	69.98	137.534		
7,800.00	7,261.75	7,007.73	6,961.25	38.23	35.78	-85.66	-2,417.03	-9,663.34	9,531.40	9,461.05	70.35	135.495		
7,900.00	7,261.33	7,009.76	6,963.28	39.59	35.79	-85.70	-2,417.01	-9,663.42	9,438.37	9,367.63	70.74	133.422		
8,000.00	7,260.91	7,011.82	6,965.34	41.10	35.80	-85.73	-2,416.99	-9,663.50	9,345.48	9,274.31	71.17	131.304		
8,100.00	7,260.49	7,013.90	6,967.42	42.75	35.81	-85.76	-2,416.96	-9,663.58	9,252.75	9,181.10	71.65	129.141		
8,200.00	7,260.07	7,016.01	6,969.52	44.53	35.82	-85.80	-2,416.94	-9,663.66	9,160.16	9,088.00	72.16	126.937		
8,300.00	7,259.65	7,018.13	6,971.65	46.41	35.82	-85.83	-2,416.92	-9,663.74	9,067.74	8,995.02	72.72	124.696		
8,400.00	7,259.23	7,020.29	6,973.80	48.39	35.83	-85.87	-2,416.90	-9,663.83	8,975.47	8,902.15	73.32	122.420		
8,500.00	7,258.81	7,022.47	6,975.98	50.45	35.84	-85.90	-2,416.87	-9,663.92	8,883.37	8,809.41	73.96	120.113		
8,600.00	7,258.39	7,024.67	6,978.18	52.59	35.85	-85.94	-2,416.85	-9,664.00	8,791.44	8,716.80	74.64	117.779		
8,700.00	7,257.97	7,026.90	6,980.41	54.79	35.86	-85.98	-2,416.82	-9,664.09	8,699.69	8,624.32	75.37	115.422		
8,800.00	7,257.55	7,029.15	6,982.66	57.05	35.87	-86.01	-2,416.80	-9,664.18	8,608.12	8,531.97	76.15	113.046		
8,900.00	7,257.13	7,031.44	6,984.94	59.36	35.88	-86.05	-2,416.77	-9,664.27	8,516.74	8,439.77	76.97	110.654		
9,000.00	7,256.71	7,033.75	6,987.25	61.72	35.89	-86.09	-2,416.75	-9,664.37	8,425.56	8,347.72	77.83	108.251		
9,100.00	7,256.29	7,036.08	6,989.58	64.12	35.90	-86.13	-2,416.72	-9,664.46	8,334.57	8,255.83	78.75	105.840		
9,200.00	7,255.87	7,038.45	6,991.95	66.56	35.91	-86.17	-2,416.69	-9,664.56	8,243.80	8,164.09	79.71	103.426		
9,300.00	7,255.45	7,040.84	6,994.34	69.02	35.92	-86.21	-2,416.67	-9,664.66	8,153.24	8,072.52	80.72	101.012		
9,400.00	7,255.03	7,043.26	6,996.76	71.52	35.93	-86.24	-2,416.64	-9,664.76	8,062.90	7,981.13	81.77	98.602		
9,500.00	7,254.61	7,045.72	6,999.21	74.04	35.94	-86.29	-2,416.61	-9,664.86	7,972.79	7,889.91	82.88	96.199		
9,600.00	7,254.19	7,048.20	7,001.69	76.58	35.95	-86.33	-2,416.58	-9,664.97	7,882.92	7,798.88	84.03	93.807		
9,700.00	7,253.77	7,050.71	7,004.20	79.15	35.96	-86.37	-2,416.55	-9,665.07	7,793.29	7,708.05	85.24	91.429		
9,800.00	7,253.35	7,053.26	7,006.74	81.74	35.97	-86.41	-2,416.52	-9,665.18	7,703.92	7,617.42	86.49	89.068		
9,900.00	7,252.92	7,055.84	7,009.32	84.34	35.98	-86.45	-2,416.49	-9,665.29	7,614.81	7,527.00	87.80	86.727		
10,000.00	7,252.50	7,058.45	7,011.93	86.96	35.99	-86.49	-2,416.46	-9,665.40	7,525.97	7,436.81	89.16	84.408		
10,100.00	7,252.08	7,061.09	7,014.57	89.59	36.00	-86.54	-2,416.42	-9,665.52	7,437.42	7,346.84	90.57	82.114		
10,200.00	7,251.66	7,063.77	7,017.24	92.24	36.01	-86.58	-2,416.39	-9,665.63	7,349.15	7,257.11	92.04	79.848		
10,300.00	7,251.24	7,066.48	7,019.95	94.90	36.02	-86.63	-2,416.35	-9,665.75	7,261.19	7,167.63	93.56	77.610		
10,400.00	7,250.82	7,069.22	7,022.69	97.57	36.03	-86.67	-2,416.32	-9,665.87	7,173.55	7,078.41	95.13	75.404		
10,500.00	7,250.40	7,072.01	7,025.47	100.25	36.04	-86.72	-2,416.28	-9,665.99	7,086.23	6,989.46	96.77	73.231		
10,600.00	7,249.98	7,074.83	7,028.29	102.93	36.05	-86.76	-2,416.25	-9,666.12	6,999.24	6,900.79	98.45	71.093		
10,700.00	7,249.56	7,077.68	7,031.14	105.63	36.07	-86.81	-2,416.21	-9,666.25	6,912.61	6,812.41	100.20	68.990		
10,800.00	7,249.14	7,080.58	7,034.03	108.34	36.08	-86.86	-2,416.17	-9,666.38	6,826.34	6,724.34	102.00	66.925		
10,900.00	7,248.72	7,083.51	7,036.96	111.05	36.09	-86.91	-2,416.13	-9,666.51	6,740.45	6,636.59	103.86	64.897		
11,000.00	7,248.30	7,086.48	7,039.93	113.77	36.10	-86.96	-2,416.09	-9,666.65	6,654.95	6,549.17	105.79	62.909		
11,100.00	7,247.88	7,089.50	7,042.94	116.50	36.11	-87.00	-2,416.05	-9,666.78	6,569.86	6,462.09	107.77	60.961		
11,200.00	7,247.46	7,092.55	7,045.99	119.23	36.13	-87.05	-2,416.01	-9,666.92	6,485.20	6,375.38	109.82	59.053		
11,300.00	7,247.04	7,095.65	7,049.08	121.97	36.14	-87.11	-2,415.97	-9,667.07	6,400.97	6,289.04	111.93	57.187		
11,400.00	7,246.62	7,098.79	7,052.22	124.72	36.15	-87.16	-2,415.92	-9,667.21	6,317.20	6,203.09	114.11	55.362		
11,500.00	7,246.20	7,101.97	7,055.40	127.46	36.16	-87.21	-2,415.88	-9,667.36	6,233.91	6,117.56	116.35	53.579		
11,600.00	7,245.78	7,105.20	7,058.62	130.22	36.18	-87.26	-2,415.83	-9,667.52	6,151.11	6,032.45	118.66	51.838		
11,700.00	7,245.36	7,108.47	7,061.89	132.98	36.19	-87.32	-2,415.78	-9,667.67	6,068.83	5,947.79	121.04	50.139		
11,800.00	7,244.94	7,111.79	7,065.21	135.74	36.20	-87.37	-2,415.74	-9,667.83	5,987.09	5,863.60	123.49	48.482		
11,900.00	7,244.52	7,115.16	7,068.57	138.50	36.22	-87.43	-2,415.69	-9,667.99	5,905.90	5,779.89	126.01	46.868		
12,000.00	7,244.10	7,118.58	7,071.99	141.27	36.23	-87.48	-2,415.64	-9,668.16	5,825.30	5,696.70	128.60	45.296		
12,100.00	7,243.68	7,122.04	7,075.45	144.04	36.24	-87.54	-2,415.58	-9,668.33	5,745.31	5,614.03	131.27	43.767		
12,200.00	7,243.26	7,125.56	7,078.96	146.82	36.26	-87.60	-2,415.53	-9,668.50	5,665.94	5,531.93	134.01	42.279		
12,300.00	7,242.84	7,129.00	7,082.49	149.60	36.29	-87.72	-2,415.42	-9,668.87	5,587.24	5,450.39	136.85	40.828		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
12,400.00	7,242.42	7,133.00	7,086.39	152.38	36.29	-87.72	-2,415.42	-9,668.87	5,509.23	5,369.50	139.73	39.427		
12,500.00	7,242.00	7,138.11	7,091.49	155.16	36.31	-87.80	-2,415.34	-9,669.12	5,431.93	5,289.22	142.71	38.062		
12,600.00	7,241.58	7,143.52	7,096.89	157.95	36.33	-87.89	-2,415.26	-9,669.39	5,355.38	5,209.60	145.78	36.737		
12,700.00	7,241.16	7,148.86	7,102.23	160.74	36.35	-87.98	-2,415.17	-9,669.66	5,279.61	5,130.69	148.92	35.452		
12,800.00	7,240.74	7,154.13	7,107.50	163.53	36.38	-88.07	-2,415.09	-9,669.91	5,204.65	5,052.51	152.15	34.208		
12,900.00	7,240.32	7,159.35	7,112.70	166.32	36.40	-88.15	-2,415.01	-9,670.17	5,130.55	4,975.09	155.45	33.004		
13,000.00	7,239.89	7,164.49	7,117.84	169.12	36.42	-88.24	-2,414.94	-9,670.42	5,057.33	4,898.48	158.84	31.838		
13,100.00	7,239.47	7,169.58	7,122.92	171.92	36.44	-88.32	-2,414.86	-9,670.66	4,985.03	4,822.71	162.32	30.712		
13,200.00	7,239.05	7,174.60	7,127.94	174.72	36.46	-88.41	-2,414.78	-9,670.90	4,913.70	4,747.83	165.87	29.623		
13,300.00	7,238.63	7,179.57	7,132.90	177.52	36.48	-88.49	-2,414.71	-9,671.14	4,843.39	4,673.87	169.51	28.572		
13,400.00	7,238.21	7,184.47	7,137.80	180.32	36.50	-88.57	-2,414.64	-9,671.37	4,774.12	4,600.89	173.24	27.558		
13,500.00	7,237.79	7,189.32	7,142.64	183.13	36.52	-88.65	-2,414.57	-9,671.60	4,705.96	4,528.92	177.04	26.581		
13,600.00	7,237.37	7,194.11	7,147.42	185.93	36.54	-88.73	-2,414.50	-9,671.83	4,638.95	4,458.02	180.93	25.639		
13,700.00	7,236.95	7,198.84	7,152.15	188.74	36.56	-88.81	-2,414.43	-9,672.05	4,573.14	4,388.24	184.90	24.733		
13,800.00	7,236.53	7,203.52	7,156.82	191.55	36.58	-88.88	-2,414.36	-9,672.26	4,508.58	4,319.64	188.95	23.862		
13,900.00	7,236.11	7,208.15	7,161.44	194.36	36.60	-88.96	-2,414.29	-9,672.48	4,445.33	4,252.26	193.07	23.024		
14,000.00	7,235.69	7,212.72	7,166.01	197.17	36.62	-89.03	-2,414.23	-9,672.69	4,383.45	4,186.18	197.27	22.221		
14,100.00	7,235.27	7,217.24	7,170.52	199.98	36.64	-89.11	-2,414.16	-9,672.89	4,322.98	4,121.45	201.53	21.451		
14,200.00	7,234.85	7,221.70	7,174.98	202.80	36.65	-89.18	-2,414.10	-9,673.10	4,264.01	4,058.14	205.86	20.713		
14,300.00	7,234.43	7,226.12	7,179.40	205.61	36.67	-89.26	-2,414.03	-9,673.30	4,206.57	3,996.31	210.26	20.007		
14,400.00	7,234.01	7,230.49	7,183.76	208.43	36.69	-89.33	-2,413.97	-9,673.49	4,150.75	3,936.04	214.71	19.332		
14,500.00	7,233.59	7,234.81	7,188.07	211.25	36.71	-89.40	-2,413.91	-9,673.69	4,096.61	3,877.40	219.21	18.688		
14,600.00	7,233.17	7,239.08	7,192.34	214.06	36.73	-89.47	-2,413.85	-9,673.88	4,044.21	3,820.46	223.75	18.075		
14,700.00	7,232.75	7,243.30	7,196.56	216.88	36.74	-89.54	-2,413.79	-9,674.06	3,993.62	3,765.29	228.33	17.491		
14,800.00	7,232.33	7,247.48	7,200.73	219.70	36.76	-89.61	-2,413.73	-9,674.25	3,944.91	3,711.98	232.93	16.936		
14,900.00	7,231.91	7,251.61	7,204.85	222.52	36.78	-89.68	-2,413.68	-9,674.43	3,898.16	3,660.61	237.55	16.410		
15,000.00	7,231.49	7,255.69	7,208.94	225.35	36.79	-89.74	-2,413.62	-9,674.61	3,853.43	3,611.25	242.17	15.912		
15,100.00	7,231.07	7,259.74	7,212.97	228.17	36.81	-89.81	-2,413.56	-9,674.78	3,810.79	3,564.00	246.79	15.441		
15,116.21	7,231.00	7,260.39	7,213.63	228.63	36.81	-89.82	-2,413.55	-9,674.81	3,804.08	3,556.54	247.54	15.368	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	37.00	0.00	3.28	-108.88	-3,073.46	-8,988.55	9,499.55					
100.00	100.00	42.85	79.85	0.18	3.28	-108.88	-3,073.35	-8,988.63	9,499.55	9,496.09	3.46	2,747.859		
200.00	200.00	114.02	151.02	0.61	3.29	-108.87	-3,072.70	-8,989.14	9,499.92	9,496.01	3.91	2,430.734		
300.00	300.00	171.00	207.98	1.05	3.33	-108.86	-3,071.75	-8,989.83	9,500.59	9,496.21	4.38	2,169.411		
400.00	400.00	210.05	247.02	1.49	3.36	-108.86	-3,071.06	-8,990.55	9,501.83	9,496.98	4.85	1,958.165		
500.00	500.00	263.00	299.94	1.93	3.41	-108.85	-3,070.37	-8,992.02	9,503.88	9,498.53	5.35	1,776.642		
600.00	599.98	263.00	299.94	2.37	3.41	-101.05	-3,070.37	-8,992.02	9,506.84	9,501.05	5.79	1,641.214		
700.00	699.84	263.00	299.94	2.81	3.41	-100.96	-3,070.37	-8,992.02	9,511.53	9,505.29	6.24	1,525.265		
800.00	799.45	304.74	341.65	3.26	3.47	-100.85	-3,070.26	-8,993.75	9,517.42	9,510.69	6.73	1,414.067		
900.00	898.70	354.00	390.82	3.70	3.55	-100.74	-3,070.93	-8,996.63	9,525.27	9,518.02	7.25	1,314.320		
1,000.00	997.47	354.00	390.82	4.15	3.55	-100.57	-3,070.93	-8,996.63	9,534.11	9,526.41	7.70	1,238.703		
1,100.00	1,095.78	354.00	390.82	4.60	3.55	-100.50	-3,070.93	-8,996.63	9,544.48	9,536.33	8.15	1,170.962		
1,200.00	1,194.05	354.00	390.82	5.05	3.55	-100.50	-3,070.93	-8,996.63	9,555.92	9,547.31	8.61	1,109.996		
1,300.00	1,292.33	406.26	442.90	5.50	3.64	-100.56	-3,072.72	-9,000.44	9,567.79	9,558.64	9.16	1,045.028		
1,400.00	1,390.61	445.00	481.46	5.96	3.73	-100.61	-3,074.84	-9,003.60	9,580.69	9,571.00	9.69	988.801		
1,500.00	1,488.89	501.00	537.14	6.43	3.85	-100.68	-3,078.74	-9,008.18	9,594.20	9,583.93	10.27	934.313		
1,600.00	1,587.16	587.61	623.19	6.89	4.08	-100.81	-3,086.05	-9,014.63	9,607.74	9,596.80	10.94	878.529		
1,700.00	1,685.44	663.03	698.05	7.36	4.31	-100.92	-3,093.34	-9,020.16	9,621.62	9,610.02	11.60	829.461		
1,800.00	1,783.72	770.27	804.43	7.83	4.66	-101.08	-3,104.69	-9,027.58	9,635.50	9,623.11	12.38	778.104		
1,900.00	1,882.00	1,383.00	1,414.90	8.30	7.01	-101.87	-3,140.11	-9,062.20	9,645.64	9,630.58	15.06	640.482		
2,000.00	1,980.27	1,383.00	1,414.90	8.77	7.01	-101.87	-3,140.11	-9,062.20	9,654.94	9,639.41	15.53	621.872		
2,100.00	2,078.55	1,383.00	1,414.90	9.25	7.01	-101.87	-3,140.11	-9,062.20	9,665.26	9,649.27	15.99	604.465		
2,200.00	2,176.83	1,383.00	1,414.90	9.72	7.01	-101.87	-3,140.11	-9,062.20	9,676.61	9,660.15	16.45	588.162		
2,300.00	2,275.11	1,383.00	1,414.90	10.19	7.01	-101.87	-3,140.11	-9,062.20	9,688.97	9,672.06	16.91	572.877		
2,400.00	2,373.38	1,416.25	1,448.05	10.66	7.15	-101.91	-3,140.86	-9,064.70	9,701.71	9,684.21	17.50	554.317		
2,500.00	2,471.66	1,445.00	1,476.62	11.14	7.27	-101.94	-3,141.82	-9,067.72	9,715.95	9,697.88	18.07	537.606		
2,600.00	2,569.94	1,445.00	1,476.62	11.61	7.27	-101.94	-3,141.82	-9,067.72	9,730.73	9,712.20	18.53	525.226		
2,700.00	2,668.22	1,445.00	1,476.62	12.09	7.27	-101.94	-3,141.82	-9,067.72	9,746.51	9,727.53	18.98	513.563		
2,800.00	2,766.49	1,486.61	1,517.90	12.56	7.46	-101.98	-3,143.57	-9,072.69	9,763.14	9,743.54	19.60	498.150		
2,900.00	2,864.77	1,544.88	1,575.68	13.04	7.72	-102.05	-3,146.53	-9,079.66	9,780.21	9,759.92	20.29	482.051		
3,000.00	2,963.05	1,569.00	1,599.58	13.51	7.83	-102.08	-3,147.93	-9,082.55	9,797.79	9,776.95	20.83	470.260		
3,100.00	3,061.33	1,609.89	1,640.06	13.99	8.02	-102.12	-3,150.76	-9,087.54	9,815.99	9,794.54	21.45	457.528		
3,200.00	3,159.60	1,665.00	1,694.49	14.46	8.29	-102.20	-3,155.76	-9,094.59	9,835.14	9,813.00	22.14	444.312		
3,300.00	3,257.88	1,665.00	1,694.49	14.94	8.29	-102.20	-3,155.76	-9,094.59	9,854.69	9,832.11	22.57	436.579		
3,400.00	3,356.16	1,665.00	1,694.49	15.41	8.29	-102.20	-3,155.76	-9,094.59	9,875.21	9,852.20	23.01	429.249		
3,500.00	3,454.43	1,697.88	1,726.87	15.89	8.46	-102.24	-3,159.33	-9,099.08	9,896.40	9,872.82	23.59	419.584		
3,600.00	3,552.71	1,747.00	1,775.06	16.36	8.71	-102.31	-3,165.30	-9,106.45	9,918.72	9,894.48	24.24	409.192		
3,700.00	3,650.99	1,885.76	1,911.33	16.84	9.44	-102.51	-3,182.22	-9,126.39	9,941.01	9,915.69	25.32	392.650		
3,800.00	3,749.27	3,800.00	2,001.50	17.32	20.12	-102.64	-3,194.19	-9,139.19	9,963.18	9,928.71	34.47	289.029		
3,900.00	3,847.54	2,078.61	2,100.74	17.79	10.48	-102.79	-3,207.21	-9,152.68	9,984.84	9,957.75	27.09	368.536		
7,900.00	7,261.33	7,300.85	7,260.57	39.59	36.68	-90.44	-3,662.03	-9,620.69	9,939.92	9,870.76	69.16	143.728		
8,000.00	7,260.91	7,301.43	7,261.15	41.10	36.68	-90.44	-3,662.02	-9,620.70	9,852.00	9,782.26	69.74	141.267		
8,100.00	7,260.49	7,302.02	7,261.74	42.75	36.69	-90.45	-3,662.01	-9,620.70	9,764.32	9,693.94	70.38	138.735		
8,200.00	7,260.07	7,302.62	7,262.34	44.53	36.69	-90.46	-3,662.00	-9,620.71	9,676.87	9,605.79	71.08	136.142		
8,300.00	7,259.65	7,303.22	7,262.95	46.41	36.69	-90.47	-3,661.98	-9,620.72	9,589.67	9,517.84	71.84	133.495		
8,400.00	7,259.23	7,303.84	7,263.56	48.39	36.69	-90.47	-3,661.97	-9,620.72	9,502.72	9,430.07	72.65	130.801		
8,500.00	7,258.81	7,304.46	7,264.18	50.45	36.70	-90.48	-3,661.96	-9,620.73	9,416.03	9,342.51	73.52	128.070		
8,600.00	7,258.39	7,305.09	7,264.81	52.59	36.70	-90.49	-3,661.95	-9,620.74	9,329.61	9,255.16	74.45	125.309		
8,700.00	7,257.97	7,305.73	7,265.45	54.79	36.70	-90.50	-3,661.93	-9,620.75	9,243.46	9,168.02	75.44	122.526		
8,800.00	7,257.55	7,306.37	7,266.09	57.05	36.70	-90.50	-3,661.92	-9,620.75	9,157.59	9,081.11	76.49	119.729		
8,900.00	7,257.13	7,307.03	7,266.75	59.36	36.70	-90.51	-3,661.91	-9,620.76	9,072.01	8,994.42	77.59	116.925		
9,000.00	7,256.71	7,307.69	7,267.41	61.72	36.71	-90.52	-3,661.89	-9,620.77	8,986.73	8,907.99	78.75	114.121		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
9,100.00	7,256.29	7,308.36	7,268.09	64.12	36.71	-90.53	-3,661.88	-9,620.78	8,901.76	8,821.80	79.96	111.324		
9,200.00	7,255.87	7,309.05	7,268.77	66.56	36.71	-90.54	-3,661.86	-9,620.79	8,817.10	8,735.86	81.23	108.539		
9,300.00	7,255.45	7,309.74	7,269.46	69.02	36.71	-90.55	-3,661.85	-9,620.79	8,732.76	8,650.20	82.56	105.773		
9,400.00	7,255.03	7,310.44	7,270.16	71.52	36.72	-90.55	-3,661.84	-9,620.80	8,648.76	8,564.82	83.94	103.029		
9,500.00	7,254.61	7,311.15	7,270.87	74.04	36.72	-90.56	-3,661.82	-9,620.81	8,565.10	8,479.72	85.38	100.314		
9,600.00	7,254.19	7,311.87	7,271.59	76.58	36.72	-90.57	-3,661.81	-9,620.82	8,481.80	8,394.92	86.88	97.630		
9,700.00	7,253.77	7,312.60	7,272.32	79.15	36.72	-90.58	-3,661.79	-9,620.83	8,398.86	8,310.44	88.43	94.983		
9,800.00	7,253.35	7,313.34	7,273.06	81.74	36.73	-90.59	-3,661.77	-9,620.84	8,316.30	8,226.27	90.03	92.374		
9,900.00	7,252.92	7,314.09	7,273.81	84.34	36.73	-90.60	-3,661.76	-9,620.85	8,234.12	8,142.43	91.69	89.807		
10,000.00	7,252.50	7,314.86	7,274.58	86.96	36.73	-90.61	-3,661.74	-9,620.86	8,152.34	8,058.94	93.40	87.285		
10,100.00	7,252.08	7,315.63	7,275.35	89.59	36.73	-90.62	-3,661.73	-9,620.86	8,070.97	7,975.80	95.17	84.809		
10,200.00	7,251.66	7,316.42	7,276.14	92.24	36.74	-90.63	-3,661.71	-9,620.87	7,990.03	7,893.04	96.99	82.381		
10,300.00	7,251.24	7,317.21	7,276.93	94.90	36.74	-90.64	-3,661.69	-9,620.88	7,909.52	7,810.65	98.87	80.002		
10,400.00	7,250.82	7,318.02	7,277.74	97.57	36.74	-90.65	-3,661.67	-9,620.89	7,829.45	7,728.66	100.80	77.674		
10,500.00	7,250.40	7,318.84	7,278.56	100.25	36.75	-90.66	-3,661.66	-9,620.90	7,749.86	7,647.07	102.79	75.398		
10,600.00	7,249.98	7,319.68	7,279.40	102.93	36.75	-90.67	-3,661.64	-9,620.92	7,670.74	7,565.91	104.83	73.174		
10,700.00	7,249.56	7,320.52	7,280.24	105.63	36.75	-90.68	-3,661.62	-9,620.93	7,592.11	7,485.18	106.93	71.003		
10,800.00	7,249.14	7,321.38	7,281.10	108.34	36.76	-90.69	-3,661.60	-9,620.94	7,513.99	7,404.91	109.08	68.885		
10,900.00	7,248.72	7,322.26	7,281.97	111.05	36.76	-90.70	-3,661.58	-9,620.95	7,436.39	7,325.10	111.29	66.819		
11,000.00	7,248.30	7,323.14	7,282.86	113.77	36.76	-90.71	-3,661.56	-9,620.96	7,359.34	7,245.78	113.56	64.807		
11,100.00	7,247.88	7,324.04	7,283.76	116.50	36.76	-90.72	-3,661.54	-9,620.97	7,282.84	7,166.96	115.88	62.848		
11,200.00	7,247.46	7,324.96	7,284.67	119.23	36.77	-90.73	-3,661.52	-9,620.98	7,206.92	7,088.66	118.26	60.941		
11,300.00	7,247.04	7,325.88	7,285.60	121.97	36.77	-90.74	-3,661.50	-9,621.00	7,131.59	7,010.89	120.70	59.086		
11,400.00	7,246.62	7,326.83	7,286.54	124.72	36.77	-90.75	-3,661.48	-9,621.01	7,056.87	6,933.68	123.19	57.282		
11,500.00	7,246.20	7,327.79	7,287.50	127.46	36.78	-90.76	-3,661.46	-9,621.02	6,982.79	6,857.04	125.75	55.530		
11,600.00	7,245.78	7,328.76	7,288.48	130.22	36.78	-90.78	-3,661.44	-9,621.03	6,909.36	6,781.00	128.36	53.828		
11,700.00	7,245.36	7,329.75	7,289.47	132.98	36.78	-90.79	-3,661.41	-9,621.05	6,836.61	6,705.58	131.03	52.176		
11,800.00	7,244.94	7,330.76	7,290.47	135.74	36.79	-90.80	-3,661.39	-9,621.06	6,764.55	6,630.79	133.76	50.573		
11,900.00	7,244.52	7,331.78	7,291.50	138.50	36.79	-90.81	-3,661.37	-9,621.07	6,693.20	6,556.66	136.55	49.018		
12,000.00	7,244.10	7,332.82	7,292.54	141.27	36.80	-90.83	-3,661.34	-9,621.09	6,622.60	6,483.21	139.39	47.510		
12,100.00	7,243.68	7,333.88	7,293.60	144.04	36.80	-90.84	-3,661.32	-9,621.10	6,552.77	6,410.47	142.30	46.049		
12,200.00	7,243.26	7,334.96	7,294.67	146.82	36.80	-90.85	-3,661.29	-9,621.12	6,483.72	6,338.46	145.26	44.634		
12,300.00	7,242.84	7,336.06	7,295.77	149.60	36.81	-90.87	-3,661.27	-9,621.13	6,415.49	6,267.21	148.29	43.264		
12,400.00	7,242.42	7,337.17	7,296.89	152.38	36.81	-90.88	-3,661.24	-9,621.15	6,348.11	6,196.73	151.37	41.937		
12,500.00	7,242.00	7,338.31	7,298.02	155.16	36.81	-90.89	-3,661.22	-9,621.16	6,281.59	6,127.07	154.51	40.654		
12,600.00	7,241.58	7,339.46	7,299.17	157.95	36.82	-90.91	-3,661.19	-9,621.18	6,215.96	6,058.25	157.72	39.412		
12,700.00	7,241.16	7,340.64	7,300.35	160.74	36.82	-90.92	-3,661.16	-9,621.20	6,151.27	5,990.29	160.97	38.213		
12,800.00	7,240.74	7,341.84	7,301.55	163.53	36.83	-90.94	-3,661.13	-9,621.21	6,087.53	5,923.24	164.29	37.053		
12,900.00	7,240.32	7,343.05	7,302.76	166.32	36.83	-90.95	-3,661.10	-9,621.23	6,024.77	5,857.11	167.66	35.933		
13,000.00	7,239.89	7,344.30	7,304.01	169.12	36.84	-90.97	-3,661.07	-9,621.25	5,963.03	5,791.94	171.09	34.852		
13,100.00	7,239.47	7,345.56	7,305.27	171.92	36.84	-90.98	-3,661.04	-9,621.27	5,902.34	5,727.76	174.58	33.809		
13,200.00	7,239.05	7,346.85	7,306.56	174.72	36.85	-91.00	-3,661.01	-9,621.29	5,842.73	5,664.61	178.12	32.803		
13,300.00	7,238.63	7,348.16	7,307.87	177.52	36.85	-91.01	-3,660.98	-9,621.31	5,784.23	5,602.53	181.71	31.833		
13,400.00	7,238.21	7,349.50	7,309.21	180.32	36.85	-91.03	-3,660.94	-9,621.32	5,726.88	5,541.54	185.35	30.898		
13,500.00	7,237.79	7,350.86	7,310.57	183.13	36.86	-91.05	-3,660.91	-9,621.35	5,670.72	5,481.68	189.04	29.998		
13,600.00	7,237.37	7,352.26	7,311.96	185.93	36.86	-91.06	-3,660.88	-9,621.37	5,615.77	5,423.00	192.77	29.132		
13,700.00	7,236.95	7,353.67	7,313.38	188.74	36.87	-91.08	-3,660.84	-9,621.39	5,562.08	5,365.53	196.55	28.298		
13,800.00	7,236.53	7,355.12	7,314.82	191.55	36.87	-91.10	-3,660.80	-9,621.41	5,509.69	5,309.31	200.38	27.497		
13,900.00	7,236.11	7,356.60	7,316.30	194.36	36.88	-91.12	-3,660.77	-9,621.43	5,458.62	5,254.38	204.24	26.727		
14,000.00	7,235.69	7,358.10	7,317.80	197.17	36.88	-91.13	-3,660.73	-9,621.46	5,408.91	5,200.78	208.13	25.988		
14,100.00	7,235.27	7,359.64	7,319.34	199.98	36.89	-91.15	-3,660.69	-9,621.48	5,360.61	5,148.55	212.06	25.278		
14,200.00	7,234.85	7,361.21	7,320.91	202.80	36.90	-91.17	-3,660.65	-9,621.50	5,313.76	5,097.74	216.02	24.598		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 82-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
14,300.00	7,234.43	7,362.81	7,322.51	205.61	36.90	-91.19	-3,660.61	-9,621.53	5,268.38	5,048.38	220.00	23.947	
14,400.00	7,234.01	7,364.44	7,324.14	208.43	36.91	-91.21	-3,660.56	-9,621.55	5,224.53	5,000.52	224.01	23.323	
14,500.00	7,233.59	7,366.11	7,325.81	211.25	36.91	-91.23	-3,660.52	-9,621.58	5,182.23	4,954.20	228.03	22.726	
14,600.00	7,233.17	7,367.82	7,327.52	214.06	36.92	-91.25	-3,660.47	-9,621.61	5,141.53	4,909.47	232.06	22.156	
14,700.00	7,232.75	7,369.56	7,329.26	216.88	36.93	-91.27	-3,660.43	-9,621.64	5,102.47	4,866.37	236.09	21.612	
14,800.00	7,232.33	7,371.34	7,331.04	219.70	36.93	-91.29	-3,660.38	-9,621.67	5,065.07	4,824.95	240.13	21.093	
14,900.00	7,231.91	7,373.17	7,332.86	222.52	36.94	-91.32	-3,660.33	-9,621.70	5,029.39	4,785.24	244.16	20.599	
15,000.00	7,231.49	7,375.03	7,334.73	225.35	36.94	-91.34	-3,660.28	-9,621.73	4,995.46	4,747.28	248.18	20.129	
15,100.00	7,231.07	7,376.94	7,336.63	228.17	36.95	-91.36	-3,660.23	-9,621.76	4,963.31	4,711.13	252.18	19.682	
15,116.21	7,231.00	7,377.25	7,336.94	228.63	36.95	-91.37	-3,660.22	-9,621.76	4,958.26	4,705.44	252.82	19.612	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	875.99	905.04	0.00	5.27	-109.55	-3,143.22	-8,854.04	9,438.91					
100.00	100.00	978.40	1,004.95	0.18	5.79	-109.67	-3,159.07	-8,838.06	9,429.20	9,422.80	6.41	1,472.127		
200.00	200.00	1,035.08	1,060.09	0.61	6.09	-109.74	-3,168.58	-8,829.10	9,419.80	9,412.93	6.87	1,370.595		
300.00	300.00	1,098.00	1,121.48	1.05	6.43	-109.82	-3,178.74	-8,819.72	9,410.98	9,403.46	7.53	1,250.547		
400.00	400.00	1,098.00	1,121.48	1.49	6.43	-109.82	-3,178.74	-8,819.72	9,402.78	9,394.89	7.89	1,191.405		
500.00	500.00	1,156.72	1,178.96	1.93	6.74	-109.89	-3,187.66	-8,811.72	9,395.13	9,386.53	8.60	1,092.423		
600.00	599.98	1,193.00	1,214.58	2.37	6.93	-102.31	-3,192.86	-8,807.22	9,388.62	9,379.41	9.20	1,020.066		
700.00	699.84	1,259.28	1,279.63	2.81	7.29	-102.51	-3,202.75	-8,799.22	9,383.38	9,373.40	9.98	940.626		
800.00	799.45	1,330.72	1,349.58	3.26	7.67	-102.71	-3,214.34	-8,790.49	9,379.25	9,368.46	10.79	869.365		
900.00	898.70	1,404.72	1,422.16	3.70	8.08	-102.91	-3,225.87	-8,781.80	9,376.21	9,364.59	11.62	806.729		
1,000.00	997.47	1,715.62	1,728.23	4.15	9.74	-103.56	-3,265.63	-8,744.64	9,372.73	9,359.03	13.70	684.163		
1,100.00	1,095.78	1,757.00	1,768.95	4.60	9.97	-103.66	-3,270.87	-8,739.47	9,369.58	9,355.21	14.37	652.026		
1,200.00	1,194.05	1,790.67	1,802.09	5.05	10.16	-103.73	-3,275.25	-8,735.43	9,367.14	9,352.13	15.01	624.121		
1,300.00	1,292.33	2,190.83	2,194.86	5.50	12.44	-104.59	-3,329.29	-8,681.92	9,365.08	9,347.40	17.69	529.527		
1,400.00	1,390.61	2,265.52	2,268.07	5.96	12.88	-104.75	-3,338.81	-8,670.59	9,360.14	9,341.57	18.57	504.044		
1,500.00	1,488.89	2,321.00	2,322.65	6.43	13.19	-104.86	-3,344.91	-8,662.69	9,355.59	9,336.25	19.34	483.689		
1,600.00	1,587.16	2,359.25	2,360.33	6.89	13.40	-104.94	-3,348.94	-8,657.52	9,351.65	9,331.63	20.02	467.168		
1,700.00	1,685.44	2,416.00	2,416.25	7.36	13.72	-105.05	-3,355.35	-8,650.28	9,348.54	9,327.75	20.79	449.586		
1,800.00	1,783.72	2,501.01	2,499.83	7.83	14.20	-105.23	-3,366.18	-8,639.16	9,345.90	9,324.15	21.74	429.868		
1,900.00	1,882.00	2,579.80	2,577.18	8.30	14.66	-105.40	-3,376.66	-8,628.43	9,343.14	9,320.48	22.66	412.337		
2,000.00	1,980.27	2,725.25	2,719.90	8.77	15.51	-105.71	-3,396.16	-8,608.38	9,340.41	9,316.44	23.97	389.697		
2,100.00	2,078.55	2,814.37	2,806.87	9.25	16.07	-105.91	-3,410.24	-8,594.95	9,337.53	9,312.55	24.98	373.742		
2,200.00	2,176.83	2,890.00	2,880.83	9.72	16.53	-106.08	-3,421.48	-8,583.86	9,334.83	9,308.92	25.92	360.184		
2,300.00	2,275.11	2,934.98	2,924.97	10.19	16.79	-106.18	-3,427.58	-8,577.67	9,332.63	9,305.98	26.65	350.150		
2,400.00	2,373.38	2,984.00	2,973.18	10.66	17.08	-106.28	-3,433.89	-8,571.48	9,331.15	9,303.74	27.41	340.394		
2,500.00	2,471.66	3,030.30	3,018.72	11.14	17.35	-106.38	-3,439.97	-8,565.82	9,330.26	9,302.10	28.16	331.354		
2,600.00	2,569.94	3,078.00	3,065.54	11.61	17.63	-106.48	-3,446.87	-8,559.83	9,329.82	9,300.91	28.91	322.704		
2,638.86	2,608.12	3,112.61	3,099.54	11.80	17.82	-106.56	-3,451.81	-8,555.60	9,329.76	9,300.47	29.29	318.528		
2,700.00	2,668.22	3,144.99	3,131.45	12.09	18.00	-106.63	-3,455.91	-8,551.98	9,329.86	9,300.10	29.76	313.465		
2,800.00	2,766.49	3,194.52	3,180.44	12.56	18.27	-106.72	-3,461.32	-8,547.01	9,330.47	9,299.96	30.51	305.845		
2,900.00	2,864.77	3,240.93	3,226.40	13.04	18.51	-106.81	-3,466.09	-8,542.75	9,331.66	9,300.44	31.22	298.866		
3,000.00	2,963.05	3,292.84	3,277.85	13.51	18.77	-106.90	-3,471.36	-8,538.31	9,333.44	9,301.47	31.97	291.958		
3,100.00	3,061.33	3,357.00	3,341.37	13.99	19.10	-107.03	-3,478.54	-8,532.84	9,335.73	9,302.95	32.78	284.825		
3,200.00	3,159.60	3,200.00	3,476.27	14.46	18.30	-107.28	-3,493.43	-8,521.57	9,338.37	9,305.91	32.46	287.682		
3,300.00	3,257.88	3,586.94	3,569.11	14.94	20.29	-107.46	-3,503.49	-8,513.23	9,340.39	9,305.46	34.92	267.445		
3,400.00	3,356.16	3,640.00	3,621.64	15.41	20.57	-107.56	-3,509.47	-8,508.79	9,343.06	9,307.38	35.68	261.864		
3,500.00	3,454.43	4,083.64	4,057.72	15.89	23.12	-108.50	-3,569.87	-8,456.00	9,342.94	9,304.24	38.70	241.433		
3,600.00	3,552.71	4,135.16	4,108.24	16.36	23.44	-108.61	-3,577.13	-8,448.99	9,342.62	9,303.13	39.49	236.588		
3,609.64	3,562.19	4,140.56	4,113.54	16.41	23.47	-108.62	-3,577.86	-8,448.28	9,342.62	9,303.05	39.57	236.123		
3,700.00	3,650.99	4,191.47	4,163.62	16.84	23.76	-108.73	-3,584.44	-8,441.87	9,342.82	9,302.53	40.30	231.857		
3,800.00	3,749.27	4,239.47	4,210.88	17.32	24.04	-108.83	-3,590.52	-8,436.10	9,343.56	9,302.50	41.06	227.577		
3,900.00	3,847.54	4,301.00	4,271.26	17.79	24.40	-108.96	-3,599.58	-8,428.52	9,344.95	9,303.05	41.90	223.045		
4,000.00	3,945.82	4,330.07	4,299.75	18.27	24.58	-109.03	-3,604.14	-8,424.97	9,346.89	9,304.34	42.55	219.673		
4,100.00	4,044.10	4,396.00	4,364.53	18.75	24.96	-109.17	-3,613.91	-8,417.56	9,349.49	9,306.07	43.42	215.335		
4,200.00	4,142.38	4,439.80	4,407.66	19.22	25.21	-109.26	-3,620.06	-8,413.00	9,352.57	9,308.43	44.14	211.863		
4,300.00	4,240.65	4,491.00	4,458.11	19.70	25.50	-109.37	-3,627.06	-8,407.88	9,356.10	9,311.18	44.91	208.323		
4,400.00	4,338.93	4,549.66	4,516.02	20.18	25.82	-109.48	-3,634.72	-8,402.47	9,360.13	9,314.42	45.71	204.783		
4,500.00	4,437.21	4,585.00	4,550.97	20.65	26.01	-109.55	-3,639.08	-8,399.55	9,364.78	9,318.41	46.37	201.949		
4,600.00	4,535.49	4,636.18	4,601.67	21.13	26.27	-109.65	-3,644.97	-8,395.85	9,370.04	9,322.93	47.10	198.920		
4,700.00	4,633.76	4,680.00	4,645.17	21.61	26.49	-109.73	-3,649.56	-8,393.26	9,375.95	9,328.16	47.80	196.164		
4,800.00	4,732.04	4,718.64	4,683.58	22.08	26.67	-109.79	-3,653.35	-8,391.35	9,382.51	9,334.06	48.45	193.670		
4,900.00	4,830.32	4,925.45	4,889.56	22.56	27.60	-110.12	-3,669.63	-8,382.89	9,389.15	9,339.26	49.89	188.202		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,928.60	4,983.12	4,947.08	23.04	27.84	-110.21	-3,673.18	-8,380.71	9,395.20	9,344.59	50.61	185.638		
5,100.00	5,026.87	5,038.16	5,002.00	23.51	28.07	-110.29	-3,676.31	-8,379.04	9,401.73	9,350.41	51.31	183.223		
5,200.00	5,125.15	5,200.15	5,163.90	23.99	28.67	-110.49	-3,679.86	-8,376.82	9,408.05	9,355.64	52.41	179.518		
5,300.00	5,223.43	5,265.33	5,229.08	24.47	28.89	-110.55	-3,679.80	-8,376.67	9,414.38	9,361.28	53.10	177.308		
5,400.00	5,321.71	5,325.26	5,289.01	24.94	29.08	-110.62	-3,679.90	-8,376.71	9,421.12	9,367.36	53.76	175.235		
5,500.00	5,419.98	5,405.47	5,369.22	25.42	29.35	-110.70	-3,680.25	-8,376.96	9,428.22	9,373.72	54.50	172.984		
5,600.00	5,518.26	5,494.21	5,457.95	25.90	29.64	-110.80	-3,680.73	-8,377.29	9,435.46	9,380.19	55.28	170.699		
5,700.00	5,616.54	5,582.92	5,546.66	26.38	29.93	-110.89	-3,681.29	-8,377.68	9,442.84	9,386.79	56.05	168.479		
5,800.00	5,714.82	5,688.14	5,651.88	26.85	30.28	-111.01	-3,681.98	-8,378.19	9,450.30	9,393.42	56.88	166.157		
5,900.00	5,813.09	5,806.48	5,770.22	27.33	30.66	-111.13	-3,682.42	-8,378.70	9,457.61	9,399.86	57.75	163.772		
6,000.00	5,911.37	5,924.96	5,888.70	27.81	31.05	-111.25	-3,682.49	-8,379.13	9,464.74	9,406.12	58.62	161.452		
6,100.00	6,009.65	6,015.92	5,979.65	28.28	31.37	-111.35	-3,682.72	-8,379.32	9,471.87	9,412.45	59.42	159.410		
6,200.00	6,107.93	6,110.84	6,074.58	28.76	31.70	-111.45	-3,683.34	-8,379.33	9,479.05	9,418.82	60.23	157.393		
6,300.00	6,206.20	6,215.98	6,179.71	29.24	32.07	-111.57	-3,684.48	-8,379.12	9,486.29	9,425.21	61.08	155.306		
6,400.00	6,304.48	6,363.42	6,327.14	29.72	32.63	-111.73	-3,686.28	-8,378.12	9,493.23	9,431.10	62.14	152.783		
6,500.00	6,402.76	6,510.78	6,474.47	30.19	33.19	-111.90	-3,688.14	-8,376.21	9,499.70	9,436.51	63.19	150.338		
6,600.00	6,501.04	6,557.06	6,520.74	30.67	33.38	-111.96	-3,688.96	-8,375.65	9,506.36	9,442.52	63.84	148.900		
6,700.00	6,599.31	6,625.11	6,588.77	31.15	33.65	-112.04	-3,690.33	-8,374.82	9,513.34	9,448.76	64.58	147.303		
6,800.00	6,697.50	6,692.99	6,656.62	31.63	33.92	-91.08	-3,691.97	-8,374.07	9,519.05	9,453.73	65.32	145.723		
6,900.00	6,794.18	6,763.81	6,727.42	32.10	34.20	-65.62	-3,693.98	-8,373.38	9,513.20	9,447.12	66.08	143.968		
7,000.00	6,886.96	6,875.36	6,838.91	32.55	34.64	-55.23	-3,696.96	-8,372.41	9,493.87	9,426.87	67.00	141.695		
7,100.00	6,973.57	6,979.63	6,943.17	32.99	35.05	-51.23	-3,699.18	-8,371.59	9,461.43	9,393.55	67.89	139.371		
7,200.00	7,051.87	7,083.43	7,046.95	33.41	35.46	-50.67	-3,700.91	-8,370.80	9,416.77	9,348.01	68.77	136.941		
7,300.00	7,119.93	7,183.50	7,146.99	33.85	35.86	-52.63	-3,702.50	-8,369.69	9,361.00	9,291.37	69.63	134.432		
7,400.00	7,176.09	7,264.86	7,228.33	34.39	36.19	-56.91	-3,703.79	-8,368.50	9,295.65	9,225.21	70.44	131.965		
7,500.00	7,218.95	7,325.66	7,289.13	35.09	36.43	-63.72	-3,704.74	-8,367.43	9,222.47	9,151.28	71.19	129.553		
7,600.00	7,247.46	7,364.70	7,328.14	35.98	36.59	-73.37	-3,705.35	-8,366.66	9,143.39	9,071.51	71.87	127.215		
7,700.00	7,260.92	7,381.33	7,344.77	37.04	36.65	-85.78	-3,705.61	-8,366.32	9,060.41	8,987.91	72.50	124.979		
7,800.00	7,261.75	7,379.52	7,342.96	38.23	36.65	-91.36	-3,705.59	-8,366.36	8,975.75	8,902.68	73.07	122.837		
7,900.00	7,261.33	7,375.93	7,339.37	39.59	36.63	-91.31	-3,705.53	-8,366.43	8,891.27	8,817.57	73.70	120.636		
8,000.00	7,260.91	7,372.38	7,335.83	41.10	36.62	-91.27	-3,705.48	-8,366.50	8,807.12	8,732.72	74.41	118.363		
8,100.00	7,260.49	7,368.88	7,332.32	42.75	36.60	-91.23	-3,705.42	-8,366.58	8,723.31	8,648.12	75.18	116.027		
8,200.00	7,260.07	7,365.41	7,328.86	44.53	36.59	-91.19	-3,705.37	-8,366.65	8,639.83	8,563.80	76.03	113.637		
8,300.00	7,259.65	7,361.98	7,325.43	46.41	36.58	-91.15	-3,705.31	-8,366.72	8,556.71	8,479.76	76.95	111.201		
8,400.00	7,259.23	7,358.60	7,322.05	48.39	36.56	-91.11	-3,705.26	-8,366.79	8,473.96	8,396.02	77.94	108.728		
8,500.00	7,258.81	7,355.25	7,318.70	50.45	36.55	-91.07	-3,705.21	-8,366.85	8,391.57	8,312.58	79.00	106.228		
8,600.00	7,258.39	7,351.93	7,315.39	52.59	36.54	-91.03	-3,705.16	-8,366.92	8,309.58	8,229.45	80.12	103.708		
8,700.00	7,257.97	7,348.66	7,312.11	54.79	36.52	-90.99	-3,705.10	-8,366.98	8,227.98	8,146.66	81.32	101.178		
8,800.00	7,257.55	7,345.42	7,308.87	57.05	36.51	-90.95	-3,705.05	-8,367.05	8,146.79	8,064.20	82.59	98.644		
8,900.00	7,257.13	7,342.22	7,305.67	59.36	36.50	-90.91	-3,705.00	-8,367.11	8,066.02	7,982.10	83.92	96.115		
9,000.00	7,256.71	7,339.05	7,302.50	61.72	36.48	-90.87	-3,704.95	-8,367.17	7,985.69	7,900.37	85.32	93.597		
9,100.00	7,256.29	7,335.91	7,299.37	64.12	36.47	-90.83	-3,704.90	-8,367.23	7,905.80	7,819.02	86.79	91.096		
9,200.00	7,255.87	7,332.81	7,296.27	66.56	36.46	-90.80	-3,704.86	-8,367.29	7,826.38	7,738.06	88.32	88.617		
9,300.00	7,255.45	7,329.75	7,293.21	69.02	36.45	-90.76	-3,704.81	-8,367.35	7,747.43	7,657.52	89.91	86.167		
9,400.00	7,255.03	7,326.71	7,290.17	71.52	36.43	-90.72	-3,704.76	-8,367.41	7,668.97	7,577.40	91.57	83.749		
9,500.00	7,254.61	7,323.71	7,287.17	74.04	36.42	-90.69	-3,704.71	-8,367.46	7,591.02	7,497.73	93.29	81.368		
9,600.00	7,254.19	7,320.74	7,284.20	76.58	36.41	-90.65	-3,704.67	-8,367.52	7,513.59	7,418.51	95.08	79.026		
9,700.00	7,253.77	7,317.80	7,281.27	79.15	36.40	-90.62	-3,704.62	-8,367.57	7,436.69	7,339.77	96.92	76.726		
9,800.00	7,253.35	7,314.89	7,278.36	81.74	36.39	-90.58	-3,704.58	-8,367.63	7,360.36	7,261.52	98.83	74.472		
9,900.00	7,252.92	7,312.02	7,275.48	84.34	36.38	-90.55	-3,704.53	-8,367.68	7,284.59	7,183.78	100.80	72.265		
10,000.00	7,252.50	7,309.17	7,272.64	86.96	36.36	-90.51	-3,704.49	-8,367.73	7,209.41	7,106.58	102.83	70.107		
10,100.00	7,252.08	7,306.35	7,269.82	89.59	36.35	-90.48	-3,704.44	-8,367.78	7,134.84	7,029.92	104.93	67.999		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,303.56	7,267.03	92.24	36.34	-90.45	-3,704.40	-8,367.83	7,060.90	6,953.82	107.08	65.942		
10,300.00	7,251.24	7,300.80	7,264.27	94.90	36.33	-90.41	-3,704.35	-8,367.88	6,987.61	6,878.32	109.29	63.937		
10,400.00	7,250.82	7,298.07	7,261.54	97.57	36.32	-90.38	-3,704.31	-8,367.93	6,914.98	6,803.42	111.56	61.984		
10,500.00	7,250.40	7,295.36	7,258.83	100.25	36.31	-90.35	-3,704.27	-8,367.98	6,843.05	6,729.16	113.89	60.084		
10,600.00	7,249.98	7,292.69	7,256.16	102.93	36.30	-90.32	-3,704.23	-8,368.03	6,771.82	6,655.54	116.28	58.237		
10,700.00	7,249.56	7,290.04	7,253.51	105.63	36.29	-90.28	-3,704.18	-8,368.07	6,701.33	6,582.61	118.73	56.442		
10,800.00	7,249.14	7,287.41	7,250.88	108.34	36.28	-90.25	-3,704.14	-8,368.12	6,631.60	6,510.37	121.24	54.700		
10,900.00	7,248.72	7,284.81	7,248.28	111.05	36.27	-90.22	-3,704.10	-8,368.16	6,562.65	6,438.85	123.80	53.010		
11,000.00	7,248.30	7,282.24	7,245.71	113.77	36.26	-90.19	-3,704.06	-8,368.21	6,494.51	6,368.09	126.42	51.371		
11,100.00	7,247.88	7,279.69	7,243.17	116.50	36.25	-90.16	-3,704.02	-8,368.25	6,427.20	6,298.10	129.10	49.784		
11,200.00	7,247.46	7,277.17	7,240.64	119.23	36.24	-90.13	-3,703.98	-8,368.29	6,360.75	6,228.91	131.84	48.246		
11,300.00	7,247.04	7,274.67	7,238.15	121.97	36.23	-90.10	-3,703.94	-8,368.33	6,295.19	6,160.56	134.63	46.758		
11,400.00	7,246.62	7,272.20	7,235.67	124.72	36.22	-90.07	-3,703.90	-8,368.38	6,230.54	6,093.06	137.48	45.319		
11,500.00	7,246.20	7,269.75	7,233.22	127.46	36.21	-90.04	-3,703.87	-8,368.42	6,166.83	6,026.45	140.39	43.928		
11,600.00	7,245.78	7,267.32	7,230.80	130.22	36.20	-90.01	-3,703.83	-8,368.46	6,104.10	5,960.76	143.34	42.584		
11,700.00	7,245.36	7,264.92	7,228.39	132.98	36.19	-89.98	-3,703.79	-8,368.50	6,042.37	5,896.01	146.35	41.286		
11,800.00	7,244.94	7,262.53	7,226.01	135.74	36.18	-89.95	-3,703.75	-8,368.53	5,981.67	5,832.25	149.42	40.034		
11,900.00	7,244.52	7,260.18	7,223.65	138.50	36.17	-89.93	-3,703.72	-8,368.57	5,922.04	5,769.51	152.53	38.825		
12,000.00	7,244.10	7,257.84	7,221.32	141.27	36.16	-89.90	-3,703.68	-8,368.61	5,863.51	5,707.81	155.69	37.661		
12,100.00	7,243.68	7,255.52	7,219.00	144.04	36.15	-89.87	-3,703.64	-8,368.65	5,806.11	5,647.20	158.91	36.538		
12,200.00	7,243.26	7,253.23	7,216.71	146.82	36.14	-89.84	-3,703.61	-8,368.68	5,749.87	5,587.71	162.16	35.457		
12,300.00	7,242.84	7,250.96	7,214.44	149.60	36.13	-89.82	-3,703.57	-8,368.72	5,694.83	5,529.37	165.46	34.417		
12,400.00	7,242.42	7,248.71	7,212.19	152.38	36.12	-89.79	-3,703.53	-8,368.76	5,641.03	5,472.22	168.81	33.417		
12,500.00	7,242.00	7,246.48	7,209.96	155.16	36.11	-89.76	-3,703.50	-8,368.79	5,588.50	5,416.31	172.19	32.455		
12,600.00	7,241.58	7,244.27	7,207.75	157.95	36.11	-89.74	-3,703.46	-8,368.83	5,537.28	5,361.67	175.62	31.531		
12,700.00	7,241.16	7,242.08	7,205.56	160.74	36.10	-89.71	-3,703.43	-8,368.86	5,487.40	5,308.33	179.07	30.643		
12,800.00	7,240.74	7,239.91	7,203.39	163.53	36.09	-89.68	-3,703.40	-8,368.89	5,438.90	5,256.34	182.56	29.792		
12,900.00	7,240.32	7,237.76	7,201.24	166.32	36.08	-89.66	-3,703.36	-8,368.93	5,391.82	5,205.74	186.08	28.976		
13,000.00	7,239.89	7,235.63	7,199.11	169.12	36.07	-89.63	-3,703.33	-8,368.96	5,346.20	5,156.57	189.62	28.194		
13,100.00	7,239.47	7,233.52	7,197.00	171.92	36.06	-89.61	-3,703.29	-8,368.99	5,302.06	5,108.88	193.18	27.446		
13,200.00	7,239.05	7,231.42	7,194.91	174.72	36.05	-89.58	-3,703.26	-8,369.02	5,259.46	5,062.69	196.77	26.729		
13,300.00	7,238.63	7,229.35	7,192.84	177.52	36.05	-89.56	-3,703.23	-8,369.05	5,218.43	5,018.06	200.36	26.045		
13,400.00	7,238.21	7,227.29	7,190.78	180.32	36.04	-89.53	-3,703.20	-8,369.08	5,179.00	4,975.03	203.97	25.391		
13,500.00	7,237.79	7,225.26	7,188.74	183.13	36.03	-89.51	-3,703.16	-8,369.11	5,141.21	4,933.64	207.57	24.768		
13,600.00	7,237.37	7,223.24	7,186.72	185.93	36.02	-89.48	-3,703.13	-8,369.14	5,105.10	4,893.92	211.18	24.174		
13,700.00	7,236.95	7,221.23	7,184.72	188.74	36.01	-89.46	-3,703.10	-8,369.17	5,070.71	4,855.92	214.79	23.608		
13,800.00	7,236.53	7,219.25	7,182.74	191.55	36.01	-89.44	-3,703.07	-8,369.20	5,038.06	4,819.69	218.38	23.070		
13,900.00	7,236.11	7,217.28	7,180.77	194.36	36.00	-89.41	-3,703.04	-8,369.23	5,007.20	4,785.25	221.95	22.560		
14,000.00	7,235.69	7,215.33	7,178.82	197.17	35.99	-89.39	-3,703.01	-8,369.26	4,978.16	4,752.65	225.51	22.075		
14,100.00	7,235.27	7,213.39	7,176.88	199.98	35.98	-89.37	-3,702.98	-8,369.29	4,950.97	4,721.93	229.04	21.617		
14,200.00	7,234.85	7,211.48	7,174.97	202.80	35.98	-89.34	-3,702.95	-8,369.31	4,925.65	4,693.12	232.53	21.183		
14,300.00	7,234.43	7,209.57	7,173.06	205.61	35.97	-89.32	-3,702.92	-8,369.34	4,902.25	4,666.26	235.98	20.774		
14,400.00	7,234.01	7,207.69	7,171.18	208.43	35.96	-89.30	-3,702.89	-8,369.37	4,880.78	4,641.38	239.39	20.388		
14,500.00	7,233.59	7,205.82	7,169.31	211.25	35.95	-89.27	-3,702.86	-8,369.39	4,861.27	4,618.52	242.75	20.025		
14,600.00	7,233.17	7,203.96	7,167.46	214.06	35.95	-89.25	-3,702.83	-8,369.42	4,843.75	4,597.69	246.06	19.685		
14,700.00	7,232.75	7,202.12	7,165.62	216.88	35.94	-89.23	-3,702.80	-8,369.44	4,828.23	4,578.94	249.30	19.367		
14,800.00	7,232.33	7,200.30	7,163.79	219.70	35.93	-89.21	-3,702.77	-8,369.47	4,814.75	4,562.28	252.47	19.070		
14,900.00	7,231.91	7,198.49	7,161.99	222.52	35.92	-89.19	-3,702.74	-8,369.49	4,803.30	4,547.73	255.57	18.794		
15,000.00	7,231.49	7,196.70	7,160.19	225.35	35.92	-89.17	-3,702.71	-8,369.52	4,793.92	4,535.32	258.59	18.538		
15,100.00	7,231.07	7,194.92	7,158.41	228.17	35.91	-89.14	-3,702.69	-8,369.54	4,786.60	4,525.07	261.53	18.302		
15,116.21	7,231.00	7,194.63	7,158.13	228.63	35.91	-89.14	-3,702.68	-8,369.55	4,785.61	4,523.61	262.00	18.266	CC, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	66.00	0.00	3.28	-135.29	-3,406.38	-3,372.32	4,793.78				
100.00	100.00	34.00	100.00	0.18	3.33	-135.29	-3,406.38	-3,372.32	4,793.33	4,789.82	3.51	1,366.089	
200.00	200.00	134.00	200.00	0.61	4.40	-135.29	-3,406.38	-3,372.32	4,793.33	4,788.31	5.01	955.987	
300.00	300.00	234.00	300.00	1.05	7.21	-135.29	-3,406.38	-3,372.32	4,793.33	4,785.06	8.27	579.921	
400.00	400.00	334.00	400.00	1.49	10.44	-135.29	-3,406.38	-3,372.32	4,793.33	4,781.39	11.93	401.628	
500.00	500.00	434.00	500.00	1.93	13.80	-135.29	-3,406.38	-3,372.32	4,793.33	4,777.59	15.73	304.696	
600.00	599.98	533.98	599.98	2.37	17.21	-127.54	-3,406.38	-3,372.32	4,794.39	4,774.81	19.58	244.857	
700.00	699.84	633.84	699.84	2.81	20.64	-127.54	-3,406.38	-3,372.32	4,797.58	4,774.13	23.45	204.563	
800.00	799.45	733.45	799.45	3.26	24.08	-127.54	-3,406.38	-3,372.32	4,802.90	4,775.57	27.33	175.715	
900.00	898.70	832.70	898.70	3.70	27.52	-127.53	-3,406.38	-3,372.32	4,810.36	4,779.15	31.21	154.111	
1,000.00	997.47	931.47	997.47	4.15	30.95	-127.53	-3,406.38	-3,372.32	4,819.97	4,784.88	35.09	137.371	
1,100.00	1,095.78	1,029.78	1,095.78	4.60	34.36	-127.64	-3,406.38	-3,372.32	4,831.24	4,792.29	38.95	124.027	
1,200.00	1,194.05	1,128.05	1,194.05	5.05	37.78	-127.81	-3,406.38	-3,372.32	4,842.68	4,799.85	42.82	113.087	
1,300.00	1,292.33	1,226.33	1,292.33	5.50	41.20	-127.98	-3,406.38	-3,372.32	4,854.15	4,807.45	46.70	103.949	
1,400.00	1,390.61	1,324.61	1,390.61	5.96	44.62	-128.15	-3,406.38	-3,372.32	4,865.67	4,815.09	50.58	96.204	
1,500.00	1,488.89	1,422.89	1,488.89	6.43	48.04	-128.32	-3,406.38	-3,372.32	4,877.23	4,822.77	54.46	89.558	
1,600.00	1,587.16	1,521.16	1,587.16	6.89	51.46	-128.49	-3,406.38	-3,372.32	4,888.83	4,830.49	58.34	83.793	
1,700.00	1,685.44	1,619.44	1,685.44	7.36	54.89	-128.66	-3,406.38	-3,372.32	4,900.47	4,838.24	62.23	78.746	
1,800.00	1,783.72	1,717.72	1,783.72	7.83	58.31	-128.82	-3,406.38	-3,372.32	4,912.16	4,846.04	66.12	74.291	
1,900.00	1,882.00	1,816.00	1,882.00	8.30	61.74	-128.99	-3,406.38	-3,372.32	4,923.89	4,853.88	70.01	70.330	
2,000.00	1,980.27	1,914.27	1,980.27	8.77	65.16	-129.15	-3,406.38	-3,372.32	4,935.66	4,861.76	73.90	66.786	
2,100.00	2,078.55	2,012.55	2,078.55	9.25	68.59	-129.32	-3,406.38	-3,372.32	4,947.47	4,869.68	77.80	63.596	
2,200.00	2,176.83	2,110.83	2,176.83	9.72	72.02	-129.48	-3,406.38	-3,372.32	4,959.32	4,877.63	81.69	60.710	
2,300.00	2,275.11	2,209.11	2,275.11	10.19	75.45	-129.64	-3,406.38	-3,372.32	4,971.22	4,885.63	85.58	58.086	
2,400.00	2,373.38	2,307.38	2,373.38	10.66	78.87	-129.81	-3,406.38	-3,372.32	4,983.15	4,893.67	89.48	55.691	
2,500.00	2,471.66	2,405.66	2,471.66	11.14	82.30	-129.97	-3,406.38	-3,372.32	4,995.12	4,901.75	93.37	53.496	
2,600.00	2,569.94	2,503.94	2,569.94	11.61	85.73	-130.13	-3,406.38	-3,372.32	5,007.13	4,909.86	97.27	51.477	
2,700.00	2,668.22	2,602.22	2,668.22	12.09	89.16	-130.29	-3,406.38	-3,372.32	5,019.18	4,918.02	101.17	49.614	
2,800.00	2,766.49	2,700.49	2,766.49	12.56	92.59	-130.45	-3,406.38	-3,372.32	5,031.27	4,926.21	105.06	47.889	
2,900.00	2,864.77	2,801.23	2,864.77	13.04	96.10	-130.60	-3,406.38	-3,372.32	5,043.40	4,934.36	109.04	46.251	
3,000.00	2,963.05	2,902.95	2,963.05	13.51	99.65	-130.76	-3,406.38	-3,372.32	5,055.57	4,942.51	113.06	44.715	
3,100.00	3,061.33	3,004.67	3,061.33	13.99	103.20	-130.92	-3,406.38	-3,372.32	5,067.77	4,950.70	117.08	43.285	
3,200.00	3,159.60	3,106.40	3,159.60	14.46	106.75	-131.07	-3,406.38	-3,372.32	5,080.02	4,958.92	121.10	41.950	
3,300.00	3,257.88	3,208.12	3,257.88	14.94	110.30	-131.23	-3,406.38	-3,372.32	5,092.30	4,967.18	125.11	40.701	
3,400.00	3,356.16	3,309.84	3,356.16	15.41	113.85	-131.38	-3,406.38	-3,372.32	5,104.62	4,975.48	129.13	39.530	
3,500.00	3,454.43	3,388.43	3,454.43	15.89	116.59	-131.54	-3,406.38	-3,372.32	5,116.97	4,984.63	132.34	38.664	
3,600.00	3,552.71	3,486.71	3,552.71	16.36	120.02	-131.69	-3,406.38	-3,372.32	5,129.36	4,993.12	136.24	37.649	
3,700.00	3,650.99	3,584.99	3,650.99	16.84	123.45	-131.84	-3,406.38	-3,372.32	5,141.79	5,001.65	140.14	36.691	
3,800.00	3,749.27	3,683.27	3,749.27	17.32	126.88	-131.99	-3,406.38	-3,372.32	5,154.26	5,010.22	144.04	35.784	
3,900.00	3,847.54	3,781.54	3,847.54	17.79	130.31	-132.15	-3,406.38	-3,372.32	5,166.76	5,018.82	147.94	34.926	
4,000.00	3,945.82	3,879.82	3,945.82	18.27	133.74	-132.30	-3,406.38	-3,372.32	5,179.30	5,027.46	151.83	34.112	
4,100.00	4,044.10	3,978.10	4,044.10	18.75	137.17	-132.45	-3,406.38	-3,372.32	5,191.87	5,036.14	155.73	33.339	
4,200.00	4,142.38	4,076.38	4,142.38	19.22	140.60	-132.59	-3,406.38	-3,372.32	5,204.48	5,044.85	159.63	32.603	
4,300.00	4,240.65	4,174.65	4,240.65	19.70	144.03	-132.74	-3,406.38	-3,372.32	5,217.12	5,053.59	163.53	31.903	
4,400.00	4,338.93	4,272.93	4,338.93	20.18	147.46	-132.89	-3,406.38	-3,372.32	5,229.80	5,062.37	167.43	31.236	
4,500.00	4,437.21	4,371.21	4,437.21	20.65	150.89	-133.04	-3,406.38	-3,372.32	5,242.51	5,071.18	171.32	30.600	
4,600.00	4,535.49	4,469.49	4,535.49	21.13	154.32	-133.18	-3,406.38	-3,372.32	5,255.25	5,080.03	175.22	29.992	
4,700.00	4,633.76	4,567.76	4,633.76	21.61	157.75	-133.33	-3,406.38	-3,372.32	5,268.04	5,088.91	179.12	29.410	
4,800.00	4,732.04	4,666.04	4,732.04	22.08	161.18	-133.47	-3,406.38	-3,372.32	5,280.85	5,097.83	183.02	28.854	
4,900.00	4,830.32	4,764.32	4,830.32	22.56	164.61	-133.62	-3,406.38	-3,372.32	5,293.70	5,106.78	186.92	28.321	
5,000.00	4,928.60	4,862.60	4,928.60	23.04	168.04	-133.76	-3,406.38	-3,372.32	5,306.58	5,115.76	190.82	27.810	
5,100.00	5,026.87	4,960.87	5,026.87	23.51	171.47	-133.90	-3,406.38	-3,372.32	5,319.49	5,124.78	194.71	27.319	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,059.15	5,125.15	23.99	174.90	-134.04	-3,406.38	-3,372.32	5,332.44	5,133.82	198.61	26.848		
5,300.00	5,223.43	5,157.43	5,223.43	24.47	178.33	-134.18	-3,406.38	-3,372.32	5,345.42	5,142.91	202.51	26.396		
5,400.00	5,321.71	5,255.71	5,321.71	24.94	181.76	-134.32	-3,406.38	-3,372.32	5,358.43	5,152.02	206.41	25.960		
5,500.00	5,419.98	5,353.98	5,419.98	25.42	185.19	-134.46	-3,406.38	-3,372.32	5,371.47	5,161.16	210.31	25.541		
5,600.00	5,518.26	5,452.26	5,518.26	25.90	188.62	-134.60	-3,406.38	-3,372.32	5,384.55	5,170.34	214.21	25.137		
5,700.00	5,616.54	5,550.54	5,616.54	26.38	192.05	-134.74	-3,406.38	-3,372.32	5,397.65	5,179.55	218.10	24.748		
5,800.00	5,714.82	5,648.82	5,714.82	26.85	195.48	-134.88	-3,406.38	-3,372.32	5,410.79	5,188.79	222.00	24.373		
5,900.00	5,813.09	5,747.09	5,813.09	27.33	198.91	-135.02	-3,406.38	-3,372.32	5,423.96	5,198.06	225.90	24.010		
6,000.00	5,911.37	5,845.37	5,911.37	27.81	202.34	-135.15	-3,406.38	-3,372.32	5,437.16	5,207.36	229.80	23.661		
6,100.00	6,009.65	5,943.65	6,009.65	28.28	205.77	-135.29	-3,406.38	-3,372.32	5,450.39	5,216.70	233.70	23.323		
6,200.00	6,107.93	6,041.93	6,107.93	28.76	209.20	-135.42	-3,406.38	-3,372.32	5,463.65	5,226.06	237.59	22.996		
6,300.00	6,206.20	6,140.20	6,206.20	29.24	212.63	-135.56	-3,406.38	-3,372.32	5,476.94	5,235.45	241.49	22.680		
6,400.00	6,304.48	6,238.48	6,304.48	29.72	216.07	-135.69	-3,406.38	-3,372.32	5,490.27	5,244.88	245.39	22.374		
6,500.00	6,402.76	6,336.76	6,402.76	30.19	219.50	-135.83	-3,406.38	-3,372.32	5,503.62	5,254.33	249.29	22.077		
6,600.00	6,501.04	6,435.04	6,501.04	30.67	222.93	-135.96	-3,406.38	-3,372.32	5,517.00	5,263.81	253.19	21.790		
6,700.00	6,599.31	6,533.31	6,599.31	31.15	226.36	-136.09	-3,406.38	-3,372.32	5,530.41	5,273.33	257.08	21.512		
6,800.00	6,697.50	6,631.50	6,697.50	31.63	229.78	-114.89	-3,406.38	-3,372.32	5,542.74	5,281.76	260.98	21.238		
6,900.00	6,794.18	6,728.18	6,794.18	32.10	233.16	-89.01	-3,406.38	-3,372.32	5,546.90	5,282.07	264.83	20.945		
7,000.00	6,886.96	6,820.96	6,886.96	32.55	236.40	-78.23	-3,406.38	-3,372.32	5,541.69	5,273.15	268.54	20.636		
7,100.00	6,973.57	6,907.57	6,973.57	32.99	239.42	-73.84	-3,406.38	-3,372.32	5,527.48	5,255.43	272.05	20.318		
7,200.00	7,051.87	6,985.87	7,051.87	33.41	242.15	-72.66	-3,406.38	-3,372.32	5,504.88	5,229.59	275.29	19.997		
7,300.00	7,119.93	7,053.93	7,119.93	33.85	244.53	-73.48	-3,406.38	-3,372.32	5,474.75	5,196.53	278.22	19.678		
7,400.00	7,176.09	7,110.09	7,176.09	34.39	246.49	-75.74	-3,406.38	-3,372.32	5,438.11	5,157.29	280.82	19.365		
7,500.00	7,218.95	7,152.95	7,218.95	35.09	247.99	-79.09	-3,406.38	-3,372.32	5,396.15	5,113.08	283.07	19.063		
7,600.00	7,247.46	7,181.46	7,247.46	35.98	248.98	-83.29	-3,406.38	-3,372.32	5,350.11	5,065.16	284.95	18.776		
7,700.00	7,260.92	7,205.08	7,260.92	37.04	249.81	-88.09	-3,406.38	-3,372.32	5,301.27	5,014.50	286.77	18.486		
7,800.00	7,261.75	7,204.25	7,261.75	38.23	249.78	-90.14	-3,406.38	-3,372.32	5,251.29	4,963.44	287.85	18.243		
7,900.00	7,261.33	7,204.67	7,261.33	39.59	249.79	-90.13	-3,406.38	-3,372.32	5,202.53	4,913.42	289.11	17.995		
8,000.00	7,260.91	7,205.09	7,260.91	41.10	249.81	-90.13	-3,406.38	-3,372.32	5,155.25	4,864.72	290.53	17.744		
8,100.00	7,260.49	7,205.51	7,260.49	42.75	249.82	-90.12	-3,406.38	-3,372.32	5,109.49	4,817.41	292.08	17.493		
8,200.00	7,260.07	7,205.93	7,260.07	44.53	249.84	-90.12	-3,406.38	-3,372.32	5,065.29	4,771.52	293.77	17.243		
8,300.00	7,259.65	7,206.35	7,259.65	46.41	249.85	-90.11	-3,406.38	-3,372.32	5,022.69	4,727.12	295.57	16.993		
8,400.00	7,259.23	7,206.77	7,259.23	48.39	249.86	-90.11	-3,406.38	-3,372.32	4,981.74	4,684.25	297.49	16.746		
8,500.00	7,258.81	7,207.19	7,258.81	50.45	249.88	-90.10	-3,406.38	-3,372.32	4,942.47	4,642.96	299.52	16.502		
8,600.00	7,258.39	7,207.61	7,258.39	52.59	249.89	-90.09	-3,406.38	-3,372.32	4,904.93	4,603.29	301.64	16.261		
8,700.00	7,257.97	7,208.03	7,257.97	54.79	249.91	-90.09	-3,406.38	-3,372.32	4,869.15	4,565.30	303.84	16.025		
8,800.00	7,257.55	7,208.45	7,257.55	57.05	249.92	-90.08	-3,406.38	-3,372.32	4,835.17	4,529.04	306.13	15.794		
8,900.00	7,257.13	7,208.87	7,257.13	59.36	249.94	-90.08	-3,406.38	-3,372.32	4,803.03	4,494.55	308.49	15.570		
9,000.00	7,256.71	7,209.29	7,256.71	61.72	249.95	-90.07	-3,406.38	-3,372.32	4,772.78	4,461.87	310.91	15.351		
9,100.00	7,256.29	7,209.71	7,256.29	64.12	249.97	-90.07	-3,406.38	-3,372.32	4,744.44	4,431.05	313.39	15.139		
9,200.00	7,255.87	7,189.87	7,255.87	66.56	249.27	-90.06	-3,406.38	-3,372.32	4,718.05	4,402.84	315.21	14.968		
9,300.00	7,255.45	7,189.45	7,255.45	69.02	249.26	-90.06	-3,406.38	-3,372.32	4,693.64	4,375.90	317.75	14.772		
9,400.00	7,255.03	7,189.03	7,255.03	71.52	249.25	-90.05	-3,406.38	-3,372.32	4,671.25	4,350.93	320.32	14.583		
9,500.00	7,254.61	7,188.61	7,254.61	74.04	249.23	-90.05	-3,406.38	-3,372.32	4,650.90	4,327.98	322.92	14.403		
9,600.00	7,254.19	7,188.19	7,254.19	76.58	249.22	-90.04	-3,406.38	-3,372.32	4,632.61	4,307.07	325.54	14.231		
9,700.00	7,253.77	7,187.77	7,253.77	79.15	249.20	-90.04	-3,406.38	-3,372.32	4,616.43	4,288.25	328.18	14.067		
9,800.00	7,253.35	7,187.35	7,253.35	81.74	249.19	-90.03	-3,406.38	-3,372.32	4,602.36	4,271.54	330.82	13.912		
9,900.00	7,252.92	7,186.92	7,252.92	84.34	249.17	-90.03	-3,406.38	-3,372.32	4,590.42	4,256.96	333.46	13.766		
10,000.00	7,252.50	7,186.50	7,252.50	86.96	249.16	-90.02	-3,406.38	-3,372.32	4,580.64	4,244.53	336.10	13.629		
10,100.00	7,252.08	7,186.08	7,252.08	89.59	249.14	-90.02	-3,406.38	-3,372.32	4,573.02	4,234.29	338.73	13.500		
10,200.00	7,251.66	7,185.66	7,251.66	92.24	249.13	-90.01	-3,406.38	-3,372.32	4,567.58	4,226.23	341.35	13.381		
10,300.00	7,251.24	7,185.24	7,251.24	94.90	249.11	-90.01	-3,406.38	-3,372.32	4,564.33	4,220.39	343.94	13.271		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,398.61	7,250.83	7,184.83	7,250.83	97.53	249.10	-90.00	-3,406.38	-3,372.32	4,563.26	4,216.79	346.47	13.171	CC	
10,400.00	7,250.82	7,184.82	7,250.82	97.57	249.10	-90.00	-3,406.38	-3,372.32	4,563.26	4,216.75	346.51	13.169		
10,500.00	7,250.40	7,184.40	7,250.40	100.25	249.08	-89.99	-3,406.38	-3,372.32	4,564.39	4,215.35	349.04	13.077	ES	
10,600.00	7,249.98	7,183.98	7,249.98	102.93	249.07	-89.99	-3,406.38	-3,372.32	4,567.70	4,216.16	351.54	12.994		
10,700.00	7,249.56	7,183.56	7,249.56	105.63	249.05	-89.98	-3,406.38	-3,372.32	4,573.20	4,219.21	353.99	12.919		
10,800.00	7,249.14	7,183.14	7,249.14	108.34	249.04	-89.98	-3,406.38	-3,372.32	4,580.88	4,224.47	356.40	12.853		
10,900.00	7,248.72	7,182.72	7,248.72	111.05	249.03	-89.97	-3,406.38	-3,372.32	4,590.72	4,231.95	358.77	12.796		
11,000.00	7,248.30	7,182.30	7,248.30	113.77	249.01	-89.97	-3,406.38	-3,372.32	4,602.72	4,241.64	361.08	12.747		
11,100.00	7,247.88	7,181.88	7,247.88	116.50	249.00	-89.96	-3,406.38	-3,372.32	4,616.85	4,253.51	363.33	12.707		
11,200.00	7,247.46	7,181.46	7,247.46	119.23	248.98	-89.96	-3,406.38	-3,372.32	4,633.09	4,267.56	365.53	12.675		
11,300.00	7,247.04	7,181.04	7,247.04	121.97	248.97	-89.95	-3,406.38	-3,372.32	4,651.43	4,283.77	367.67	12.651		
11,400.00	7,246.62	7,180.62	7,246.62	124.72	248.95	-89.95	-3,406.38	-3,372.32	4,671.84	4,302.10	369.74	12.635		
11,500.00	7,246.20	7,180.20	7,246.20	127.46	248.94	-89.94	-3,406.38	-3,372.32	4,694.29	4,322.54	371.75	12.627		
11,600.00	7,245.78	7,179.78	7,245.78	130.22	248.92	-89.94	-3,406.38	-3,372.32	4,718.75	4,345.06	373.70	12.627	SF	
11,700.00	7,245.36	7,179.36	7,245.36	132.98	248.91	-89.93	-3,406.38	-3,372.32	4,745.20	4,369.62	375.57	12.635		
11,800.00	7,244.94	7,178.94	7,244.94	135.74	248.89	-89.93	-3,406.38	-3,372.32	4,773.59	4,396.21	377.39	12.649		
11,900.00	7,244.52	7,178.52	7,244.52	138.50	248.88	-89.92	-3,406.38	-3,372.32	4,803.90	4,424.77	379.13	12.671		
12,000.00	7,244.10	7,178.10	7,244.10	141.27	248.86	-89.92	-3,406.38	-3,372.32	4,836.09	4,455.28	380.80	12.700		
12,100.00	7,243.68	7,177.68	7,243.68	144.04	248.85	-89.91	-3,406.38	-3,372.32	4,870.11	4,487.70	382.41	12.735		
12,200.00	7,243.26	7,177.26	7,243.26	146.82	248.83	-89.90	-3,406.38	-3,372.32	4,905.94	4,521.99	383.95	12.777		
12,300.00	7,242.84	7,176.84	7,242.84	149.60	248.82	-89.90	-3,406.38	-3,372.32	4,943.54	4,558.11	385.43	12.826		
12,400.00	7,242.42	7,176.42	7,242.42	152.38	248.81	-89.89	-3,406.38	-3,372.32	4,982.85	4,596.02	386.83	12.881		
12,500.00	7,242.00	7,176.00	7,242.00	155.16	248.79	-89.89	-3,406.38	-3,372.32	5,023.85	4,635.67	388.18	12.942		
12,600.00	7,241.58	7,175.58	7,241.58	157.95	248.78	-89.88	-3,406.38	-3,372.32	5,066.49	4,677.04	389.46	13.009		
12,700.00	7,241.16	7,175.16	7,241.16	160.74	248.76	-89.88	-3,406.38	-3,372.32	5,110.74	4,720.06	390.67	13.082		
12,800.00	7,240.74	7,174.74	7,240.74	163.53	248.75	-89.87	-3,406.38	-3,372.32	5,156.54	4,764.71	391.83	13.160		
12,900.00	7,240.32	7,174.32	7,240.32	166.32	248.73	-89.87	-3,406.38	-3,372.32	5,203.86	4,810.93	392.93	13.244		
13,000.00	7,239.89	7,173.89	7,239.89	169.12	248.72	-89.86	-3,406.38	-3,372.32	5,252.66	4,858.69	393.97	13.333		
13,100.00	7,239.47	7,173.47	7,239.47	171.92	248.70	-89.86	-3,406.38	-3,372.32	5,302.90	4,907.95	394.95	13.427		
13,200.00	7,239.05	7,173.05	7,239.05	174.72	248.69	-89.85	-3,406.38	-3,372.32	5,354.53	4,958.65	395.88	13.526		
13,300.00	7,238.63	7,172.63	7,238.63	177.52	248.67	-89.85	-3,406.38	-3,372.32	5,407.52	5,010.76	396.76	13.629		
13,400.00	7,238.21	7,172.21	7,238.21	180.32	248.66	-89.84	-3,406.38	-3,372.32	5,461.82	5,064.24	397.58	13.738		
13,500.00	7,237.79	7,171.79	7,237.79	183.13	248.64	-89.84	-3,406.38	-3,372.32	5,517.41	5,119.04	398.36	13.850		
13,600.00	7,237.37	7,171.37	7,237.37	185.93	248.63	-89.83	-3,406.38	-3,372.32	5,574.23	5,175.14	399.09	13.967		
13,700.00	7,236.95	7,170.95	7,236.95	188.74	248.61	-89.83	-3,406.38	-3,372.32	5,632.26	5,232.48	399.78	14.088		
13,800.00	7,236.53	7,170.53	7,236.53	191.55	248.60	-89.82	-3,406.38	-3,372.32	5,691.45	5,291.02	400.42	14.214		
13,900.00	7,236.11	7,170.11	7,236.11	194.36	248.59	-89.82	-3,406.38	-3,372.32	5,751.77	5,350.74	401.03	14.343		
14,000.00	7,235.69	7,169.69	7,235.69	197.17	248.57	-89.81	-3,406.38	-3,372.32	5,813.18	5,411.59	401.59	14.475		
14,100.00	7,235.27	7,169.27	7,235.27	199.98	248.56	-89.80	-3,406.38	-3,372.32	5,875.66	5,473.54	402.11	14.612		
14,200.00	7,234.85	7,168.85	7,234.85	202.80	248.54	-89.80	-3,406.38	-3,372.32	5,939.16	5,536.56	402.60	14.752		
14,300.00	7,234.43	7,168.43	7,234.43	205.61	248.53	-89.79	-3,406.38	-3,372.32	6,003.66	5,600.60	403.06	14.895		
14,400.00	7,234.01	7,168.01	7,234.01	208.43	248.51	-89.79	-3,406.38	-3,372.32	6,069.11	5,665.63	403.48	15.042		
14,500.00	7,233.59	7,167.59	7,233.59	211.25	248.50	-89.78	-3,406.38	-3,372.32	6,135.50	5,731.63	403.87	15.192		
14,600.00	7,233.17	7,167.17	7,233.17	214.06	248.48	-89.78	-3,406.38	-3,372.32	6,202.80	5,798.56	404.23	15.345		
14,700.00	7,232.75	7,166.75	7,232.75	216.88	248.47	-89.77	-3,406.38	-3,372.32	6,270.96	5,866.39	404.57	15.500		
14,800.00	7,232.33	7,166.33	7,232.33	219.70	248.45	-89.77	-3,406.38	-3,372.32	6,339.97	5,935.09	404.87	15.659		
14,900.00	7,231.91	7,165.91	7,231.91	222.52	248.44	-89.76	-3,406.38	-3,372.32	6,409.79	6,004.64	405.16	15.821		
15,000.00	7,231.49	7,165.49	7,231.49	225.35	248.42	-89.76	-3,406.38	-3,372.32	6,480.41	6,075.00	405.41	15.985		
15,100.00	7,231.07	7,165.07	7,231.07	228.17	248.41	-89.75	-3,406.38	-3,372.32	6,551.79	6,146.14	405.65	16.151		
15,116.21	7,231.00	7,165.00	7,231.00	228.63	248.41	-89.75	-3,406.38	-3,372.32	6,563.43	6,157.75	405.69	16.179		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	12.00	0.00	3.28	30.26	837.54	488.67	969.75					
100.00	100.00	85.83	97.83	0.18	3.29	30.26	837.62	488.73	969.78	966.32	3.46	280.171		
200.00	200.00	185.80	197.80	0.61	3.33	30.27	837.78	488.93	970.02	966.07	3.95	245.836		
300.00	300.00	288.31	300.31	1.05	3.44	30.28	837.80	489.13	970.13	965.64	4.49	216.160		
322.42	322.42	311.37	323.37	1.15	3.47	30.28	837.78	489.14	970.12	965.50	4.62	210.121		
400.00	400.00	382.10	394.10	1.49	3.58	30.30	837.80	489.56	970.37	965.30	5.07	191.508		
500.00	500.00	484.54	496.54	1.93	3.77	30.35	837.90	490.57	970.95	965.25	5.70	170.298		
600.00	599.98	580.35	592.33	2.37	3.99	38.21	837.90	491.50	970.08	963.72	6.36	152.543		
700.00	699.84	683.13	695.10	2.81	4.26	38.53	837.87	493.03	966.71	959.64	7.07	136.793		
800.00	799.45	784.61	796.58	3.26	4.55	39.02	837.53	494.33	960.27	952.47	7.80	123.124		
900.00	898.70	880.73	892.69	3.70	4.84	39.65	837.30	495.49	951.24	942.71	8.54	111.411		
1,000.00	997.47	982.07	994.02	4.15	5.17	40.50	837.05	496.98	939.78	930.47	9.31	100.900		
1,100.00	1,095.78	1,076.24	1,088.18	4.60	5.49	41.32	836.93	498.06	926.37	916.29	10.08	91.879		
1,200.00	1,194.05	1,174.70	1,186.64	5.05	5.83	42.15	837.06	499.47	913.37	902.49	10.88	83.976		
1,300.00	1,292.33	1,278.95	1,290.87	5.50	6.21	43.07	836.72	500.96	900.20	888.50	11.70	76.918		
1,400.00	1,390.61	1,378.69	1,390.61	5.96	6.58	43.96	836.10	501.86	886.71	874.18	12.52	70.795		
1,500.00	1,488.89	1,476.82	1,488.73	6.43	6.94	44.86	835.57	502.60	873.40	860.05	13.35	65.422		
1,600.00	1,587.16	1,574.29	1,586.19	6.89	7.31	45.80	834.79	503.72	860.35	846.17	14.18	60.667		
1,700.00	1,685.44	1,671.79	1,683.68	7.36	7.69	46.76	834.19	504.75	847.63	832.61	15.02	56.434		
1,800.00	1,783.72	1,770.90	1,782.79	7.83	8.08	47.74	833.81	505.51	835.15	819.28	15.87	52.629		
1,900.00	1,882.00	1,874.96	1,886.84	8.30	8.49	48.80	833.12	506.07	822.56	805.83	16.74	49.145		
2,000.00	1,980.27	1,972.83	1,984.71	8.77	8.87	49.80	832.38	505.90	809.71	792.12	17.59	46.032		
2,100.00	2,078.55	2,071.55	2,083.43	9.25	9.26	50.80	832.00	505.55	797.26	778.81	18.45	43.213		
2,200.00	2,176.83	2,167.28	2,179.16	9.72	9.64	51.82	831.52	505.32	785.06	765.75	19.30	40.669		
2,300.00	2,275.11	2,262.70	2,274.58	10.19	10.03	52.84	831.60	505.11	773.55	753.39	20.16	38.369		
2,400.00	2,373.38	2,359.74	2,371.62	10.66	10.42	53.93	831.65	505.31	762.58	741.55	21.03	36.267		
2,500.00	2,471.66	2,460.84	2,472.72	11.14	10.83	55.08	831.77	505.38	751.86	729.95	21.91	34.320		
2,600.00	2,569.94	2,559.29	2,571.16	11.61	11.23	56.22	831.83	504.95	741.03	718.25	22.78	32.528		
2,700.00	2,668.22	2,656.43	2,668.30	12.09	11.62	57.35	832.23	504.55	730.74	707.09	23.65	30.892		
2,800.00	2,766.49	2,756.58	2,768.46	12.56	12.03	58.54	832.68	504.05	720.72	696.19	24.54	29.372		
2,900.00	2,864.77	2,858.69	2,870.56	13.04	12.45	59.79	832.90	503.18	710.60	685.17	25.43	27.946		
3,000.00	2,963.05	2,957.98	2,969.85	13.51	12.86	61.06	832.66	502.13	700.37	674.06	26.31	26.619		
3,100.00	3,061.33	3,059.11	3,070.96	13.99	13.28	62.34	832.77	500.71	690.41	663.21	27.20	25.383		
3,200.00	3,159.60	3,157.20	3,169.04	14.46	13.68	63.61	832.79	498.82	680.33	652.24	28.08	24.225		
3,300.00	3,257.88	3,254.47	3,266.29	14.94	14.09	64.91	832.89	497.32	670.95	641.98	28.97	23.162		
3,400.00	3,356.16	3,354.09	3,365.90	15.41	14.50	66.33	832.48	495.97	661.83	631.98	29.86	22.167		
3,500.00	3,454.43	3,452.26	3,464.06	15.89	14.91	67.75	832.06	494.48	652.97	622.23	30.74	21.239		
3,600.00	3,552.71	3,547.35	3,559.14	16.36	15.31	69.17	831.73	493.23	644.77	613.14	31.63	20.387		
3,700.00	3,650.99	3,640.64	3,652.43	16.84	15.70	70.61	831.60	492.65	637.69	605.19	32.50	19.619		
3,800.00	3,749.27	3,736.44	3,748.23	17.32	16.10	72.09	832.02	492.54	631.78	598.39	33.39	18.922		
3,900.00	3,847.54	3,836.82	3,848.61	17.79	16.52	73.66	832.51	492.33	626.26	591.97	34.29	18.266		
4,000.00	3,945.82	3,936.84	3,948.63	18.27	16.94	75.24	832.89	491.77	620.86	585.68	35.18	17.647		
4,100.00	4,044.10	4,034.92	4,046.70	18.75	17.35	76.81	833.33	491.11	615.86	579.79	36.07	17.072		
4,200.00	4,142.38	4,133.11	4,144.89	19.22	17.76	78.43	833.58	490.63	611.46	574.50	36.97	16.541		
4,300.00	4,240.65	4,232.13	4,243.90	19.70	18.17	80.09	833.76	490.01	607.42	569.56	37.86	16.044		
4,400.00	4,338.93	4,329.37	4,341.15	20.18	18.58	81.74	834.00	489.51	604.02	565.27	38.75	15.588		
4,500.00	4,437.21	4,427.45	4,439.22	20.65	19.00	83.41	834.28	489.05	601.20	561.56	39.64	15.167		
4,600.00	4,535.49	4,523.93	4,535.70	21.13	19.40	85.07	834.62	488.77	599.11	558.59	40.52	14.784		
4,700.00	4,633.76	4,620.65	4,632.42	21.61	19.81	86.73	835.14	488.81	597.92	556.51	41.41	14.440		
4,800.00	4,732.04	4,719.40	4,731.17	22.08	20.23	88.43	835.66	488.82	597.23	554.94	42.30	14.119		
4,830.39	4,761.90	4,748.06	4,759.83	22.23	20.35	88.92	835.83	488.87	597.18	554.62	42.56	14.030 CC		
4,900.00	4,830.32	4,813.88	4,825.65	22.56	20.62	90.04	836.34	489.17	597.47	554.30	43.17	13.840 ES		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,928.60	4,910.09	4,921.85	23.04	21.03	91.65	837.51	490.02	598.78	554.73	44.05	13.594		
5,100.00	5,026.87	5,012.93	5,024.68	23.51	21.46	93.33	838.97	490.63	600.32	555.36	44.95	13.354		
5,200.00	5,125.15	5,112.91	5,124.65	23.99	21.89	95.00	839.87	490.82	601.93	556.09	45.85	13.129		
5,300.00	5,223.43	5,215.02	5,226.75	24.47	22.32	96.76	840.12	490.55	603.61	556.86	46.75	12.912		
5,400.00	5,321.71	5,315.70	5,327.44	24.94	22.74	98.49	840.39	489.78	605.32	557.67	47.64	12.705		
5,500.00	5,419.98	5,415.06	5,426.79	25.42	23.16	100.21	840.25	488.79	607.37	558.84	48.53	12.515		
5,600.00	5,518.26	5,517.07	5,528.78	25.90	23.60	102.00	839.89	487.20	609.43	560.00	49.43	12.330		
5,700.00	5,616.54	5,611.91	5,623.62	26.38	24.00	103.64	839.61	485.85	612.17	561.88	50.29	12.172		
5,800.00	5,714.82	5,711.59	5,723.29	26.85	24.42	105.35	839.33	484.58	615.62	564.44	51.18	12.029		
5,900.00	5,813.09	5,814.04	5,825.72	27.33	24.85	107.07	839.18	482.71	619.06	566.98	52.08	11.888		
6,000.00	5,911.37	5,910.64	5,922.30	27.81	25.26	108.67	839.20	480.87	622.92	569.97	52.94	11.766		
6,100.00	6,009.65	6,009.93	6,021.58	28.28	25.68	110.28	839.34	479.06	627.34	573.51	53.82	11.655		
6,200.00	6,107.93	6,111.25	6,122.88	28.76	26.11	111.90	839.57	476.90	631.92	577.21	54.72	11.549		
6,300.00	6,206.20	6,206.73	6,218.33	29.24	26.52	113.43	839.43	474.83	637.07	581.49	55.57	11.463		
6,400.00	6,304.48	6,308.79	6,320.37	29.72	26.95	115.03	839.39	472.49	642.55	586.08	56.47	11.379		
6,500.00	6,402.76	6,410.57	6,422.11	30.19	27.39	116.62	839.40	469.57	647.95	590.60	57.36	11.297		
6,600.00	6,501.04	6,509.95	6,521.43	30.67	27.81	118.12	839.70	466.52	653.54	595.31	58.24	11.223		
6,700.00	6,599.31	6,614.16	6,625.57	31.15	28.25	119.65	840.45	462.78	658.95	599.81	59.14	11.143		
6,800.00	6,697.50	6,712.72	6,724.05	31.63	28.67	121.16	841.12	458.76	666.02	606.01	60.01	11.099 SF		
6,900.00	6,794.18	6,807.29	6,818.55	32.10	29.07	122.69	841.48	455.08	673.90	615.05	60.86	11.071		
7,000.00	6,886.96	6,908.66	6,919.82	32.55	29.51	124.16	841.96	450.78	681.09	625.38	61.72	11.052		
7,100.00	6,973.57	7,001.29	7,012.34	32.99	29.90	125.66	842.71	446.24	688.37	636.86	62.50	11.029		
7,200.00	7,051.87	7,082.45	7,093.39	33.41	30.25	127.11	843.32	442.02	695.82	648.02	63.20	11.005		
7,300.00	7,119.93	7,167.02	7,177.81	33.85	30.61	128.51	843.90	437.10	703.42	659.48	63.85	10.981		
7,400.00	7,176.09	7,232.52	7,243.14	34.39	30.89	129.86	844.57	432.44	711.67	670.73	64.35	10.957		
7,500.00	7,218.95	7,279.08	7,289.58	35.09	31.10	131.16	844.90	429.19	719.47	681.57	64.72	10.933		
7,600.00	7,247.46	7,314.17	7,324.59	35.98	31.25	132.41	845.12	426.75	727.87	692.01	64.97	10.909		
7,700.00	7,260.92	7,334.46	7,344.83	37.04	31.34	133.51	845.26	425.35	736.87	702.11	65.10	10.885		
7,800.00	7,261.75	7,342.21	7,352.56	38.23	31.37	134.46	845.31	424.81	746.37	711.71	65.15	10.861		
7,900.00	7,261.33	7,348.71	7,359.04	39.59	31.40	135.26	845.35	424.36	756.37	720.81	65.19	10.837		
8,000.00	7,260.91	7,355.20	7,365.52	41.10	31.43	135.91	845.39	423.91	766.37	729.31	65.24	10.813		
8,100.00	7,260.49	7,361.70	7,372.01	42.75	31.46	136.41	845.43	423.46	776.37	737.81	65.29	10.789		
8,200.00	7,260.07	7,368.20	7,378.49	44.53	31.48	136.76	845.47	423.01	786.37	746.31	65.34	10.765		
8,300.00	7,259.65	7,374.69	7,384.97	46.41	31.51	137.06	845.51	422.56	796.37	754.81	65.40	10.741		
8,400.00	7,259.23	7,381.19	7,391.45	48.39	31.54	137.31	845.56	422.11	806.37	763.31	65.46	10.717		
8,500.00	7,258.81	7,387.69	7,397.93	50.45	31.57	137.51	845.60	421.66	816.37	771.81	65.52	10.693		
8,600.00	7,258.39	7,394.19	7,404.41	52.59	31.60	137.66	845.64	421.21	826.37	780.31	65.58	10.669		
8,700.00	7,257.97	7,400.68	7,410.90	54.79	31.63	137.76	845.68	420.76	836.37	788.81	65.64	10.645		
8,800.00	7,257.55	7,407.18	7,417.38	57.05	31.65	137.81	845.72	420.31	846.37	797.31	65.70	10.621		
8,900.00	7,257.13	7,413.68	7,423.86	59.36	31.68	137.81	845.77	419.86	856.37	805.81	65.77	10.597		
9,000.00	7,256.71	7,420.18	7,430.34	61.72	31.71	137.76	845.81	419.41	866.37	814.31	65.83	10.573		
9,100.00	7,256.29	7,426.67	7,436.82	64.12	31.74	137.56	845.85	418.96	876.37	822.81	65.90	10.549		
9,200.00	7,255.87	7,433.17	7,443.30	66.56	31.77	137.31	845.89	418.51	886.37	831.31	65.97	10.525		
9,300.00	7,255.45	7,439.67	7,449.78	69.02	31.80	136.91	845.93	418.06	896.37	839.81	66.04	10.501		
9,400.00	7,255.03	7,446.16	7,456.27	71.52	31.82	136.46	845.98	417.61	906.37	848.31	66.11	10.477		
9,500.00	7,254.61	7,452.66	7,462.75	74.04	31.85	135.91	846.02	417.16	916.37	856.81	66.18	10.453		
9,600.00	7,254.19	7,459.16	7,469.23	76.58	31.88	135.26	846.06	416.71	926.37	865.31	66.25	10.429		
9,700.00	7,253.77	7,443.00	7,453.11	79.15	31.81	134.51	845.96	416.26	936.37	873.81	66.32	10.405		
9,800.00	7,253.35	7,443.00	7,453.11	81.74	31.81	133.66	845.96	415.81	946.37	882.31	66.39	10.381		
9,900.00	7,252.92	7,443.00	7,453.11	84.34	31.81	132.71	845.96	415.36	956.37	890.81	66.46	10.357		
10,000.00	7,252.50	7,443.00	7,453.11	86.96	31.81	131.76	845.96	414.91	966.37	899.31	66.53	10.333		
10,100.00	7,252.08	7,443.00	7,453.11	89.59	31.81	130.71	845.96	414.46	976.37	907.81	66.60	10.309		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,443.00	7,453.11	92.24	31.81	-116.43	845.96	417.83	3,686.14	3,619.74	66.40	55.518		
10,300.00	7,251.24	7,443.00	7,453.11	94.90	31.81	-116.43	845.96	417.83	3,785.51	3,719.07	66.44	56.980		
10,400.00	7,250.82	7,443.00	7,453.11	97.57	31.81	-116.43	845.96	417.83	3,884.91	3,818.44	66.48	58.439		
10,500.00	7,250.40	7,443.00	7,453.11	100.25	31.81	-116.43	845.96	417.83	3,984.35	3,917.83	66.52	59.897		
10,600.00	7,249.98	7,443.00	7,453.11	102.93	31.81	-116.43	845.96	417.83	4,083.81	4,017.25	66.56	61.353		
10,700.00	7,249.56	7,443.00	7,453.11	105.63	31.81	-116.43	845.96	417.83	4,183.30	4,116.69	66.61	62.806		
10,800.00	7,249.14	7,443.00	7,453.11	108.34	31.81	-116.43	845.96	417.83	4,282.81	4,216.16	66.65	64.257		
10,900.00	7,248.72	7,443.00	7,453.11	111.05	31.81	-116.43	845.96	417.83	4,382.34	4,315.64	66.70	65.706		
11,000.00	7,248.30	7,443.00	7,453.11	113.77	31.81	-116.43	845.96	417.83	4,481.90	4,415.15	66.74	67.152		
11,100.00	7,247.88	7,443.00	7,453.11	116.50	31.81	-116.43	845.96	417.83	4,581.47	4,514.68	66.79	68.596		
11,200.00	7,247.46	7,443.00	7,453.11	119.23	31.81	-116.43	845.96	417.83	4,681.06	4,614.22	66.84	70.037		
11,300.00	7,247.04	7,443.00	7,453.11	121.97	31.81	-116.43	845.96	417.83	4,780.67	4,713.78	66.89	71.475		
11,400.00	7,246.62	7,443.00	7,453.11	124.72	31.81	-116.43	845.96	417.83	4,880.29	4,813.36	66.94	72.911		
11,500.00	7,246.20	7,443.00	7,453.11	127.46	31.81	-116.43	845.96	417.83	4,979.93	4,912.95	66.99	74.344		
11,600.00	7,245.78	7,443.00	7,453.11	130.22	31.81	-116.43	845.96	417.83	5,079.59	5,012.55	67.04	75.774		
11,700.00	7,245.36	7,443.00	7,453.11	132.98	31.81	-116.43	845.96	417.83	5,179.25	5,112.17	67.09	77.201		
11,800.00	7,244.94	7,443.00	7,453.11	135.74	31.81	-116.43	845.96	417.83	5,278.93	5,211.79	67.14	78.625		
11,900.00	7,244.52	7,443.00	7,453.11	138.50	31.81	-116.43	845.96	417.83	5,378.63	5,311.43	67.19	80.046		
12,000.00	7,244.10	7,443.00	7,453.11	141.27	31.81	-116.43	845.96	417.83	5,478.33	5,411.08	67.25	81.464		
12,100.00	7,243.68	7,443.00	7,453.11	144.04	31.81	-116.43	845.96	417.83	5,578.04	5,510.74	67.30	82.878		
12,200.00	7,243.26	7,443.00	7,453.11	146.82	31.81	-116.43	845.96	417.83	5,677.77	5,610.41	67.36	84.290		
12,300.00	7,242.84	7,443.00	7,453.11	149.60	31.81	-116.43	845.96	417.83	5,777.50	5,710.08	67.42	85.698		
12,400.00	7,242.42	7,443.00	7,453.11	152.38	31.81	-116.43	845.96	417.83	5,877.24	5,809.77	67.47	87.103		
12,500.00	7,242.00	7,443.00	7,453.11	155.16	31.81	-116.43	845.96	417.83	5,976.99	5,909.46	67.53	88.504		
12,600.00	7,241.58	7,443.00	7,453.11	157.95	31.81	-116.43	845.96	417.83	6,076.75	6,009.16	67.59	89.902		
12,700.00	7,241.16	7,443.00	7,453.11	160.74	31.81	-116.43	845.96	417.83	6,176.52	6,108.87	67.65	91.297		
12,800.00	7,240.74	7,443.00	7,453.11	163.53	31.81	-116.43	845.96	417.83	6,276.29	6,208.58	67.71	92.687		
12,900.00	7,240.32	7,443.00	7,453.11	166.32	31.81	-116.43	845.96	417.83	6,376.08	6,308.30	67.78	94.075		
13,000.00	7,239.89	7,443.00	7,453.11	169.12	31.81	-116.43	845.96	417.83	6,475.86	6,408.02	67.84	95.459		
13,100.00	7,239.47	7,443.00	7,453.11	171.92	31.81	-116.43	845.96	417.83	6,575.66	6,507.75	67.90	96.839		
13,200.00	7,239.05	7,443.00	7,453.11	174.72	31.81	-116.43	845.96	417.83	6,675.46	6,607.49	67.97	98.215		
13,300.00	7,238.63	7,443.00	7,453.11	177.52	31.81	-116.43	845.96	417.83	6,775.27	6,707.23	68.03	99.587		
13,400.00	7,238.21	7,443.00	7,453.11	180.32	31.81	-116.43	845.96	417.83	6,875.08	6,806.98	68.10	100.956		
13,500.00	7,237.79	7,443.00	7,453.11	183.13	31.81	-116.43	845.96	417.83	6,974.90	6,906.73	68.17	102.321		
13,600.00	7,237.37	7,443.00	7,453.11	185.93	31.81	-116.43	845.96	417.83	7,074.72	7,006.48	68.23	103.682		
13,700.00	7,236.95	7,443.00	7,453.11	188.74	31.81	-116.43	845.96	417.83	7,174.55	7,106.24	68.30	105.039		
13,800.00	7,236.53	7,443.00	7,453.11	191.55	31.81	-116.43	845.96	417.83	7,274.38	7,206.00	68.37	106.393		
13,900.00	7,236.11	7,443.00	7,453.11	194.36	31.81	-116.43	845.96	417.83	7,374.21	7,305.77	68.44	107.742		
14,000.00	7,235.69	7,443.00	7,453.11	197.17	31.81	-116.43	845.96	417.83	7,474.06	7,405.54	68.51	109.087		
14,100.00	7,235.27	7,443.00	7,453.11	199.98	31.81	-116.43	845.96	417.83	7,573.90	7,505.32	68.59	110.428		
14,200.00	7,234.85	7,443.00	7,453.11	202.80	31.81	-116.43	845.96	417.83	7,673.75	7,605.09	68.66	111.765		
14,300.00	7,234.43	7,443.00	7,453.11	205.61	31.81	-116.43	845.96	417.83	7,773.60	7,704.87	68.73	113.098		
14,400.00	7,234.01	7,443.00	7,453.11	208.43	31.81	-116.43	845.96	417.83	7,873.46	7,804.65	68.81	114.427		
14,500.00	7,233.59	7,443.00	7,453.11	211.25	31.81	-116.43	845.96	417.83	7,973.32	7,904.44	68.88	115.751		
14,600.00	7,233.17	7,443.00	7,453.11	214.06	31.81	-116.43	845.96	417.83	8,073.19	8,004.23	68.96	117.072		
14,700.00	7,232.75	7,443.00	7,453.11	216.88	31.81	-116.43	845.96	417.83	8,173.05	8,104.02	69.04	118.388		
14,800.00	7,232.33	7,443.00	7,453.11	219.70	31.81	-116.43	845.96	417.83	8,272.92	8,203.81	69.11	119.700		
14,900.00	7,231.91	7,443.00	7,453.11	222.52	31.81	-116.43	845.96	417.83	8,372.80	8,303.61	69.19	121.008		
15,000.00	7,231.49	7,443.00	7,453.11	225.35	31.81	-116.43	845.96	417.83	8,472.68	8,403.40	69.27	122.311		
15,100.00	7,231.07	7,443.00	7,453.11	228.17	31.81	-116.43	845.96	417.83	8,572.56	8,503.20	69.35	123.610		
15,116.21	7,231.00	7,443.00	7,453.11	228.63	31.81	-116.43	845.96	417.83	8,588.75	8,519.38	69.36	123.820		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	22.00	0.00	3.28	112.52	-215.29	519.29	562.58					
100.00	100.00	80.42	102.42	0.18	3.29	112.46	-214.74	519.33	561.98	558.52	3.46	162.274		
200.00	200.00	182.89	204.88	0.61	3.33	112.32	-213.13	519.26	561.32	557.37	3.95	142.145		
300.00	300.00	283.17	305.15	1.05	3.43	112.21	-211.84	518.79	560.40	555.91	4.49	124.881		
400.00	400.00	380.84	402.81	1.49	3.58	112.12	-210.70	518.47	559.65	554.58	5.07	110.393		
500.00	500.00	478.65	500.61	1.93	3.76	112.00	-209.53	518.63	559.36	553.66	5.69	98.228		
505.19	505.19	483.73	505.69	1.95	3.78	119.74	-209.47	518.65	559.35	553.63	5.73	97.654	CC, ES	
600.00	599.98	578.92	600.87	2.37	3.99	119.74	-208.19	519.07	560.13	553.77	6.36	88.060		
700.00	699.84	677.67	699.61	2.81	4.25	119.99	-206.64	519.60	562.64	555.59	7.05	79.759		
800.00	799.45	777.48	799.40	3.26	4.53	120.52	-205.23	520.25	567.11	559.33	7.78	72.924		
900.00	898.70	875.67	897.58	3.70	4.83	121.26	-203.58	521.04	573.47	564.95	8.52	67.324		
1,000.00	997.47	974.48	996.37	4.15	5.15	122.25	-202.11	521.95	582.00	572.72	9.28	62.704		
1,100.00	1,095.78	1,073.74	1,095.62	4.60	5.49	123.54	-200.66	522.77	592.17	582.11	10.06	58.836		
1,200.00	1,194.05	1,172.61	1,194.48	5.05	5.83	124.83	-199.16	523.49	602.65	591.79	10.86	55.492		
1,300.00	1,292.33	1,273.20	1,295.05	5.50	6.19	126.13	-197.74	524.01	613.28	601.61	11.67	52.532		
1,400.00	1,390.61	1,371.05	1,392.89	5.96	6.55	127.33	-196.13	524.38	623.98	611.49	12.49	49.963		
1,500.00	1,488.89	1,470.18	1,492.01	6.43	6.92	128.53	-194.73	524.78	635.09	621.78	13.32	47.693		
1,600.00	1,587.16	1,570.57	1,592.39	6.89	7.31	129.73	-193.53	524.77	646.23	632.07	14.16	45.651		
1,700.00	1,685.44	1,670.36	1,692.17	7.36	7.69	130.89	-192.22	524.50	657.37	642.37	15.00	43.827		
1,800.00	1,783.72	1,766.85	1,788.66	7.83	8.07	132.02	-191.35	523.98	668.78	652.94	15.83	42.241		
1,900.00	1,882.00	1,864.96	1,886.76	8.30	8.45	133.12	-190.55	523.78	680.75	664.07	16.68	40.820		
2,000.00	1,980.27	1,964.51	1,986.30	8.77	8.85	134.19	-189.61	523.49	692.83	675.30	17.53	39.518		
2,100.00	2,078.55	2,062.15	2,083.95	9.25	9.24	135.25	-189.12	522.80	705.08	686.70	18.38	38.361		
2,200.00	2,176.83	2,159.40	2,181.19	9.72	9.62	136.31	-189.11	521.98	717.77	698.54	19.23	37.326		
2,300.00	2,275.11	2,256.25	2,278.03	10.19	10.01	137.32	-189.11	521.32	730.83	710.75	20.08	36.399		
2,400.00	2,373.38	2,354.27	2,376.06	10.66	10.41	138.33	-189.46	520.60	744.31	723.37	20.93	35.555		
2,500.00	2,471.66	2,451.00	2,472.78	11.14	10.80	139.31	-189.95	519.72	757.98	736.20	21.78	34.795		
2,600.00	2,569.94	2,546.59	2,568.36	11.61	11.19	140.25	-190.78	519.06	772.27	749.64	22.63	34.129		
2,700.00	2,668.22	2,642.97	2,664.74	12.09	11.58	141.17	-191.77	518.52	786.97	763.49	23.48	33.522		
2,800.00	2,766.49	2,739.79	2,761.55	12.56	11.97	142.04	-192.74	518.36	802.12	777.80	24.33	32.971		
2,900.00	2,864.77	2,839.88	2,861.64	13.04	12.38	142.92	-193.89	517.98	817.43	792.23	25.20	32.437		
3,000.00	2,963.05	2,940.72	2,962.47	13.51	12.80	143.77	-194.67	517.42	832.51	806.43	26.08	31.923		
3,100.00	3,061.33	3,040.84	3,062.59	13.99	13.21	144.57	-195.22	516.86	847.60	820.65	26.95	31.446		
3,200.00	3,159.60	3,141.74	3,163.48	14.46	13.63	145.34	-195.42	516.09	862.45	834.62	27.84	30.983		
3,300.00	3,257.88	3,239.94	3,261.68	14.94	14.04	146.07	-195.60	515.24	877.37	848.66	28.70	30.567		
3,400.00	3,356.16	3,336.29	3,358.03	15.41	14.44	146.76	-195.78	514.46	892.46	862.91	29.56	30.194		
3,500.00	3,454.43	3,431.30	3,453.04	15.89	14.84	147.40	-196.02	514.23	908.09	877.69	30.40	29.867		
3,600.00	3,552.71	3,529.67	3,551.41	16.36	15.25	148.04	-196.37	514.04	923.94	892.66	31.27	29.544		
3,700.00	3,650.99	3,628.02	3,649.75	16.84	15.66	148.67	-196.81	513.70	939.88	907.74	32.14	29.240		
3,800.00	3,749.27	3,726.33	3,748.06	17.32	16.07	149.28	-197.35	513.22	955.92	922.90	33.01	28.956		
3,900.00	3,847.54	3,824.61	3,846.34	17.79	16.48	149.89	-197.98	512.60	972.05	938.16	33.88	28.688		
4,000.00	3,945.82	3,922.86	3,944.58	18.27	16.90	150.49	-198.72	511.84	988.27	953.52	34.75	28.437		
4,100.00	4,044.10	4,021.07	4,042.79	18.75	17.31	151.07	-199.54	510.93	1,004.60	968.97	35.62	28.201		
4,200.00	4,142.38	4,119.26	4,140.96	19.22	17.72	151.65	-200.47	509.88	1,021.01	984.52	36.49	27.978		
4,300.00	4,240.65	4,217.40	4,239.10	19.70	18.13	152.22	-201.49	508.69	1,037.53	1,000.16	37.36	27.769		
4,400.00	4,338.93	4,314.10	4,335.78	20.18	18.54	152.76	-202.50	507.64	1,054.21	1,015.99	38.22	27.581		
4,500.00	4,437.21	4,412.13	4,433.80	20.65	18.95	153.27	-203.39	506.95	1,071.09	1,032.00	39.09	27.400		
4,600.00	4,535.49	4,516.85	4,538.52	21.13	19.39	153.78	-203.83	506.24	1,087.66	1,047.65	40.01	27.187		
4,700.00	4,633.76	4,615.07	4,636.74	21.61	19.81	154.24	-204.03	505.44	1,104.04	1,063.17	40.88	27.008		
4,800.00	4,732.04	4,711.98	4,733.64	22.08	20.22	154.67	-204.18	504.81	1,120.55	1,078.81	41.74	26.845		
4,900.00	4,830.32	4,806.95	4,828.61	22.56	20.62	155.08	-204.44	504.46	1,137.37	1,094.78	42.59	26.705		
5,000.00	4,928.60	4,909.78	4,931.44	23.04	21.05	155.49	-204.50	504.26	1,154.16	1,110.66	43.49	26.536		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	5,011.61	5,033.27	23.51	21.48	155.89	-204.24	503.93	1,170.66	1,126.27	44.39	26.370		
5,200.00	5,125.15	5,107.65	5,129.31	23.99	21.89	156.26	-204.04	503.49	1,187.20	1,141.94	45.25	26.236		
5,300.00	5,223.43	5,207.38	5,229.04	24.47	22.31	156.63	-203.84	503.04	1,203.78	1,157.65	46.14	26.092		
5,400.00	5,321.71	5,307.80	5,329.46	24.94	22.74	157.00	-203.65	502.27	1,220.27	1,173.25	47.02	25.950		
5,500.00	5,419.98	5,403.62	5,425.27	25.42	23.14	157.37	-203.67	501.26	1,236.84	1,188.96	47.88	25.831		
5,600.00	5,518.26	5,501.74	5,523.38	25.90	23.56	157.73	-203.74	500.33	1,253.55	1,204.80	48.75	25.712		
5,700.00	5,616.54	5,597.17	5,618.82	26.38	23.96	158.07	-203.78	499.68	1,270.43	1,220.82	49.61	25.609		
5,800.00	5,714.82	5,690.98	5,712.62	26.85	24.36	158.38	-204.06	499.17	1,287.62	1,237.17	50.45	25.523		
5,900.00	5,813.09	5,788.58	5,810.22	27.33	24.77	158.71	-204.60	498.61	1,305.07	1,253.75	51.32	25.431		
6,000.00	5,911.37	5,890.77	5,912.41	27.81	25.21	159.04	-204.96	498.14	1,322.44	1,270.22	52.22	25.324		
6,100.00	6,009.65	5,992.23	6,013.87	28.28	25.64	159.35	-204.97	497.70	1,339.55	1,286.43	53.12	25.218		
6,200.00	6,107.93	6,088.49	6,110.12	28.76	26.05	159.65	-205.05	497.01	1,356.65	1,302.67	53.98	25.133		
6,300.00	6,206.20	6,186.34	6,207.98	29.24	26.46	159.94	-205.29	496.28	1,373.89	1,319.04	54.85	25.048		
6,400.00	6,304.48	6,284.51	6,306.14	29.72	26.88	160.23	-205.41	495.78	1,391.18	1,335.46	55.73	24.965		
6,500.00	6,402.76	6,382.67	6,404.30	30.19	27.30	160.49	-205.42	495.51	1,408.51	1,351.91	56.60	24.885		
6,600.00	6,501.04	6,480.83	6,502.46	30.67	27.71	160.75	-205.43	495.27	1,425.87	1,368.40	57.48	24.808		
6,700.00	6,599.31	6,578.99	6,600.61	31.15	28.13	160.99	-205.44	495.04	1,443.27	1,384.92	58.35	24.735		
6,800.00	6,697.50	6,677.06	6,698.69	31.63	28.55	-177.10	-205.44	494.84	1,461.48	1,402.25	59.23	24.676 SF		
6,900.00	6,794.18	6,773.64	6,795.27	32.10	28.96	-149.58	-205.45	494.66	1,485.26	1,425.16	60.09	24.717		
7,000.00	6,886.96	6,866.35	6,887.98	32.55	29.35	-136.30	-205.46	494.50	1,515.14	1,454.21	60.93	24.868		
7,100.00	6,973.57	6,952.90	6,974.53	32.99	29.72	-128.46	-205.46	494.37	1,550.96	1,489.24	61.72	25.129		
7,200.00	7,051.87	7,031.16	7,052.79	33.41	30.06	-122.71	-205.47	494.27	1,592.63	1,530.17	62.46	25.499		
7,300.00	7,119.93	7,099.19	7,120.82	33.85	30.35	-117.65	-205.47	494.19	1,640.05	1,576.90	63.14	25.973		
7,400.00	7,176.09	7,155.33	7,176.96	34.39	30.59	-112.49	-205.47	494.13	1,692.93	1,629.15	63.77	26.546		
7,500.00	7,218.95	7,198.18	7,219.81	35.09	30.77	-106.78	-205.47	494.09	1,750.74	1,686.39	64.35	27.207		
7,600.00	7,247.46	7,226.71	7,248.34	35.98	30.89	-100.26	-205.47	494.07	1,812.63	1,747.77	64.86	27.946		
7,700.00	7,260.92	7,240.22	7,261.84	37.04	30.95	-92.94	-205.47	494.06	1,877.43	1,812.13	65.30	28.751		
7,800.00	7,261.75	7,241.12	7,262.75	38.23	30.95	-89.82	-205.47	494.06	1,944.07	1,878.39	65.68	29.600		
7,900.00	7,261.33	7,240.78	7,262.41	39.59	30.95	-89.80	-205.47	494.06	2,013.32	1,947.24	66.08	30.467		
8,000.00	7,260.91	7,240.44	7,262.07	41.10	30.95	-89.79	-205.47	494.06	2,085.08	2,018.57	66.51	31.352		
8,100.00	7,260.49	7,240.10	7,261.73	42.75	30.95	-89.78	-205.47	494.06	2,159.08	2,092.14	66.94	32.255		
8,200.00	7,260.07	7,239.76	7,261.38	44.53	30.95	-89.76	-205.47	494.06	2,235.10	2,167.73	67.37	33.176		
8,300.00	7,259.65	7,239.42	7,261.04	46.41	30.94	-89.75	-205.47	494.06	2,312.95	2,245.15	67.80	34.114		
8,400.00	7,259.23	7,239.07	7,260.70	48.39	30.94	-89.74	-205.47	494.06	2,392.45	2,324.23	68.22	35.069		
8,500.00	7,258.81	7,238.73	7,260.36	50.45	30.94	-89.72	-205.47	494.06	2,473.43	2,404.80	68.63	36.040		
8,600.00	7,258.39	7,238.39	7,260.02	52.59	30.94	-89.71	-205.47	494.06	2,555.77	2,486.74	69.03	37.026		
8,700.00	7,257.97	7,238.05	7,259.68	54.79	30.94	-89.69	-205.47	494.06	2,639.32	2,569.91	69.41	38.026		
8,800.00	7,257.55	7,237.71	7,259.34	57.05	30.94	-89.68	-205.47	494.06	2,723.98	2,654.21	69.77	39.040		
8,900.00	7,257.13	7,237.37	7,259.00	59.36	30.94	-89.67	-205.47	494.06	2,809.65	2,739.52	70.13	40.066		
9,000.00	7,256.71	7,237.03	7,258.66	61.72	30.93	-89.65	-205.47	494.06	2,896.24	2,825.78	70.46	41.103		
9,100.00	7,256.29	7,236.69	7,258.32	64.12	30.93	-89.64	-205.47	494.06	2,983.67	2,912.88	70.79	42.151		
9,200.00	7,255.87	7,236.35	7,257.98	66.56	30.93	-89.63	-205.47	494.06	3,071.86	3,000.77	71.09	43.209		
9,300.00	7,255.45	7,236.01	7,257.64	69.02	30.93	-89.61	-205.47	494.06	3,160.76	3,089.37	71.39	44.276		
9,400.00	7,255.03	7,235.67	7,257.30	71.52	30.93	-89.60	-205.47	494.06	3,250.30	3,178.63	71.67	45.351		
9,500.00	7,254.61	7,235.33	7,256.96	74.04	30.93	-89.58	-205.47	494.06	3,340.44	3,268.50	71.94	46.434		
9,600.00	7,254.19	7,234.99	7,256.62	76.58	30.93	-89.57	-205.47	494.06	3,431.12	3,358.92	72.20	47.524		
9,700.00	7,253.77	7,234.65	7,256.28	79.15	30.92	-89.56	-205.47	494.06	3,522.31	3,449.86	72.44	48.621		
9,800.00	7,253.35	7,234.32	7,255.94	81.74	30.92	-89.54	-205.47	494.06	3,613.96	3,541.28	72.68	49.723		
9,900.00	7,252.92	7,233.98	7,255.60	84.34	30.92	-89.53	-205.47	494.07	3,706.04	3,633.14	72.91	50.831		
10,000.00	7,252.50	7,233.64	7,255.27	86.96	30.92	-89.52	-205.47	494.07	3,798.53	3,725.40	73.13	51.944		
10,100.00	7,252.08	7,233.30	7,254.93	89.59	30.92	-89.50	-205.47	494.07	3,891.39	3,818.05	73.34	53.062		
10,200.00	7,251.66	7,232.96	7,254.59	92.24	30.92	-89.49	-205.47	494.07	3,984.59	3,911.05	73.54	54.183		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,232.62	7,254.25	94.90	30.92	-89.48	-205.47	494.07	4,078.11	4,004.38	73.73	55.309		
10,400.00	7,250.82	7,232.28	7,253.91	97.57	30.91	-89.46	-205.47	494.07	4,171.94	4,098.02	73.92	56.438		
10,500.00	7,250.40	7,231.95	7,253.57	100.25	30.91	-89.45	-205.47	494.07	4,266.04	4,191.94	74.10	57.570		
10,600.00	7,249.98	7,231.61	7,253.24	102.93	30.91	-89.44	-205.47	494.07	4,360.41	4,286.14	74.28	58.705		
10,700.00	7,249.56	7,231.27	7,252.90	105.63	30.91	-89.42	-205.47	494.07	4,455.03	4,380.58	74.45	59.843		
10,800.00	7,249.14	7,230.93	7,252.56	108.34	30.91	-89.41	-205.47	494.07	4,549.87	4,475.26	74.61	60.983		
10,900.00	7,248.72	7,230.60	7,252.22	111.05	30.91	-89.39	-205.47	494.07	4,644.93	4,570.16	74.77	62.124		
11,000.00	7,248.30	7,230.26	7,251.89	113.77	30.91	-89.38	-205.47	494.07	4,740.19	4,665.27	74.92	63.268		
11,100.00	7,247.88	7,229.92	7,251.55	116.50	30.90	-89.37	-205.47	494.07	4,835.65	4,760.58	75.07	64.413		
11,200.00	7,247.46	7,229.58	7,251.21	119.23	30.90	-89.35	-205.47	494.07	4,931.28	4,856.07	75.22	65.560		
11,300.00	7,247.04	7,229.25	7,250.87	121.97	30.90	-89.34	-205.47	494.07	5,027.09	4,951.73	75.36	66.708		
11,400.00	7,246.62	7,228.91	7,250.54	124.72	30.90	-89.33	-205.47	494.07	5,123.05	5,047.56	75.50	67.857		
11,500.00	7,246.20	7,228.57	7,250.20	127.46	30.90	-89.31	-205.47	494.07	5,219.17	5,143.54	75.63	69.007		
11,600.00	7,245.78	7,228.24	7,249.86	130.22	30.90	-89.30	-205.47	494.07	5,315.43	5,239.67	75.76	70.157		
11,700.00	7,245.36	7,227.90	7,249.53	132.98	30.90	-89.29	-205.47	494.07	5,411.83	5,335.93	75.89	71.308		
11,800.00	7,244.94	7,227.56	7,249.19	135.74	30.89	-89.27	-205.47	494.07	5,508.35	5,432.33	76.02	72.460		
11,900.00	7,244.52	7,227.23	7,248.86	138.50	30.89	-89.26	-205.47	494.07	5,604.99	5,528.85	76.14	73.612		
12,000.00	7,244.10	7,226.89	7,248.52	141.27	30.89	-89.25	-205.47	494.07	5,701.76	5,625.49	76.26	74.764		
12,100.00	7,243.68	7,226.56	7,248.18	144.04	30.89	-89.23	-205.47	494.07	5,798.63	5,722.25	76.38	75.916		
12,200.00	7,243.26	7,226.22	7,247.85	146.82	30.89	-89.22	-205.47	494.07	5,895.60	5,819.10	76.50	77.068		
12,300.00	7,242.84	7,225.89	7,247.51	149.60	30.89	-89.21	-205.47	494.07	5,992.68	5,916.06	76.61	78.219		
12,400.00	7,242.42	7,225.55	7,247.18	152.38	30.88	-89.19	-205.47	494.07	6,089.85	6,013.12	76.73	79.371		
12,500.00	7,242.00	7,225.22	7,246.84	155.16	30.88	-89.18	-205.47	494.07	6,187.11	6,110.27	76.84	80.522		
12,600.00	7,241.58	7,224.88	7,246.51	157.95	30.88	-89.17	-205.47	494.07	6,284.45	6,207.51	76.95	81.672		
12,700.00	7,241.16	7,224.55	7,246.17	160.74	30.88	-89.15	-205.47	494.07	6,381.88	6,304.83	77.06	82.822		
12,800.00	7,240.74	7,224.21	7,245.84	163.53	30.88	-89.14	-205.47	494.07	6,479.39	6,402.23	77.16	83.972		
12,900.00	7,240.32	7,223.88	7,245.50	166.32	30.88	-89.12	-205.47	494.07	6,576.97	6,499.70	77.27	85.120		
13,000.00	7,239.89	7,223.54	7,245.17	169.12	30.88	-89.11	-205.47	494.07	6,674.62	6,597.25	77.37	86.268		
13,100.00	7,239.47	7,223.21	7,244.84	171.92	30.88	-89.10	-205.47	494.07	6,772.34	6,694.87	77.47	87.415		
13,200.00	7,239.05	7,222.87	7,244.50	174.72	30.87	-89.08	-205.47	494.07	6,870.13	6,792.56	77.58	88.561		
13,300.00	7,238.63	7,222.54	7,244.17	177.52	30.87	-89.07	-205.47	494.07	6,967.98	6,890.30	77.68	89.706		
13,400.00	7,238.21	7,222.21	7,243.83	180.32	30.87	-89.06	-205.47	494.07	7,065.89	6,988.11	77.78	90.850		
13,500.00	7,237.79	7,221.87	7,243.50	183.13	30.87	-89.04	-205.47	494.07	7,163.86	7,085.98	77.87	91.992		
13,600.00	7,237.37	7,221.54	7,243.17	185.93	30.87	-89.03	-205.47	494.08	7,261.88	7,183.91	77.97	93.134		
13,700.00	7,236.95	7,221.20	7,242.83	188.74	30.87	-89.02	-205.47	494.08	7,359.96	7,281.89	78.07	94.274		
13,800.00	7,236.53	7,220.87	7,242.50	191.55	30.87	-89.00	-205.47	494.08	7,458.08	7,379.92	78.17	95.413		
13,900.00	7,236.11	7,220.54	7,242.17	194.36	30.86	-88.99	-205.47	494.08	7,556.26	7,478.00	78.26	96.550		
14,000.00	7,235.69	7,220.21	7,241.83	197.17	30.86	-88.98	-205.47	494.08	7,654.48	7,576.13	78.36	97.686		
14,100.00	7,235.27	7,219.87	7,241.50	199.98	30.86	-88.96	-205.47	494.08	7,752.75	7,674.30	78.45	98.820		
14,200.00	7,234.85	7,219.54	7,241.17	202.80	30.86	-88.95	-205.47	494.08	7,851.07	7,772.52	78.55	99.953		
14,300.00	7,234.43	7,219.21	7,240.83	205.61	30.86	-88.94	-205.47	494.08	7,949.42	7,870.78	78.64	101.085		
14,400.00	7,234.01	7,218.87	7,240.50	208.43	30.86	-88.92	-205.47	494.08	8,047.82	7,969.08	78.73	102.214		
14,500.00	7,233.59	7,218.54	7,240.17	211.25	30.86	-88.91	-205.47	494.08	8,146.25	8,067.42	78.83	103.342		
14,600.00	7,233.17	7,218.21	7,239.84	214.06	30.85	-88.90	-205.47	494.08	8,244.72	8,165.80	78.92	104.468		
14,700.00	7,232.75	7,217.88	7,239.51	216.88	30.85	-88.88	-205.47	494.08	8,343.23	8,264.22	79.01	105.593		
14,800.00	7,232.33	7,217.55	7,239.17	219.70	30.85	-88.87	-205.47	494.08	8,441.77	8,362.67	79.11	106.715		
14,900.00	7,231.91	7,217.21	7,238.84	222.52	30.85	-88.86	-205.47	494.08	8,540.35	8,461.15	79.20	107.836		
15,000.00	7,231.49	7,216.88	7,238.51	225.35	30.85	-88.84	-205.47	494.08	8,638.96	8,559.67	79.29	108.955		
15,100.00	7,231.07	7,216.55	7,238.18	228.17	30.85	-88.83	-205.47	494.08	8,737.60	8,658.22	79.38	110.072		
15,116.21	7,231.00	7,216.50	7,238.13	228.63	30.85	-88.83	-205.47	494.08	8,753.60	8,674.20	79.40	110.253		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	2.00	0.00	3.28	10.53	1,310.41	243.63	1,332.87				
100.00	100.00	105.89	107.89	0.18	3.29	10.54	1,310.08	243.69	1,332.58	1,329.11	3.47	384.185	
200.00	200.00	211.03	213.03	0.61	3.34	10.55	1,309.19	243.78	1,331.75	1,327.80	3.95	336.855	
300.00	300.00	313.68	315.67	1.05	3.45	10.55	1,308.07	243.69	1,330.67	1,326.17	4.50	295.578	
400.00	400.00	407.45	409.43	1.49	3.59	10.55	1,307.15	243.53	1,329.67	1,324.59	5.08	261.489	
500.00	500.00	503.49	505.48	1.93	3.78	10.54	1,306.70	243.12	1,329.13	1,323.42	5.71	232.667	
600.00	599.98	609.80	611.78	2.37	4.03	18.32	1,306.10	242.75	1,326.86	1,320.46	6.40	207.200	
700.00	699.84	706.77	708.74	2.81	4.30	18.40	1,305.46	242.13	1,321.13	1,314.03	7.11	185.920	
800.00	799.45	805.93	807.90	3.26	4.58	18.53	1,305.05	241.07	1,312.25	1,304.42	7.84	167.402	
900.00	898.70	908.78	910.74	3.70	4.91	18.75	1,304.35	239.90	1,299.82	1,291.21	8.61	151.001	
1,000.00	997.47	997.88	999.83	4.15	5.20	19.00	1,303.96	238.68	1,284.33	1,274.99	9.35	137.377	
1,100.00	1,095.78	1,079.19	1,081.11	4.60	5.48	19.15	1,304.84	236.39	1,267.52	1,257.44	10.07	125.831	
1,200.00	1,194.05	1,163.15	1,164.93	5.05	5.77	19.18	1,307.08	232.47	1,251.72	1,240.91	10.81	115.785	
1,300.00	1,292.33	1,242.86	1,244.40	5.50	6.05	19.14	1,310.62	227.25	1,237.30	1,225.75	11.55	107.140	
1,400.00	1,390.61	1,334.12	1,335.13	5.96	6.39	18.97	1,316.14	219.15	1,223.99	1,211.65	12.34	99.173	
1,500.00	1,488.89	1,419.58	1,419.82	6.43	6.72	18.71	1,322.38	209.62	1,211.51	1,198.38	13.13	92.257	
1,600.00	1,587.16	1,511.29	1,510.50	6.89	7.09	18.37	1,330.16	198.33	1,200.01	1,186.05	13.96	85.953	
1,700.00	1,685.44	1,609.31	1,607.34	7.36	7.50	17.98	1,338.86	185.93	1,188.89	1,174.06	14.83	80.161	
1,800.00	1,783.72	1,722.20	1,718.91	7.83	8.00	17.52	1,348.33	171.56	1,177.35	1,161.58	15.78	74.629	
1,900.00	1,882.00	1,821.58	1,817.23	8.30	8.44	17.12	1,355.93	159.20	1,165.18	1,148.51	16.68	69.872	
2,000.00	1,980.27	1,935.21	1,929.73	8.77	8.96	16.68	1,363.73	145.31	1,152.31	1,134.67	17.64	65.319	
2,100.00	2,078.55	2,034.90	2,028.53	9.25	9.42	16.31	1,369.78	133.48	1,138.78	1,120.23	18.56	61.372	
2,200.00	2,176.83	2,124.17	2,116.98	9.72	9.84	15.96	1,375.66	122.89	1,125.81	1,106.37	19.43	57.934	
2,300.00	2,275.11	2,215.86	2,207.72	10.19	10.27	15.58	1,382.52	111.70	1,113.72	1,093.39	20.33	54.795	
2,400.00	2,373.38	2,316.06	2,306.91	10.66	10.75	15.16	1,390.05	99.69	1,101.74	1,080.48	21.26	51.829	
2,500.00	2,471.66	2,408.49	2,398.42	11.14	11.20	14.78	1,397.40	88.89	1,090.28	1,068.12	22.16	49.206	
2,600.00	2,569.94	2,508.26	2,497.24	11.61	11.68	14.39	1,405.33	77.65	1,078.93	1,055.84	23.09	46.726	
2,700.00	2,668.22	2,604.20	2,592.24	12.09	12.15	14.00	1,413.32	66.93	1,068.01	1,044.00	24.01	44.485	
2,800.00	2,766.49	2,710.29	2,697.33	12.56	12.67	13.56	1,421.71	55.05	1,056.72	1,031.75	24.97	42.317	
2,900.00	2,864.77	2,809.07	2,795.14	13.04	13.15	13.13	1,429.27	43.56	1,045.21	1,019.30	25.91	40.343	
3,000.00	2,963.05	2,904.99	2,890.04	13.51	13.63	12.66	1,436.86	31.87	1,033.97	1,007.14	26.84	38.527	
3,100.00	3,061.33	3,007.11	2,991.05	13.99	14.15	12.15	1,445.12	19.24	1,022.97	995.18	27.79	36.805	
3,200.00	3,159.60	3,107.97	3,090.90	14.46	14.65	11.65	1,452.66	7.24	1,011.47	982.73	28.75	35.188	
3,300.00	3,257.88	3,204.86	3,186.81	14.94	15.14	11.17	1,460.13	-4.36	1,000.26	970.58	29.68	33.701	
3,400.00	3,356.16	3,317.77	3,298.54	15.41	15.71	10.56	1,468.40	-18.32	988.78	958.10	30.68	32.229	
3,500.00	3,454.43	3,421.90	3,401.78	15.89	16.23	10.04	1,474.60	-30.37	976.00	944.37	31.64	30.849	
3,600.00	3,552.71	3,520.11	3,499.26	16.36	16.71	9.58	1,480.31	-40.92	963.18	930.62	32.57	29.574	
3,700.00	3,650.99	3,607.46	3,586.00	16.84	17.14	9.21	1,485.89	-49.50	951.03	917.58	33.46	28.425	
3,800.00	3,749.27	3,698.91	3,676.74	17.32	17.59	8.81	1,492.75	-58.60	940.02	905.66	34.36	27.359	
3,900.00	3,847.54	3,800.51	3,777.54	17.79	18.09	8.36	1,500.69	-68.61	929.38	894.09	35.30	26.330	
4,000.00	3,945.82	3,888.97	3,865.30	18.27	18.53	7.97	1,507.84	-77.08	919.07	882.88	36.18	25.401	
4,100.00	4,044.10	3,986.39	3,961.88	18.75	19.02	7.54	1,516.59	-86.37	909.69	872.59	37.10	24.517	
4,200.00	4,142.38	4,081.35	4,055.92	19.22	19.50	7.05	1,525.27	-96.34	900.55	862.53	38.02	23.687	
4,300.00	4,240.65	4,177.16	4,150.70	19.70	19.99	6.53	1,534.49	-106.77	891.98	853.04	38.94	22.908	
4,400.00	4,338.93	4,292.12	4,264.55	20.18	20.57	5.91	1,544.91	-118.83	882.95	843.01	39.94	22.109	
4,500.00	4,437.21	4,398.61	4,370.16	20.65	21.10	5.34	1,553.08	-129.75	872.56	831.67	40.89	21.339	
4,600.00	4,535.49	4,509.22	4,479.97	21.13	21.65	4.75	1,560.49	-140.82	861.29	819.45	41.85	20.582	
4,700.00	4,633.76	4,625.24	4,595.41	21.61	22.20	4.20	1,566.13	-150.93	848.16	805.36	42.80	19.818	
4,800.00	4,732.04	4,733.72	4,703.42	22.08	22.71	3.67	1,569.76	-160.34	833.59	789.87	43.72	19.068	
4,900.00	4,830.32	4,840.77	4,810.09	22.56	23.20	3.16	1,572.27	-168.94	818.06	773.43	44.62	18.333	
5,000.00	4,928.60	4,941.33	4,910.44	23.04	23.65	2.79	1,574.07	-175.23	801.88	756.37	45.51	17.618	
5,100.00	5,026.87	5,045.57	5,014.58	23.51	24.10	2.57	1,575.74	-179.30	785.34	738.95	46.39	16.929	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,149.39	5,118.36	23.99	24.52	2.45	1,576.78	-181.88	768.08	720.82	47.25	16.255		
5,300.00	5,223.43	5,246.40	5,215.35	24.47	24.92	2.35	1,577.60	-184.06	750.65	702.52	48.13	15.598		
5,400.00	5,321.71	5,347.98	5,316.90	24.94	25.34	2.25	1,578.23	-186.15	732.98	684.00	48.99	14.963		
5,500.00	5,419.98	5,446.85	5,415.75	25.42	25.74	2.15	1,578.75	-188.14	715.22	665.36	49.85	14.346		
5,600.00	5,518.26	5,550.22	5,519.10	25.90	26.16	2.06	1,578.73	-189.88	696.89	646.19	50.70	13.745		
5,700.00	5,616.54	5,647.32	5,616.19	26.38	26.55	1.98	1,578.44	-191.51	678.30	626.73	51.57	13.153		
5,800.00	5,714.82	5,743.15	5,712.00	26.85	26.94	1.88	1,578.60	-193.28	660.17	607.73	52.45	12.587		
5,900.00	5,813.09	5,842.23	5,811.07	27.33	27.35	1.77	1,578.71	-195.04	641.99	588.68	53.31	12.042		
6,000.00	5,911.37	5,940.35	5,909.17	27.81	27.75	1.67	1,578.95	-196.74	623.93	569.75	54.18	11.515		
6,100.00	6,009.65	6,040.99	6,009.80	28.28	28.16	1.54	1,578.90	-198.61	605.61	550.56	55.04	11.003		
6,200.00	6,107.93	6,140.93	6,109.72	28.76	28.57	1.43	1,578.55	-200.22	586.96	531.07	55.89	10.501		
6,300.00	6,206.20	6,239.82	6,208.60	29.24	28.96	1.38	1,578.06	-201.09	568.10	511.35	56.75	10.010		
6,400.00	6,304.48	6,338.51	6,307.29	29.72	29.36	1.32	1,577.50	-202.08	549.18	491.58	57.61	9.533		
6,500.00	6,402.76	6,469.48	6,438.21	30.19	29.86	1.26	1,574.48	-202.87	528.97	470.89	58.08	9.108		
6,600.00	6,501.04	6,779.70	6,734.35	30.67	30.79	-0.44	1,490.63	-205.70	486.14	436.04	50.10	9.703		
6,700.00	6,599.31	6,929.55	6,857.63	31.15	31.08	-3.05	1,405.78	-205.78	414.57	370.12	44.45	9.328		
6,800.00	6,697.50	7,023.32	6,928.18	31.63	31.23	20.91	1,344.04	-205.69	336.47	295.02	41.45	8.118		
6,900.00	6,794.18	7,101.00	6,981.62	32.10	31.34	63.68	1,287.70	-204.83	252.08	213.94	38.15	6.609		
7,000.00	6,886.96	7,155.38	7,016.92	32.55	31.42	101.32	1,246.35	-204.09	168.20	131.40	36.80	4.571		
7,100.00	6,973.57	7,202.17	7,045.86	32.99	31.50	135.55	1,209.60	-203.62	101.93	57.36	44.57	2.287		
7,142.73	7,008.16	7,218.85	7,055.74	33.16	31.54	147.12	1,196.16	-203.50	92.52	36.67	55.84	1.657 CC, ES, SF		
7,200.00	7,051.87	7,237.92	7,066.71	33.41	31.58	159.75	1,180.55	-203.28	109.24	44.92	64.32	1.698		
7,300.00	7,119.93	7,264.74	7,081.58	33.85	31.67	178.48	1,158.25	-202.93	185.47	122.88	62.59	2.963		
7,400.00	7,176.09	7,284.83	7,092.36	34.39	31.75	-158.04	1,141.29	-202.66	279.70	218.93	60.77	4.602		
7,500.00	7,218.95	7,298.90	7,099.74	35.09	31.81	-109.09	1,129.31	-202.47	378.21	317.74	60.47	6.255		
7,600.00	7,247.46	7,306.78	7,103.82	35.98	31.85	-55.50	1,122.57	-202.35	477.21	416.32	60.89	7.837		
7,700.00	7,260.92	7,310.07	7,105.50	37.04	31.86	-34.15	1,119.75	-202.29	574.88	513.23	61.65	9.325		
7,800.00	7,261.75	7,309.93	7,105.43	38.23	31.86	-29.56	1,119.87	-202.29	670.81	608.34	62.47	10.739		
7,900.00	7,261.33	7,309.48	7,105.20	39.59	31.86	-29.42	1,120.25	-202.30	767.50	704.46	63.05	12.173		
8,000.00	7,260.91	7,309.06	7,104.99	41.10	31.86	-29.29	1,120.62	-202.31	864.95	801.49	63.46	13.630		
8,100.00	7,260.49	7,308.66	7,104.78	42.75	31.86	-29.17	1,120.96	-202.31	962.92	899.16	63.77	15.101		
8,200.00	7,260.07	7,308.28	7,104.59	44.53	31.85	-29.05	1,121.28	-202.32	1,061.27	997.27	64.00	16.582		
8,300.00	7,259.65	7,307.92	7,104.40	46.41	31.85	-28.93	1,121.59	-202.33	1,159.91	1,095.72	64.19	18.070		
8,400.00	7,259.23	7,307.58	7,104.22	48.39	31.85	-28.83	1,121.89	-202.33	1,258.75	1,194.41	64.34	19.564		
8,500.00	7,258.81	7,307.25	7,104.06	50.45	31.85	-28.72	1,122.17	-202.34	1,357.77	1,293.30	64.47	21.061		
8,600.00	7,258.39	7,306.93	7,103.89	52.59	31.85	-28.62	1,122.44	-202.35	1,456.92	1,392.34	64.58	22.561		
8,700.00	7,257.97	7,306.63	7,103.74	54.79	31.85	-28.53	1,122.70	-202.35	1,556.18	1,491.51	64.67	24.063		
8,800.00	7,257.55	7,306.34	7,103.59	57.05	31.85	-28.44	1,122.95	-202.36	1,655.53	1,590.77	64.75	25.566		
8,900.00	7,257.13	7,306.07	7,103.45	59.36	31.84	-28.35	1,123.18	-202.36	1,754.95	1,690.12	64.83	27.070		
9,000.00	7,256.71	7,305.80	7,103.31	61.72	31.84	-28.27	1,123.41	-202.36	1,854.43	1,789.54	64.90	28.574		
9,100.00	7,256.29	7,305.55	7,103.18	64.12	31.84	-28.19	1,123.63	-202.37	1,953.97	1,889.01	64.96	30.079		
9,200.00	7,255.87	7,305.30	7,103.06	66.56	31.84	-28.11	1,123.84	-202.37	2,053.55	1,988.53	65.02	31.583		
9,300.00	7,255.45	7,305.07	7,102.93	69.02	31.84	-28.04	1,124.04	-202.38	2,153.17	2,088.10	65.08	33.086		
9,400.00	7,255.03	7,304.84	7,102.82	71.52	31.84	-27.97	1,124.23	-202.38	2,252.83	2,187.70	65.13	34.589		
9,500.00	7,254.61	7,304.63	7,102.71	74.04	31.84	-27.90	1,124.42	-202.38	2,352.51	2,287.33	65.18	36.090		
9,600.00	7,254.19	7,304.42	7,102.60	76.58	31.84	-27.84	1,124.60	-202.39	2,452.22	2,386.99	65.23	37.591		
9,700.00	7,253.77	7,304.21	7,102.49	79.15	31.83	-27.77	1,124.77	-202.39	2,551.95	2,486.67	65.28	39.090		
9,800.00	7,253.35	7,304.02	7,102.39	81.74	31.83	-27.71	1,124.94	-202.39	2,651.70	2,586.37	65.33	40.588		
9,900.00	7,252.92	7,297.00	7,098.75	84.34	31.80	-25.53	1,130.94	-202.50	2,751.49	2,686.15	65.35	42.107		
10,000.00	7,252.50	7,297.00	7,098.75	86.96	31.80	-25.53	1,130.94	-202.50	2,851.28	2,785.88	65.39	43.602		
10,100.00	7,252.08	7,297.00	7,098.75	89.59	31.80	-25.53	1,130.94	-202.50	2,951.08	2,885.64	65.44	45.094		
10,200.00	7,251.66	7,297.00	7,098.75	92.24	31.80	-25.53	1,130.94	-202.50	3,050.89	2,985.40	65.49	46.585		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,297.00	7,098.75	94.90	31.80	-25.53	1,130.94	-202.50	3,150.71	3,085.18	65.54	48.074		
10,400.00	7,250.82	7,297.00	7,098.75	97.57	31.80	-25.53	1,130.94	-202.50	3,250.55	3,184.96	65.59	49.561		
10,500.00	7,250.40	7,297.00	7,098.75	100.25	31.80	-25.53	1,130.94	-202.50	3,350.39	3,284.76	65.63	51.046		
10,600.00	7,249.98	7,297.00	7,098.75	102.93	31.80	-25.53	1,130.94	-202.50	3,450.25	3,384.57	65.68	52.528		
10,700.00	7,249.56	7,297.00	7,098.75	105.63	31.80	-25.53	1,130.94	-202.50	3,550.11	3,484.38	65.73	54.009		
10,800.00	7,249.14	7,297.00	7,098.75	108.34	31.80	-25.53	1,130.94	-202.50	3,649.98	3,584.20	65.78	55.486		
10,900.00	7,248.72	7,297.00	7,098.75	111.05	31.80	-25.53	1,130.94	-202.50	3,749.86	3,684.03	65.83	56.961		
11,000.00	7,248.30	7,297.00	7,098.75	113.77	31.80	-25.53	1,130.94	-202.50	3,849.74	3,783.86	65.88	58.434		
11,100.00	7,247.88	7,297.00	7,098.75	116.50	31.80	-25.53	1,130.94	-202.50	3,949.63	3,883.70	65.93	59.904		
11,200.00	7,247.46	7,297.00	7,098.75	119.23	31.80	-25.53	1,130.94	-202.50	4,049.52	3,983.54	65.98	61.371		
11,300.00	7,247.04	7,297.00	7,098.75	121.97	31.80	-25.53	1,130.94	-202.50	4,149.42	4,083.39	66.04	62.836		
11,400.00	7,246.62	7,297.00	7,098.75	124.72	31.80	-25.53	1,130.94	-202.50	4,249.33	4,183.24	66.09	64.298		
11,500.00	7,246.20	7,297.00	7,098.75	127.46	31.80	-25.53	1,130.94	-202.50	4,349.24	4,283.10	66.14	65.756		
11,600.00	7,245.78	7,297.00	7,098.75	130.22	31.80	-25.53	1,130.94	-202.50	4,449.15	4,382.95	66.20	67.212		
11,700.00	7,245.36	7,297.00	7,098.75	132.98	31.80	-25.53	1,130.94	-202.50	4,549.07	4,482.82	66.25	68.665		
11,800.00	7,244.94	7,297.00	7,098.75	135.74	31.80	-25.53	1,130.94	-202.50	4,648.99	4,582.68	66.31	70.115		
11,900.00	7,244.52	7,297.00	7,098.75	138.50	31.80	-25.53	1,130.94	-202.50	4,748.91	4,682.55	66.36	71.561		
12,000.00	7,244.10	7,297.00	7,098.75	141.27	31.80	-25.53	1,130.94	-202.50	4,848.84	4,782.42	66.42	73.004		
12,100.00	7,243.68	7,297.00	7,098.75	144.04	31.80	-25.53	1,130.94	-202.50	4,948.77	4,882.29	66.48	74.444		
12,200.00	7,243.26	7,297.00	7,098.75	146.82	31.80	-25.53	1,130.94	-202.50	5,048.70	4,982.16	66.53	75.881		
12,300.00	7,242.84	7,297.00	7,098.75	149.60	31.80	-25.53	1,130.94	-202.50	5,148.63	5,082.04	66.59	77.314		
12,400.00	7,242.42	7,297.00	7,098.75	152.38	31.80	-25.53	1,130.94	-202.50	5,248.57	5,181.92	66.65	78.744		
12,500.00	7,242.00	7,297.00	7,098.75	155.16	31.80	-25.53	1,130.94	-202.50	5,348.51	5,281.80	66.71	80.171		
12,600.00	7,241.58	7,297.00	7,098.75	157.95	31.80	-25.53	1,130.94	-202.50	5,448.45	5,381.68	66.78	81.594		
12,700.00	7,241.16	7,297.00	7,098.75	160.74	31.80	-25.53	1,130.94	-202.50	5,548.40	5,481.56	66.84	83.013		
12,800.00	7,240.74	7,297.00	7,098.75	163.53	31.80	-25.53	1,130.94	-202.50	5,648.34	5,581.44	66.90	84.429		
12,900.00	7,240.32	7,297.00	7,098.75	166.32	31.80	-25.53	1,130.94	-202.50	5,748.29	5,681.33	66.96	85.841		
13,000.00	7,239.89	7,297.00	7,098.75	169.12	31.80	-25.53	1,130.94	-202.50	5,848.24	5,781.21	67.03	87.249		
13,100.00	7,239.47	7,297.00	7,098.75	171.92	31.80	-25.53	1,130.94	-202.50	5,948.19	5,881.10	67.09	88.653		
13,200.00	7,239.05	7,297.00	7,098.75	174.72	31.80	-25.53	1,130.94	-202.50	6,048.15	5,980.99	67.16	90.054		
13,300.00	7,238.63	7,297.00	7,098.75	177.52	31.80	-25.53	1,130.94	-202.50	6,148.10	6,080.87	67.23	91.451		
13,400.00	7,238.21	7,297.00	7,098.75	180.32	31.80	-25.53	1,130.94	-202.50	6,248.06	6,180.76	67.30	92.844		
13,500.00	7,237.79	7,297.00	7,098.75	183.13	31.80	-25.53	1,130.94	-202.50	6,348.01	6,280.65	67.37	94.233		
13,600.00	7,237.37	7,297.00	7,098.75	185.93	31.80	-25.53	1,130.94	-202.50	6,447.97	6,380.54	67.43	95.618		
13,700.00	7,236.95	7,297.00	7,098.75	188.74	31.80	-25.53	1,130.94	-202.50	6,547.93	6,480.43	67.50	96.999		
13,800.00	7,236.53	7,297.00	7,098.75	191.55	31.80	-25.53	1,130.94	-202.50	6,647.89	6,580.32	67.58	98.376		
13,900.00	7,236.11	7,297.00	7,098.75	194.36	31.80	-25.53	1,130.94	-202.50	6,747.86	6,680.21	67.65	99.750		
14,000.00	7,235.69	7,297.00	7,098.75	197.17	31.80	-25.53	1,130.94	-202.50	6,847.82	6,780.10	67.72	101.118		
14,100.00	7,235.27	7,297.00	7,098.75	199.98	31.80	-25.53	1,130.94	-202.50	6,947.79	6,879.99	67.79	102.483		
14,200.00	7,234.85	7,297.00	7,098.75	202.80	31.80	-25.53	1,130.94	-202.50	7,047.75	6,979.88	67.87	103.844		
14,300.00	7,234.43	7,297.00	7,098.75	205.61	31.80	-25.53	1,130.94	-202.50	7,147.72	7,079.77	67.94	105.200		
14,400.00	7,234.01	7,297.00	7,098.75	208.43	31.80	-25.53	1,130.94	-202.50	7,247.68	7,179.67	68.02	106.552		
14,500.00	7,233.59	7,297.00	7,098.75	211.25	31.80	-25.53	1,130.94	-202.50	7,347.65	7,279.56	68.10	107.900		
14,600.00	7,233.17	7,297.00	7,098.75	214.06	31.80	-25.53	1,130.94	-202.50	7,447.62	7,379.45	68.17	109.244		
14,700.00	7,232.75	7,297.00	7,098.75	216.88	31.80	-25.53	1,130.94	-202.50	7,547.59	7,479.34	68.25	110.583		
14,800.00	7,232.33	7,297.00	7,098.75	219.70	31.80	-25.53	1,130.94	-202.50	7,647.56	7,579.23	68.33	111.918		
14,900.00	7,231.91	7,297.00	7,098.75	222.52	31.80	-25.53	1,130.94	-202.50	7,747.53	7,679.12	68.41	113.249		
15,000.00	7,231.49	7,297.00	7,098.75	225.35	31.80	-25.53	1,130.94	-202.50	7,847.51	7,779.01	68.49	114.575		
15,100.00	7,231.07	7,297.00	7,098.75	228.17	31.80	-25.53	1,130.94	-202.50	7,947.48	7,878.91	68.57	115.897		
15,116.21	7,231.00	7,297.00	7,098.75	228.63	31.80	-25.53	1,130.94	-202.50	7,963.69	7,895.10	68.59	116.111		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	2.00	0.00	3.28	11.83	1,311.87	274.78	1,340.34					
100.00	100.00	100.89	102.89	0.18	3.29	11.84	1,311.72	274.98	1,340.23	1,336.77	3.46	386.944		
200.00	200.00	207.35	209.35	0.61	3.33	11.87	1,311.17	275.48	1,339.83	1,335.89	3.95	339.305		
300.00	300.00	311.35	313.34	1.05	3.44	11.87	1,310.25	275.35	1,338.93	1,334.44	4.50	297.849		
400.00	400.00	414.09	416.07	1.49	3.60	11.84	1,309.30	274.37	1,337.84	1,332.75	5.09	262.746		
500.00	500.00	517.60	519.58	1.93	3.81	11.85	1,307.90	274.33	1,336.51	1,330.77	5.74	232.883		
600.00	599.98	610.86	612.83	2.37	4.03	19.66	1,306.73	274.56	1,333.69	1,327.29	6.40	208.398		
700.00	699.84	713.06	715.02	2.81	4.31	19.81	1,305.55	275.06	1,327.73	1,320.61	7.12	186.520		
800.00	799.45	815.85	817.79	3.26	4.61	20.04	1,304.00	275.69	1,318.19	1,310.32	7.87	167.545		
900.00	898.70	911.37	913.30	3.70	4.92	20.35	1,302.63	276.41	1,305.50	1,296.89	8.62	151.529		
1,000.00	997.47	1,004.78	1,006.69	4.15	5.23	20.75	1,301.44	277.55	1,289.87	1,280.49	9.37	137.612		
1,100.00	1,095.78	1,096.46	1,098.37	4.60	5.54	21.11	1,300.86	278.47	1,272.35	1,262.22	10.14	125.510		
1,200.00	1,194.05	1,193.81	1,195.72	5.05	5.89	21.45	1,300.55	279.16	1,254.94	1,244.02	10.93	114.840		
1,300.00	1,292.33	1,293.34	1,295.24	5.50	6.25	21.80	1,300.21	279.91	1,237.57	1,225.83	11.74	105.419		
1,400.00	1,390.61	1,389.98	1,391.88	5.96	6.62	22.15	1,299.81	280.45	1,220.13	1,207.58	12.55	97.207		
1,500.00	1,488.89	1,484.61	1,486.50	6.43	6.97	22.50	1,299.76	281.08	1,203.10	1,189.74	13.36	90.030		
1,600.00	1,587.16	1,582.49	1,584.39	6.89	7.35	22.87	1,299.79	281.79	1,186.21	1,172.02	14.19	83.581		
1,700.00	1,685.44	1,681.45	1,683.34	7.36	7.73	23.26	1,299.82	282.58	1,169.40	1,154.37	15.03	77.792		
1,800.00	1,783.72	1,783.88	1,785.77	7.83	8.14	23.67	1,299.68	283.21	1,152.44	1,136.54	15.89	72.515		
1,900.00	1,882.00	1,879.14	1,881.03	8.30	8.51	24.06	1,299.35	283.74	1,135.31	1,118.58	16.73	67.878		
2,000.00	1,980.27	1,968.84	1,970.73	8.77	8.85	24.37	1,299.96	283.09	1,118.85	1,101.32	17.53	63.817		
2,100.00	2,078.55	2,055.48	2,057.33	9.25	9.18	24.62	1,301.62	281.52	1,103.30	1,084.97	18.33	60.198		
2,200.00	2,176.83	2,138.59	2,140.36	9.72	9.50	24.80	1,304.51	279.38	1,089.04	1,069.92	19.12	56.968		
2,300.00	2,275.11	2,221.72	2,223.34	10.19	9.82	24.96	1,308.85	276.98	1,076.33	1,056.42	19.91	54.065		
2,400.00	2,373.38	2,311.39	2,312.80	10.66	10.17	25.12	1,314.54	274.50	1,064.75	1,044.03	20.73	51.373		
2,500.00	2,471.66	2,402.00	2,403.14	11.14	10.53	25.28	1,321.09	272.11	1,054.06	1,032.51	21.55	48.909		
2,600.00	2,569.94	2,496.69	2,497.47	11.61	10.91	25.41	1,328.68	269.07	1,043.97	1,021.57	22.40	46.613		
2,700.00	2,668.22	2,586.80	2,587.17	12.09	11.28	25.50	1,336.68	265.86	1,034.58	1,011.36	23.23	44.542		
2,800.00	2,766.49	2,678.89	2,678.76	12.56	11.66	25.58	1,345.66	262.53	1,026.01	1,001.95	24.07	42.628		
2,900.00	2,864.77	2,768.25	2,767.52	13.04	12.04	25.62	1,355.32	258.88	1,018.32	993.42	24.90	40.893		
3,000.00	2,963.05	2,870.32	2,868.81	13.51	12.48	25.63	1,366.99	254.10	1,011.05	985.25	25.80	39.195		
3,100.00	3,061.33	2,978.91	2,976.63	13.99	12.95	25.63	1,378.74	248.84	1,003.13	976.41	26.72	37.540		
3,200.00	3,159.60	3,080.67	3,077.68	14.46	13.39	25.61	1,389.42	243.27	994.73	967.10	27.62	36.012		
3,300.00	3,257.88	3,183.97	3,180.25	14.94	13.85	25.57	1,400.09	237.30	986.06	957.53	28.53	34.561		
3,400.00	3,356.16	3,285.30	3,280.97	15.41	14.30	25.57	1,409.91	231.99	976.95	947.52	29.43	33.190		
3,500.00	3,454.43	3,380.20	3,375.31	15.89	14.72	25.60	1,419.22	227.62	968.15	937.83	30.31	31.938		
3,600.00	3,552.71	3,476.43	3,470.93	16.36	15.15	25.63	1,429.08	223.20	959.76	928.56	31.20	30.761		
3,700.00	3,650.99	3,575.37	3,569.23	16.84	15.60	25.67	1,439.41	218.87	951.63	919.53	32.10	29.645		
3,800.00	3,749.27	3,677.92	3,671.12	17.32	16.06	25.70	1,450.03	214.15	943.35	910.33	33.02	28.571		
3,900.00	3,847.54	3,780.88	3,773.41	17.79	16.53	25.70	1,460.50	208.80	934.71	900.77	33.94	27.540		
4,000.00	3,945.82	3,876.24	3,868.14	18.27	16.97	25.69	1,470.17	203.65	925.99	891.16	34.83	26.584		
4,100.00	4,044.10	3,971.61	3,962.72	18.75	17.42	25.60	1,480.81	197.64	917.96	882.23	35.73	25.693		
4,200.00	4,142.38	4,066.65	4,056.91	19.22	17.86	25.49	1,491.83	191.38	910.27	873.64	36.63	24.853		
4,300.00	4,240.65	4,163.81	4,153.15	19.70	18.32	25.38	1,503.59	185.16	903.12	865.59	37.53	24.062		
4,400.00	4,338.93	4,267.85	4,256.32	20.18	18.82	25.32	1,515.80	179.40	895.88	857.40	38.47	23.286		
4,500.00	4,437.21	4,372.65	4,360.32	20.65	19.31	25.28	1,527.38	173.68	888.01	848.59	39.41	22.530		
4,600.00	4,535.49	4,469.42	4,456.42	21.13	19.77	25.30	1,537.69	169.12	879.97	839.65	40.32	21.825		
4,700.00	4,633.76	4,568.99	4,555.35	21.61	20.23	25.37	1,548.30	165.31	872.20	830.97	41.24	21.151		
4,800.00	4,732.04	4,670.99	4,656.74	22.08	20.71	25.46	1,558.92	161.68	864.29	822.13	42.16	20.498		
4,900.00	4,830.32	4,787.88	4,773.09	22.56	21.25	25.63	1,569.49	157.96	855.17	812.03	43.14	19.824		
5,000.00	4,928.60	4,899.10	4,883.96	23.04	21.75	25.87	1,577.55	154.82	844.48	800.40	44.08	19.158		
5,100.00	5,026.87	5,012.14	4,996.79	23.51	22.26	26.17	1,583.82	151.77	832.22	787.21	45.01	18.490		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,123.55	5,108.11	23.99	22.74	26.62	1,587.69	150.13	818.42	772.50	45.92	17.823		
5,300.00	5,223.43	5,229.69	5,214.24	24.47	23.18	27.19	1,589.55	149.80	803.42	756.61	46.81	17.162		
5,400.00	5,321.71	5,333.86	5,318.40	24.94	23.62	27.76	1,590.67	149.06	787.73	740.03	47.70	16.514		
5,500.00	5,419.98	5,438.47	5,423.00	25.42	24.05	28.32	1,591.20	147.65	771.38	722.79	48.58	15.877		
5,600.00	5,518.26	5,542.41	5,526.91	25.90	24.48	28.85	1,591.27	145.33	754.38	704.92	49.46	15.253		
5,700.00	5,616.54	5,648.59	5,633.06	26.38	24.90	29.54	1,589.72	143.91	736.35	686.04	50.31	14.635		
5,800.00	5,714.82	5,744.96	5,729.41	26.85	25.28	30.29	1,587.59	143.58	718.11	666.91	51.20	14.027		
5,900.00	5,813.09	5,839.44	5,823.87	27.33	25.66	31.07	1,585.84	143.41	700.38	648.29	52.09	13.446		
6,000.00	5,911.37	5,934.85	5,919.28	27.81	26.04	31.86	1,584.59	143.15	683.23	630.25	52.98	12.896		
6,100.00	6,009.65	6,032.07	6,016.49	28.28	26.43	32.68	1,583.66	142.65	666.46	612.59	53.87	12.372		
6,200.00	6,107.93	6,130.50	6,114.92	28.76	26.83	33.54	1,582.85	142.01	649.88	595.13	54.76	11.869		
6,300.00	6,206.20	6,229.19	6,213.60	29.24	27.23	34.43	1,581.94	141.27	633.33	577.69	55.65	11.382		
6,400.00	6,304.48	6,326.07	6,310.47	29.72	27.63	35.34	1,581.19	140.37	616.99	560.44	56.55	10.911		
6,500.00	6,402.76	6,422.50	6,406.89	30.19	28.03	36.24	1,580.96	139.15	601.11	543.66	57.45	10.462		
6,600.00	6,501.04	6,629.87	6,612.98	30.67	28.83	38.99	1,563.12	133.84	578.96	522.08	56.88	10.179		
6,700.00	6,599.31	6,818.71	6,792.42	31.15	29.45	44.50	1,505.75	128.14	537.61	482.93	54.68	9.832		
6,800.00	6,697.50	6,971.74	6,925.37	31.63	29.89	76.35	1,430.47	127.54	485.89	433.27	52.62	9.233		
6,900.00	6,794.18	7,080.89	7,009.79	32.10	30.22	115.40	1,361.42	128.05	438.50	385.30	53.20	8.242		
7,000.00	6,886.96	7,155.70	7,062.25	32.55	30.48	136.72	1,308.15	129.53	411.97	355.25	56.72	7.263		
7,037.64	6,920.40	7,177.35	7,076.46	32.72	30.57	142.12	1,291.82	130.16	409.62	351.22	58.39	7.015 CC, ES		
7,100.00	6,973.57	7,209.57	7,096.81	32.99	30.70	149.35	1,266.87	131.16	416.22	355.29	60.93	6.831 SF		
7,200.00	7,051.87	7,251.47	7,121.96	33.41	30.89	157.80	1,233.38	132.35	453.36	389.72	63.63	7.125		
7,300.00	7,119.93	7,280.95	7,138.84	33.85	31.03	163.60	1,209.22	133.10	517.31	452.67	64.64	8.003		
7,400.00	7,176.09	7,301.49	7,150.23	34.39	31.13	168.17	1,192.15	133.65	599.37	534.62	64.75	9.257		
7,500.00	7,218.95	7,317.42	7,158.85	35.09	31.21	173.64	1,178.75	134.07	692.05	627.42	64.63	10.707		
7,600.00	7,247.46	7,327.17	7,164.03	35.98	31.26	-173.13	1,170.49	134.31	790.10	725.54	64.55	12.239		
7,700.00	7,260.92	7,331.13	7,166.11	37.04	31.29	-41.21	1,167.13	134.41	889.91	825.34	64.57	13.782		
7,800.00	7,261.75	7,330.38	7,165.71	38.23	31.28	-25.56	1,167.77	134.39	989.34	924.68	64.66	15.302		
7,900.00	7,261.33	7,329.13	7,165.06	39.59	31.27	-24.92	1,168.83	134.36	1,088.76	1,024.03	64.73	16.820		
8,000.00	7,260.91	7,327.84	7,164.38	41.10	31.27	-24.26	1,169.92	134.33	1,188.28	1,123.49	64.79	18.340		
8,100.00	7,260.49	7,326.52	7,163.68	42.75	31.26	-23.59	1,171.04	134.30	1,287.88	1,223.04	64.84	19.862		
8,200.00	7,260.07	7,325.16	7,162.97	44.53	31.25	-22.90	1,172.20	134.26	1,387.53	1,322.64	64.88	21.385		
8,300.00	7,259.65	7,323.76	7,162.22	46.41	31.25	-22.19	1,173.39	134.23	1,487.22	1,422.30	64.92	22.908		
8,400.00	7,259.23	7,322.31	7,161.46	48.39	31.24	-21.46	1,174.61	134.19	1,586.96	1,522.00	64.96	24.431		
8,500.00	7,258.81	7,320.83	7,160.67	50.45	31.23	-20.72	1,175.87	134.16	1,686.72	1,621.73	64.99	25.954		
8,600.00	7,258.39	7,319.29	7,159.85	52.59	31.22	-19.95	1,177.17	134.12	1,786.51	1,721.49	65.02	27.477		
8,700.00	7,257.97	7,317.71	7,159.00	54.79	31.22	-19.17	1,178.51	134.08	1,886.32	1,821.28	65.05	29.000		
8,800.00	7,257.55	7,316.07	7,158.13	57.05	31.21	-18.37	1,179.89	134.03	1,986.15	1,921.08	65.07	30.521		
8,900.00	7,257.13	7,314.39	7,157.23	59.36	31.20	-17.54	1,181.31	133.99	2,085.99	2,020.89	65.10	32.042		
9,000.00	7,256.71	7,312.64	7,156.29	61.72	31.19	-16.70	1,182.78	133.95	2,185.85	2,120.72	65.13	33.563		
9,100.00	7,256.29	7,310.84	7,155.32	64.12	31.18	-15.84	1,184.30	133.90	2,285.72	2,220.57	65.15	35.082		
9,200.00	7,255.87	7,308.97	7,154.31	66.56	31.17	-14.95	1,185.87	133.85	2,385.60	2,320.42	65.18	36.600		
9,300.00	7,255.45	7,307.04	7,153.26	69.02	31.16	-14.04	1,187.49	133.80	2,485.48	2,420.28	65.21	38.117		
9,400.00	7,255.03	7,305.05	7,152.18	71.52	31.15	-13.12	1,189.16	133.74	2,585.38	2,520.15	65.23	39.633		
9,500.00	7,254.61	7,302.98	7,151.05	74.04	31.14	-12.17	1,190.90	133.69	2,685.28	2,620.02	65.26	41.147		
9,600.00	7,254.19	7,300.83	7,149.87	76.58	31.13	-11.20	1,192.70	133.63	2,785.19	2,719.90	65.29	42.660		
9,700.00	7,253.77	7,299.00	7,148.87	79.15	31.12	-10.38	1,194.22	133.58	2,885.10	2,819.78	65.32	44.171		
9,800.00	7,253.35	7,299.00	7,148.87	81.74	31.12	-10.38	1,194.22	133.58	2,985.02	2,919.66	65.35	45.676		
9,900.00	7,252.92	7,296.46	7,147.47	84.34	31.11	-9.26	1,196.34	133.51	3,084.94	3,019.56	65.38	47.184		
10,000.00	7,252.50	7,295.32	7,146.84	86.96	31.10	-8.77	1,197.30	133.48	3,184.87	3,119.45	65.42	48.687		
10,100.00	7,252.08	7,294.19	7,146.22	89.59	31.09	-8.28	1,198.23	133.45	3,284.80	3,219.35	65.45	50.188		
10,200.00	7,251.66	7,293.08	7,145.61	92.24	31.09	-7.81	1,199.16	133.42	3,384.73	3,319.24	65.49	51.687		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,291.99	7,145.00	94.90	31.08	-7.35	1,200.07	133.39	3,484.67	3,419.15	65.52	53.184		
10,400.00	7,250.82	7,290.91	7,144.40	97.57	31.08	-6.89	1,200.97	133.36	3,584.61	3,519.05	65.56	54.678		
10,500.00	7,250.40	7,289.84	7,143.81	100.25	31.07	-6.45	1,201.86	133.33	3,684.55	3,618.95	65.60	56.170		
10,600.00	7,249.98	7,288.79	7,143.22	102.93	31.07	-6.01	1,202.73	133.30	3,784.50	3,718.86	65.64	57.660		
10,700.00	7,249.56	7,287.75	7,142.64	105.63	31.06	-5.59	1,203.60	133.27	3,884.44	3,818.77	65.67	59.147		
10,800.00	7,249.14	7,286.72	7,142.07	108.34	31.06	-5.17	1,204.45	133.25	3,984.39	3,918.68	65.72	60.631		
10,900.00	7,248.72	7,285.71	7,141.51	111.05	31.05	-4.76	1,205.29	133.22	4,084.35	4,018.59	65.76	62.113		
11,000.00	7,248.30	7,284.70	7,140.95	113.77	31.05	-4.36	1,206.12	133.19	4,184.30	4,118.50	65.80	63.592		
11,100.00	7,247.88	7,283.72	7,140.39	116.50	31.04	-3.97	1,206.94	133.17	4,284.26	4,218.41	65.84	65.068		
11,200.00	7,247.46	7,282.74	7,139.85	119.23	31.04	-3.59	1,207.74	133.14	4,384.21	4,318.33	65.89	66.541		
11,300.00	7,247.04	7,281.78	7,139.31	121.97	31.03	-3.22	1,208.54	133.12	4,484.17	4,418.24	65.93	68.012		
11,400.00	7,246.62	7,280.83	7,138.77	124.72	31.03	-2.85	1,209.33	133.09	4,584.13	4,518.16	65.98	69.479		
11,500.00	7,246.20	7,279.89	7,138.24	127.46	31.02	-2.49	1,210.10	133.07	4,684.10	4,618.07	66.03	70.944		
11,600.00	7,245.78	7,278.96	7,137.72	130.22	31.02	-2.14	1,210.87	133.05	4,784.06	4,717.99	66.07	72.405		
11,700.00	7,245.36	7,278.04	7,137.20	132.98	31.01	-1.79	1,211.63	133.02	4,884.02	4,817.90	66.12	73.863		
11,800.00	7,244.94	7,277.13	7,136.69	135.74	31.01	-1.45	1,212.38	133.00	4,983.99	4,917.82	66.17	75.318		
11,900.00	7,244.52	7,276.24	7,136.19	138.50	31.01	-1.12	1,213.11	132.98	5,083.96	5,017.73	66.22	76.770		
12,000.00	7,244.10	7,275.35	7,135.69	141.27	31.00	-0.80	1,213.84	132.95	5,183.93	5,117.65	66.27	78.219		
12,100.00	7,243.68	7,274.48	7,135.19	144.04	31.00	-0.48	1,214.56	132.93	5,283.89	5,217.57	66.33	79.664		
12,200.00	7,243.26	7,273.62	7,134.70	146.82	30.99	-0.16	1,215.27	132.91	5,383.86	5,317.48	66.38	81.105		
12,300.00	7,242.84	7,272.76	7,134.22	149.60	30.99	0.14	1,215.98	132.89	5,483.84	5,417.40	66.44	82.544		
12,400.00	7,242.42	7,271.92	7,133.74	152.38	30.98	0.44	1,216.67	132.87	5,583.81	5,517.32	66.49	83.978		
12,500.00	7,242.00	7,271.08	7,133.26	155.16	30.97	0.74	1,217.35	132.85	5,683.78	5,617.24	66.54	85.405		
12,600.00	7,241.58	7,270.24	7,132.78	157.95	30.96	1.04	1,218.02	132.83	5,783.75	5,717.16	66.59	86.825		
12,700.00	7,241.16	7,269.40	7,132.30	160.74	30.95	1.34	1,218.69	132.81	5,883.72	5,817.08	66.64	88.240		
12,800.00	7,240.74	7,268.56	7,131.82	163.53	30.94	1.64	1,219.35	132.79	5,983.70	5,916.99	66.69	89.655		
12,900.00	7,240.32	7,267.72	7,131.34	166.32	30.93	1.94	1,219.99	132.77	6,083.68	6,016.91	66.74	91.065		
13,000.00	7,239.90	7,266.88	7,130.86	169.12	30.92	2.24	1,220.63	132.75	6,183.65	6,116.81	66.79	92.470		
13,100.00	7,239.48	7,266.04	7,130.38	171.92	30.91	2.54	1,221.26	132.73	6,283.63	6,216.73	66.84	93.875		
13,200.00	7,239.06	7,265.20	7,129.90	174.72	30.90	2.84	1,221.88	132.71	6,383.60	6,316.65	66.89	95.280		
13,300.00	7,238.64	7,264.36	7,129.42	177.52	30.89	3.14	1,222.50	132.69	6,483.58	6,416.57	66.94	96.685		
13,400.00	7,238.22	7,263.52	7,128.94	180.32	30.88	3.44	1,223.11	132.67	6,583.55	6,516.49	67.00	98.090		
13,500.00	7,237.80	7,262.68	7,128.46	183.12	30.87	3.74	1,223.72	132.65	6,683.53	6,616.41	67.05	99.495		
13,600.00	7,237.38	7,261.84	7,127.98	185.93	30.86	4.04	1,224.33	132.63	6,783.50	6,716.32	67.10	100.900		
13,700.00	7,236.96	7,261.00	7,127.50	188.74	30.85	4.34	1,224.94	132.61	6,883.47	6,816.23	67.15	102.305		
13,800.00	7,236.54	7,260.16	7,127.02	191.55	30.84	4.64	1,225.55	132.59	6,983.44	6,916.14	67.20	103.710		
13,900.00	7,236.12	7,259.32	7,126.54	194.36	30.83	4.94	1,226.16	132.57	7,083.41	7,016.04	67.25	105.115		
14,000.00	7,235.70	7,258.48	7,126.06	197.17	30.82	5.24	1,226.77	132.55	7,183.38	7,115.95	67.30	106.520		
14,100.00	7,235.28	7,257.64	7,125.58	199.98	30.81	5.54	1,227.38	132.53	7,283.35	7,215.84	67.35	107.925		
14,200.00	7,234.86	7,256.80	7,125.10	202.80	30.80	5.84	1,227.99	132.51	7,383.32	7,315.74	67.40	109.330		
14,300.00	7,234.44	7,255.96	7,124.62	205.61	30.79	6.14	1,228.60	132.49	7,483.29	7,415.64	67.45	110.735		
14,400.00	7,234.02	7,255.12	7,124.14	208.43	30.78	6.44	1,229.21	132.47	7,583.26	7,515.53	67.50	112.140		
14,500.00	7,233.60	7,254.28	7,123.66	211.25	30.77	6.74	1,229.82	132.45	7,683.23	7,615.43	67.55	113.545		
14,600.00	7,233.18	7,253.44	7,123.18	214.06	30.76	7.04	1,230.43	132.43	7,783.20	7,715.32	67.60	114.950		
14,700.00	7,232.76	7,252.60	7,122.70	216.88	30.75	7.34	1,231.04	132.41	7,883.17	7,815.22	67.65	116.355		
14,800.00	7,232.34	7,251.76	7,122.22	219.70	30.74	7.64	1,231.65	132.39	7,983.14	7,915.11	67.70	117.760		
14,900.00	7,231.92	7,250.92	7,121.74	222.52	30.73	7.94	1,232.26	132.37	8,083.11	8,015.01	67.75	119.165		
15,000.00	7,231.50	7,250.08	7,121.26	225.35	30.72	8.24	1,232.87	132.35	8,183.08	8,114.90	67.80	120.570		
15,100.00	7,231.08	7,249.24	7,120.78	228.17	30.71	8.54	1,233.48	132.33	8,283.05	8,214.79	67.85	121.975		
15,116.21	7,231.00	7,249.10	7,120.70	228.63	30.70	8.84	1,234.09	132.31	8,299.26	8,230.99	67.90	122.380		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	2.00	0.00	3.28	13.02	1,307.50	302.32	1,342.00					
100.00	100.00	79.51	81.50	0.18	3.29	13.04	1,307.91	302.95	1,342.67	1,339.18	3.49	385.267		
200.00	200.00	165.50	167.45	0.61	3.31	13.11	1,309.26	305.02	1,344.72	1,340.78	3.94	341.114		
300.00	300.00	280.77	282.66	1.05	3.41	13.24	1,310.82	308.50	1,346.74	1,342.28	4.46	301.766		
400.00	400.00	375.28	377.13	1.49	3.54	13.36	1,311.10	311.30	1,347.74	1,342.71	5.04	267.604		
500.00	500.00	473.55	475.37	1.93	3.72	13.37	1,313.28	312.17	1,350.10	1,344.44	5.65	238.754		
600.00	599.98	592.35	594.17	2.37	3.99	21.14	1,314.42	312.11	1,349.35	1,343.00	6.36	212.223		
700.00	699.84	682.96	684.77	2.81	4.23	21.25	1,314.98	312.46	1,345.17	1,338.13	7.04	191.141		
800.00	799.45	775.43	777.23	3.26	4.49	21.44	1,316.15	313.18	1,338.46	1,330.71	7.75	172.755		
900.00	898.70	884.96	886.75	3.70	4.83	21.75	1,317.48	314.03	1,328.48	1,319.95	8.53	155.662		
1,000.00	997.47	980.75	982.53	4.15	5.15	22.11	1,318.39	314.55	1,314.98	1,305.68	9.30	141.413		
1,100.00	1,095.78	1,069.31	1,071.08	4.60	5.45	22.43	1,319.67	315.05	1,299.54	1,289.48	10.05	129.255		
1,200.00	1,194.05	1,169.13	1,170.88	5.05	5.81	22.75	1,321.51	315.52	1,284.31	1,273.46	10.86	118.312		
1,300.00	1,292.33	1,274.36	1,276.10	5.50	6.19	23.06	1,323.19	315.17	1,268.68	1,256.99	11.68	108.574		
1,400.00	1,390.61	1,371.52	1,373.25	5.96	6.55	23.33	1,324.78	314.40	1,253.00	1,240.51	12.50	100.274		
1,500.00	1,488.89	1,466.07	1,467.78	6.43	6.90	23.60	1,326.30	313.69	1,237.35	1,224.04	13.31	92.980		
1,600.00	1,587.16	1,545.12	1,546.80	6.89	7.21	23.90	1,328.06	314.71	1,222.86	1,208.78	14.08	86.878		
1,700.00	1,685.44	1,622.91	1,624.50	7.36	7.52	24.28	1,330.63	317.48	1,210.07	1,195.22	14.85	81.504		
1,800.00	1,783.72	1,708.63	1,710.01	7.83	7.86	24.76	1,334.20	322.37	1,198.79	1,183.14	15.65	76.590		
1,900.00	1,882.00	1,789.35	1,790.39	8.30	8.19	25.30	1,338.06	328.58	1,188.83	1,172.39	16.44	72.298		
2,000.00	1,980.27	1,868.91	1,869.48	8.77	8.53	25.86	1,342.91	335.67	1,180.63	1,163.40	17.23	68.510		
2,100.00	2,078.55	1,954.12	1,954.09	9.25	8.89	26.46	1,349.41	343.44	1,174.09	1,156.04	18.05	65.052		
2,200.00	2,176.83	2,048.48	2,047.71	9.72	9.30	27.13	1,357.15	352.34	1,168.38	1,149.48	18.91	61.797		
2,300.00	2,275.11	2,145.50	2,144.02	10.19	9.73	27.76	1,365.85	360.12	1,163.08	1,143.30	19.78	58.800		
2,400.00	2,373.38	2,243.61	2,241.37	10.66	10.17	28.43	1,374.52	368.71	1,158.07	1,137.41	20.66	56.047		
2,500.00	2,471.66	2,353.24	2,350.10	11.14	10.67	29.25	1,383.46	379.48	1,153.02	1,131.42	21.60	53.375		
2,600.00	2,569.94	2,458.05	2,454.18	11.61	11.14	30.04	1,390.89	389.28	1,146.97	1,124.45	22.52	50.926		
2,700.00	2,668.22	2,550.98	2,546.48	12.09	11.57	30.73	1,397.77	397.65	1,141.28	1,117.89	23.39	48.792		
2,800.00	2,766.49	2,639.58	2,634.40	12.56	11.98	31.40	1,404.86	405.98	1,136.49	1,112.25	24.24	46.885		
2,900.00	2,864.77	2,736.24	2,730.22	13.04	12.43	32.15	1,413.17	415.58	1,132.66	1,107.53	25.13	45.073		
3,000.00	2,963.05	2,850.16	2,843.15	13.51	12.97	33.11	1,421.71	427.86	1,128.43	1,102.33	26.11	43.226		
3,100.00	3,061.33	2,956.23	2,948.37	13.99	13.47	34.06	1,428.02	439.69	1,123.23	1,096.19	27.04	41.533		
3,200.00	3,159.60	3,066.76	3,058.23	14.46	13.99	34.96	1,434.74	449.84	1,117.52	1,089.52	28.00	39.912		
3,300.00	3,257.88	3,152.00	3,142.96	14.94	14.39	35.65	1,440.17	457.46	1,112.15	1,083.31	28.84	38.560		
3,400.00	3,356.16	3,240.81	3,231.11	15.41	14.81	36.39	1,446.30	466.25	1,107.96	1,078.26	29.70	37.304		
3,500.00	3,454.43	3,360.78	3,350.32	15.89	15.38	37.37	1,454.33	477.00	1,103.31	1,072.61	30.70	35.934		
3,600.00	3,552.71	3,454.95	3,443.98	16.36	15.82	38.12	1,460.30	484.84	1,098.31	1,066.72	31.59	34.770		
3,700.00	3,650.99	3,549.90	3,538.35	16.84	16.27	38.91	1,466.41	493.28	1,093.88	1,061.41	32.48	33.683		
3,800.00	3,749.27	3,645.38	3,633.24	17.32	16.73	39.69	1,472.98	501.66	1,090.00	1,056.64	33.37	32.668		
3,900.00	3,847.54	3,742.01	3,729.21	17.79	17.19	40.52	1,479.50	510.79	1,086.60	1,052.34	34.26	31.714		
4,000.00	3,945.82	3,835.70	3,822.22	18.27	17.64	41.36	1,485.50	520.31	1,083.57	1,048.42	35.15	30.829		
4,100.00	4,044.10	3,913.19	3,899.00	18.75	18.02	42.09	1,491.00	529.28	1,082.17	1,046.22	35.94	30.108		
4,137.84	4,081.29	3,948.26	3,933.69	18.93	18.20	42.43	1,493.70	533.67	1,082.11	1,045.83	36.28	29.830		
4,200.00	4,142.38	4,005.87	3,990.65	19.22	18.49	42.99	1,498.25	541.00	1,082.27	1,045.45	36.82	29.393		
4,300.00	4,240.65	4,100.65	4,084.35	19.70	18.97	43.88	1,506.40	552.67	1,083.10	1,045.39	37.71	28.723		
4,400.00	4,338.93	4,218.65	4,201.19	20.18	19.56	44.88	1,517.10	565.24	1,083.57	1,044.84	38.73	27.977		
4,500.00	4,437.21	4,335.99	4,317.73	20.65	20.13	45.78	1,526.88	574.81	1,082.11	1,042.37	39.74	27.232		
4,600.00	4,535.49	4,436.81	4,417.93	21.13	20.61	46.51	1,535.40	581.86	1,080.24	1,039.59	40.65	26.574		
4,700.00	4,633.76	4,531.86	4,512.42	21.61	21.06	47.19	1,543.48	588.40	1,078.52	1,036.98	41.54	25.965		
4,800.00	4,732.04	4,631.92	4,611.82	22.08	21.54	47.92	1,552.15	595.86	1,077.46	1,035.01	42.45	25.382		
4,900.00	4,830.32	4,735.01	4,714.30	22.56	22.04	48.67	1,560.79	602.98	1,075.99	1,032.61	43.38	24.804		
5,000.00	4,928.60	4,846.43	4,825.11	23.04	22.57	49.52	1,569.25	610.87	1,074.25	1,029.91	44.35	24.224		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	4,953.56	4,931.80	23.51	23.07	50.34	1,576.41	617.63	1,071.50	1,026.21	45.29	23.658		
5,200.00	5,125.15	5,088.63	5,066.48	23.99	23.68	51.50	1,581.96	626.04	1,067.07	1,020.74	46.33	23.034		
5,300.00	5,223.43	5,207.47	5,185.21	24.47	24.20	52.43	1,585.63	629.39	1,059.70	1,012.43	47.28	22.415		
5,400.00	5,321.71	5,361.38	5,339.08	24.94	24.81	53.62	1,587.46	629.88	1,049.58	1,001.39	48.18	21.783		
5,500.00	5,419.98	5,455.87	5,433.55	25.42	25.15	54.40	1,586.49	628.87	1,037.10	988.06	49.04	21.148		
5,600.00	5,518.26	5,551.77	5,529.45	25.90	25.51	55.21	1,585.71	628.09	1,025.17	975.27	49.90	20.544		
5,700.00	5,616.54	5,652.92	5,630.59	26.38	25.88	56.09	1,584.89	627.19	1,013.41	962.66	50.76	19.966		
5,800.00	5,714.82	5,754.67	5,732.33	26.85	26.26	56.98	1,583.85	625.90	1,001.46	949.84	51.62	19.401		
5,900.00	5,813.09	5,854.12	5,831.76	27.33	26.63	57.84	1,583.14	624.17	989.59	937.10	52.48	18.856		
6,000.00	5,911.37	5,953.44	5,931.06	27.81	27.00	58.73	1,582.25	622.32	977.74	924.39	53.35	18.327		
6,100.00	6,009.65	6,052.57	6,030.16	28.28	27.38	59.62	1,581.52	620.33	966.11	911.89	54.22	17.819		
6,200.00	6,107.93	6,148.45	6,126.02	28.76	27.74	60.50	1,580.81	618.29	954.63	899.53	55.10	17.327		
6,300.00	6,206.20	6,243.55	6,221.11	29.24	28.10	61.43	1,579.90	617.02	943.87	887.90	55.98	16.862		
6,400.00	6,304.48	6,355.17	6,332.71	29.72	28.53	62.52	1,579.08	615.06	933.26	876.43	56.83	16.421		
6,500.00	6,402.76	6,540.31	6,516.24	30.19	29.17	63.35	1,557.35	609.08	914.10	856.82	57.28	15.959		
6,600.00	6,501.04	6,680.91	6,651.66	30.67	29.60	68.90	1,519.96	608.98	891.95	834.16	57.80	15.433		
6,700.00	6,599.31	6,934.46	6,869.22	31.15	30.19	79.41	1,393.16	609.93	860.79	803.93	56.85	15.140		
6,800.00	6,697.50	7,024.36	6,933.58	31.63	30.33	105.78	1,330.43	610.78	829.85	771.43	58.42	14.205		
6,898.00	6,792.27	7,076.49	6,968.20	32.09	30.40	134.62	1,291.48	611.12	817.86	757.46	60.40	13.542 CC		
6,900.00	6,794.18	7,077.20	6,968.65	32.10	30.40	135.00	1,290.93	611.13	817.86	757.43	60.44	13.533 ES		
7,000.00	6,886.96	7,125.02	6,997.81	32.55	30.46	149.41	1,253.07	612.56	830.85	768.71	62.14	13.370 SF		
7,100.00	6,973.57	7,162.11	7,018.60	32.99	30.52	157.53	1,222.38	613.90	868.03	804.72	63.31	13.712		
7,200.00	7,051.87	7,204.66	7,040.20	33.41	30.71	163.92	1,185.77	615.28	926.37	862.40	63.96	14.482		
7,300.00	7,119.93	7,225.28	7,049.73	33.85	30.82	167.93	1,167.48	615.71	1,001.31	937.12	64.19	15.600		
7,400.00	7,176.09	7,238.86	7,055.66	34.39	30.89	171.50	1,155.27	615.98	1,088.36	1,024.17	64.19	16.955		
7,500.00	7,218.95	7,246.33	7,058.80	35.09	30.93	176.19	1,148.49	616.12	1,183.13	1,119.00	64.13	18.450		
7,600.00	7,247.46	7,250.80	7,060.64	35.98	30.96	-163.91	1,144.43	616.21	1,281.93	1,217.84	64.09	20.001		
7,700.00	7,260.92	7,252.56	7,061.36	37.04	30.97	-28.33	1,142.81	616.25	1,381.77	1,317.65	64.12	21.550		
7,800.00	7,261.75	7,252.28	7,061.25	38.23	30.96	-21.30	1,143.07	616.24	1,480.73	1,416.54	64.19	23.067		
7,900.00	7,261.33	7,251.81	7,061.05	39.59	30.96	-21.18	1,143.51	616.23	1,579.67	1,515.41	64.26	24.581		
8,000.00	7,260.91	7,251.34	7,060.86	41.10	30.96	-21.06	1,143.93	616.22	1,678.74	1,614.42	64.32	26.098		
8,100.00	7,260.49	7,250.87	7,060.67	42.75	30.96	-20.94	1,144.36	616.21	1,777.91	1,713.54	64.38	27.617		
8,200.00	7,260.07	7,250.42	7,060.49	44.53	30.95	-20.82	1,144.77	616.21	1,877.17	1,812.75	64.42	29.138		
8,300.00	7,259.65	7,249.97	7,060.30	46.41	30.95	-20.71	1,145.18	616.20	1,976.51	1,912.04	64.47	30.659		
8,400.00	7,259.23	7,249.52	7,060.12	48.39	30.95	-20.59	1,145.59	616.19	2,075.90	2,011.40	64.51	32.182		
8,500.00	7,258.81	7,249.08	7,059.94	50.45	30.95	-20.48	1,145.99	616.18	2,175.36	2,110.81	64.54	33.704		
8,600.00	7,258.39	7,248.65	7,059.76	52.59	30.94	-20.37	1,146.39	616.17	2,274.86	2,210.28	64.58	35.226		
8,700.00	7,257.97	7,248.22	7,059.58	54.79	30.94	-20.26	1,146.78	616.16	2,374.40	2,309.79	64.61	36.749		
8,800.00	7,257.55	7,247.79	7,059.41	57.05	30.94	-20.15	1,147.16	616.15	2,473.98	2,409.34	64.64	38.271		
8,900.00	7,257.13	7,247.37	7,059.23	59.36	30.94	-20.04	1,147.55	616.14	2,573.59	2,508.92	64.68	39.792		
9,000.00	7,256.71	7,246.96	7,059.06	61.72	30.94	-19.93	1,147.92	616.14	2,673.23	2,608.52	64.71	41.312		
9,100.00	7,256.29	7,246.55	7,058.89	64.12	30.93	-19.83	1,148.29	616.13	2,772.90	2,708.16	64.74	42.831		
9,200.00	7,255.87	7,246.15	7,058.73	66.56	30.93	-19.72	1,148.66	616.12	2,872.59	2,807.82	64.77	44.350		
9,300.00	7,255.45	7,245.75	7,058.56	69.02	30.93	-19.62	1,149.02	616.11	2,972.30	2,907.50	64.80	45.867		
9,400.00	7,255.03	7,245.35	7,058.39	71.52	30.93	-19.52	1,149.38	616.10	3,072.03	3,007.19	64.83	47.382		
9,500.00	7,254.61	7,244.96	7,058.23	74.04	30.92	-19.42	1,149.74	616.10	3,171.77	3,106.91	64.87	48.897		
9,600.00	7,254.19	7,244.58	7,058.07	76.58	30.92	-19.32	1,150.09	616.09	3,271.54	3,206.64	64.90	50.409		
9,700.00	7,253.77	7,244.20	7,057.91	79.15	30.92	-19.22	1,150.43	616.08	3,371.31	3,306.38	64.93	51.920		
9,800.00	7,253.35	7,243.82	7,057.75	81.74	30.92	-19.13	1,150.77	616.07	3,471.10	3,406.13	64.97	53.429		
9,900.00	7,252.92	7,243.45	7,057.60	84.34	30.92	-19.03	1,151.11	616.07	3,570.90	3,505.90	65.00	54.936		
10,000.00	7,252.50	7,243.08	7,057.44	86.96	30.91	-18.94	1,151.44	616.06	3,670.71	3,605.67	65.04	56.441		
10,100.00	7,252.08	7,238.00	7,055.29	89.59	30.89	-17.64	1,156.05	615.96	3,770.54	3,705.48	65.06	57.958		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,200.00	7,251.66	7,238.00	7,055.29	92.24	30.89	-17.64	1,156.05	615.96	3,870.37	3,805.27	65.09	59.458	
10,300.00	7,251.24	7,238.00	7,055.29	94.90	30.89	-17.64	1,156.05	615.96	3,970.20	3,905.07	65.13	60.955	
10,400.00	7,250.82	7,238.00	7,055.29	97.57	30.89	-17.64	1,156.05	615.96	4,070.05	4,004.88	65.17	62.451	
10,500.00	7,250.40	7,238.00	7,055.29	100.25	30.89	-17.64	1,156.05	615.96	4,169.90	4,104.69	65.21	63.943	
10,600.00	7,249.98	7,238.00	7,055.29	102.93	30.89	-17.64	1,156.05	615.96	4,269.76	4,204.51	65.25	65.434	
10,700.00	7,249.56	7,238.00	7,055.29	105.63	30.89	-17.64	1,156.05	615.96	4,369.63	4,304.33	65.29	66.921	
10,800.00	7,249.14	7,242.39	7,057.15	108.34	30.91	-18.76	1,152.07	616.04	4,469.50	4,404.15	65.35	68.394	
10,900.00	7,248.72	7,241.81	7,056.91	111.05	30.91	-18.61	1,152.59	616.03	4,569.38	4,503.99	65.39	69.877	
11,000.00	7,248.30	7,241.23	7,056.66	113.77	30.90	-18.46	1,153.13	616.02	4,669.26	4,603.83	65.43	71.358	
11,100.00	7,247.88	7,240.62	7,056.41	116.50	30.90	-18.31	1,153.67	616.01	4,769.15	4,703.67	65.48	72.836	
11,200.00	7,247.46	7,240.01	7,056.15	119.23	30.90	-18.15	1,154.23	616.00	4,869.04	4,803.52	65.52	74.312	
11,300.00	7,247.04	7,239.38	7,055.88	121.97	30.89	-17.99	1,154.80	615.99	4,968.94	4,903.37	65.57	75.784	
11,400.00	7,246.62	7,238.73	7,055.60	124.72	30.89	-17.83	1,155.38	615.97	5,068.84	5,003.23	65.61	77.253	
11,500.00	7,246.20	7,238.08	7,055.32	127.46	30.89	-17.66	1,155.98	615.96	5,168.75	5,103.09	65.66	78.720	
11,600.00	7,245.78	7,237.40	7,055.03	130.22	30.88	-17.49	1,156.59	615.95	5,268.66	5,202.95	65.71	80.183	
11,700.00	7,245.36	7,236.71	7,054.74	132.98	30.88	-17.31	1,157.21	615.94	5,368.57	5,302.81	65.76	81.643	
11,800.00	7,244.94	7,236.00	7,054.43	135.74	30.88	-17.13	1,157.85	615.92	5,468.48	5,402.68	65.81	83.100	
11,900.00	7,244.52	7,235.28	7,054.12	138.50	30.87	-16.95	1,158.50	615.91	5,568.40	5,502.54	65.86	84.553	
12,000.00	7,244.10	7,153.63	7,014.00	141.27	30.50	1.33	1,229.51	613.58	5,668.29	5,602.54	65.74	86.220	
12,100.00	7,243.68	7,152.14	7,013.18	144.04	30.50	1.60	1,230.75	613.52	5,768.19	5,702.39	65.79	87.670	
12,200.00	7,243.26	7,150.66	7,012.37	146.82	30.50	1.87	1,231.98	613.47	5,868.09	5,802.24	65.85	89.115	
12,300.00	7,242.84	7,149.19	7,011.55	149.60	30.50	2.14	1,233.20	613.42	5,968.00	5,902.09	65.90	90.558	
12,400.00	7,242.42	7,148.00	7,008.10	152.38	30.49	3.24	1,238.34	613.19	6,067.91	6,001.96	65.95	92.005	
12,500.00	7,242.00	7,143.00	7,008.10	155.16	30.49	3.24	1,238.34	613.19	6,167.82	6,101.81	66.01	93.438	
12,600.00	7,241.58	7,143.00	7,008.10	157.95	30.49	3.24	1,238.34	613.19	6,267.73	6,201.66	66.07	94.866	
12,700.00	7,241.16	7,143.00	7,008.10	160.74	30.49	3.24	1,238.34	613.19	6,367.65	6,301.52	66.13	96.291	
12,800.00	7,240.74	7,143.00	7,008.10	163.53	30.49	3.24	1,238.34	613.19	6,467.56	6,401.37	66.19	97.712	
12,900.00	7,240.32	7,143.00	7,008.10	166.32	30.49	3.24	1,238.34	613.19	6,567.48	6,501.23	66.25	99.129	
13,000.00	7,239.89	7,143.00	7,008.10	169.12	30.49	3.24	1,238.34	613.19	6,667.41	6,601.09	66.31	100.542	
13,100.00	7,239.47	7,143.00	7,008.10	171.92	30.49	3.24	1,238.34	613.19	6,767.33	6,700.95	66.38	101.951	
13,200.00	7,239.05	7,143.00	7,008.10	174.72	30.49	3.24	1,238.34	613.19	6,867.26	6,800.82	66.44	103.356	
13,300.00	7,238.63	7,135.97	7,004.12	177.52	30.48	4.45	1,244.12	612.94	6,967.18	6,900.68	66.50	104.768	
13,400.00	7,238.21	7,134.78	7,003.44	180.32	30.48	4.64	1,245.10	612.90	7,067.11	7,000.54	66.57	106.167	
13,500.00	7,237.79	7,133.60	7,002.76	183.13	30.47	4.84	1,246.07	612.86	7,167.04	7,100.41	66.63	107.562	
13,600.00	7,237.37	7,132.43	7,002.09	185.93	30.47	5.03	1,247.03	612.82	7,266.97	7,200.27	66.70	108.953	
13,700.00	7,236.95	7,131.27	7,001.43	188.74	30.47	5.22	1,247.97	612.78	7,366.90	7,300.14	66.77	110.339	
13,800.00	7,236.53	7,130.13	7,000.77	191.55	30.47	5.41	1,248.91	612.74	7,466.84	7,400.00	66.83	111.722	
13,900.00	7,236.11	7,129.00	7,000.12	194.36	30.47	5.59	1,249.83	612.70	7,566.78	7,499.87	66.90	113.100	
14,000.00	7,235.69	7,127.87	6,999.47	197.17	30.47	5.77	1,250.75	612.66	7,666.71	7,599.74	66.97	114.474	
14,100.00	7,235.27	7,126.76	6,998.82	199.98	30.47	5.95	1,251.65	612.62	7,766.65	7,699.61	67.04	115.843	
14,200.00	7,234.85	7,125.66	6,998.18	202.80	30.46	6.12	1,252.55	612.58	7,866.59	7,799.47	67.12	117.208	
14,300.00	7,234.43	7,124.57	6,997.55	205.61	30.46	6.29	1,253.43	612.55	7,966.53	7,899.34	67.19	118.569	
14,400.00	7,234.01	7,123.49	6,996.92	208.43	30.46	6.46	1,254.31	612.51	8,066.47	7,999.21	67.26	119.925	
14,500.00	7,233.59	7,122.43	6,996.30	211.25	30.46	6.63	1,255.17	612.47	8,166.42	8,099.08	67.34	121.277	
14,600.00	7,233.17	7,121.37	6,995.68	214.06	30.46	6.79	1,256.03	612.44	8,266.36	8,198.95	67.41	122.624	
14,700.00	7,232.75	7,120.32	6,995.06	216.88	30.46	6.95	1,256.88	612.40	8,366.31	8,298.82	67.49	123.967	
14,800.00	7,232.33	7,119.29	6,994.45	219.70	30.46	7.11	1,257.71	612.37	8,466.25	8,398.69	67.56	125.306	
14,900.00	7,231.91	7,118.26	6,993.85	222.52	30.45	7.26	1,258.54	612.33	8,566.20	8,498.56	67.64	126.639	
15,000.00	7,231.49	7,117.00	6,993.24	225.35	30.45	7.41	1,259.38	612.30	8,666.16	8,598.44	67.72	127.978	
15,100.00	7,231.07	7,115.00	6,992.63	228.17	30.45	7.56	1,260.22	612.27	8,766.10	8,698.31	67.80	129.301	
15,116.21	7,231.00	7,111.00	6,989.54	228.63	30.45	8.33	1,264.38	612.10	8,782.31	8,714.50	67.81	129.515	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	10.46	2.46	0.00	3.28	52.40	1,303.90	1,692.92	2,136.85					
100.00	100.00	141.18	133.18	0.18	3.29	52.38	1,303.80	1,691.62	2,136.02	2,132.52	3.50	610.590		
200.00	200.00	256.68	248.63	0.61	3.37	52.32	1,304.05	1,688.62	2,134.09	2,130.09	4.00	533.009		
300.00	300.00	360.79	352.65	1.05	3.51	52.23	1,305.05	1,684.52	2,131.56	2,126.99	4.57	466.402		
400.00	400.00	451.64	443.40	1.49	3.67	52.13	1,306.89	1,680.60	2,129.38	2,124.21	5.16	412.390		
500.00	500.00	551.22	542.85	1.93	3.89	52.00	1,309.43	1,676.04	2,127.33	2,121.51	5.82	365.591		
600.00	599.98	649.26	640.71	2.37	4.15	59.69	1,312.66	1,671.07	2,124.49	2,117.98	6.51	326.392		
700.00	699.84	744.38	735.61	2.81	4.42	59.71	1,316.37	1,665.94	2,120.01	2,112.79	7.22	293.532		
800.00	799.45	847.03	837.99	3.26	4.75	59.83	1,321.03	1,660.14	2,113.97	2,105.98	7.99	264.659		
900.00	898.70	940.67	931.38	3.70	5.07	60.06	1,325.14	1,654.73	2,105.99	2,097.24	8.75	240.797		
1,000.00	997.47	1,034.62	1,025.03	4.15	5.41	60.37	1,330.21	1,649.17	2,096.79	2,087.26	9.53	220.030		
1,100.00	1,095.78	1,309.49	1,296.27	4.60	6.58	60.54	1,351.69	1,611.48	2,080.67	2,069.54	11.13	186.895		
1,200.00	1,194.05	1,419.50	1,404.19	5.05	7.12	60.52	1,359.35	1,591.52	2,061.43	2,049.35	12.08	170.611		
1,300.00	1,292.33	1,507.62	1,490.55	5.50	7.56	60.49	1,365.73	1,575.26	2,042.14	2,029.18	12.95	157.678		
1,400.00	1,390.61	1,683.26	1,662.58	5.96	8.48	60.48	1,375.59	1,541.31	2,021.05	2,006.82	14.24	141.973		
1,500.00	1,488.89	1,791.03	1,768.13	6.43	9.06	60.52	1,378.98	1,519.85	1,998.15	1,982.94	15.20	131.423		
1,600.00	1,587.16	1,869.45	1,845.00	6.89	9.48	60.56	1,380.99	1,504.47	1,975.17	1,959.12	16.05	123.093		
1,700.00	1,685.44	1,937.91	1,912.30	7.36	9.84	60.62	1,383.09	1,492.10	1,953.63	1,936.78	16.85	115.946		
1,800.00	1,783.72	2,011.00	1,984.31	7.83	10.23	60.68	1,385.65	1,479.87	1,933.41	1,915.74	17.68	109.386		
1,900.00	1,882.00	2,076.05	2,048.52	8.30	10.57	60.75	1,388.44	1,469.80	1,914.67	1,896.20	18.47	103.672		
2,000.00	1,980.27	2,158.21	2,129.69	8.77	10.99	60.82	1,392.97	1,457.92	1,897.40	1,878.06	19.34	98.102		
2,100.00	2,078.55	2,249.77	2,220.07	9.25	11.47	60.88	1,398.73	1,444.47	1,880.48	1,860.21	20.26	92.801		
2,200.00	2,176.83	2,337.82	2,306.92	9.72	11.94	60.92	1,405.16	1,431.45	1,864.08	1,842.90	21.18	88.011		
2,300.00	2,275.11	2,430.69	2,398.47	10.19	12.43	60.94	1,412.66	1,417.77	1,848.18	1,826.06	22.12	83.539		
2,400.00	2,373.38	2,524.26	2,490.88	10.66	12.92	61.00	1,419.42	1,404.74	1,832.43	1,809.36	23.07	79.442		
2,500.00	2,471.66	2,614.56	2,580.15	11.14	13.39	61.07	1,425.87	1,392.83	1,817.20	1,793.21	23.99	75.749		
2,600.00	2,569.94	2,715.28	2,679.83	11.61	13.90	61.17	1,432.73	1,380.02	1,802.14	1,777.19	24.96	72.213		
2,700.00	2,668.22	2,849.72	2,812.71	12.09	14.61	61.29	1,441.62	1,361.75	1,786.38	1,760.32	26.07	68.527		
2,800.00	2,766.49	2,977.61	2,938.56	12.56	15.32	61.33	1,450.06	1,340.65	1,768.17	1,741.00	27.17	65.082		
2,900.00	2,864.77	3,067.30	3,026.83	13.04	15.82	61.37	1,455.62	1,325.75	1,749.68	1,721.57	28.12	62.232		
3,000.00	2,963.05	3,167.75	3,125.81	13.51	16.37	61.44	1,461.38	1,309.58	1,731.32	1,702.22	29.10	59.500		
3,100.00	3,061.33	3,261.62	3,218.28	13.99	16.89	61.49	1,466.85	1,294.39	1,712.97	1,682.91	30.05	56.995		
3,200.00	3,159.60	3,342.32	3,298.02	14.46	17.32	61.59	1,470.78	1,282.66	1,695.35	1,664.40	30.95	54.775		
3,300.00	3,257.88	3,457.06	3,411.63	14.94	17.91	61.82	1,474.47	1,267.06	1,677.46	1,645.52	31.94	52.515		
3,400.00	3,356.16	3,535.40	3,489.30	15.41	18.31	61.99	1,476.66	1,257.03	1,660.01	1,627.20	32.81	50.598		
3,500.00	3,454.43	3,622.48	3,575.65	15.89	18.75	62.18	1,479.94	1,246.25	1,643.50	1,609.79	33.70	48.762		
3,600.00	3,552.71	3,712.77	3,665.07	16.36	19.21	62.32	1,484.75	1,234.71	1,627.59	1,592.96	34.63	47.004		
3,700.00	3,650.99	3,827.02	3,777.89	16.84	19.82	62.43	1,492.58	1,218.60	1,611.53	1,575.88	35.66	45.196		
3,800.00	3,749.27	3,940.65	3,889.71	17.32	20.46	62.45	1,501.44	1,200.43	1,594.50	1,557.79	36.71	43.436		
3,900.00	3,847.54	4,057.59	4,004.62	17.79	21.14	62.47	1,510.08	1,180.55	1,576.42	1,538.65	37.77	41.736		
4,000.00	3,945.82	4,175.50	4,120.40	18.27	21.82	62.50	1,517.66	1,159.54	1,557.12	1,518.29	38.83	40.103		
4,100.00	4,044.10	4,263.97	4,207.29	18.75	22.32	62.54	1,522.67	1,143.72	1,537.36	1,497.57	39.78	38.642		
4,200.00	4,142.38	4,346.90	4,288.98	19.22	22.79	62.62	1,527.08	1,130.09	1,518.54	1,477.82	40.72	37.291		
4,300.00	4,240.65	4,434.44	4,375.41	19.70	23.27	62.74	1,531.50	1,116.87	1,500.64	1,458.97	41.66	36.020		
4,400.00	4,338.93	4,526.01	4,465.87	20.18	23.76	62.87	1,536.26	1,103.53	1,483.25	1,440.65	42.60	34.814		
4,500.00	4,437.21	4,614.98	4,553.83	20.65	24.24	63.01	1,541.04	1,090.99	1,466.37	1,422.83	43.54	33.681		
4,600.00	4,535.49	4,700.88	4,638.84	21.13	24.69	63.16	1,545.77	1,079.65	1,450.30	1,405.84	44.46	32.624		
4,700.00	4,633.76	4,785.37	4,722.56	21.61	25.12	63.33	1,550.52	1,069.34	1,435.11	1,389.75	45.36	31.636		
4,800.00	4,732.04	4,865.33	4,801.89	22.08	25.53	63.50	1,555.28	1,060.58	1,421.14	1,374.89	46.24	30.731		
4,900.00	4,830.32	4,950.80	4,886.81	22.56	25.94	63.72	1,560.48	1,052.32	1,408.31	1,361.17	47.13	29.880		
5,000.00	4,928.60	5,045.81	4,981.28	23.04	26.40	63.98	1,566.16	1,043.94	1,396.14	1,348.10	48.05	29.059		
5,100.00	5,026.87	5,151.34	5,086.12	23.51	26.91	64.24	1,573.09	1,034.10	1,383.92	1,334.91	49.01	28.240		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,241.20	5,175.38	23.99	27.34	64.47	1,579.18	1,025.71	1,371.83	1,321.92	49.91	27.485		
5,300.00	5,223.43	5,343.95	5,277.59	24.47	27.83	64.78	1,585.11	1,017.02	1,359.94	1,309.09	50.85	26.745		
5,400.00	5,321.71	5,434.00	5,367.30	24.94	28.24	65.12	1,589.24	1,010.35	1,348.31	1,296.59	51.72	26.069		
5,500.00	5,419.98	5,521.03	5,454.11	25.42	28.62	65.51	1,592.47	1,005.17	1,337.49	1,284.92	52.56	25.445		
5,600.00	5,518.26	5,612.92	5,545.85	25.90	29.01	65.99	1,595.21	1,000.91	1,327.46	1,274.05	53.41	24.856		
5,700.00	5,616.54	5,708.14	5,640.96	26.38	29.41	66.51	1,597.75	997.13	1,317.93	1,263.67	54.25	24.292		
5,800.00	5,714.82	5,806.80	5,739.51	26.85	29.82	67.06	1,600.45	993.32	1,308.65	1,253.54	55.11	23.744		
5,900.00	5,813.09	5,905.65	5,838.27	27.33	30.23	67.64	1,602.72	989.75	1,299.49	1,243.52	55.97	23.218		
6,000.00	5,911.37	5,999.01	5,931.58	27.81	30.60	68.23	1,604.23	986.97	1,290.67	1,233.88	56.80	22.725		
6,100.00	6,009.65	6,100.16	6,032.69	28.28	31.00	68.91	1,605.31	984.40	1,282.12	1,224.47	57.64	22.243		
6,200.00	6,107.93	6,199.38	6,131.88	28.76	31.40	69.60	1,606.08	981.89	1,273.60	1,215.13	58.48	21.779		
6,300.00	6,206.20	6,296.61	6,229.09	29.24	31.77	70.34	1,605.67	980.06	1,265.30	1,206.01	59.29	21.341		
6,400.00	6,304.48	6,393.68	6,326.14	29.72	32.13	71.11	1,604.81	978.60	1,257.33	1,197.24	60.09	20.924		
6,500.00	6,402.76	6,483.11	6,415.90	30.19	33.58	76.94	1,537.65	955.50	1,247.02	1,187.22	59.80	20.852		
6,600.00	6,501.04	6,586.77	6,489.85	30.67	33.98	81.26	1,464.50	940.96	1,213.66	1,153.76	59.90	20.262		
6,700.00	6,599.31	7,083.00	6,960.45	31.15	34.20	85.51	1,392.16	933.97	1,180.69	1,120.18	60.51	19.513		
6,800.00	6,697.50	7,158.72	7,015.02	31.63	34.34	109.73	1,339.84	929.89	1,151.88	1,090.27	61.61	18.697		
6,900.00	6,794.18	7,233.76	7,065.36	32.10	34.47	138.89	1,284.33	926.30	1,140.85	1,078.06	62.79	18.170		
6,902.51	6,796.56	7,235.41	7,066.41	32.11	34.47	139.37	1,283.06	926.22	1,140.84	1,078.02	62.82	18.161 CC, ES		
7,000.00	6,886.96	7,290.98	7,099.82	32.55	34.57	152.93	1,238.74	924.03	1,151.24	1,087.28	63.97	17.998 SF		
7,100.00	6,973.57	7,316.11	7,113.39	32.99	34.62	159.95	1,217.61	923.38	1,183.67	1,118.82	64.85	18.252		
7,200.00	7,051.87	7,331.00	7,121.00	33.41	34.64	164.08	1,204.80	923.22	1,236.53	1,171.19	65.34	18.925		
7,300.00	7,119.93	7,341.14	7,126.02	33.85	34.66	166.83	1,195.99	923.24	1,306.40	1,240.87	65.53	19.937		
7,400.00	7,176.09	7,347.85	7,129.27	34.39	34.67	168.86	1,190.12	923.32	1,389.27	1,323.73	65.54	21.198		
7,500.00	7,218.95	7,352.36	7,131.42	35.09	34.68	170.76	1,186.16	923.41	1,481.18	1,415.70	65.48	22.620		
7,600.00	7,247.46	7,363.00	7,136.42	35.98	34.69	176.04	1,176.77	923.72	1,578.62	1,513.13	65.48	24.107		
7,700.00	7,260.92	7,363.00	7,136.42	37.04	34.69	-49.75	1,176.77	923.72	1,678.32	1,612.85	65.47	25.637		
7,800.00	7,261.75	7,363.00	7,136.42	38.23	34.69	-21.38	1,176.77	923.72	1,778.05	1,712.55	65.50	27.146		
7,900.00	7,261.33	7,363.00	7,136.42	39.59	34.69	-21.38	1,176.77	923.72	1,877.75	1,812.21	65.54	28.651		
8,000.00	7,260.91	7,363.00	7,136.42	41.10	34.69	-21.38	1,176.77	923.72	1,977.47	1,911.90	65.57	30.156		
8,100.00	7,260.49	7,363.00	7,136.42	42.75	34.69	-21.38	1,176.77	923.72	2,077.23	2,011.62	65.61	31.661		
8,200.00	7,260.07	7,363.00	7,136.42	44.53	34.69	-21.38	1,176.77	923.72	2,177.00	2,111.36	65.64	33.165		
8,300.00	7,259.65	7,363.00	7,136.42	46.41	34.69	-21.38	1,176.77	923.72	2,276.80	2,211.12	65.67	34.669		
8,400.00	7,259.23	7,363.00	7,136.42	48.39	34.69	-21.38	1,176.77	923.72	2,376.61	2,310.91	65.70	36.172		
8,500.00	7,258.81	7,363.00	7,136.42	50.45	34.69	-21.38	1,176.77	923.72	2,476.43	2,410.70	65.73	37.674		
8,600.00	7,258.39	7,363.00	7,136.42	52.59	34.69	-21.38	1,176.77	923.72	2,576.28	2,510.51	65.76	39.175		
8,700.00	7,257.97	7,363.00	7,136.42	54.79	34.69	-21.38	1,176.77	923.72	2,676.13	2,610.34	65.79	40.675		
8,800.00	7,257.55	7,363.00	7,136.42	57.05	34.69	-21.38	1,176.77	923.72	2,775.99	2,710.17	65.82	42.174		
8,900.00	7,257.13	7,363.00	7,136.42	59.36	34.69	-21.38	1,176.77	923.72	2,875.86	2,810.01	65.85	43.672		
9,000.00	7,256.71	7,363.00	7,136.42	61.72	34.69	-21.38	1,176.77	923.72	2,975.74	2,909.86	65.88	45.168		
9,100.00	7,256.29	7,363.00	7,136.42	64.12	34.69	-21.38	1,176.77	923.72	3,075.63	3,009.72	65.91	46.662		
9,200.00	7,255.87	7,363.00	7,136.42	66.56	34.69	-21.38	1,176.77	923.72	3,175.53	3,109.58	65.94	48.155		
9,300.00	7,255.45	7,363.00	7,136.42	69.02	34.69	-21.38	1,176.77	923.72	3,275.43	3,209.46	65.98	49.646		
9,400.00	7,255.03	7,363.00	7,136.42	71.52	34.69	-21.38	1,176.77	923.72	3,375.34	3,309.33	66.01	51.135		
9,500.00	7,254.61	7,363.00	7,136.42	74.04	34.69	-21.38	1,176.77	923.72	3,475.25	3,409.21	66.04	52.623		
9,600.00	7,254.19	7,363.00	7,136.42	76.58	34.69	-21.38	1,176.77	923.72	3,575.17	3,509.10	66.07	54.108		
9,700.00	7,253.77	7,363.00	7,136.42	79.15	34.69	-21.38	1,176.77	923.72	3,675.09	3,608.98	66.11	55.592		
9,800.00	7,253.35	7,363.00	7,136.42	81.74	34.69	-21.38	1,176.77	923.72	3,775.02	3,708.88	66.14	57.073		
9,900.00	7,252.92	7,363.00	7,136.42	84.34	34.69	-21.38	1,176.77	923.72	3,874.95	3,808.77	66.18	58.553		
10,000.00	7,252.50	7,363.00	7,136.42	86.96	34.69	-21.38	1,176.77	923.72	3,974.88	3,908.67	66.22	60.030		
10,100.00	7,252.08	7,363.00	7,136.42	89.59	34.69	-21.38	1,176.77	923.72	4,074.82	4,008.57	66.25	61.504		
10,200.00	7,251.66	7,363.00	7,136.42	92.24	34.69	-21.38	1,176.77	923.72	4,174.76	4,108.47	66.29	62.977		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,251.24	7,363.00	7,136.42	94.90	34.69	-21.38	1,176.77	923.72	4,274.70	4,208.38	66.33	64.447	
10,400.00	7,250.82	7,363.00	7,136.42	97.57	34.69	-21.38	1,176.77	923.72	4,374.65	4,308.28	66.37	65.914	
10,500.00	7,250.40	7,363.00	7,136.42	100.25	34.69	-21.38	1,176.77	923.72	4,474.60	4,408.19	66.41	67.379	
10,600.00	7,249.98	7,363.00	7,136.42	102.93	34.69	-21.38	1,176.77	923.72	4,574.55	4,508.10	66.45	68.841	
10,700.00	7,249.56	7,363.00	7,136.42	105.63	34.69	-21.38	1,176.77	923.72	4,674.50	4,608.01	66.49	70.301	
10,800.00	7,249.14	7,363.00	7,136.42	108.34	34.69	-21.38	1,176.77	923.72	4,774.46	4,707.92	66.54	71.757	
10,900.00	7,248.72	7,363.00	7,136.42	111.05	34.69	-21.38	1,176.77	923.72	4,874.41	4,807.83	66.58	73.211	
11,000.00	7,248.30	7,349.61	7,130.11	113.77	34.67	-16.11	1,188.58	923.35	4,974.24	4,907.65	66.59	74.702	
11,100.00	7,247.88	7,349.52	7,130.07	116.50	34.67	-16.08	1,188.65	923.35	5,074.20	5,007.56	66.63	76.151	
11,200.00	7,247.46	7,349.44	7,130.03	119.23	34.67	-16.05	1,188.73	923.35	5,174.16	5,107.48	66.68	77.597	
11,300.00	7,247.04	7,349.36	7,129.99	121.97	34.67	-16.02	1,188.80	923.35	5,274.12	5,207.39	66.73	79.039	
11,400.00	7,246.62	7,349.29	7,129.96	124.72	34.67	-15.99	1,188.86	923.35	5,374.08	5,307.30	66.78	80.479	
11,500.00	7,246.20	7,349.21	7,129.92	127.46	34.67	-15.96	1,188.93	923.34	5,474.05	5,407.22	66.83	81.915	
11,600.00	7,245.78	7,349.14	7,129.89	130.22	34.67	-15.93	1,188.99	923.34	5,574.01	5,507.13	66.88	83.348	
11,700.00	7,245.36	7,349.07	7,129.85	132.98	34.67	-15.90	1,189.05	923.34	5,673.98	5,607.05	66.93	84.778	
11,800.00	7,244.94	7,349.00	7,129.82	135.74	34.67	-15.88	1,189.11	923.34	5,773.95	5,706.97	66.98	86.205	
11,900.00	7,244.52	7,348.94	7,129.79	138.50	34.67	-15.85	1,189.17	923.34	5,873.91	5,806.88	67.03	87.628	
12,000.00	7,244.10	7,348.87	7,129.76	141.27	34.67	-15.83	1,189.22	923.34	5,973.88	5,906.80	67.09	89.048	
12,100.00	7,243.68	7,348.81	7,129.73	144.04	34.67	-15.80	1,189.28	923.34	6,073.86	6,006.71	67.14	90.464	
12,200.00	7,243.26	7,348.75	7,129.70	146.82	34.67	-15.78	1,189.33	923.34	6,173.83	6,106.63	67.20	91.877	
12,300.00	7,242.84	7,348.69	7,129.67	149.60	34.67	-15.76	1,189.38	923.34	6,273.80	6,206.55	67.25	93.286	
12,400.00	7,242.42	7,348.64	7,129.64	152.38	34.67	-15.74	1,189.43	923.33	6,373.77	6,306.46	67.31	94.691	
12,500.00	7,242.00	7,348.58	7,129.62	155.16	34.67	-15.71	1,189.48	923.33	6,473.75	6,406.38	67.37	96.093	
12,600.00	7,241.58	7,348.53	7,129.59	157.95	34.67	-15.69	1,189.53	923.33	6,573.72	6,506.30	67.43	97.492	
12,700.00	7,241.16	7,348.47	7,129.57	160.74	34.67	-15.67	1,189.58	923.33	6,673.70	6,606.21	67.49	98.886	
12,800.00	7,240.74	7,348.42	7,129.54	163.53	34.67	-15.65	1,189.62	923.33	6,773.68	6,706.13	67.55	100.277	
12,900.00	7,240.32	7,348.37	7,129.52	166.32	34.67	-15.63	1,189.66	923.33	6,873.65	6,806.04	67.61	101.663	
13,000.00	7,239.89	7,348.32	7,129.49	169.12	34.67	-15.62	1,189.71	923.33	6,973.63	6,905.96	67.67	103.046	
13,100.00	7,239.47	7,348.28	7,129.47	171.92	34.67	-15.60	1,189.75	923.33	7,073.61	7,005.87	67.74	104.425	
13,200.00	7,239.05	7,348.23	7,129.45	174.72	34.67	-15.58	1,189.79	923.33	7,173.59	7,105.79	67.80	105.800	
13,300.00	7,238.63	7,348.18	7,129.43	177.52	34.67	-15.56	1,189.83	923.33	7,273.57	7,205.70	67.87	107.172	
13,400.00	7,238.21	7,348.14	7,129.41	180.32	34.67	-15.55	1,189.87	923.33	7,373.55	7,305.62	67.93	108.539	
13,500.00	7,237.79	7,348.10	7,129.39	183.13	34.67	-15.53	1,189.90	923.32	7,473.53	7,405.53	68.00	109.902	
13,600.00	7,237.37	7,348.06	7,129.36	185.93	34.67	-15.51	1,189.94	923.32	7,573.51	7,505.44	68.07	111.261	
13,700.00	7,236.95	7,348.01	7,129.35	188.74	34.67	-15.50	1,189.98	923.32	7,673.49	7,605.36	68.14	112.615	
13,800.00	7,236.53	7,347.97	7,129.33	191.55	34.67	-15.48	1,190.01	923.32	7,773.48	7,705.27	68.21	113.966	
13,900.00	7,236.11	7,347.94	7,129.31	194.36	34.67	-15.47	1,190.05	923.32	7,873.46	7,805.18	68.28	115.313	
14,000.00	7,235.69	7,347.90	7,129.29	197.17	34.67	-15.45	1,190.08	923.32	7,973.44	7,905.09	68.35	116.655	
14,100.00	7,235.27	7,347.86	7,129.27	199.98	34.67	-15.44	1,190.11	923.32	8,073.43	8,005.00	68.42	117.993	
14,200.00	7,234.85	7,347.82	7,129.25	202.80	34.67	-15.42	1,190.15	923.32	8,173.41	8,104.91	68.50	119.327	
14,300.00	7,234.43	7,347.79	7,129.24	205.61	34.67	-15.41	1,190.18	923.32	8,273.39	8,204.82	68.57	120.656	
14,400.00	7,234.01	7,347.75	7,129.22	208.43	34.67	-15.40	1,190.21	923.32	8,373.38	8,304.73	68.64	121.981	
14,500.00	7,233.59	7,347.72	7,129.20	211.25	34.67	-15.38	1,190.24	923.32	8,473.36	8,404.64	68.72	123.302	
14,600.00	7,233.17	7,347.68	7,129.19	214.06	34.67	-15.37	1,190.27	923.32	8,573.35	8,504.55	68.80	124.618	
14,700.00	7,232.75	7,347.65	7,129.17	216.88	34.67	-15.36	1,190.30	923.32	8,673.34	8,604.46	68.87	125.930	
14,800.00	7,232.33	7,347.62	7,129.16	219.70	34.67	-15.35	1,190.32	923.32	8,773.32	8,704.37	68.95	127.238	
14,900.00	7,231.91	7,347.59	7,129.14	222.52	34.67	-15.33	1,190.35	923.32	8,873.31	8,804.28	69.03	128.541	
15,000.00	7,231.49	7,347.56	7,129.12	225.35	34.67	-15.32	1,190.38	923.32	8,973.30	8,904.18	69.11	129.840	
15,100.00	7,231.07	7,347.53	7,129.11	228.17	34.67	-15.31	1,190.41	923.32	9,073.28	9,004.09	69.19	131.134	
15,116.21	7,231.00	7,347.52	7,129.11	228.63	34.67	-15.31	1,190.41	923.32	9,089.49	9,020.29	69.20	131.343	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	3.28	0.40	39.71	0.28	39.71					
100.00	100.00	100.00	100.00	0.18	3.28	0.40	39.71	0.28	39.71	36.25	3.46	11.476		
200.00	200.00	200.00	200.00	0.61	3.34	0.40	39.71	0.28	39.71	35.76	3.95	10.050 CC		
300.00	300.00	298.60	298.58	1.05	3.44	0.15	41.40	0.11	41.42	36.90	4.53	9.151		
400.00	400.00	396.97	396.81	1.49	3.60	-0.49	46.44	-0.40	46.55	41.38	5.17	8.997		
500.00	500.00	494.88	494.36	1.93	3.81	-1.29	54.80	-1.24	55.10	49.23	5.87	9.389		
600.00	599.98	592.31	591.08	2.37	4.05	5.80	66.39	-2.40	65.31	58.72	6.59	9.910		
700.00	699.84	689.41	687.03	2.81	4.32	5.42	81.20	-3.89	75.44	68.11	7.34	10.285		
800.00	799.45	786.19	782.11	3.26	4.62	5.21	99.17	-5.69	85.48	77.38	8.10	10.551		
900.00	898.70	882.66	876.22	3.70	4.94	5.12	120.26	-7.81	95.41	86.53	8.88	10.743		
1,000.00	997.47	978.81	969.26	4.15	5.29	5.11	144.40	-10.23	105.22	95.54	9.68	10.869		
1,100.00	1,095.78	1,075.73	1,062.20	4.60	5.68	5.14	171.71	-12.97	115.54	105.06	10.48	11.024		
1,200.00	1,194.05	1,175.12	1,157.29	5.05	6.10	5.16	200.50	-15.86	126.49	115.21	11.29	11.207		
1,300.00	1,292.33	1,274.52	1,252.38	5.50	6.53	5.18	229.29	-18.75	137.45	125.33	12.12	11.343		
1,400.00	1,390.61	1,373.92	1,347.48	5.96	6.99	5.19	258.08	-21.65	148.41	135.44	12.97	11.446		
1,500.00	1,488.89	1,473.32	1,442.57	6.43	7.45	5.20	286.87	-24.54	159.36	145.53	13.83	11.523		
1,600.00	1,587.16	1,572.72	1,537.66	6.89	7.92	5.21	315.65	-27.43	170.32	155.61	14.71	11.581		
1,700.00	1,685.44	1,672.11	1,632.76	7.36	8.40	5.22	344.44	-30.32	181.28	165.68	15.59	11.624		
1,800.00	1,783.72	1,771.51	1,727.85	7.83	8.88	5.23	373.23	-33.21	192.24	175.74	16.49	11.657		
1,900.00	1,882.00	1,870.91	1,822.95	8.30	9.37	5.23	402.02	-36.10	203.19	185.80	17.40	11.681		
2,000.00	1,980.27	1,970.31	1,918.04	8.77	9.87	5.24	430.81	-38.99	214.15	195.84	18.31	11.698		
2,100.00	2,078.55	2,069.71	2,013.13	9.25	10.37	5.25	459.60	-41.88	225.11	205.88	19.22	11.711		
2,200.00	2,176.83	2,169.10	2,108.23	9.72	10.87	5.25	488.39	-44.77	236.06	215.92	20.14	11.719		
2,300.00	2,275.11	2,268.50	2,203.32	10.19	11.38	5.26	517.18	-47.66	247.02	225.95	21.07	11.724		
2,400.00	2,373.38	2,367.90	2,298.41	10.66	11.88	5.26	545.96	-50.55	257.98	235.98	22.00	11.727		
2,500.00	2,471.66	2,467.30	2,393.51	11.14	12.39	5.26	574.75	-53.44	268.93	246.00	22.93	11.728		
2,600.00	2,569.94	2,566.70	2,488.60	11.61	12.91	5.27	603.54	-56.33	279.89	256.03	23.87	11.728		
2,700.00	2,668.22	2,666.09	2,583.69	12.09	13.42	5.27	632.33	-59.22	290.85	266.04	24.80	11.726		
2,800.00	2,766.49	2,765.49	2,678.79	12.56	13.94	5.27	661.12	-62.11	301.81	276.06	25.74	11.724		
2,900.00	2,864.77	2,864.89	2,773.88	13.04	14.45	5.28	689.91	-65.00	312.76	286.08	26.69	11.720		
3,000.00	2,963.05	2,964.29	2,868.98	13.51	14.97	5.28	718.70	-67.89	323.72	296.09	27.63	11.717		
3,100.00	3,061.33	3,063.69	2,964.07	13.99	15.49	5.28	747.49	-70.78	334.68	306.10	28.57	11.712		
3,200.00	3,159.60	3,163.08	3,059.16	14.46	16.01	5.28	776.28	-73.67	345.63	316.11	29.52	11.708		
3,300.00	3,257.88	3,262.48	3,154.26	14.94	16.53	5.29	805.06	-76.56	356.59	326.12	30.47	11.703		
3,400.00	3,356.16	3,361.88	3,249.35	15.41	17.06	5.29	833.85	-79.45	367.55	336.13	31.42	11.698		
3,500.00	3,454.43	3,461.28	3,344.44	15.89	17.58	5.29	862.64	-82.34	378.50	346.13	32.37	11.693		
3,600.00	3,552.71	3,560.67	3,439.54	16.36	18.10	5.29	891.43	-85.23	389.46	356.14	33.32	11.688		
3,700.00	3,650.99	3,660.07	3,534.63	16.84	18.63	5.29	920.22	-88.12	400.42	366.14	34.27	11.683		
3,800.00	3,749.27	3,759.47	3,629.72	17.32	19.15	5.30	949.01	-91.01	411.37	376.15	35.23	11.677		
3,900.00	3,847.54	3,858.87	3,724.82	17.79	19.68	5.30	977.80	-93.90	422.33	386.15	36.18	11.672		
4,000.00	3,945.82	3,958.27	3,819.91	18.27	20.20	5.30	1,006.59	-96.79	433.29	396.15	37.14	11.667		
4,100.00	4,044.10	4,057.66	3,915.00	18.75	20.73	5.30	1,035.38	-99.68	444.25	406.15	38.09	11.662		
4,200.00	4,142.38	4,157.06	4,010.10	19.22	21.26	5.30	1,064.16	-102.57	455.20	416.15	39.05	11.657		
4,300.00	4,240.65	4,256.46	4,105.19	19.70	21.78	5.30	1,092.95	-105.46	466.16	426.15	40.01	11.652		
4,400.00	4,338.93	4,355.86	4,200.29	20.18	22.31	5.30	1,121.74	-108.35	477.12	436.15	40.96	11.647		
4,500.00	4,437.21	4,455.26	4,295.38	20.65	22.84	5.31	1,150.53	-111.24	488.07	446.15	41.92	11.642		
4,600.00	4,535.49	4,554.65	4,390.47	21.13	23.37	5.31	1,179.32	-114.13	499.03	456.15	42.88	11.637		
4,700.00	4,633.76	4,654.05	4,485.57	21.61	23.90	5.31	1,208.11	-117.02	509.99	466.15	43.84	11.633		
4,800.00	4,732.04	4,753.45	4,580.66	22.08	24.43	5.31	1,236.90	-119.91	520.94	476.14	44.80	11.628		
4,900.00	4,830.32	4,852.85	4,675.75	22.56	24.95	5.31	1,265.69	-122.80	531.90	486.14	45.76	11.624		
5,000.00	4,928.60	4,952.25	4,770.85	23.04	25.48	5.31	1,294.47	-125.70	542.86	496.14	46.72	11.619		
5,100.00	5,026.87	5,051.64	4,865.94	23.51	26.01	5.31	1,323.26	-128.59	553.82	506.14	47.68	11.615		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.00	5,125.15	5,151.04	4,961.03	23.99	26.54	5.31	1,352.05	-131.48	564.77	516.13	48.64	11.611	
5,300.00	5,223.43	5,250.44	5,056.13	24.47	27.07	5.31	1,380.84	-134.37	575.73	526.13	49.60	11.607	
5,400.00	5,321.71	5,349.84	5,151.22	24.94	27.60	5.31	1,409.63	-137.26	586.69	536.12	50.56	11.603	
5,500.00	5,419.98	5,464.57	5,261.26	25.42	28.21	5.32	1,441.96	-140.50	596.89	545.21	51.69	11.548	
5,600.00	5,518.26	5,590.77	5,383.60	25.90	28.85	5.36	1,472.73	-143.59	603.10	550.26	52.84	11.414	
5,700.00	5,616.54	5,717.42	5,507.62	26.38	29.45	5.42	1,498.19	-146.15	604.91	551.04	53.87	11.228	
5,800.00	5,714.82	5,844.01	5,632.60	26.85	30.02	5.52	1,518.17	-148.15	602.31	547.53	54.78	10.996	
5,900.00	5,813.09	5,970.07	5,757.81	27.33	30.55	5.65	1,532.58	-149.60	595.31	539.75	55.55	10.716	
6,000.00	5,911.37	6,095.10	5,882.52	27.81	31.05	5.82	1,541.45	-150.49	583.95	527.76	56.20	10.391	
6,100.00	6,009.65	6,218.66	6,006.01	28.28	31.51	6.03	1,544.89	-150.84	568.32	511.61	56.71	10.022	
6,200.00	6,107.93	6,320.57	6,107.93	28.76	31.87	6.24	1,544.95	-150.84	549.98	492.50	57.49	9.567	
6,300.00	6,206.20	6,418.85	6,206.20	29.24	32.22	6.46	1,544.95	-150.84	531.61	473.29	58.32	9.115	
6,400.00	6,304.48	6,517.12	6,304.48	29.72	32.57	6.69	1,544.95	-150.84	513.25	454.08	59.17	8.675	
6,500.00	6,402.76	6,615.40	6,402.76	30.19	32.92	6.94	1,544.95	-150.84	494.90	434.89	60.01	8.247	
6,600.00	6,501.04	6,713.68	6,501.04	30.67	33.28	7.21	1,544.95	-150.84	476.55	415.70	60.85	7.831	
6,700.00	6,599.31	6,811.95	6,599.31	31.15	33.64	7.50	1,544.95	-150.84	458.22	396.52	61.70	7.427	
6,800.00	6,697.50	6,910.37	6,697.57	31.63	33.99	7.79	1,544.92	-155.06	439.92	377.39	62.53	7.035	
6,900.00	6,794.18	7,008.74	6,794.03	32.10	34.34	8.08	1,544.77	-173.86	422.01	358.63	63.37	6.659	
7,000.00	6,886.96	7,107.13	6,886.46	32.55	34.68	8.37	1,544.51	-207.29	404.95	340.72	64.23	6.305	
7,100.00	6,973.57	7,205.66	6,972.76	32.99	34.99	8.64	1,544.14	-254.62	389.15	324.04	65.11	5.977	
7,200.00	7,051.87	7,304.42	7,050.91	33.41	35.28	8.91	1,543.67	-314.85	375.02	308.97	66.04	5.678	
7,300.00	7,119.93	7,403.48	7,118.99	33.85	35.55	9.18	1,543.11	-386.65	362.88	295.78	67.10	5.408	
7,400.00	7,176.09	7,502.82	7,175.27	34.39	35.82	9.44	1,542.47	-468.39	353.05	284.69	68.36	5.165	
7,500.00	7,218.95	7,602.42	7,218.26	35.09	36.18	9.69	1,541.76	-558.12	345.77	275.87	69.89	4.947	
7,600.00	7,247.46	7,702.21	7,246.78	35.98	36.82	9.94	1,541.02	-653.64	341.21	269.46	71.74	4.756	
7,700.00	7,260.92	7,802.07	7,260.04	37.04	37.75	10.19	1,540.24	-752.51	339.48	265.59	73.89	4.594	
7,723.72	7,262.12	7,825.75	7,260.90	37.32	38.00	10.25	1,540.06	-776.17	339.45	264.98	74.47	4.558	
7,800.00	7,261.75	7,902.01	7,260.76	38.23	38.88	10.49	1,539.46	-852.43	340.13	263.82	76.30	4.458	
7,900.00	7,261.33	8,002.00	7,260.38	39.59	40.21	10.73	1,538.68	-952.42	341.00	261.96	79.05	4.314	
8,000.00	7,260.91	8,102.00	7,260.00	41.10	41.70	10.97	1,537.90	-1,052.41	341.88	259.79	82.09	4.165	
8,100.00	7,260.49	8,202.00	7,259.62	42.75	43.33	11.21	1,537.12	-1,152.40	342.76	257.34	85.41	4.013	
8,200.00	7,260.07	8,301.99	7,259.24	44.53	45.09	11.45	1,536.33	-1,252.40	343.63	254.66	88.98	3.862	
8,300.00	7,259.65	8,401.99	7,258.86	46.41	46.95	11.69	1,535.55	-1,352.39	344.51	251.75	92.76	3.714	
8,400.00	7,259.23	8,501.98	7,258.48	48.39	48.91	11.93	1,534.77	-1,452.38	345.39	248.66	96.73	3.571	
8,500.00	7,258.81	8,601.98	7,258.10	50.45	50.96	12.17	1,533.99	-1,552.37	346.26	245.40	100.86	3.433	
8,600.00	7,258.39	8,701.98	7,257.72	52.59	53.08	12.41	1,533.21	-1,652.36	347.14	241.99	105.15	3.301	
8,700.00	7,257.97	8,801.97	7,257.34	54.79	55.27	12.65	1,532.42	-1,752.36	348.02	238.45	109.56	3.176	
8,800.00	7,257.55	8,901.97	7,256.96	57.05	57.52	12.89	1,531.64	-1,852.35	348.89	234.80	114.09	3.058	
8,900.00	7,257.13	9,001.97	7,256.58	59.36	59.82	13.13	1,530.86	-1,952.34	349.77	231.04	118.72	2.946	
9,000.00	7,256.71	9,101.96	7,256.20	61.72	62.16	13.37	1,530.08	-2,052.33	350.64	227.20	123.45	2.840	
9,100.00	7,256.29	9,201.96	7,255.82	64.12	64.55	13.61	1,529.30	-2,152.33	351.52	223.27	128.25	2.741	
9,200.00	7,255.87	9,301.95	7,255.44	66.56	66.97	13.85	1,528.51	-2,252.32	352.40	219.27	133.12	2.647	
9,300.00	7,255.45	9,401.95	7,255.07	69.02	69.43	14.09	1,527.73	-2,352.31	353.27	215.21	138.06	2.559	
9,400.00	7,255.03	9,501.95	7,254.69	71.52	71.92	14.33	1,526.95	-2,452.30	354.15	211.09	143.06	2.476	
9,500.00	7,254.61	9,601.94	7,254.31	74.04	74.43	14.57	1,526.17	-2,552.30	355.03	206.92	148.11	2.397	
9,600.00	7,254.19	9,701.94	7,253.93	76.58	76.97	14.81	1,525.39	-2,652.29	355.90	202.70	153.20	2.323	
9,700.00	7,253.77	9,801.93	7,253.55	79.15	79.53	15.05	1,524.60	-2,752.28	356.78	198.44	158.34	2.253	
9,800.00	7,253.35	9,901.93	7,253.17	81.74	82.11	15.29	1,523.82	-2,852.27	357.66	194.14	163.52	2.187	
9,900.00	7,252.92	10,001.93	7,252.79	84.34	84.70	15.53	1,523.04	-2,952.27	358.53	189.81	168.73	2.125	
10,000.00	7,252.50	10,101.92	7,252.41	86.96	87.32	15.77	1,522.26	-3,052.26	359.41	185.44	173.97	2.066	
10,100.00	7,252.08	10,201.92	7,252.03	89.59	89.94	16.01	1,521.48	-3,152.25	360.29	181.05	179.24	2.010	
10,200.00	7,251.66	10,301.92	7,251.65	92.24	92.59	16.25	1,520.70	-3,252.24	361.16	176.63	184.53	1.957	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.00	7,251.24	10,401.91	7,251.27	94.90	95.24	90.00	1,519.91	-3,352.24	362.04	172.19	189.85	1.907	
10,400.00	7,250.82	10,501.91	7,250.89	97.57	97.91	90.01	1,519.13	-3,452.23	362.92	167.72	195.20	1.859	
10,500.00	7,250.40	10,601.90	7,250.51	100.25	100.58	90.01	1,518.35	-3,552.22	363.79	163.23	200.56	1.814	
10,600.00	7,249.98	10,701.90	7,250.13	102.93	103.27	90.02	1,517.57	-3,652.21	364.67	158.73	205.94	1.771	
10,700.00	7,249.56	10,801.90	7,249.75	105.63	105.96	90.03	1,516.79	-3,752.20	365.55	154.21	211.34	1.730	
10,800.00	7,249.14	10,901.89	7,249.37	108.34	108.67	90.03	1,516.00	-3,852.20	366.42	149.67	216.76	1.690	
10,900.00	7,248.72	11,001.89	7,248.99	111.05	111.38	90.04	1,515.22	-3,952.19	367.30	145.11	222.19	1.653	
11,000.00	7,248.30	11,101.88	7,248.61	113.77	114.10	90.05	1,514.44	-4,052.18	368.18	140.55	227.63	1.617	
11,100.00	7,247.88	11,201.88	7,248.23	116.50	116.82	90.05	1,513.66	-4,152.17	369.05	135.97	233.09	1.583	
11,200.00	7,247.46	11,301.88	7,247.85	119.23	119.55	90.06	1,512.88	-4,252.17	369.93	131.37	238.56	1.551	
11,300.00	7,247.04	11,401.87	7,247.48	121.97	122.29	90.07	1,512.09	-4,352.16	370.81	126.77	244.04	1.519	
11,400.00	7,246.62	11,501.87	7,247.10	124.72	125.03	90.07	1,511.31	-4,452.15	371.68	122.16	249.53	1.490 Level 3	
11,500.00	7,246.20	11,601.87	7,246.72	127.46	127.78	90.08	1,510.53	-4,552.14	372.56	117.53	255.03	1.461 Level 3	
11,600.00	7,245.78	11,701.86	7,246.34	130.22	130.53	90.08	1,509.75	-4,652.14	373.44	112.90	260.54	1.433 Level 3	
11,700.00	7,245.36	11,801.86	7,245.96	132.98	133.29	90.09	1,508.97	-4,752.13	374.32	108.26	266.05	1.407 Level 3	
11,800.00	7,244.94	11,901.85	7,245.58	135.74	136.05	90.10	1,508.18	-4,852.12	375.19	103.61	271.58	1.382 Level 3	
11,900.00	7,244.52	12,001.85	7,245.20	138.50	138.81	90.10	1,507.40	-4,952.11	376.07	98.95	277.11	1.357 Level 3	
12,000.00	7,244.10	12,101.85	7,244.82	141.27	141.58	90.11	1,506.62	-5,052.11	376.95	94.29	282.65	1.334 Level 3	
12,100.00	7,243.68	12,201.84	7,244.44	144.04	144.35	90.11	1,505.84	-5,152.10	377.82	89.62	288.20	1.311 Level 3	
12,200.00	7,243.26	12,301.84	7,244.06	146.82	147.13	90.12	1,505.06	-5,252.09	378.70	84.94	293.76	1.289 Level 3	
12,300.00	7,242.84	12,401.83	7,243.68	149.60	149.91	90.13	1,504.27	-5,352.08	379.58	80.26	299.31	1.268 Level 3	
12,400.00	7,242.42	12,501.83	7,243.30	152.38	152.69	90.13	1,503.49	-5,452.08	380.45	75.57	304.88	1.248 Level 2	
12,500.00	7,242.00	12,601.83	7,242.92	155.16	155.47	90.14	1,502.71	-5,552.07	381.33	70.88	310.45	1.228 Level 2	
12,600.00	7,241.58	12,701.82	7,242.54	157.95	158.26	90.14	1,501.93	-5,652.06	382.21	66.18	316.03	1.209 Level 2	
12,700.00	7,241.16	12,801.82	7,242.16	160.74	161.05	90.15	1,501.15	-5,752.05	383.08	61.48	321.61	1.191 Level 2	
12,800.00	7,240.74	12,901.82	7,241.78	163.53	163.84	90.15	1,500.36	-5,852.04	383.96	56.77	327.19	1.174 Level 2	
12,900.00	7,240.32	13,001.81	7,241.40	166.32	166.63	90.16	1,499.58	-5,952.04	384.84	52.06	332.78	1.156 Level 2	
13,000.00	7,239.89	13,101.81	7,241.02	169.12	169.43	90.17	1,498.80	-6,052.03	385.71	47.34	338.37	1.140 Level 2	
13,100.00	7,239.47	13,201.80	7,240.64	171.92	172.23	90.17	1,498.02	-6,152.02	386.59	42.62	343.97	1.124 Level 2	
13,200.00	7,239.05	13,301.80	7,240.26	174.72	175.03	90.18	1,497.24	-6,252.01	387.47	37.89	349.57	1.108 Level 2	
13,300.00	7,238.63	13,401.80	7,239.89	177.52	177.83	90.18	1,496.45	-6,352.01	388.34	33.17	355.18	1.093 Level 2	
13,400.00	7,238.21	13,501.79	7,239.51	180.32	180.63	90.19	1,495.67	-6,452.00	389.22	28.44	360.78	1.079 Level 2	
13,500.00	7,237.79	13,601.79	7,239.13	183.13	183.44	90.19	1,494.89	-6,551.99	390.10	23.70	366.40	1.065 Level 2	
13,600.00	7,237.37	13,701.78	7,238.75	185.93	186.25	90.20	1,494.11	-6,651.98	390.97	18.96	372.01	1.051 Level 2	
13,700.00	7,236.95	13,801.78	7,238.37	188.74	189.05	90.20	1,493.33	-6,751.98	391.85	14.22	377.63	1.038 Level 2	
13,800.00	7,236.53	13,901.78	7,237.99	191.55	191.86	90.21	1,492.54	-6,851.97	392.73	9.48	383.25	1.025 Level 2	
13,900.00	7,236.11	14,001.77	7,237.61	194.36	194.68	90.22	1,491.76	-6,951.96	393.60	4.73	388.87	1.012 Level 2	
14,000.00	7,235.69	14,101.77	7,237.23	197.17	197.49	90.22	1,490.98	-7,051.95	394.48	-0.01	394.49	1.000 Level 1	
14,100.00	7,235.27	14,201.77	7,236.85	199.98	200.30	90.23	1,490.20	-7,151.95	395.36	-4.76	400.12	0.988 Level 1	
14,200.00	7,234.85	14,301.76	7,236.47	202.80	203.12	90.23	1,489.42	-7,251.94	396.23	-9.52	405.75	0.977 Level 1	
14,300.00	7,234.43	14,401.76	7,236.09	205.61	205.93	90.24	1,488.63	-7,351.93	397.11	-14.27	411.38	0.965 Level 1	
14,400.00	7,234.01	14,501.75	7,235.71	208.43	208.75	90.24	1,487.85	-7,451.92	397.99	-19.03	417.02	0.954 Level 1	
14,500.00	7,233.59	14,601.75	7,235.33	211.25	211.57	90.25	1,487.07	-7,551.91	398.87	-23.79	422.66	0.944 Level 1	
14,600.00	7,233.17	14,701.75	7,234.95	214.06	214.39	90.25	1,486.29	-7,651.91	399.74	-28.55	428.29	0.933 Level 1	
14,700.00	7,232.75	14,801.74	7,234.57	216.88	217.21	90.26	1,485.51	-7,751.90	400.62	-33.32	433.93	0.923 Level 1	
14,800.00	7,232.33	14,901.74	7,234.19	219.70	220.03	90.26	1,484.72	-7,851.89	401.50	-38.08	439.58	0.913 Level 1	
14,900.00	7,231.91	15,001.73	7,233.81	222.52	222.85	90.27	1,483.94	-7,951.88	402.37	-42.85	445.22	0.904 Level 1	
15,000.00	7,231.49	15,101.73	7,233.43	225.35	225.68	90.27	1,483.16	-8,051.88	403.25	-47.62	450.87	0.894 Level 1	
15,100.00	7,231.07	15,201.73	7,233.05	228.17	228.50	90.28	1,482.38	-8,151.87	404.13	-52.39	456.51	0.885 Level 1	
15,116.21	7,231.00	15,216.01	7,233.00	228.63	228.91	90.28	1,482.27	-8,166.16	404.27	-53.14	457.41	0.884 Level 1, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	3.28	0.80	20.04	0.28	20.04					
100.00	100.00	100.00	100.00	0.18	3.28	0.80	20.04	0.28	20.04	16.58	3.46	5.792		
200.00	200.00	200.00	200.00	0.61	3.34	0.80	20.04	0.28	20.04	16.09	3.95	5.072		
300.00	300.00	300.00	300.00	1.05	3.44	0.80	20.04	0.28	20.04	15.54	4.50	4.456 CC		
400.00	400.00	399.27	399.25	1.49	3.60	0.16	21.75	0.06	21.76	16.64	5.12	4.254		
500.00	500.00	498.31	498.15	1.93	3.81	-1.27	26.85	-0.59	26.92	21.12	5.80	4.643		
600.00	599.98	597.03	596.50	2.37	4.05	5.27	35.30	-1.68	33.78	27.27	6.52	5.184		
700.00	699.84	695.52	694.26	2.81	4.32	4.51	47.08	-3.19	40.61	33.35	7.26	5.592		
800.00	799.45	793.78	791.34	3.26	4.62	4.01	62.15	-5.12	47.39	39.36	8.03	5.900		
900.00	898.70	907.82	887.99	3.70	5.01	3.67	80.47	-7.47	54.05	45.18	8.86	6.099		
1,000.00	997.47	992.09	985.90	4.15	5.30	3.54	100.14	-9.99	58.33	48.75	9.57	6.093		
1,100.00	1,095.78	1,107.93	1,083.90	4.60	5.73	3.60	119.84	-12.51	59.92	49.49	10.43	5.746		
1,200.00	1,194.05	1,207.94	1,181.90	5.05	6.12	3.66	139.53	-15.03	61.32	50.08	11.25	5.453		
1,300.00	1,292.33	1,307.95	1,279.90	5.50	6.52	3.72	159.22	-17.56	62.73	50.65	12.08	5.192		
1,400.00	1,390.61	1,407.96	1,377.89	5.96	6.94	3.77	178.92	-20.08	64.14	51.21	12.93	4.960		
1,500.00	1,488.89	1,492.03	1,475.89	6.43	7.29	3.83	198.61	-22.60	65.55	51.82	13.73	4.775		
1,600.00	1,587.16	1,592.02	1,573.89	6.89	7.72	3.88	218.30	-25.13	66.95	52.36	14.59	4.588		
1,700.00	1,685.44	1,707.99	1,671.89	7.36	8.23	3.93	237.99	-27.65	68.36	52.82	15.54	4.400		
1,800.00	1,783.72	1,792.00	1,769.89	7.83	8.60	3.98	257.69	-30.17	69.77	53.42	16.35	4.266		
1,900.00	1,882.00	1,908.01	1,867.89	8.30	9.12	4.02	277.38	-32.70	71.18	53.87	17.31	4.111		
2,000.00	1,980.27	1,991.98	1,965.89	8.77	9.49	4.06	297.07	-35.22	72.58	54.45	18.14	4.002		
2,100.00	2,078.55	2,108.03	2,063.89	9.25	10.02	4.11	316.77	-37.75	73.99	54.89	19.10	3.873		
2,200.00	2,176.83	2,208.04	2,161.89	9.72	10.47	4.15	336.46	-40.27	75.40	55.39	20.01	3.769		
2,300.00	2,275.11	2,291.95	2,259.89	10.19	10.86	4.19	356.15	-42.79	76.81	55.97	20.84	3.685		
2,400.00	2,373.38	2,408.06	2,357.89	10.66	11.39	4.22	375.84	-45.32	78.22	56.39	21.82	3.584		
2,500.00	2,471.66	2,508.07	2,456.89	11.14	11.86	4.26	395.54	-47.84	79.62	56.89	22.73	3.503		
2,600.00	2,569.94	2,608.08	2,553.88	11.61	12.32	4.30	415.23	-50.36	81.03	57.39	23.64	3.427		
2,700.00	2,668.22	2,708.09	2,651.88	12.09	12.79	4.33	434.92	-52.89	82.44	57.88	24.56	3.357		
2,800.00	2,766.49	2,808.10	2,749.88	12.56	13.25	4.36	454.62	-55.41	83.85	58.37	25.48	3.291		
2,900.00	2,864.77	2,891.89	2,847.88	13.04	13.64	4.39	474.31	-57.93	85.26	58.93	26.32	3.239		
3,000.00	2,963.05	2,991.88	2,945.88	13.51	14.11	4.42	494.00	-60.46	86.66	59.42	27.24	3.181		
3,100.00	3,061.33	3,108.13	3,043.88	13.99	14.66	4.45	513.69	-62.98	88.07	59.84	28.24	3.119		
3,200.00	3,159.60	3,208.14	3,141.88	14.46	15.13	4.48	533.39	-65.50	89.48	60.32	29.16	3.069		
3,300.00	3,257.88	3,308.15	3,239.88	14.94	15.60	4.51	553.08	-68.03	90.89	60.81	30.08	3.021		
3,400.00	3,356.16	3,408.16	3,337.88	15.41	16.08	4.54	572.77	-70.55	92.30	61.29	31.00	2.977		
3,500.00	3,454.43	3,508.17	3,435.88	15.89	16.55	4.56	592.47	-73.07	93.70	61.77	31.93	2.935		
3,600.00	3,552.71	3,608.18	3,533.88	16.36	17.02	4.59	612.16	-75.60	95.11	62.26	32.86	2.895		
3,700.00	3,650.99	3,708.19	3,631.88	16.84	17.50	4.61	631.85	-78.12	96.52	62.74	33.78	2.857		
3,800.00	3,749.27	3,808.20	3,729.87	17.32	17.97	4.64	651.55	-80.65	97.93	63.22	34.71	2.821		
3,900.00	3,847.54	3,908.21	3,827.87	17.79	18.45	4.66	671.24	-83.17	99.34	63.70	35.64	2.787		
4,000.00	3,945.82	3,991.78	3,925.87	18.27	18.85	4.68	690.93	-85.69	100.75	64.26	36.49	2.761		
4,100.00	4,044.10	4,108.23	4,023.87	18.75	19.40	4.71	710.62	-88.22	102.15	64.66	37.50	2.724		
4,200.00	4,142.38	4,191.76	4,121.87	19.22	19.80	4.73	730.32	-90.74	103.56	65.21	38.35	2.701		
4,300.00	4,240.65	4,308.25	4,219.87	19.70	20.35	4.75	750.01	-93.26	104.97	65.62	39.35	2.667		
4,400.00	4,338.93	4,408.26	4,317.87	20.18	20.83	4.77	769.70	-95.79	106.38	66.09	40.29	2.641		
4,500.00	4,437.21	4,491.73	4,415.87	20.65	21.23	4.79	789.40	-98.31	107.79	66.65	41.14	2.620		
4,600.00	4,535.49	4,591.72	4,513.87	21.13	21.71	4.81	809.09	-100.83	109.20	67.12	42.07	2.596		
4,700.00	4,633.76	4,691.71	4,611.87	21.61	22.19	4.83	828.78	-103.36	110.60	67.60	43.00	2.572		
4,800.00	4,732.04	4,808.30	4,709.87	22.08	22.74	4.84	848.47	-105.88	112.01	68.00	44.01	2.545		
4,900.00	4,830.32	4,908.31	4,807.87	22.56	23.22	4.86	868.17	-108.40	113.42	68.48	44.94	2.524		
5,000.00	4,928.60	5,008.32	4,905.86	23.04	23.70	4.88	887.86	-110.93	114.83	68.95	45.88	2.503		
5,100.00	5,026.87	5,108.32	5,003.86	23.51	24.18	4.90	907.55	-113.45	116.24	69.43	46.81	2.483		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30N-16B-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,125.15	5,208.33	5,101.86	23.99	24.66	4.91	927.25	-115.97	117.65	69.90	47.74	2.464	
5,300.00	5,223.43	5,308.34	5,199.86	24.47	25.14	4.93	946.94	-118.50	119.05	70.38	48.68	2.446	
5,400.00	5,321.71	5,408.35	5,297.86	24.94	25.62	4.95	966.63	-121.02	120.46	70.85	49.61	2.428	
5,500.00	5,419.98	5,508.36	5,395.86	25.42	26.10	4.96	986.32	-123.55	121.87	71.33	50.54	2.411	
5,600.00	5,518.26	5,608.37	5,493.86	25.90	26.58	4.98	1,006.02	-126.07	123.28	71.80	51.48	2.395	
5,700.00	5,616.54	5,691.62	5,591.86	26.38	26.98	4.99	1,025.71	-128.59	124.69	72.36	52.33	2.383	
5,800.00	5,714.82	5,808.39	5,689.86	26.85	27.54	5.01	1,045.40	-131.12	126.10	72.75	53.35	2.364	
5,900.00	5,813.09	5,908.40	5,787.86	27.33	28.02	5.02	1,065.10	-133.64	127.50	73.22	54.28	2.349	
6,000.00	5,911.37	6,008.41	5,885.86	27.81	28.50	5.03	1,084.79	-136.16	128.91	73.70	55.21	2.335	
6,100.00	6,009.65	6,108.42	5,983.86	28.28	28.98	5.05	1,104.48	-138.69	130.32	74.17	56.15	2.321	
6,200.00	6,107.93	6,191.57	6,081.86	28.76	29.38	5.06	1,124.17	-141.21	131.73	74.72	57.01	2.311	
6,300.00	6,206.20	6,308.44	6,179.85	29.24	29.94	5.07	1,143.87	-143.73	133.14	75.12	58.02	2.295	
6,400.00	6,304.48	6,408.45	6,277.85	29.72	30.42	5.09	1,163.56	-146.26	134.55	75.59	58.95	2.282	
6,500.00	6,402.76	6,491.54	6,375.85	30.19	30.82	5.10	1,183.25	-148.78	135.96	76.14	59.81	2.273	
6,600.00	6,501.04	6,591.44	6,473.76	30.67	31.31	5.07	1,202.93	-151.40	137.37	76.62	60.74	2.261	
6,700.00	6,599.31	6,689.55	6,569.18	31.15	31.78	1.27	1,222.04	-163.12	139.45	77.85	61.60	2.264	
6,800.00	6,697.50	6,783.22	6,657.63	31.63	32.22	13.64	1,239.65	-188.13	144.96	82.77	62.19	2.331	
6,900.00	6,794.18	6,873.51	6,738.61	32.10	32.62	31.15	1,255.69	-224.51	154.02	91.83	62.19	2.476	
7,000.00	6,886.96	6,961.27	6,811.74	32.55	33.00	35.79	1,270.07	-270.70	165.13	103.72	61.41	2.689	
7,100.00	6,973.57	7,046.91	6,876.46	32.99	33.37	36.19	1,282.71	-325.24	177.05	117.19	59.86	2.958	
7,200.00	7,051.87	7,130.82	6,932.37	33.41	33.74	35.34	1,293.53	-386.78	188.77	131.00	57.77	3.267	
7,300.00	7,119.93	7,213.32	6,979.15	33.85	34.17	34.23	1,302.47	-454.07	199.51	144.05	55.46	3.597	
7,400.00	7,176.09	7,294.72	7,016.58	34.39	34.69	33.25	1,309.50	-525.95	208.70	155.41	53.29	3.917	
7,500.00	7,218.95	7,375.30	7,044.49	35.09	35.33	32.50	1,314.59	-601.32	215.93	164.28	51.65	4.181	
7,600.00	7,247.46	7,455.32	7,062.76	35.98	36.09	32.05	1,317.72	-679.11	220.94	170.03	50.91	4.340	
7,700.00	7,260.92	7,535.02	7,071.31	37.04	36.95	31.91	1,318.89	-758.29	223.55	172.20	51.35	4.354	
7,800.00	7,261.75	7,626.87	7,071.83	38.23	38.06	32.07	1,318.36	-850.12	224.13	171.05	53.08	4.222	
7,900.00	7,261.33	7,726.86	7,071.55	39.59	39.43	32.28	1,317.61	-950.12	224.49	169.30	55.19	4.067	
8,000.00	7,260.91	7,826.86	7,071.26	41.10	40.95	32.50	1,316.85	-1,050.11	224.87	167.40	57.46	3.913	
8,100.00	7,260.49	7,926.85	7,070.98	42.75	42.61	32.71	1,316.10	-1,150.10	225.24	165.36	59.88	3.762	
8,200.00	7,260.07	8,026.85	7,070.69	44.53	44.39	32.92	1,315.35	-1,250.09	225.62	163.20	62.42	3.614	
8,300.00	7,259.65	8,126.85	7,070.41	46.41	46.29	33.13	1,314.60	-1,350.09	226.00	160.91	65.09	3.472	
8,400.00	7,259.23	8,226.84	7,070.12	48.39	48.27	33.35	1,313.84	-1,450.08	226.38	158.51	67.87	3.336	
8,500.00	7,258.81	8,326.84	7,069.84	50.45	50.35	33.56	1,313.09	-1,550.07	226.77	156.02	70.75	3.205	
8,600.00	7,258.39	8,426.83	7,069.55	52.59	52.49	33.76	1,312.34	-1,650.06	227.16	153.44	73.72	3.081	
8,700.00	7,257.97	8,526.83	7,069.27	54.79	54.70	33.97	1,311.59	-1,750.06	227.55	150.77	76.78	2.964	
8,800.00	7,257.55	8,626.82	7,068.98	57.05	56.97	34.18	1,310.83	-1,850.05	227.95	148.02	79.92	2.852	
8,900.00	7,257.13	8,726.82	7,068.70	59.36	59.30	34.39	1,310.08	-1,950.04	228.34	145.21	83.14	2.747	
9,000.00	7,256.71	8,826.82	7,068.41	61.72	61.66	34.60	1,309.33	-2,050.04	228.75	142.32	86.42	2.647	
9,100.00	7,256.29	8,926.81	7,068.13	64.12	64.07	34.80	1,308.58	-2,150.03	229.15	139.38	89.77	2.553	
9,200.00	7,255.87	9,026.81	7,067.85	66.56	66.51	35.01	1,307.83	-2,250.02	229.56	136.38	93.18	2.464	
9,300.00	7,255.45	9,126.80	7,067.56	69.02	68.99	35.21	1,307.07	-2,350.01	229.97	133.32	96.65	2.379	
9,400.00	7,255.03	9,226.80	7,067.28	71.52	71.49	35.41	1,306.32	-2,450.01	230.38	130.21	100.17	2.300	
9,500.00	7,254.61	9,326.80	7,066.99	74.04	74.02	35.62	1,305.57	-2,550.00	230.80	127.05	103.75	2.225	
9,600.00	7,254.19	9,426.79	7,066.71	76.58	76.57	35.82	1,304.82	-2,649.99	231.22	123.84	107.37	2.153	
9,700.00	7,253.77	9,526.79	7,066.42	79.15	79.14	36.02	1,304.06	-2,749.98	231.64	120.60	111.04	2.086	
9,800.00	7,253.35	9,626.78	7,066.14	81.74	81.74	36.22	1,303.31	-2,849.98	232.06	117.31	114.76	2.022	
9,900.00	7,252.92	9,726.78	7,065.85	84.34	84.34	36.42	1,302.56	-2,949.97	232.49	113.98	118.51	1.962	
10,000.00	7,252.50	9,826.77	7,065.57	86.96	86.97	36.62	1,301.81	-3,049.96	232.92	110.61	122.31	1.904	
10,100.00	7,252.08	9,926.77	7,065.28	89.59	89.61	36.82	1,301.05	-3,149.95	233.35	107.20	126.15	1.850	
10,200.00	7,251.66	10,026.77	7,065.00	92.24	92.26	37.02	1,300.30	-3,249.95	233.79	103.76	130.03	1.798	
10,300.00	7,251.24	10,126.76	7,064.71	94.90	94.93	37.21	1,299.55	-3,349.94	234.23	100.29	133.94	1.749	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30N-16B-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.00	7,250.82	10,226.76	7,064.43	97.57	97.60	37.41	1,298.80	-3,449.93	234.67	96.78	137.89	1.702	
10,500.00	7,250.40	10,326.75	7,064.14	100.25	100.29	37.60	1,298.04	-3,549.92	235.11	93.24	141.87	1.657	
10,600.00	7,249.98	10,426.75	7,063.86	102.93	102.98	37.80	1,297.29	-3,649.92	235.56	89.67	145.89	1.615	
10,700.00	7,249.56	10,526.74	7,063.57	105.63	105.68	37.99	1,296.54	-3,749.91	236.01	86.08	149.93	1.574	
10,800.00	7,249.14	10,626.74	7,063.29	108.34	108.40	38.19	1,295.79	-3,849.90	236.46	82.45	154.01	1.535	
10,900.00	7,248.72	10,726.74	7,063.00	111.05	111.11	38.38	1,295.03	-3,949.89	236.92	78.79	158.13	1.498	Level 3
11,000.00	7,248.30	10,826.73	7,062.72	113.77	113.84	38.57	1,294.28	-4,049.89	237.38	75.11	162.27	1.463	Level 3
11,100.00	7,247.88	10,926.73	7,062.44	116.50	116.57	38.76	1,293.53	-4,149.88	237.84	71.40	166.44	1.429	Level 3
11,200.00	7,247.46	11,026.72	7,062.15	119.23	119.31	38.95	1,292.78	-4,249.87	238.30	67.67	170.63	1.397	Level 3
11,300.00	7,247.04	11,126.72	7,061.87	121.97	122.05	39.14	1,292.02	-4,349.86	238.77	63.91	174.86	1.365	Level 3
11,400.00	7,246.62	11,226.72	7,061.58	124.72	124.80	39.33	1,291.27	-4,449.86	239.23	60.12	179.11	1.336	Level 3
11,500.00	7,246.20	11,326.71	7,061.30	127.46	127.56	39.52	1,290.52	-4,549.85	239.70	56.31	183.39	1.307	Level 3
11,600.00	7,245.78	11,426.71	7,061.01	130.22	130.31	39.71	1,289.77	-4,649.84	240.18	52.48	187.70	1.280	Level 3
11,700.00	7,245.36	11,526.70	7,060.73	132.98	133.08	39.89	1,289.01	-4,749.83	240.65	48.62	192.03	1.253	Level 3
11,800.00	7,244.94	11,626.70	7,060.44	135.74	135.84	40.08	1,288.26	-4,849.83	241.13	44.74	196.39	1.228	Level 2
11,900.00	7,244.52	11,726.69	7,060.16	138.50	138.61	40.26	1,287.51	-4,949.82	241.61	40.84	200.77	1.203	Level 2
12,000.00	7,244.10	11,826.69	7,059.87	141.27	141.38	40.45	1,286.76	-5,049.81	242.10	36.92	205.17	1.180	Level 2
12,100.00	7,243.68	11,926.69	7,059.59	144.04	144.16	40.63	1,286.01	-5,149.80	242.58	32.98	209.60	1.157	Level 2
12,200.00	7,243.26	12,026.68	7,059.30	146.82	146.94	40.81	1,285.25	-5,249.80	243.07	29.01	214.06	1.136	Level 2
12,300.00	7,242.84	12,126.68	7,059.02	149.60	149.72	41.00	1,284.50	-5,349.79	243.56	25.03	218.53	1.115	Level 2
12,400.00	7,242.42	12,226.67	7,058.73	152.38	152.51	41.18	1,283.75	-5,449.78	244.06	21.02	223.03	1.094	Level 2
12,500.00	7,242.00	12,326.67	7,058.45	155.16	155.30	41.36	1,283.00	-5,549.78	244.55	17.00	227.55	1.075	Level 2
12,600.00	7,241.58	12,426.67	7,058.16	157.95	158.09	41.54	1,282.24	-5,649.77	245.05	12.96	232.10	1.056	Level 2
12,700.00	7,241.16	12,526.66	7,057.88	160.74	160.88	41.72	1,281.49	-5,749.76	245.55	8.89	236.66	1.038	Level 2
12,800.00	7,240.74	12,626.66	7,057.59	163.53	163.68	41.90	1,280.74	-5,849.75	246.05	4.81	241.24	1.020	Level 2
12,900.00	7,240.32	12,726.65	7,057.31	166.32	166.47	42.07	1,279.99	-5,949.75	246.56	0.71	245.85	1.003	Level 2
13,000.00	7,239.89	12,826.65	7,057.02	169.12	169.27	42.25	1,279.23	-6,049.74	247.07	-3.41	250.48	0.986	Level 1
13,100.00	7,239.47	12,926.64	7,056.74	171.92	172.07	42.43	1,278.48	-6,149.73	247.58	-7.55	255.12	0.970	Level 1
13,200.00	7,239.05	13,026.64	7,056.46	174.72	174.88	42.60	1,277.73	-6,249.72	248.09	-11.70	259.79	0.955	Level 1
13,300.00	7,238.63	13,126.64	7,056.17	177.52	177.68	42.78	1,276.98	-6,349.72	248.61	-15.87	264.48	0.940	Level 1
13,400.00	7,238.21	13,226.63	7,055.89	180.32	180.49	42.95	1,276.22	-6,449.71	249.12	-20.06	269.18	0.925	Level 1
13,500.00	7,237.79	13,326.63	7,055.60	183.13	183.30	43.13	1,275.47	-6,549.70	249.64	-24.27	273.91	0.911	Level 1
13,600.00	7,237.37	13,426.62	7,055.32	185.93	186.11	43.30	1,274.72	-6,649.69	250.16	-28.49	278.65	0.898	Level 1
13,700.00	7,236.95	13,526.62	7,055.03	188.74	188.92	43.47	1,273.97	-6,749.69	250.69	-32.72	283.41	0.885	Level 1
13,800.00	7,236.53	13,626.61	7,054.75	191.55	191.73	43.64	1,273.21	-6,849.68	251.21	-36.98	288.19	0.872	Level 1
13,900.00	7,236.11	13,726.61	7,054.46	194.36	194.55	43.81	1,272.46	-6,949.67	251.74	-41.25	292.99	0.859	Level 1
14,000.00	7,235.69	13,826.61	7,054.18	197.17	197.36	43.98	1,271.71	-7,049.66	252.27	-45.53	297.81	0.847	Level 1
14,100.00	7,235.27	13,926.60	7,053.89	199.98	200.18	44.15	1,270.96	-7,149.66	252.81	-49.83	302.64	0.835	Level 1
14,200.00	7,234.85	14,026.60	7,053.61	202.80	202.99	44.32	1,270.20	-7,249.65	253.34	-54.15	307.49	0.824	Level 1
14,300.00	7,234.43	14,126.59	7,053.32	205.61	205.81	44.49	1,269.45	-7,349.64	253.88	-58.48	312.36	0.813	Level 1
14,400.00	7,234.01	14,226.59	7,053.04	208.43	208.63	44.65	1,268.70	-7,449.63	254.42	-62.82	317.24	0.802	Level 1
14,500.00	7,233.59	14,326.59	7,052.75	211.25	211.45	44.82	1,267.95	-7,549.63	254.96	-67.18	322.14	0.791	Level 1
14,600.00	7,233.17	14,426.58	7,052.47	214.06	214.28	44.99	1,267.20	-7,649.62	255.50	-71.55	327.06	0.781	Level 1
14,700.00	7,232.75	14,526.58	7,052.18	216.88	217.10	45.15	1,266.44	-7,749.61	256.05	-75.94	331.99	0.771	Level 1
14,800.00	7,232.33	14,626.57	7,051.90	219.70	219.92	45.32	1,265.69	-7,849.60	256.60	-80.34	336.94	0.762	Level 1
14,900.00	7,231.91	14,726.57	7,051.61	222.52	222.75	45.48	1,264.94	-7,949.60	257.15	-84.76	341.90	0.752	Level 1
15,000.00	7,231.49	14,826.56	7,051.33	225.35	225.57	45.64	1,264.19	-8,049.59	257.70	-89.18	346.88	0.743	Level 1
15,100.00	7,231.07	14,926.56	7,051.05	228.17	228.40	45.80	1,263.43	-8,149.58	258.25	-93.62	351.88	0.734	Level 1
15,116.21	7,231.00	14,942.77	7,051.00	228.63	228.86	45.83	1,263.31	-8,165.79	258.34	-94.34	352.69	0.732	Level 1, ES, SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	0.00	3.28	-179.47	-60.11	-0.56	60.11					
100.00	100.00	101.00	100.00	0.18	3.28	-179.47	-60.11	-0.56	60.11	56.65	3.46	17.371		
200.00	200.00	201.00	200.00	0.61	3.34	-179.47	-60.11	-0.56	60.11	56.16	3.95	15.210		
300.00	300.00	301.00	300.00	1.05	3.45	-179.47	-60.11	-0.56	60.11	55.61	4.50	13.361		
400.00	400.00	401.00	400.00	1.49	3.61	-179.47	-60.11	-0.56	60.11	55.02	5.10	11.794		
500.00	500.00	501.00	500.00	1.93	3.81	-179.47	-60.11	-0.56	60.11	54.37	5.74	10.475 CC, ES		
600.00	599.98	598.98	599.98	2.37	4.04	-171.95	-60.11	-0.56	61.84	55.43	6.41	9.642		
700.00	699.84	700.98	701.96	2.81	4.32	-171.98	-58.47	-1.25	65.42	58.28	7.14	9.165		
800.00	799.45	802.77	803.60	3.26	4.63	-171.25	-53.54	-3.33	69.22	61.33	7.90	8.767		
900.00	898.70	902.58	903.20	3.70	4.94	-170.62	-47.51	-5.88	75.30	66.64	8.66	8.698		
1,000.00	997.47	1,002.12	1,002.52	4.15	5.28	-170.48	-41.50	-8.42	84.81	75.37	9.44	8.984		
1,100.00	1,095.78	1,101.38	1,101.57	4.60	5.63	-170.65	-35.50	-10.95	96.97	86.73	10.24	9.470		
1,200.00	1,194.05	1,200.61	1,200.59	5.05	5.99	-170.80	-29.50	-13.48	109.30	98.25	11.05	9.894		
1,300.00	1,292.33	1,300.15	1,299.61	5.50	6.36	-170.93	-23.51	-16.02	121.64	109.77	11.87	10.248		
1,400.00	1,390.61	1,399.08	1,398.63	5.96	6.74	-171.03	-17.51	-18.55	133.98	121.28	12.70	10.549		
1,500.00	1,488.89	1,501.68	1,497.66	6.43	7.14	-171.11	-11.52	-21.08	146.32	132.76	13.55	10.795		
1,600.00	1,587.16	1,602.45	1,596.68	6.89	7.53	-171.18	-5.53	-23.61	158.65	144.25	14.41	11.012		
1,700.00	1,685.44	1,703.21	1,695.70	7.36	7.94	-171.24	0.47	-26.14	170.99	155.73	15.27	11.200		
1,800.00	1,783.72	1,803.97	1,794.72	7.83	8.34	-171.29	6.46	-28.68	183.33	167.20	16.13	11.364		
1,900.00	1,882.00	1,904.74	1,893.74	8.30	8.75	-171.34	12.46	-31.21	195.67	178.67	17.00	11.508		
2,000.00	1,980.27	2,005.50	1,992.77	8.77	9.17	-171.38	18.45	-33.74	208.01	190.13	17.88	11.636		
2,100.00	2,078.55	2,106.27	2,091.79	9.25	9.59	-171.41	24.45	-36.27	220.35	201.60	18.75	11.750		
2,200.00	2,176.83	2,192.97	2,190.81	9.72	9.95	-171.45	30.44	-38.81	232.69	213.11	19.58	11.887		
2,300.00	2,275.11	2,307.80	2,289.83	10.19	10.43	-171.47	36.44	-41.34	245.03	224.51	20.52	11.943		
2,400.00	2,373.38	2,408.56	2,388.85	10.66	10.85	-171.50	42.43	-43.87	257.37	235.97	21.40	12.026		
2,500.00	2,471.66	2,509.32	2,487.88	11.14	11.28	-171.52	48.43	-46.40	269.71	247.42	22.29	12.101		
2,600.00	2,569.94	2,589.91	2,586.90	11.61	11.62	-171.55	54.42	-48.93	282.05	258.96	23.09	12.214		
2,700.00	2,668.22	2,689.15	2,685.92	12.09	12.04	-171.57	60.42	-51.47	294.39	270.41	23.98	12.278		
2,800.00	2,766.49	2,788.38	2,784.94	12.56	12.46	-171.58	66.41	-54.00	306.73	281.87	24.86	12.338		
2,900.00	2,864.77	2,887.62	2,883.96	13.04	12.89	-171.60	72.41	-56.53	319.07	293.32	25.75	12.392		
3,000.00	2,963.05	2,986.85	2,982.99	13.51	13.31	-171.62	78.40	-59.06	331.41	304.77	26.64	12.442		
3,100.00	3,061.33	3,086.09	3,082.01	13.99	13.74	-171.63	84.40	-61.60	343.75	316.22	27.52	12.489		
3,200.00	3,159.60	3,185.33	3,181.03	14.46	14.17	-171.64	90.39	-64.13	356.09	327.67	28.41	12.532		
3,300.00	3,257.88	3,284.56	3,280.05	14.94	14.59	-171.66	96.39	-66.66	368.43	339.12	29.30	12.573		
3,400.00	3,356.16	3,383.80	3,379.08	15.41	15.02	-171.67	102.38	-69.19	380.77	350.57	30.20	12.610		
3,500.00	3,454.43	3,483.03	3,478.10	15.89	15.45	-171.68	108.38	-71.72	393.11	362.02	31.09	12.645		
3,600.00	3,552.71	3,582.27	3,577.12	16.36	15.88	-171.69	114.37	-74.26	405.45	373.47	31.98	12.678		
3,700.00	3,650.99	3,681.50	3,676.14	16.84	16.31	-171.70	120.36	-76.79	417.79	384.91	32.87	12.709		
3,800.00	3,749.27	3,780.74	3,775.16	17.32	16.74	-171.71	126.36	-79.32	430.13	396.36	33.77	12.738		
3,900.00	3,847.54	3,879.98	3,874.19	17.79	17.17	-171.72	132.35	-81.85	442.46	407.80	34.66	12.765		
4,000.00	3,945.82	3,979.21	3,973.21	18.27	17.60	-171.72	138.35	-84.38	454.80	419.25	35.56	12.791		
4,100.00	4,044.10	4,078.45	4,072.23	18.75	18.03	-171.73	144.34	-86.92	467.14	430.69	36.45	12.815		
4,200.00	4,142.38	4,177.68	4,171.25	19.22	18.47	-171.74	150.34	-89.45	479.48	442.14	37.35	12.838		
4,300.00	4,240.65	4,276.92	4,270.27	19.70	18.90	-171.75	156.33	-91.98	491.82	453.58	38.24	12.860		
4,400.00	4,338.93	4,376.15	4,369.30	20.18	19.33	-171.75	162.33	-94.51	504.16	465.02	39.14	12.881		
4,500.00	4,437.21	4,475.39	4,468.32	20.65	19.76	-171.76	168.32	-97.05	516.50	476.47	40.04	12.901		
4,600.00	4,535.49	4,574.63	4,567.34	21.13	20.20	-171.76	174.32	-99.58	528.84	487.91	40.93	12.919		
4,700.00	4,633.76	4,673.86	4,666.36	21.61	20.63	-171.77	180.31	-102.11	541.18	499.35	41.83	12.937		
4,800.00	4,732.04	4,773.10	4,765.38	22.08	21.06	-171.78	186.31	-104.64	553.52	510.79	42.73	12.954		
4,900.00	4,830.32	4,872.33	4,864.41	22.56	21.50	-171.78	192.30	-107.17	565.86	522.24	43.63	12.970		
5,000.00	4,928.60	4,971.57	4,963.43	23.04	21.93	-171.79	198.30	-109.71	578.20	533.68	44.53	12.986		
5,100.00	5,026.87	5,070.80	5,062.45	23.51	22.37	-171.79	204.29	-112.24	590.54	545.12	45.42	13.000		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,170.04	5,161.47	23.99	22.80	-171.80	210.29	-114.77	602.88	556.56	46.32	13.015		
5,300.00	5,223.43	5,269.28	5,260.49	24.47	23.24	-171.80	216.28	-117.30	615.22	568.00	47.22	13.028		
5,400.00	5,321.71	5,368.51	5,359.52	24.94	23.67	-171.80	222.28	-119.83	627.56	579.44	48.12	13.041		
5,500.00	5,419.98	5,467.75	5,458.54	25.42	24.11	-171.81	228.27	-122.37	639.90	590.88	49.02	13.054		
5,600.00	5,518.26	5,566.98	5,557.56	25.90	24.54	-171.81	234.27	-124.90	652.24	602.32	49.92	13.066		
5,700.00	5,616.54	5,666.22	5,656.58	26.38	24.98	-171.82	240.26	-127.43	664.58	613.76	50.82	13.077		
5,800.00	5,714.82	5,765.45	5,755.61	26.85	25.41	-171.82	246.25	-129.96	676.92	625.20	51.72	13.088		
5,900.00	5,813.09	5,864.69	5,854.63	27.33	25.85	-171.82	252.25	-132.50	689.26	636.64	52.62	13.099		
6,000.00	5,911.37	5,963.93	5,953.65	27.81	26.28	-171.83	258.24	-135.03	701.60	648.08	53.52	13.109		
6,100.00	6,009.65	6,063.16	6,052.67	28.28	26.72	-171.83	264.24	-137.56	713.94	659.52	54.42	13.119		
6,200.00	6,107.93	6,162.40	6,151.69	28.76	27.16	-171.83	270.23	-140.09	726.28	670.96	55.32	13.128		
6,300.00	6,206.20	6,261.63	6,250.72	29.24	27.59	-171.84	276.23	-142.62	738.62	682.40	56.22	13.137		
6,400.00	6,304.48	6,360.87	6,349.74	29.72	28.03	-171.84	282.22	-145.16	750.96	693.84	57.12	13.146		
6,500.00	6,402.76	6,460.10	6,448.76	30.19	28.47	-171.84	288.22	-147.69	763.30	705.28	58.02	13.155		
6,600.00	6,501.04	6,559.34	6,547.78	30.67	28.90	-171.84	294.21	-150.22	775.64	716.72	58.93	13.163		
6,700.00	6,599.31	6,658.57	6,646.79	31.15	29.34	-171.84	300.21	-152.86	787.98	728.16	59.83	13.171		
6,800.00	6,697.50	6,756.93	6,744.16	31.63	29.77	-149.79	306.16	-164.76	800.31	739.59	60.73	13.179		
6,900.00	6,794.18	6,853.87	6,837.18	32.10	30.20	-122.25	311.93	-191.04	812.26	750.65	61.61	13.183		
7,000.00	6,886.96	6,949.63	6,924.13	32.55	30.63	-109.17	317.41	-230.58	823.47	760.98	62.49	13.177		
7,100.00	6,973.57	7,044.37	7,003.37	32.99	31.07	-101.88	322.50	-282.11	833.65	770.27	63.38	13.154		
7,200.00	7,051.87	7,138.26	7,073.49	33.41	31.55	-97.26	327.10	-344.24	842.51	778.20	64.31	13.100		
7,300.00	7,119.93	7,231.43	7,133.33	33.85	32.10	-94.13	331.14	-415.43	849.83	784.46	65.37	13.001		
7,400.00	7,176.09	7,324.00	7,181.88	34.39	32.75	-91.98	334.53	-494.08	855.41	788.79	66.62	12.841		
7,500.00	7,218.95	7,416.11	7,218.39	35.09	33.53	-90.56	337.23	-578.51	859.10	790.97	68.12	12.611		
7,600.00	7,247.46	7,507.86	7,242.29	35.98	34.43	-89.73	339.20	-666.99	860.79	790.87	69.92	12.311		
7,700.00	7,260.92	7,599.37	7,253.25	37.04	35.46	-89.44	340.39	-757.76	860.45	788.46	71.99	11.952		
7,800.00	7,261.75	7,703.77	7,253.76	38.23	36.78	-89.47	341.00	-854.61	858.40	783.89	74.51	11.520		
7,900.00	7,261.33	7,803.79	7,253.40	39.59	38.22	-89.47	341.56	-954.58	856.18	778.84	77.34	11.071		
8,000.00	7,260.91	7,903.81	7,253.03	41.10	39.81	-89.48	342.13	-1,054.55	853.95	773.49	80.47	10.613		
8,100.00	7,260.49	8,003.84	7,252.67	42.75	41.54	-89.48	342.70	-1,154.53	851.73	767.86	83.87	10.155		
8,200.00	7,260.07	8,103.86	7,252.30	44.53	43.39	-89.48	343.26	-1,254.50	849.50	761.99	87.52	9.707		
8,300.00	7,259.65	8,203.89	7,251.93	46.41	45.34	-89.48	343.83	-1,354.47	847.28	755.90	91.37	9.273		
8,400.00	7,259.23	8,303.91	7,251.57	48.39	47.38	-89.49	344.40	-1,454.44	845.05	749.63	95.42	8.856		
8,500.00	7,258.81	8,403.94	7,251.20	50.45	49.51	-89.49	344.96	-1,554.42	842.82	743.20	99.63	8.460		
8,600.00	7,258.39	8,503.96	7,250.84	52.59	51.71	-89.49	345.53	-1,654.39	840.60	736.62	103.98	8.084		
8,700.00	7,257.97	8,603.99	7,250.47	54.79	53.97	-89.49	346.10	-1,754.36	838.37	729.91	108.46	7.730		
8,800.00	7,257.55	8,704.01	7,250.10	57.05	56.28	-89.50	346.66	-1,854.34	836.15	723.09	113.05	7.396		
8,900.00	7,257.13	8,804.04	7,249.74	59.36	58.65	-89.50	347.23	-1,954.31	833.92	716.18	117.74	7.083		
9,000.00	7,256.71	8,904.06	7,249.37	61.72	61.06	-89.50	347.80	-2,054.28	831.69	709.18	122.52	6.788		
9,100.00	7,256.29	9,004.09	7,249.00	64.12	63.50	-89.50	348.36	-2,154.25	829.47	702.10	127.37	6.512		
9,200.00	7,255.87	9,104.11	7,248.64	66.56	65.98	-89.50	348.93	-2,254.23	827.24	694.95	132.30	6.253		
9,300.00	7,255.45	9,204.14	7,248.27	69.02	68.49	-89.51	349.50	-2,354.20	825.02	687.73	137.28	6.010		
9,400.00	7,255.03	9,304.16	7,247.91	71.52	71.02	-89.51	350.06	-2,454.17	822.79	680.47	142.32	5.781		
9,500.00	7,254.61	9,404.19	7,247.54	74.04	73.58	-89.51	350.63	-2,554.15	820.57	673.15	147.41	5.566		
9,600.00	7,254.19	9,504.21	7,247.17	76.58	76.16	-89.51	351.20	-2,654.12	818.34	665.79	152.55	5.364		
9,700.00	7,253.77	9,604.24	7,246.81	79.15	78.76	-89.52	351.76	-2,754.09	816.11	658.39	157.72	5.174		
9,800.00	7,253.35	9,704.26	7,246.44	81.74	81.38	-89.52	352.33	-2,854.07	813.89	650.96	162.93	4.995		
9,900.00	7,252.92	9,804.29	7,246.08	84.34	84.01	-89.52	352.90	-2,954.04	811.66	643.49	168.18	4.826		
10,000.00	7,252.50	9,904.31	7,245.71	86.96	86.66	-89.52	353.46	-3,054.01	809.44	635.99	173.45	4.667		
10,100.00	7,252.08	10,004.34	7,245.34	89.59	89.32	-89.53	354.03	-3,153.98	807.21	628.46	178.75	4.516		
10,200.00	7,251.66	10,104.36	7,244.98	92.24	92.00	-89.53	354.60	-3,253.96	804.99	620.91	184.08	4.373		
10,300.00	7,251.24	10,204.38	7,244.61	94.90	94.68	-89.53	355.16	-3,353.93	802.76	613.33	189.43	4.238		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,304.41	7,244.25	97.57	97.38	-89.53	355.73	-3,453.90	800.53	605.74	194.80	4.110		
10,500.00	7,250.40	10,404.43	7,243.88	100.25	100.08	-89.54	356.30	-3,553.88	798.31	598.12	200.19	3.988		
10,600.00	7,249.98	10,504.46	7,243.51	102.93	102.79	-89.54	356.86	-3,653.85	796.08	590.49	205.59	3.872		
10,700.00	7,249.56	10,604.48	7,243.15	105.63	105.51	-89.54	357.43	-3,753.82	793.86	582.84	211.02	3.762		
10,800.00	7,249.14	10,704.51	7,242.78	108.34	108.24	-89.54	358.00	-3,853.79	791.63	575.18	216.45	3.657		
10,900.00	7,248.72	10,804.53	7,242.42	111.05	110.98	-89.55	358.56	-3,953.77	789.41	567.50	221.91	3.557		
11,000.00	7,248.30	10,904.56	7,242.05	113.77	113.72	-89.55	359.13	-4,053.74	787.18	559.81	227.37	3.462		
11,100.00	7,247.88	11,004.58	7,241.68	116.50	116.47	-89.55	359.70	-4,153.71	784.95	552.10	232.85	3.371		
11,200.00	7,247.46	11,104.61	7,241.32	119.23	119.22	-89.56	360.26	-4,253.69	782.73	544.39	238.34	3.284		
11,300.00	7,247.04	11,204.63	7,240.95	121.97	121.98	-89.56	360.83	-4,353.66	780.50	536.66	243.84	3.201		
11,400.00	7,246.62	11,304.66	7,240.58	124.72	124.74	-89.56	361.40	-4,453.63	778.28	528.93	249.35	3.121		
11,500.00	7,246.20	11,404.68	7,240.22	127.46	127.51	-89.56	361.96	-4,553.61	776.05	521.18	254.87	3.045		
11,600.00	7,245.78	11,504.71	7,239.85	130.22	130.28	-89.57	362.53	-4,653.58	773.82	513.43	260.39	2.972		
11,700.00	7,245.36	11,604.73	7,239.49	132.98	133.05	-89.57	363.10	-4,753.55	771.60	505.67	265.93	2.902		
11,800.00	7,244.94	11,704.76	7,239.12	135.74	135.83	-89.57	363.66	-4,853.52	769.37	497.90	271.47	2.834		
11,900.00	7,244.52	11,804.78	7,238.75	138.50	138.61	-89.57	364.23	-4,953.50	767.15	490.13	277.02	2.769		
12,000.00	7,244.10	11,904.81	7,238.39	141.27	141.40	-89.58	364.80	-5,053.47	764.92	482.34	282.58	2.707		
12,100.00	7,243.68	12,004.83	7,238.02	144.04	144.19	-89.58	365.36	-5,153.44	762.70	474.56	288.14	2.647		
12,200.00	7,243.26	12,104.86	7,237.66	146.82	146.98	-89.58	365.93	-5,253.42	760.47	466.76	293.71	2.589		
12,300.00	7,242.84	12,204.88	7,237.29	149.60	149.77	-89.59	366.50	-5,353.39	758.24	458.96	299.28	2.534		
12,400.00	7,242.42	12,304.90	7,236.92	152.38	152.57	-89.59	367.06	-5,453.36	756.02	451.16	304.86	2.480		
12,500.00	7,242.00	12,404.93	7,236.56	155.16	155.37	-89.59	367.63	-5,553.33	753.79	443.34	310.45	2.428		
12,600.00	7,241.58	12,504.95	7,236.19	157.95	158.17	-89.59	368.20	-5,653.31	751.57	435.53	316.04	2.378		
12,700.00	7,241.16	12,604.98	7,235.83	160.74	160.97	-89.60	368.77	-5,753.28	749.34	427.71	321.63	2.330		
12,800.00	7,240.74	12,705.00	7,235.46	163.53	163.78	-89.60	369.33	-5,853.25	747.12	419.89	327.23	2.283		
12,900.00	7,240.32	12,805.03	7,235.09	166.32	166.59	-89.60	369.90	-5,953.23	744.89	412.06	332.83	2.238		
13,000.00	7,239.89	12,905.05	7,234.73	169.12	169.39	-89.61	370.47	-6,053.20	742.66	404.23	338.44	2.194		
13,100.00	7,239.47	13,005.08	7,234.36	171.92	172.21	-89.61	371.03	-6,153.17	740.44	396.39	344.05	2.152		
13,200.00	7,239.05	13,105.10	7,233.99	174.72	175.02	-89.61	371.60	-6,253.15	738.21	388.55	349.66	2.111		
13,300.00	7,238.63	13,205.13	7,233.63	177.52	177.83	-89.62	372.17	-6,353.12	735.99	380.71	355.28	2.072		
13,400.00	7,238.21	13,305.15	7,233.26	180.32	180.65	-89.62	372.73	-6,453.09	733.76	372.86	360.90	2.033		
13,500.00	7,237.79	13,405.18	7,232.90	183.13	183.47	-89.62	373.30	-6,553.06	731.54	365.01	366.52	1.996		
13,600.00	7,237.37	13,505.20	7,232.53	185.93	186.29	-89.62	373.87	-6,653.04	729.31	357.16	372.15	1.960		
13,700.00	7,236.95	13,605.23	7,232.16	188.74	189.11	-89.63	374.43	-6,753.01	727.08	349.31	377.78	1.925		
13,800.00	7,236.53	13,705.25	7,231.80	191.55	191.93	-89.63	375.00	-6,852.98	724.86	341.45	383.41	1.891		
13,900.00	7,236.11	13,805.28	7,231.43	194.36	194.75	-89.63	375.57	-6,952.96	722.63	333.59	389.04	1.857		
14,000.00	7,235.69	13,905.30	7,231.07	197.17	197.57	-89.64	376.13	-7,052.93	720.41	325.73	394.68	1.825		
14,100.00	7,235.27	14,005.33	7,230.70	199.98	200.40	-89.64	376.70	-7,152.90	718.18	317.86	400.32	1.794		
14,200.00	7,234.85	14,105.35	7,230.33	202.80	203.22	-89.64	377.27	-7,252.87	715.96	310.00	405.96	1.764		
14,300.00	7,234.43	14,205.38	7,229.97	205.61	206.05	-89.65	377.83	-7,352.85	713.73	302.13	411.60	1.734		
14,400.00	7,234.01	14,305.40	7,229.60	208.43	208.88	-89.65	378.40	-7,452.82	711.50	294.26	417.25	1.705		
14,500.00	7,233.59	14,405.43	7,229.24	211.25	211.71	-89.65	378.97	-7,552.79	709.28	286.38	422.89	1.677		
14,600.00	7,233.17	14,505.45	7,228.87	214.06	214.54	-89.66	379.53	-7,652.77	707.05	278.51	428.54	1.650		
14,700.00	7,232.75	14,605.47	7,228.50	216.88	217.37	-89.66	380.10	-7,752.74	704.83	270.63	434.19	1.623		
14,800.00	7,232.33	14,705.50	7,228.14	219.70	220.20	-89.66	380.67	-7,852.71	702.60	262.76	439.85	1.597		
14,900.00	7,231.91	14,805.52	7,227.77	222.52	223.03	-89.67	381.23	-7,952.69	700.38	254.88	445.50	1.572		
15,000.00	7,231.49	14,905.55	7,227.40	225.35	225.87	-89.67	381.80	-8,052.66	698.15	246.99	451.16	1.547		
15,100.00	7,231.07	14,994.43	7,227.04	228.17	228.38	-89.67	382.37	-8,152.63	695.92	239.43	456.50	1.524		
15,116.21	7,231.00	15,010.63	7,226.98	228.63	228.84	-89.67	382.46	-8,168.84	695.56	238.15	457.41	1.521 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	0.00	3.28	-179.51	-359.94	-3.06	359.95					
100.00	100.00	102.00	100.00	0.18	3.29	-179.51	-359.94	-3.06	359.95	356.49	3.46	104.012		
200.00	200.00	198.00	200.00	0.61	3.34	-179.51	-359.94	-3.06	359.95	356.00	3.95	91.134 CC, ES		
300.00	300.00	287.06	289.05	1.05	3.42	-179.50	-361.26	-3.17	361.44	356.94	4.50	80.311		
400.00	400.00	375.73	377.62	1.49	3.55	-179.45	-365.31	-3.51	366.01	360.90	5.11	71.654		
500.00	500.00	464.07	465.69	1.93	3.72	-179.37	-372.06	-4.07	373.66	367.90	5.75	64.929		
600.00	599.98	551.70	552.82	2.37	3.91	-171.52	-381.43	-4.85	386.07	379.64	6.44	59.982		
700.00	699.84	638.03	638.32	2.81	4.14	-171.44	-393.24	-5.83	404.89	397.75	7.14	56.680		
800.00	799.45	722.54	721.65	3.26	4.38	-171.38	-407.30	-7.00	429.97	422.12	7.86	54.725		
900.00	898.70	804.79	802.31	3.70	4.65	-171.33	-423.32	-8.33	461.16	452.59	8.57	53.830		
1,000.00	997.47	884.37	879.88	4.15	4.94	-171.29	-441.02	-9.80	498.23	488.97	9.26	53.777		
1,100.00	1,095.78	961.22	954.30	4.60	5.24	-171.34	-460.13	-11.39	540.25	530.30	9.95	54.299		
1,200.00	1,194.05	1,045.11	1,035.04	5.05	5.59	-171.41	-482.79	-13.28	584.41	573.79	10.63	55.002		
1,300.00	1,292.33	1,134.73	1,121.27	5.50	5.97	-171.48	-507.16	-15.30	628.76	617.43	11.34	55.470		
1,400.00	1,390.61	1,224.36	1,207.49	5.96	6.38	-171.53	-531.53	-17.33	673.11	661.05	12.07	55.789		
1,500.00	1,488.89	1,313.98	1,293.71	6.43	6.79	-171.58	-555.90	-19.36	717.47	704.65	12.81	55.995		
1,600.00	1,587.16	1,403.61	1,379.94	6.89	7.22	-171.63	-580.27	-21.38	761.82	748.24	13.58	56.119		
1,700.00	1,685.44	1,506.77	1,466.16	7.36	7.72	-171.67	-604.65	-23.41	806.17	791.76	14.41	55.955		
1,800.00	1,783.72	1,582.86	1,552.38	7.83	8.09	-171.70	-629.02	-25.44	850.53	835.39	15.13	56.199		
1,900.00	1,882.00	1,672.48	1,638.61	8.30	8.54	-171.74	-653.39	-27.46	894.88	878.95	15.93	56.184		
2,000.00	1,980.27	1,762.11	1,724.83	8.77	8.99	-171.76	-677.76	-29.49	939.23	922.50	16.73	56.144		
2,100.00	2,078.55	1,851.73	1,811.06	9.25	9.45	-171.79	-702.13	-31.52	983.59	966.05	17.54	56.087		
2,200.00	2,176.83	1,941.36	1,897.28	9.72	9.91	-171.81	-726.50	-33.54	1,027.94	1,009.59	18.35	56.018		
2,300.00	2,275.11	2,030.98	1,983.50	10.19	10.38	-171.84	-750.87	-35.57	1,072.29	1,053.13	19.17	55.940		
2,400.00	2,373.38	2,120.61	2,069.73	10.66	10.84	-171.86	-775.25	-37.60	1,116.65	1,096.66	19.99	55.856		
2,500.00	2,471.66	2,210.23	2,155.95	11.14	11.31	-171.88	-799.62	-39.62	1,161.00	1,140.18	20.82	55.768		
2,600.00	2,569.94	2,300.15	2,242.17	11.61	11.78	-171.89	-823.99	-41.65	1,205.36	1,183.71	21.65	55.675		
2,700.00	2,668.22	2,389.48	2,328.40	12.09	12.26	-171.91	-848.36	-43.68	1,249.71	1,227.23	22.48	55.588		
2,800.00	2,766.49	2,479.10	2,414.62	12.56	12.73	-171.92	-872.73	-45.70	1,294.07	1,270.75	23.32	55.497		
2,900.00	2,864.77	2,568.73	2,500.84	13.04	13.21	-171.94	-897.10	-47.73	1,338.42	1,314.26	24.16	55.408		
3,000.00	2,963.05	2,658.35	2,587.07	13.51	13.69	-171.95	-921.48	-49.76	1,382.77	1,357.78	25.00	55.319		
3,100.00	3,061.33	2,747.98	2,673.29	13.99	14.16	-171.96	-945.85	-51.79	1,427.13	1,401.29	25.84	55.232		
3,200.00	3,159.60	2,837.60	2,759.52	14.46	14.64	-171.98	-970.22	-53.81	1,471.48	1,444.80	26.68	55.146		
3,300.00	3,257.88	2,927.23	2,845.74	14.94	15.13	-171.99	-994.59	-55.84	1,515.84	1,488.31	27.53	55.063		
3,400.00	3,356.16	3,016.85	2,931.96	15.41	15.61	-172.00	-1,018.96	-57.87	1,560.19	1,531.82	28.38	54.981		
3,500.00	3,454.43	3,106.48	3,018.19	15.89	16.09	-172.01	-1,043.33	-59.89	1,604.55	1,575.32	29.23	54.902		
3,600.00	3,552.71	3,203.90	3,104.41	16.36	16.62	-172.02	-1,067.70	-61.92	1,648.90	1,618.79	30.11	54.756		
3,700.00	3,650.99	3,285.73	3,190.63	16.84	17.06	-172.02	-1,092.08	-63.95	1,693.26	1,662.33	30.93	54.750		
3,800.00	3,749.27	3,375.35	3,276.86	17.32	17.54	-172.03	-1,116.45	-65.97	1,737.61	1,705.83	31.78	54.677		
3,900.00	3,847.54	3,464.98	3,363.08	17.79	18.03	-172.04	-1,140.82	-68.00	1,781.97	1,749.34	32.63	54.606		
4,000.00	3,945.82	3,554.60	3,449.30	18.27	18.52	-172.05	-1,165.19	-70.03	1,826.32	1,792.84	33.49	54.538		
4,100.00	4,044.10	3,644.23	3,535.53	18.75	19.00	-172.05	-1,189.56	-72.05	1,870.68	1,836.34	34.34	54.471		
4,200.00	4,142.38	3,733.85	3,621.75	19.22	19.49	-172.06	-1,213.93	-74.08	1,915.03	1,879.84	35.20	54.407		
4,300.00	4,240.65	3,823.47	3,707.97	19.70	19.98	-172.07	-1,238.30	-76.11	1,959.39	1,923.33	36.06	54.344		
4,400.00	4,338.93	3,913.10	3,794.20	20.18	20.46	-172.07	-1,262.68	-78.13	2,003.74	1,966.83	36.91	54.284		
4,500.00	4,437.21	4,002.72	3,880.42	20.65	20.95	-172.08	-1,287.05	-80.16	2,048.10	2,010.33	37.77	54.225		
4,600.00	4,535.49	4,107.65	3,966.65	21.13	21.52	-172.09	-1,311.42	-82.19	2,092.45	2,053.75	38.70	54.062		
4,700.00	4,633.76	4,181.97	4,052.87	21.61	21.93	-172.09	-1,335.79	-84.21	2,136.81	2,097.32	39.49	54.112		
4,800.00	4,732.04	4,271.60	4,139.09	22.08	22.42	-172.10	-1,360.16	-86.24	2,181.16	2,140.82	40.35	54.058		
4,900.00	4,830.32	4,361.22	4,225.32	22.56	22.91	-172.10	-1,384.53	-88.27	2,225.52	2,184.31	41.21	54.005		
5,000.00	4,928.60	4,450.85	4,311.54	23.04	23.40	-172.11	-1,408.91	-90.29	2,269.87	2,227.80	42.07	53.954		
5,100.00	5,026.87	4,540.47	4,397.76	23.51	23.89	-172.11	-1,433.28	-92.32	2,314.23	2,271.30	42.93	53.905		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,630.10	4,483.99	23.99	24.38	-172.12	-1,457.65	-94.35	2,358.59	2,314.79	43.79	53.856		
5,300.00	5,223.43	4,719.72	4,570.21	24.47	24.87	-172.12	-1,482.02	-96.37	2,402.94	2,358.28	44.66	53.810		
5,400.00	5,321.71	4,809.35	4,656.43	24.94	25.36	-172.12	-1,506.39	-98.40	2,447.30	2,401.78	45.52	53.764		
5,500.00	5,419.98	4,901.03	4,742.66	25.42	25.86	-172.13	-1,530.76	-100.43	2,491.65	2,445.26	46.39	53.708		
5,600.00	5,518.26	4,988.60	4,828.88	25.90	26.34	-172.13	-1,555.13	-102.45	2,536.01	2,488.76	47.25	53.676		
5,700.00	5,616.54	5,078.22	4,915.11	26.38	26.83	-172.14	-1,579.51	-104.48	2,580.36	2,532.25	48.11	53.634		
5,800.00	5,714.82	5,167.85	5,001.33	26.85	27.32	-172.14	-1,603.88	-106.51	2,624.72	2,575.74	48.98	53.593		
5,900.00	5,813.09	5,257.47	5,087.55	27.33	27.82	-172.14	-1,628.25	-108.54	2,669.07	2,619.23	49.84	53.552		
6,000.00	5,911.37	5,347.09	5,173.78	27.81	28.31	-172.15	-1,652.62	-110.56	2,713.43	2,662.72	50.71	53.513		
6,100.00	6,009.65	5,436.72	5,260.00	28.28	28.80	-172.15	-1,676.99	-112.59	2,757.78	2,706.21	51.57	53.475		
6,200.00	6,107.93	5,526.34	5,346.22	28.76	29.29	-172.15	-1,701.36	-114.62	2,802.14	2,749.70	52.44	53.438		
6,300.00	6,206.20	5,615.97	5,432.45	29.24	29.78	-172.16	-1,725.73	-116.64	2,846.49	2,793.19	53.30	53.401		
6,400.00	6,304.48	5,705.59	5,518.67	29.72	30.28	-172.16	-1,750.11	-118.67	2,890.85	2,836.68	54.17	53.365		
6,500.00	6,402.76	5,804.78	5,604.89	30.19	30.82	-172.16	-1,774.48	-120.70	2,935.20	2,880.12	55.09	53.285		
6,600.00	6,501.04	5,884.84	5,691.12	30.67	31.26	-172.16	-1,798.85	-122.72	2,979.56	2,923.65	55.91	53.296		
6,700.00	6,599.31	5,974.47	5,777.34	31.15	31.75	-172.17	-1,823.22	-124.75	3,023.91	2,967.14	56.77	53.263		
6,800.00	6,697.50	6,064.06	5,863.54	31.63	32.25	-149.10	-1,847.58	-126.78	3,068.22	3,010.58	57.64	53.229		
6,900.00	6,794.18	6,152.64	5,948.75	32.10	32.73	-119.24	-1,871.67	-128.78	3,111.78	3,053.27	58.51	53.186		
7,000.00	6,886.96	6,238.08	6,030.95	32.55	33.20	-104.21	-1,894.90	-130.71	3,153.74	3,094.39	59.35	53.137		
7,100.00	6,973.57	6,318.27	6,108.10	32.99	33.64	-95.28	-1,916.71	-132.52	3,193.49	3,133.32	60.17	53.077		
7,200.00	7,051.87	6,391.26	6,178.31	33.41	34.04	-89.27	-1,936.56	-134.17	3,230.60	3,169.64	60.96	52.994		
7,300.00	7,119.93	6,455.22	6,239.85	33.85	34.40	-84.90	-1,953.95	-135.62	3,264.80	3,203.05	61.76	52.866		
7,400.00	7,176.09	6,508.61	6,291.21	34.39	34.69	-81.56	-1,968.47	-136.83	3,295.93	3,233.35	62.58	52.668		
7,500.00	7,218.95	6,550.09	6,331.12	35.09	34.92	-78.93	-1,979.75	-137.77	3,323.84	3,260.38	63.46	52.380		
7,600.00	7,247.46	6,578.64	6,358.59	35.98	35.08	-76.80	-1,987.51	-138.41	3,348.40	3,284.00	64.40	51.995		
7,700.00	7,260.92	6,606.43	6,372.95	37.04	35.23	-75.07	-1,991.57	-138.75	3,369.41	3,303.96	65.46	51.476		
7,800.00	7,261.75	6,597.02	6,376.27	38.23	35.18	-74.50	-1,992.51	-138.83	3,387.84	3,321.41	66.43	50.996		
7,900.00	7,261.33	6,600.67	6,378.49	39.59	35.20	-74.54	-1,993.14	-138.88	3,408.56	3,340.95	67.61	50.412		
8,000.00	7,260.91	6,601.64	6,380.71	41.10	35.20	-74.58	-1,993.77	-138.93	3,432.07	3,363.18	68.90	49.816		
8,100.00	7,260.49	6,601.55	6,382.94	42.75	44.23	-89.81	-2,246.47	-1,129.57	3,440.92	3,355.40	85.52	40.233		
8,200.00	7,260.07	6,601.55	6,382.94	44.53	45.76	-89.81	-2,247.06	-1,129.57	3,439.85	3,350.84	89.01	38.644		
8,300.00	7,259.65	6,601.55	6,382.94	46.41	47.46	-89.80	-2,247.64	-1,129.55	3,438.78	3,346.05	92.73	37.086		
8,400.00	7,259.23	6,601.55	6,382.94	48.39	49.28	-89.80	-2,248.22	-1,129.54	3,437.70	3,341.07	96.63	35.575		
8,500.00	7,258.81	6,601.55	6,382.94	50.45	51.21	-89.80	-2,248.81	-1,129.53	3,436.63	3,335.92	100.71	34.124		
8,600.00	7,258.39	6,601.55	6,382.94	52.59	53.23	-89.80	-2,249.39	-1,129.52	3,435.55	3,330.61	104.94	32.737		
8,700.00	7,257.97	6,601.55	6,382.94	54.79	55.34	-89.79	-2,249.98	-1,129.51	3,434.48	3,325.17	109.31	31.420		
8,800.00	7,257.55	6,601.55	6,382.94	57.05	57.51	-89.79	-2,250.56	-1,129.50	3,433.40	3,319.61	113.80	30.172		
8,900.00	7,257.13	6,601.55	6,382.94	59.36	59.74	-89.79	-2,251.14	-1,129.49	3,432.33	3,313.94	118.39	28.992		
9,000.00	7,256.71	6,601.55	6,382.94	61.72	62.03	-89.78	-2,251.73	-1,129.48	3,431.26	3,308.18	123.07	27.880		
9,100.00	7,256.29	6,601.55	6,382.94	64.12	64.36	-89.78	-2,252.31	-1,129.48	3,430.18	3,302.34	127.84	26.831		
9,200.00	7,255.87	6,601.55	6,382.94	66.56	66.74	-89.78	-2,252.89	-1,129.47	3,429.11	3,296.42	132.69	25.844		
9,300.00	7,255.45	6,601.55	6,382.94	69.02	69.15	-89.77	-2,253.48	-1,129.46	3,428.03	3,290.44	137.60	24.913		
9,400.00	7,255.03	6,601.55	6,382.94	71.52	71.60	-89.77	-2,254.06	-1,129.45	3,426.96	3,284.39	142.57	24.037		
9,500.00	7,254.61	6,601.55	6,382.94	74.04	74.08	-89.77	-2,254.65	-1,129.44	3,425.88	3,278.29	147.59	23.212		
9,600.00	7,254.19	6,601.55	6,382.94	76.58	76.58	-89.77	-2,255.23	-1,129.43	3,424.81	3,272.14	152.67	22.433		
9,700.00	7,253.77	6,601.55	6,382.94	79.15	79.11	-89.76	-2,255.81	-1,129.42	3,423.74	3,265.95	157.78	21.699		
9,800.00	7,253.35	6,601.55	6,382.94	81.74	81.66	-89.76	-2,256.40	-1,129.41	3,422.66	3,259.72	162.94	21.006		
9,900.00	7,252.92	6,601.55	6,382.94	84.34	84.23	-89.76	-2,256.98	-1,129.40	3,421.59	3,253.46	168.13	20.351		
10,000.00	7,252.50	6,601.55	6,382.94	86.96	86.82	-89.75	-2,257.56	-1,129.39	3,420.51	3,247.16	173.36	19.731		
10,100.00	7,252.08	6,601.55	6,382.94	89.59	89.43	-89.75	-2,258.15	-1,129.38	3,419.44	3,240.83	178.61	19.145		
10,200.00	7,251.66	6,601.55	6,382.94	92.24	92.05	-89.75	-2,258.73	-1,129.37	3,418.37	3,234.47	183.89	18.589		
10,300.00	7,251.24	6,601.55	6,382.94	94.90	94.68	-89.74	-2,259.32	-1,129.36	3,417.29	3,228.09	189.20	18.062		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,518.42	7,235.24	97.57	97.33	-89.74	-2,259.90	-3,429.35	3,416.22	3,221.68	194.53	17.561		
10,500.00	7,250.40	10,618.41	7,234.64	100.25	99.99	-89.74	-2,260.48	-3,529.34	3,415.14	3,215.26	199.88	17.086		
10,600.00	7,249.98	10,718.41	7,234.05	102.93	102.66	-89.74	-2,261.07	-3,629.33	3,414.07	3,208.81	205.26	16.633		
10,700.00	7,249.56	10,818.40	7,233.45	105.63	105.34	-89.73	-2,261.65	-3,729.33	3,413.00	3,202.35	210.65	16.203		
10,800.00	7,249.14	10,918.39	7,232.85	108.34	108.03	-89.73	-2,262.23	-3,829.32	3,411.92	3,195.87	216.05	15.792		
10,900.00	7,248.72	11,018.39	7,232.26	111.05	110.73	-89.73	-2,262.82	-3,929.31	3,410.85	3,189.37	221.47	15.401		
11,000.00	7,248.30	11,118.38	7,231.66	113.77	113.43	-89.72	-2,263.40	-4,029.30	3,409.77	3,182.86	226.91	15.027		
11,100.00	7,247.88	11,218.38	7,231.07	116.50	116.15	-89.72	-2,263.99	-4,129.29	3,408.70	3,176.34	232.36	14.670		
11,200.00	7,247.46	11,318.37	7,230.47	119.23	118.87	-89.72	-2,264.57	-4,229.28	3,407.63	3,169.81	237.82	14.329		
11,300.00	7,247.04	11,418.37	7,229.88	121.97	121.59	-89.71	-2,265.15	-4,329.27	3,406.55	3,163.26	243.29	14.002		
11,400.00	7,246.62	11,518.36	7,229.28	124.72	124.33	-89.71	-2,265.74	-4,429.26	3,405.48	3,156.70	248.78	13.689		
11,500.00	7,246.20	11,618.35	7,228.68	127.46	127.06	-89.71	-2,266.32	-4,529.25	3,404.40	3,150.13	254.27	13.389		
11,600.00	7,245.78	11,718.35	7,228.09	130.22	129.81	-89.70	-2,266.90	-4,629.24	3,403.33	3,143.56	259.77	13.101		
11,700.00	7,245.36	11,818.34	7,227.49	132.98	132.55	-89.70	-2,267.49	-4,729.23	3,402.26	3,136.97	265.29	12.825		
11,800.00	7,244.94	11,918.34	7,226.90	135.74	135.31	-89.70	-2,268.07	-4,829.22	3,401.18	3,130.37	270.81	12.559		
11,900.00	7,244.52	12,018.33	7,226.30	138.50	138.06	-89.70	-2,268.65	-4,929.21	3,400.11	3,123.77	276.34	12.304		
12,000.00	7,244.10	12,118.32	7,225.71	141.27	140.83	-89.69	-2,269.24	-5,029.20	3,399.03	3,117.16	281.87	12.059		
12,100.00	7,243.68	12,218.32	7,225.11	144.04	143.59	-89.69	-2,269.82	-5,129.19	3,397.96	3,110.55	287.41	11.823		
12,200.00	7,243.26	12,318.31	7,224.51	146.82	146.36	-89.69	-2,270.41	-5,229.18	3,396.89	3,103.92	292.96	11.595		
12,300.00	7,242.84	12,418.31	7,223.92	149.60	149.13	-89.68	-2,270.99	-5,329.17	3,395.81	3,097.29	298.52	11.376		
12,400.00	7,242.42	12,518.30	7,223.32	152.38	151.91	-89.68	-2,271.57	-5,429.17	3,394.74	3,090.66	304.08	11.164		
12,500.00	7,242.00	12,618.29	7,222.73	155.16	154.68	-89.68	-2,272.16	-5,529.16	3,393.66	3,084.02	309.65	10.960		
12,600.00	7,241.58	12,718.29	7,222.13	157.95	157.47	-89.67	-2,272.74	-5,629.15	3,392.59	3,077.37	315.22	10.763		
12,700.00	7,241.16	12,818.28	7,221.53	160.74	160.25	-89.67	-2,273.32	-5,729.14	3,391.52	3,070.72	320.80	10.572		
12,800.00	7,240.74	12,918.28	7,220.94	163.53	163.04	-89.67	-2,273.91	-5,829.13	3,390.44	3,064.06	326.38	10.388		
12,900.00	7,240.32	13,018.27	7,220.34	166.32	165.83	-89.66	-2,274.49	-5,929.12	3,389.37	3,057.40	331.97	10.210		
13,000.00	7,239.89	13,118.26	7,219.75	169.12	168.62	-89.66	-2,275.08	-6,029.11	3,388.29	3,050.74	337.56	10.038		
13,100.00	7,239.47	13,218.26	7,219.15	171.92	171.41	-89.66	-2,275.66	-6,129.10	3,387.22	3,044.07	343.15	9.871		
13,200.00	7,239.05	13,318.25	7,218.56	174.72	174.21	-89.66	-2,276.24	-6,229.09	3,386.15	3,037.40	348.75	9.709		
13,300.00	7,238.63	13,418.25	7,217.96	177.52	177.00	-89.65	-2,276.83	-6,329.08	3,385.07	3,030.72	354.35	9.553		
13,400.00	7,238.21	13,518.24	7,217.36	180.32	179.80	-89.65	-2,277.41	-6,429.07	3,384.00	3,024.04	359.96	9.401		
13,500.00	7,237.79	13,618.23	7,216.77	183.13	182.60	-89.65	-2,277.99	-6,529.06	3,382.93	3,017.36	365.57	9.254		
13,600.00	7,237.37	13,718.23	7,216.17	185.93	185.41	-89.64	-2,278.58	-6,629.05	3,381.85	3,010.67	371.18	9.111		
13,700.00	7,236.95	13,818.22	7,215.58	188.74	188.21	-89.64	-2,279.16	-6,729.04	3,380.78	3,003.98	376.79	8.972		
13,800.00	7,236.53	13,918.22	7,214.98	191.55	191.02	-89.64	-2,279.75	-6,829.03	3,379.70	2,997.29	382.41	8.838		
13,900.00	7,236.11	14,018.21	7,214.38	194.36	193.83	-89.63	-2,280.33	-6,929.02	3,378.63	2,990.60	388.03	8.707		
14,000.00	7,235.69	14,118.21	7,213.79	197.17	196.64	-89.63	-2,280.91	-7,029.01	3,377.56	2,983.90	393.66	8.580		
14,100.00	7,235.27	14,218.20	7,213.19	199.98	199.45	-89.63	-2,281.50	-7,129.01	3,376.48	2,977.20	399.28	8.456		
14,200.00	7,234.85	14,318.19	7,212.60	202.80	202.26	-89.62	-2,282.08	-7,229.00	3,375.41	2,970.50	404.91	8.336		
14,300.00	7,234.43	14,418.19	7,212.00	205.61	205.07	-89.62	-2,282.66	-7,328.99	3,374.34	2,963.79	410.54	8.219		
14,400.00	7,234.01	14,518.18	7,211.41	208.43	207.89	-89.62	-2,283.25	-7,428.98	3,373.26	2,957.09	416.18	8.105		
14,500.00	7,233.59	14,618.18	7,210.81	211.25	210.70	-89.62	-2,283.83	-7,528.97	3,372.19	2,950.38	421.81	7.995		
14,600.00	7,233.17	14,718.17	7,210.21	214.06	213.52	-89.61	-2,284.42	-7,628.96	3,371.11	2,943.67	427.45	7.887		
14,700.00	7,232.75	14,818.16	7,209.62	216.88	216.34	-89.61	-2,285.00	-7,728.95	3,370.04	2,936.95	433.09	7.781		
14,800.00	7,232.33	14,918.16	7,209.02	219.70	219.16	-89.61	-2,285.58	-7,828.94	3,368.97	2,930.24	438.73	7.679		
14,900.00	7,231.91	15,018.15	7,208.43	222.52	221.98	-89.60	-2,286.17	-7,928.93	3,367.89	2,923.52	444.37	7.579		
15,000.00	7,231.49	15,118.15	7,207.83	225.35	224.80	-89.60	-2,286.75	-8,028.92	3,366.82	2,916.80	450.02	7.482		
15,100.00	7,231.07	15,218.14	7,207.23	228.17	227.62	-89.60	-2,287.33	-8,128.91	3,365.75	2,910.08	455.66	7.386		
15,116.21	7,231.00	15,234.35	7,207.14	228.63	228.08	-89.60	-2,287.43	-8,145.12	3,365.57	2,908.99	456.58	7.371 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	0.00	3.28	-179.54	-480.15	-3.89	480.17					
100.00	100.00	103.00	100.00	0.18	3.29	-179.54	-480.15	-3.89	480.17	476.71	3.46	138.739		
200.00	200.00	197.00	200.00	0.61	3.33	-179.54	-480.15	-3.89	480.17	476.22	3.95	121.595 CC, ES		
300.00	300.00	283.06	286.05	1.05	3.42	-179.53	-481.35	-3.95	481.57	477.08	4.49	107.166		
400.00	400.00	368.54	371.45	1.49	3.54	-179.51	-485.10	-4.12	485.96	480.87	5.09	95.442		
500.00	500.00	453.73	456.40	1.93	3.69	-179.49	-491.37	-4.41	493.32	487.59	5.73	86.149		
600.00	599.98	538.27	540.49	2.37	3.88	-171.69	-500.08	-4.82	505.34	498.95	6.39	79.030		
700.00	699.84	621.62	623.10	2.81	4.09	-171.66	-511.09	-5.32	523.67	516.59	7.09	73.892		
800.00	799.45	703.30	703.71	3.26	4.32	-171.65	-524.20	-5.93	548.19	540.40	7.79	70.406		
900.00	898.70	782.87	781.86	3.70	4.58	-171.64	-539.18	-6.62	578.73	570.24	8.48	68.208		
1,000.00	997.47	859.96	857.14	4.15	4.85	-171.64	-555.75	-7.39	615.10	605.93	9.17	67.075		
1,100.00	1,095.78	934.51	929.49	4.60	5.13	-171.72	-573.70	-8.22	656.37	646.52	9.85	66.667		
1,200.00	1,194.05	1,007.23	999.59	5.05	5.43	-171.82	-593.01	-9.11	700.13	689.64	10.49	66.730		
1,300.00	1,292.33	1,078.14	1,067.45	5.50	5.73	-171.91	-613.54	-10.06	746.13	735.00	11.13	67.045		
1,400.00	1,390.61	1,147.23	1,133.06	5.96	6.05	-171.97	-635.16	-11.06	794.28	782.53	11.75	67.575		
1,500.00	1,488.89	1,214.48	1,196.41	6.43	6.37	-172.02	-657.72	-12.11	844.51	832.14	12.37	68.294		
1,600.00	1,587.16	1,279.91	1,257.52	6.89	6.69	-172.06	-681.08	-13.19	896.72	883.76	12.96	69.172		
1,700.00	1,685.44	1,343.52	1,316.40	7.36	7.02	-172.09	-705.12	-14.30	950.84	937.29	13.55	70.189		
1,800.00	1,783.72	1,400.00	1,368.21	7.83	7.33	-172.11	-727.56	-15.34	1,006.80	992.73	14.08	71.530		
1,900.00	1,882.00	1,465.35	1,427.60	8.30	7.70	-172.13	-754.79	-16.60	1,064.47	1,049.81	14.67	72.583		
2,000.00	1,980.27	1,523.60	1,480.01	8.77	8.04	-172.14	-780.20	-17.77	1,123.83	1,108.63	15.20	73.932		
2,100.00	2,078.55	1,580.13	1,530.36	9.25	8.38	-172.14	-805.87	-18.96	1,184.79	1,169.07	15.72	75.367		
2,200.00	2,176.83	1,634.97	1,578.71	9.72	8.72	-172.14	-831.71	-20.15	1,247.28	1,231.05	16.22	76.877		
2,300.00	2,275.11	1,688.14	1,625.11	10.19	9.05	-172.14	-857.65	-21.35	1,311.22	1,294.51	16.71	78.463		
2,400.00	2,373.38	1,739.70	1,669.64	10.66	9.39	-172.14	-883.61	-22.55	1,376.56	1,359.38	17.18	80.105		
2,500.00	2,471.66	1,789.68	1,712.34	11.14	9.73	-172.13	-909.55	-23.75	1,443.23	1,425.59	17.64	81.813		
2,600.00	2,569.94	1,842.36	1,756.88	11.61	10.09	-172.12	-937.66	-25.05	1,511.14	1,493.02	18.13	83.365		
2,700.00	2,668.22	1,915.36	1,818.37	12.09	10.60	-172.11	-976.95	-26.87	1,579.49	1,560.66	18.83	83.864		
2,800.00	2,766.49	1,988.36	1,879.87	12.56	11.12	-172.10	-1,016.24	-28.69	1,647.84	1,628.29	19.55	84.288		
2,900.00	2,864.77	2,061.36	1,941.37	13.04	11.65	-172.09	-1,055.53	-30.51	1,716.18	1,695.91	20.27	84.647		
3,000.00	2,963.05	2,134.35	2,002.87	13.51	12.18	-172.08	-1,094.82	-32.32	1,784.53	1,763.52	21.01	84.953		
3,100.00	3,061.33	2,207.35	2,064.36	13.99	12.71	-172.07	-1,134.11	-34.14	1,852.87	1,831.13	21.74	85.215		
3,200.00	3,159.60	2,280.35	2,125.86	14.46	13.25	-172.06	-1,173.40	-35.96	1,921.22	1,898.73	22.49	85.434		
3,300.00	3,257.88	2,353.35	2,187.36	14.94	13.79	-172.05	-1,212.68	-37.77	1,989.56	1,966.33	23.24	85.620		
3,400.00	3,356.16	2,426.35	2,248.85	15.41	14.34	-172.04	-1,251.97	-39.59	2,057.91	2,033.92	23.99	85.778		
3,500.00	3,454.43	2,499.35	2,310.35	15.89	14.89	-172.03	-1,291.26	-41.41	2,126.25	2,101.50	24.75	85.912		
3,600.00	3,552.71	2,572.35	2,371.85	16.36	15.44	-172.03	-1,330.55	-43.23	2,194.60	2,169.09	25.51	86.023		
3,700.00	3,650.99	2,645.35	2,433.35	16.84	15.99	-172.02	-1,369.84	-45.04	2,262.94	2,236.67	26.28	86.116		
3,800.00	3,749.27	2,718.35	2,494.84	17.32	16.55	-172.02	-1,409.13	-46.86	2,331.29	2,304.24	27.05	86.194		
3,900.00	3,847.54	2,808.65	2,556.34	17.79	17.23	-172.01	-1,448.42	-48.68	2,399.64	2,371.71	27.92	85.936		
4,000.00	3,945.82	2,864.35	2,617.84	18.27	17.66	-172.01	-1,487.71	-50.49	2,467.98	2,439.39	28.59	86.309		
4,100.00	4,044.10	2,937.34	2,679.34	18.75	18.22	-172.00	-1,527.00	-52.31	2,536.33	2,506.95	29.37	86.350		
4,200.00	4,142.38	3,010.34	2,740.83	19.22	18.78	-172.00	-1,566.29	-54.13	2,604.67	2,574.52	30.15	86.382		
4,300.00	4,240.65	3,083.34	2,802.33	19.70	19.35	-171.99	-1,605.58	-55.95	2,673.02	2,642.08	30.94	86.406		
4,400.00	4,338.93	3,156.34	2,863.83	20.18	19.91	-171.99	-1,644.86	-57.76	2,741.36	2,709.64	31.72	86.423		
4,500.00	4,437.21	3,229.34	2,925.33	20.65	20.47	-171.98	-1,684.15	-59.58	2,809.71	2,777.20	32.51	86.434		
4,600.00	4,535.49	3,302.34	2,986.82	21.13	21.04	-171.98	-1,723.44	-61.40	2,878.05	2,844.76	33.30	86.440		
4,700.00	4,633.76	3,375.34	3,048.32	21.61	21.61	-171.98	-1,762.73	-63.21	2,946.40	2,912.31	34.09	86.440		
4,800.00	4,732.04	3,448.34	3,109.82	22.08	22.17	-171.97	-1,802.02	-65.03	3,014.75	2,979.87	34.88	86.437		
4,900.00	4,830.32	3,521.34	3,171.31	22.56	22.74	-171.97	-1,841.31	-66.85	3,083.09	3,047.42	35.67	86.430		
5,000.00	4,928.60	3,605.66	3,232.81	23.04	23.40	-171.97	-1,880.60	-68.67	3,151.44	3,114.90	36.54	86.253		
5,100.00	5,026.87	3,667.33	3,294.31	23.51	23.88	-171.96	-1,919.89	-70.48	3,219.78	3,182.52	37.26	86.406		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	3,740.33	3,355.81	23.99	24.45	-171.96	-1,959.18	-72.30	3,288.13	3,250.07	38.06	86.390		
5,300.00	5,223.43	3,813.33	3,417.30	24.47	25.02	-171.96	-1,998.47	-74.12	3,356.47	3,317.61	38.86	86.372		
5,400.00	5,321.71	3,886.33	3,478.80	24.94	25.59	-171.95	-2,037.76	-75.93	3,424.82	3,385.16	39.66	86.351		
5,500.00	5,419.98	3,959.33	3,540.30	25.42	26.16	-171.95	-2,077.04	-77.75	3,493.17	3,452.70	40.46	86.329		
5,600.00	5,518.26	4,032.33	3,601.80	25.90	26.74	-171.95	-2,116.33	-79.57	3,561.51	3,520.24	41.27	86.306		
5,700.00	5,616.54	4,105.33	3,663.29	26.38	27.31	-171.95	-2,155.62	-81.39	3,629.86	3,587.79	42.07	86.281		
5,800.00	5,714.82	4,178.33	3,724.79	26.85	27.88	-171.94	-2,194.91	-83.20	3,698.20	3,655.33	42.88	86.254		
5,900.00	5,813.09	4,251.33	3,786.29	27.33	28.45	-171.94	-2,234.20	-85.02	3,766.55	3,722.87	43.68	86.227		
6,000.00	5,911.37	4,324.33	3,847.79	27.81	29.03	-171.94	-2,273.49	-86.84	3,834.89	3,790.40	44.49	86.198		
6,100.00	6,009.65	4,402.68	3,909.28	28.28	29.64	-171.94	-2,312.78	-88.65	3,903.24	3,857.91	45.33	86.105		
6,200.00	6,107.93	4,470.32	3,970.78	28.76	30.18	-171.94	-2,352.07	-90.47	3,971.59	3,925.48	46.11	86.138		
6,300.00	6,206.20	4,543.32	4,032.28	29.24	30.75	-171.93	-2,391.36	-92.29	4,039.93	3,993.01	46.92	86.107		
6,400.00	6,304.48	4,616.32	4,093.78	29.72	31.33	-171.93	-2,430.65	-94.11	4,108.28	4,060.55	47.73	86.075		
6,500.00	6,402.76	4,689.32	4,155.27	30.19	31.90	-171.93	-2,469.94	-95.92	4,176.62	4,128.08	48.54	86.042		
6,600.00	6,501.04	4,762.32	4,216.77	30.67	32.48	-171.93	-2,509.22	-97.74	4,244.97	4,195.61	49.36	86.009		
6,700.00	6,599.31	4,835.32	4,278.27	31.15	33.05	-171.93	-2,548.51	-99.56	4,313.31	4,263.14	50.17	85.975		
6,800.00	6,697.50	4,908.32	4,339.76	31.63	33.63	-146.94	-2,587.80	-101.37	4,381.60	4,330.61	50.98	85.939		
6,900.00	6,794.18	4,980.64	4,400.69	32.10	34.20	-113.31	-2,626.73	-103.17	4,448.82	4,397.03	51.79	85.893		
7,000.00	6,886.96	5,050.58	4,459.61	32.55	34.75	-94.95	-2,664.37	-104.92	4,513.50	4,460.92	52.58	85.843		
7,100.00	6,973.57	5,116.42	4,515.07	32.99	35.27	-83.30	-2,699.80	-106.55	4,574.32	4,521.00	53.33	85.778		
7,200.00	7,051.87	5,176.53	4,565.72	33.41	35.74	-75.17	-2,732.16	-108.05	4,630.18	4,576.13	54.05	85.669		
7,300.00	7,119.93	5,229.44	4,610.29	33.85	36.16	-69.26	-2,760.64	-109.37	4,680.14	4,625.38	54.76	85.468		
7,400.00	7,176.09	5,051.07	7,151.45	34.39	50.42	-92.43	-3,502.55	-451.29	4,692.07	4,619.59	72.48	64.733		
7,500.00	7,218.95	8,146.64	7,194.52	35.09	50.51	-90.95	-3,503.08	-536.50	4,699.19	4,625.39	73.80	63.671		
7,600.00	7,247.46	8,242.71	7,224.47	35.98	50.58	-90.08	-3,503.64	-627.69	4,703.57	4,628.15	75.42	62.362		
7,700.00	7,260.92	8,339.29	7,240.42	37.04	50.62	-89.75	-3,504.22	-722.84	4,705.11	4,627.77	77.34	60.836		
7,800.00	7,261.75	8,437.41	7,242.85	38.23	50.66	-89.77	-3,504.82	-820.88	4,704.29	4,624.73	79.56	59.127		
7,900.00	7,261.33	8,537.40	7,242.44	39.59	50.71	-89.77	-3,505.43	-920.87	4,703.25	4,621.13	82.12	57.276		
8,000.00	7,260.91	8,637.40	7,242.04	41.10	50.79	-89.77	-3,506.04	-1,020.86	4,702.20	4,617.22	84.98	55.335		
8,100.00	7,260.49	8,737.39	7,241.63	42.75	50.90	-89.77	-3,506.66	-1,120.86	4,701.15	4,613.04	88.12	53.352		
8,200.00	7,260.07	8,837.39	7,241.23	44.53	51.11	-89.77	-3,507.27	-1,220.85	4,700.11	4,608.60	91.50	51.365		
8,300.00	7,259.65	8,937.38	7,240.82	46.41	51.51	-89.77	-3,507.88	-1,320.84	4,699.06	4,603.95	95.11	49.405		
8,400.00	7,259.23	9,037.38	7,240.42	48.39	52.32	-89.77	-3,508.49	-1,420.83	4,698.02	4,599.09	98.92	47.492		
8,500.00	7,258.81	9,137.37	7,240.01	50.45	53.66	-89.77	-3,509.11	-1,520.82	4,696.97	4,594.06	102.91	45.644		
8,600.00	7,258.39	9,237.37	7,239.60	52.59	55.36	-89.77	-3,509.72	-1,620.82	4,695.92	4,588.88	107.05	43.869		
8,700.00	7,257.97	9,337.36	7,239.20	54.79	57.27	-89.77	-3,510.33	-1,720.81	4,694.88	4,583.55	111.32	42.173		
8,800.00	7,257.55	9,437.35	7,238.79	57.05	59.30	-89.77	-3,510.94	-1,820.80	4,693.83	4,578.10	115.73	40.560		
8,900.00	7,257.13	9,537.35	7,238.39	59.36	61.43	-89.77	-3,511.56	-1,920.79	4,692.78	4,572.55	120.24	39.029		
9,000.00	7,256.71	9,637.34	7,237.98	61.72	63.63	-89.77	-3,512.17	-2,020.78	4,691.74	4,566.89	124.85	37.579		
9,100.00	7,256.29	9,737.34	7,237.58	64.12	65.89	-89.77	-3,512.78	-2,120.77	4,690.69	4,561.14	129.55	36.208		
9,200.00	7,255.87	9,837.33	7,237.17	66.56	68.19	-89.77	-3,513.39	-2,220.77	4,689.65	4,555.32	134.33	34.912		
9,300.00	7,255.45	9,937.33	7,236.76	69.02	70.54	-89.77	-3,514.01	-2,320.76	4,688.60	4,549.43	139.17	33.689		
9,400.00	7,255.03	10,037.32	7,236.36	71.52	72.93	-89.77	-3,514.62	-2,420.75	4,687.55	4,543.47	144.08	32.533		
9,500.00	7,254.61	10,137.32	7,235.95	74.04	75.36	-89.77	-3,515.23	-2,520.74	4,686.51	4,537.46	149.05	31.442		
9,600.00	7,254.19	10,237.31	7,235.55	76.58	77.81	-89.77	-3,515.84	-2,620.73	4,685.46	4,531.39	154.07	30.411		
9,700.00	7,253.77	10,337.31	7,235.14	79.15	80.29	-89.77	-3,516.45	-2,720.73	4,684.41	4,525.28	159.14	29.436		
9,800.00	7,253.35	10,437.30	7,234.74	81.74	82.80	-89.77	-3,517.07	-2,820.72	4,683.37	4,519.12	164.25	28.514		
9,900.00	7,252.92	10,537.29	7,234.33	84.34	85.33	-89.77	-3,517.68	-2,920.71	4,682.32	4,512.93	169.39	27.642		
10,000.00	7,252.50	10,637.29	7,233.92	86.96	87.88	-89.78	-3,518.29	-3,020.70	4,681.28	4,506.70	174.58	26.815		
10,100.00	7,252.08	10,737.28	7,233.52	89.59	90.45	-89.78	-3,518.90	-3,120.69	4,680.23	4,500.44	179.79	26.031		
10,200.00	7,251.66	10,837.28	7,233.11	92.24	93.04	-89.78	-3,519.52	-3,220.68	4,679.18	4,494.15	185.04	25.288		
10,300.00	7,251.24	10,937.27	7,232.71	94.90	95.64	-89.78	-3,520.13	-3,320.68	4,678.14	4,487.83	190.31	24.582		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	11,037.27	7,232.30	97.57	98.26	-89.78	-3,520.74	-3,420.67	4,677.09	4,481.49	195.60	23.911		
10,500.00	7,250.40	11,137.26	7,231.90	100.25	100.89	-89.78	-3,521.35	-3,520.66	4,676.04	4,475.12	200.92	23.273		
10,600.00	7,249.98	11,237.26	7,231.49	102.93	103.53	-89.78	-3,521.97	-3,620.65	4,675.00	4,468.74	206.26	22.665		
10,700.00	7,249.56	11,337.25	7,231.08	105.63	106.18	-89.78	-3,522.58	-3,720.64	4,673.95	4,462.33	211.62	22.086		
10,800.00	7,249.14	11,437.25	7,230.68	108.34	108.85	-89.78	-3,523.19	-3,820.64	4,672.91	4,455.91	217.00	21.534		
10,900.00	7,248.72	11,537.24	7,230.27	111.05	111.52	-89.78	-3,523.80	-3,920.63	4,671.86	4,449.47	222.39	21.007		
11,000.00	7,248.30	11,637.23	7,229.87	113.77	114.20	-89.78	-3,524.42	-4,020.62	4,670.81	4,443.01	227.80	20.504		
11,100.00	7,247.88	11,737.23	7,229.46	116.50	116.90	-89.78	-3,525.03	-4,120.61	4,669.77	4,436.54	233.23	20.022		
11,200.00	7,247.46	11,837.22	7,229.06	119.23	119.59	-89.78	-3,525.64	-4,220.60	4,668.72	4,430.06	238.66	19.562		
11,300.00	7,247.04	11,937.22	7,228.65	121.97	122.30	-89.78	-3,526.25	-4,320.60	4,667.67	4,423.56	244.12	19.121		
11,400.00	7,246.62	12,037.21	7,228.24	124.72	125.01	-89.78	-3,526.87	-4,420.59	4,666.63	4,417.05	249.58	18.698		
11,500.00	7,246.20	12,137.21	7,227.84	127.46	127.73	-89.78	-3,527.48	-4,520.58	4,665.58	4,410.53	255.05	18.293		
11,600.00	7,245.78	12,237.20	7,227.43	130.22	130.46	-89.78	-3,528.09	-4,620.57	4,664.54	4,404.00	260.53	17.904		
11,700.00	7,245.36	12,337.20	7,227.03	132.98	133.19	-89.78	-3,528.70	-4,720.56	4,663.49	4,397.46	266.03	17.530		
11,800.00	7,244.94	12,437.19	7,226.62	135.74	135.93	-89.78	-3,529.32	-4,820.55	4,662.44	4,390.91	271.53	17.171		
11,900.00	7,244.52	12,537.19	7,226.22	138.50	138.67	-89.78	-3,529.93	-4,920.55	4,661.40	4,384.36	277.04	16.826		
12,000.00	7,244.10	12,637.18	7,225.81	141.27	141.41	-89.78	-3,530.54	-5,020.54	4,660.35	4,377.79	282.56	16.493		
12,100.00	7,243.68	12,737.17	7,225.40	144.04	144.16	-89.78	-3,531.15	-5,120.53	4,659.30	4,371.22	288.09	16.173		
12,200.00	7,243.26	12,837.17	7,225.00	146.82	146.92	-89.78	-3,531.77	-5,220.52	4,658.26	4,364.64	293.62	15.865		
12,300.00	7,242.84	12,937.16	7,224.59	149.60	149.68	-89.78	-3,532.38	-5,320.51	4,657.21	4,358.05	299.16	15.568		
12,400.00	7,242.42	13,037.16	7,224.19	152.38	152.44	-89.78	-3,532.99	-5,420.51	4,656.17	4,351.46	304.71	15.281		
12,500.00	7,242.00	13,137.15	7,223.78	155.16	155.20	-89.78	-3,533.60	-5,520.50	4,655.12	4,344.86	310.26	15.004		
12,600.00	7,241.58	13,237.15	7,223.38	157.95	157.97	-89.78	-3,534.22	-5,620.49	4,654.07	4,338.26	315.82	14.737		
12,700.00	7,241.16	13,337.14	7,222.97	160.74	160.75	-89.78	-3,534.83	-5,720.48	4,653.03	4,331.64	321.38	14.478		
12,800.00	7,240.74	13,437.14	7,222.56	163.53	163.52	-89.78	-3,535.44	-5,820.47	4,651.98	4,325.03	326.95	14.228		
12,900.00	7,240.32	13,537.13	7,222.16	166.32	166.30	-89.78	-3,536.05	-5,920.46	4,650.93	4,318.41	332.53	13.987		
13,000.00	7,239.89	13,637.13	7,221.75	169.12	169.08	-89.78	-3,536.66	-6,020.46	4,649.89	4,311.78	338.10	13.753		
13,100.00	7,239.47	13,737.12	7,221.35	171.92	171.86	-89.78	-3,537.28	-6,120.45	4,648.84	4,305.15	343.69	13.526		
13,200.00	7,239.05	13,837.11	7,220.94	174.72	174.65	-89.78	-3,537.89	-6,220.44	4,647.80	4,298.52	349.27	13.307		
13,300.00	7,238.63	13,937.11	7,220.54	177.52	177.44	-89.78	-3,538.50	-6,320.43	4,646.75	4,291.88	354.87	13.094		
13,400.00	7,238.21	14,037.10	7,220.13	180.32	180.23	-89.78	-3,539.11	-6,420.42	4,645.70	4,285.24	360.46	12.888		
13,500.00	7,237.79	14,137.10	7,219.72	183.13	183.02	-89.78	-3,539.73	-6,520.42	4,644.66	4,278.60	366.06	12.688		
13,600.00	7,237.37	14,237.09	7,219.32	185.93	185.81	-89.78	-3,540.34	-6,620.41	4,643.61	4,271.95	371.66	12.494		
13,700.00	7,236.95	14,337.09	7,218.91	188.74	188.61	-89.78	-3,540.95	-6,720.40	4,642.56	4,265.30	377.27	12.306		
13,800.00	7,236.53	14,437.08	7,218.51	191.55	191.41	-89.78	-3,541.56	-6,820.39	4,641.52	4,258.64	382.88	12.123		
13,900.00	7,236.11	14,537.08	7,218.10	194.36	194.21	-89.78	-3,542.18	-6,920.38	4,640.47	4,251.98	388.49	11.945		
14,000.00	7,235.69	14,637.07	7,217.70	197.17	197.01	-89.78	-3,542.79	-7,020.37	4,639.43	4,245.32	394.10	11.772		
14,100.00	7,235.27	14,737.06	7,217.29	199.98	199.81	-89.78	-3,543.40	-7,120.37	4,638.38	4,238.66	399.72	11.604		
14,200.00	7,234.85	14,837.06	7,216.88	202.80	202.62	-89.78	-3,544.01	-7,220.36	4,637.33	4,231.99	405.34	11.441		
14,300.00	7,234.43	14,937.05	7,216.48	205.61	205.42	-89.78	-3,544.63	-7,320.35	4,636.29	4,225.32	410.96	11.281		
14,400.00	7,234.01	15,037.05	7,216.07	208.43	208.23	-89.78	-3,545.24	-7,420.34	4,635.24	4,218.65	416.59	11.127		
14,500.00	7,233.59	15,137.04	7,215.67	211.25	211.04	-89.78	-3,545.85	-7,520.33	4,634.19	4,211.98	422.22	10.976		
14,600.00	7,233.17	15,237.04	7,215.26	214.06	213.85	-89.78	-3,546.46	-7,620.33	4,633.15	4,205.30	427.85	10.829		
14,700.00	7,232.75	15,337.03	7,214.86	216.88	216.66	-89.78	-3,547.08	-7,720.32	4,632.10	4,198.62	433.48	10.686		
14,800.00	7,232.33	15,437.03	7,214.45	219.70	219.47	-89.78	-3,547.69	-7,820.31	4,631.06	4,191.94	439.11	10.546		
14,900.00	7,231.91	15,537.02	7,214.04	222.52	222.29	-89.78	-3,548.30	-7,920.30	4,630.01	4,185.26	444.75	10.410		
15,000.00	7,231.49	15,637.02	7,213.64	225.35	225.10	-89.78	-3,548.91	-8,020.29	4,628.96	4,178.57	450.39	10.278		
15,100.00	7,231.07	15,737.01	7,213.23	228.17	227.92	-89.78	-3,549.53	-8,120.28	4,627.92	4,171.89	456.03	10.148		
15,116.21	7,231.00	15,753.22	7,213.17	228.63	228.38	-89.78	-3,549.63	-8,136.49	4,627.75	4,170.80	456.94	10.128 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	0.00	3.28	-179.52	-100.18	-0.83	100.19					
100.00	100.00	101.00	100.00	0.18	3.28	-179.52	-100.18	-0.83	100.19	96.73	3.46	28.952		
200.00	200.00	201.00	200.00	0.61	3.34	-179.52	-100.18	-0.83	100.19	96.24	3.95	25.350		
300.00	300.00	301.00	300.00	1.05	3.45	-179.52	-100.18	-0.83	100.19	95.69	4.50	22.267		
400.00	400.00	401.00	400.00	1.49	3.61	-179.52	-100.18	-0.83	100.19	95.09	5.10	19.656		
500.00	500.00	501.00	500.00	1.93	3.81	-179.52	-100.18	-0.83	100.19	94.45	5.74	17.458 CC, ES		
600.00	599.98	598.98	599.98	2.37	4.04	-171.91	-100.18	-0.83	101.91	95.50	6.41	15.890		
700.00	699.84	700.49	701.47	2.81	4.32	-171.51	-99.27	-2.29	106.21	99.08	7.13	14.897		
800.00	799.45	800.23	801.17	3.26	4.61	-170.86	-97.70	-4.80	113.30	105.43	7.87	14.405		
900.00	898.70	900.33	900.56	3.70	4.92	-170.54	-96.14	-7.31	123.83	115.20	8.63	14.354		
1,000.00	997.47	1,001.32	999.53	4.15	5.26	-170.50	-94.58	-9.80	137.78	128.37	9.41	14.639		
1,100.00	1,095.78	1,102.70	1,098.10	4.60	5.61	-170.66	-93.03	-12.28	154.36	144.15	10.21	15.113		
1,200.00	1,194.05	1,204.12	1,196.65	5.05	5.98	-170.81	-91.48	-14.76	171.12	160.09	11.02	15.523		
1,300.00	1,292.33	1,305.53	1,295.19	5.50	6.35	-170.93	-89.93	-17.24	187.88	176.03	11.85	15.859		
1,400.00	1,390.61	1,406.95	1,393.73	5.96	6.74	-171.03	-88.38	-19.72	204.64	191.96	12.68	16.138		
1,500.00	1,488.89	1,508.36	1,492.27	6.43	7.13	-171.12	-86.83	-22.20	221.40	207.88	13.52	16.372		
1,600.00	1,587.16	1,609.78	1,590.81	6.89	7.53	-171.19	-85.28	-24.68	238.16	223.79	14.37	16.569		
1,700.00	1,685.44	1,688.81	1,689.35	7.36	7.84	-171.26	-83.73	-27.16	254.92	239.78	15.14	16.837		
1,800.00	1,783.72	1,787.39	1,787.89	7.83	8.23	-171.31	-82.18	-29.64	271.69	255.70	15.99	16.990		
1,900.00	1,882.00	1,885.98	1,886.43	8.30	8.63	-171.36	-80.63	-32.12	288.45	271.60	16.84	17.124		
2,000.00	1,980.27	1,984.56	1,984.98	8.77	9.03	-171.41	-79.08	-34.60	305.21	287.51	17.70	17.241		
2,100.00	2,078.55	2,083.15	2,083.52	9.25	9.44	-171.45	-77.53	-37.08	321.97	303.41	18.56	17.344		
2,200.00	2,176.83	2,181.73	2,182.06	9.72	9.85	-171.49	-75.98	-39.56	338.74	319.31	19.43	17.435		
2,300.00	2,275.11	2,280.32	2,280.60	10.19	10.26	-171.52	-74.43	-42.04	355.50	335.20	20.30	17.516		
2,400.00	2,373.38	2,378.90	2,379.14	10.66	10.67	-171.55	-72.88	-44.52	372.26	351.10	21.17	17.588		
2,500.00	2,471.66	2,477.48	2,477.68	11.14	11.08	-171.57	-71.33	-47.01	389.03	366.99	22.04	17.654		
2,600.00	2,569.94	2,576.07	2,576.22	11.61	11.49	-171.60	-69.78	-49.49	405.79	382.88	22.91	17.712		
2,700.00	2,668.22	2,674.65	2,674.77	12.09	11.91	-171.62	-68.23	-51.97	422.55	398.77	23.78	17.766		
2,800.00	2,766.49	2,773.24	2,773.31	12.56	12.33	-171.64	-66.68	-54.45	439.32	414.66	24.66	17.814		
2,900.00	2,864.77	2,871.82	2,871.85	13.04	12.75	-171.66	-65.13	-56.93	456.08	430.54	25.54	17.859		
3,000.00	2,963.05	2,970.41	2,970.39	13.51	13.16	-171.68	-63.58	-59.41	472.85	446.43	26.42	17.899		
3,100.00	3,061.33	3,068.99	3,068.93	13.99	13.59	-171.70	-62.03	-61.89	489.61	462.31	27.30	17.936		
3,200.00	3,159.60	3,167.58	3,167.47	14.46	14.01	-171.71	-60.48	-64.37	506.37	478.19	28.18	17.971		
3,300.00	3,257.88	3,266.16	3,266.01	14.94	14.43	-171.73	-58.93	-66.85	523.14	494.08	29.06	18.002		
3,400.00	3,356.16	3,364.75	3,364.56	15.41	14.85	-171.74	-57.38	-69.33	539.90	509.96	29.94	18.032		
3,500.00	3,454.43	3,463.33	3,463.10	15.89	15.27	-171.76	-55.83	-71.81	556.66	525.84	30.83	18.059		
3,600.00	3,552.71	3,561.92	3,561.64	16.36	15.70	-171.77	-54.28	-74.29	573.43	541.72	31.71	18.084		
3,700.00	3,650.99	3,660.50	3,660.18	16.84	16.12	-171.78	-52.73	-76.77	590.19	557.60	32.59	18.108		
3,800.00	3,749.27	3,759.09	3,758.72	17.32	16.55	-171.79	-51.18	-79.25	606.96	573.48	33.48	18.130		
3,900.00	3,847.54	3,857.67	3,857.26	17.79	16.97	-171.80	-49.63	-81.73	623.72	589.36	34.36	18.150		
4,000.00	3,945.82	3,956.26	3,955.80	18.27	17.40	-171.81	-48.08	-84.21	640.48	605.23	35.25	18.169		
4,100.00	4,044.10	4,054.84	4,054.35	18.75	17.82	-171.82	-46.53	-86.69	657.25	621.11	36.14	18.188		
4,200.00	4,142.38	4,153.43	4,152.89	19.22	18.25	-171.83	-44.98	-89.17	674.01	636.99	37.02	18.205		
4,300.00	4,240.65	4,252.01	4,251.43	19.70	18.68	-171.84	-43.43	-91.65	690.78	652.86	37.91	18.221		
4,400.00	4,338.93	4,350.60	4,349.97	20.18	19.10	-171.85	-41.88	-94.14	707.54	668.74	38.80	18.236		
4,500.00	4,437.21	4,449.18	4,448.51	20.65	19.53	-171.85	-40.33	-96.62	724.30	684.62	39.69	18.250		
4,600.00	4,535.49	4,547.77	4,547.05	21.13	19.96	-171.86	-38.78	-99.10	741.07	700.49	40.58	18.264		
4,700.00	4,633.76	4,646.35	4,645.59	21.61	20.39	-171.87	-37.23	-101.58	757.83	716.37	41.47	18.276		
4,800.00	4,732.04	4,744.93	4,744.13	22.08	20.81	-171.88	-35.68	-104.06	774.60	732.24	42.35	18.288		
4,900.00	4,830.32	4,843.52	4,842.68	22.56	21.24	-171.88	-34.13	-106.54	791.36	748.12	43.24	18.300		
5,000.00	4,928.60	4,942.10	4,941.22	23.04	21.67	-171.89	-32.58	-109.02	808.12	763.99	44.13	18.311		
5,100.00	5,026.87	5,040.69	5,039.76	23.51	22.10	-171.89	-31.03	-111.50	824.89	779.87	45.02	18.321		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,139.27	5,138.30	23.99	22.53	-171.90	-29.48	-113.98	841.65	795.74	45.91	18.331		
5,300.00	5,223.43	5,237.86	5,236.84	24.47	22.96	-171.91	-27.93	-116.46	858.42	811.61	46.80	18.341		
5,400.00	5,321.71	5,336.44	5,335.38	24.94	23.39	-171.91	-26.38	-118.94	875.18	827.49	47.69	18.350		
5,500.00	5,419.98	5,435.03	5,433.92	25.42	23.82	-171.92	-24.83	-121.42	891.94	843.36	48.59	18.358		
5,600.00	5,518.26	5,533.61	5,532.47	25.90	24.25	-171.92	-23.28	-123.90	908.71	859.23	49.48	18.367		
5,700.00	5,616.54	5,632.20	5,631.01	26.38	24.68	-171.93	-21.73	-126.38	925.47	875.11	50.37	18.374		
5,800.00	5,714.82	5,730.78	5,729.55	26.85	25.11	-171.93	-20.18	-128.86	942.24	890.98	51.26	18.382		
5,900.00	5,813.09	5,829.37	5,828.09	27.33	25.54	-171.93	-18.63	-131.34	959.00	906.85	52.15	18.389		
6,000.00	5,911.37	5,927.95	5,926.63	27.81	25.97	-171.94	-17.08	-133.82	975.77	922.72	53.04	18.396		
6,100.00	6,009.65	6,026.54	6,025.17	28.28	26.40	-171.94	-15.53	-136.30	992.53	938.60	53.93	18.403		
6,200.00	6,107.93	6,125.12	6,123.71	28.76	26.83	-171.95	-13.98	-138.78	1,009.29	954.47	54.83	18.409		
6,300.00	6,206.20	6,223.71	6,222.26	29.24	27.26	-171.95	-12.43	-141.27	1,026.06	970.34	55.72	18.415		
6,400.00	6,304.48	6,322.29	6,320.80	29.72	27.69	-171.95	-10.88	-143.75	1,042.82	986.21	56.61	18.421		
6,500.00	6,402.76	6,420.88	6,419.34	30.19	28.12	-171.96	-9.33	-146.23	1,059.59	1,002.08	57.50	18.427		
6,600.00	6,501.04	6,519.46	6,517.88	30.67	28.55	-171.96	-7.78	-148.71	1,076.35	1,017.96	58.40	18.432		
6,700.00	6,599.31	6,618.05	6,616.42	31.15	28.98	-171.96	-6.23	-151.19	1,093.11	1,033.83	59.29	18.437		
6,800.00	6,697.50	6,714.69	6,712.60	31.63	29.41	-150.05	-4.77	-159.50	1,109.90	1,049.73	60.17	18.447		
6,900.00	6,794.18	6,810.36	6,805.52	32.10	29.83	-122.46	-3.46	-181.89	1,126.36	1,065.31	61.05	18.451		
7,000.00	6,886.96	6,905.46	6,893.53	32.55	30.26	-109.32	-2.33	-217.68	1,142.03	1,080.11	61.92	18.444		
7,100.00	6,973.57	7,000.18	6,974.91	32.99	30.70	-101.97	-1.40	-265.95	1,156.52	1,093.71	62.80	18.415		
7,200.00	7,051.87	7,094.66	7,048.08	33.41	31.17	-97.29	-0.69	-325.60	1,169.46	1,105.72	63.75	18.346		
7,300.00	7,119.93	7,189.05	7,111.56	33.85	31.71	-94.10	-0.21	-395.33	1,180.55	1,115.74	64.81	18.216		
7,400.00	7,176.09	7,283.44	7,164.05	34.39	32.34	-91.90	0.03	-473.67	1,189.50	1,123.43	66.07	18.004		
7,500.00	7,218.95	7,377.89	7,204.41	35.09	33.10	-90.43	0.02	-558.97	1,196.09	1,128.49	67.60	17.694		
7,600.00	7,247.46	7,472.48	7,231.76	35.98	34.00	-89.58	-0.24	-649.43	1,200.16	1,130.73	69.43	17.286		
7,700.00	7,260.92	7,567.22	7,245.42	37.04	35.05	-89.26	-0.73	-743.08	1,201.62	1,130.07	71.55	16.794		
7,800.00	7,261.75	7,664.68	7,246.84	38.23	36.26	-89.29	-1.45	-840.51	1,200.93	1,126.95	73.98	16.233		
7,900.00	7,261.33	7,764.67	7,246.53	39.59	37.67	-89.30	-2.22	-940.50	1,200.04	1,123.27	76.77	15.632		
8,000.00	7,260.91	7,864.67	7,246.22	41.10	39.23	-89.30	-2.99	-1,040.49	1,199.15	1,119.28	79.86	15.015		
8,100.00	7,260.49	7,964.67	7,245.90	42.75	40.93	-89.30	-3.76	-1,140.48	1,198.25	1,115.02	83.23	14.396		
8,200.00	7,260.07	8,064.66	7,245.59	44.53	42.75	-89.31	-4.52	-1,240.48	1,197.36	1,110.51	86.85	13.786		
8,300.00	7,259.65	8,164.66	7,245.28	46.41	44.68	-89.31	-5.29	-1,340.47	1,196.47	1,105.78	90.69	13.193		
8,400.00	7,259.23	8,264.65	7,244.97	48.39	46.71	-89.32	-6.06	-1,440.46	1,195.58	1,100.87	94.71	12.623		
8,500.00	7,258.81	8,364.65	7,244.66	50.45	48.82	-89.32	-6.83	-1,540.45	1,194.68	1,095.78	98.90	12.080		
8,600.00	7,258.39	8,464.65	7,244.34	52.59	51.00	-89.33	-7.59	-1,640.45	1,193.79	1,090.55	103.24	11.564		
8,700.00	7,257.97	8,564.64	7,244.03	54.79	53.25	-89.33	-8.36	-1,740.44	1,192.90	1,085.20	107.70	11.076		
8,800.00	7,257.55	8,664.64	7,243.72	57.05	55.55	-89.34	-9.13	-1,840.43	1,192.01	1,079.73	112.28	10.616		
8,900.00	7,257.13	8,764.63	7,243.41	59.36	57.91	-89.34	-9.90	-1,940.42	1,191.11	1,074.15	116.96	10.184		
9,000.00	7,256.71	8,864.63	7,243.10	61.72	60.30	-89.35	-10.66	-2,040.42	1,190.22	1,068.50	121.73	9.778		
9,100.00	7,256.29	8,964.63	7,242.78	64.12	62.74	-89.35	-11.43	-2,140.41	1,189.33	1,062.76	126.57	9.396		
9,200.00	7,255.87	9,064.62	7,242.47	66.56	65.21	-89.36	-12.20	-2,240.40	1,188.44	1,056.95	131.49	9.038		
9,300.00	7,255.45	9,164.62	7,242.16	69.02	67.71	-89.36	-12.97	-2,340.39	1,187.54	1,051.08	136.46	8.702		
9,400.00	7,255.03	9,264.61	7,241.85	71.52	70.24	-89.37	-13.73	-2,440.38	1,186.65	1,045.16	141.50	8.386		
9,500.00	7,254.61	9,364.61	7,241.54	74.04	72.79	-89.37	-14.50	-2,540.38	1,185.76	1,039.18	146.58	8.090		
9,600.00	7,254.19	9,464.61	7,241.22	76.58	75.36	-89.38	-15.27	-2,640.37	1,184.87	1,033.16	151.71	7.810		
9,700.00	7,253.77	9,564.60	7,240.91	79.15	77.96	-89.38	-16.04	-2,740.36	1,183.98	1,027.10	156.88	7.547		
9,800.00	7,253.35	9,664.60	7,240.60	81.74	80.57	-89.38	-16.80	-2,840.36	1,183.08	1,021.00	162.08	7.299		
9,900.00	7,252.92	9,764.59	7,240.29	84.34	83.20	-89.39	-17.57	-2,940.35	1,182.19	1,014.87	167.32	7.066		
10,000.00	7,252.50	9,864.59	7,239.98	86.96	85.84	-89.39	-18.34	-3,040.34	1,181.30	1,008.71	172.59	6.845		
10,100.00	7,252.08	9,964.59	7,239.67	89.59	88.50	-89.40	-19.11	-3,140.33	1,180.41	1,002.53	177.88	6.636		
10,200.00	7,251.66	10,064.58	7,239.35	92.24	91.17	-89.40	-19.87	-3,240.33	1,179.51	996.31	183.20	6.438		
10,300.00	7,251.24	10,164.58	7,239.04	94.90	93.84	-89.41	-20.64	-3,340.32	1,178.62	990.08	188.55	6.251		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5C-16-M - OH - PLAN #1													Offset Site Error: 0.00 ft	
Survey Program: 0-MWD+IFR1													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,250.82	10,264.57	7,238.73	97.57	96.53	-89.41	-21.41	-3,440.31	1,177.73	983.82	193.91	6.074		
10,500.00	7,250.40	10,364.57	7,238.42	100.25	99.23	-89.42	-22.18	-3,540.30	1,176.84	977.54	199.30	5.905		
10,600.00	7,249.98	10,464.57	7,238.11	102.93	101.94	-89.42	-22.94	-3,640.30	1,175.95	971.25	204.70	5.745		
10,700.00	7,249.56	10,564.56	7,237.79	105.63	104.66	-89.43	-23.71	-3,740.29	1,175.05	964.94	210.12	5.592		
10,800.00	7,249.14	10,664.56	7,237.48	108.34	107.38	-89.43	-24.48	-3,840.28	1,174.16	958.61	215.55	5.447		
10,900.00	7,248.72	10,764.55	7,237.17	111.05	110.11	-89.44	-25.25	-3,940.27	1,173.27	952.27	221.00	5.309		
11,000.00	7,248.30	10,864.55	7,236.86	113.77	112.85	-89.44	-26.01	-4,040.27	1,172.38	945.92	226.46	5.177		
11,100.00	7,247.88	10,964.55	7,236.55	116.50	115.59	-89.45	-26.78	-4,140.26	1,171.49	939.55	231.93	5.051		
11,200.00	7,247.46	11,064.54	7,236.23	119.23	118.34	-89.45	-27.55	-4,240.25	1,170.59	933.18	237.42	4.931		
11,300.00	7,247.04	11,164.54	7,235.92	121.97	121.09	-89.46	-28.32	-4,340.24	1,169.70	926.79	242.91	4.815		
11,400.00	7,246.62	11,264.53	7,235.61	124.72	123.85	-89.46	-29.08	-4,440.24	1,168.81	920.39	248.42	4.705		
11,500.00	7,246.20	11,364.53	7,235.30	127.46	126.61	-89.47	-29.85	-4,540.23	1,167.92	913.99	253.93	4.599		
11,600.00	7,245.78	11,464.53	7,234.99	130.22	129.38	-89.47	-30.62	-4,640.22	1,167.03	907.57	259.45	4.498		
11,700.00	7,245.36	11,564.52	7,234.67	132.98	132.15	-89.48	-31.39	-4,740.21	1,166.13	901.15	264.98	4.401		
11,800.00	7,244.94	11,664.52	7,234.36	135.74	134.92	-89.48	-32.15	-4,840.21	1,165.24	894.72	270.52	4.307		
11,900.00	7,244.52	11,764.51	7,234.05	138.50	137.70	-89.49	-32.92	-4,940.20	1,164.35	888.28	276.07	4.218		
12,000.00	7,244.10	11,864.51	7,233.74	141.27	140.48	-89.49	-33.69	-5,040.19	1,163.46	881.84	281.62	4.131		
12,100.00	7,243.68	11,964.50	7,233.43	144.04	143.26	-89.50	-34.46	-5,140.19	1,162.56	875.39	287.18	4.048		
12,200.00	7,243.26	12,064.50	7,233.11	146.82	146.05	-89.50	-35.23	-5,240.18	1,161.67	868.93	292.74	3.968		
12,300.00	7,242.84	12,164.50	7,232.80	149.60	148.84	-89.51	-35.99	-5,340.17	1,160.78	862.47	298.31	3.891		
12,400.00	7,242.42	12,264.49	7,232.49	152.38	151.63	-89.51	-36.76	-5,440.16	1,159.89	856.00	303.89	3.817		
12,500.00	7,242.00	12,364.49	7,232.18	155.16	154.43	-89.52	-37.53	-5,540.16	1,159.00	849.53	309.47	3.745		
12,600.00	7,241.58	12,464.48	7,231.87	157.95	157.22	-89.52	-38.30	-5,640.15	1,158.10	843.05	315.06	3.676		
12,700.00	7,241.16	12,564.48	7,231.56	160.74	160.02	-89.53	-39.06	-5,740.14	1,157.21	836.57	320.65	3.609		
12,800.00	7,240.74	12,664.48	7,231.24	163.53	162.82	-89.53	-39.83	-5,840.13	1,156.32	830.08	326.24	3.544		
12,900.00	7,240.32	12,764.47	7,230.93	166.32	165.62	-89.54	-40.60	-5,940.13	1,155.43	823.59	331.84	3.482		
13,000.00	7,239.89	12,864.47	7,230.62	169.12	168.43	-89.54	-41.37	-6,040.12	1,154.54	817.10	337.44	3.421		
13,100.00	7,239.47	12,964.46	7,230.31	171.92	171.24	-89.55	-42.13	-6,140.11	1,153.64	810.60	343.05	3.363		
13,200.00	7,239.05	13,064.46	7,230.00	174.72	174.04	-89.55	-42.90	-6,240.10	1,152.75	804.10	348.66	3.306		
13,300.00	7,238.63	13,164.46	7,229.68	177.52	176.85	-89.56	-43.67	-6,340.10	1,151.86	797.59	354.27	3.251		
13,400.00	7,238.21	13,264.45	7,229.37	180.32	179.66	-89.56	-44.44	-6,440.09	1,150.97	791.08	359.89	3.198		
13,500.00	7,237.79	13,364.45	7,229.06	183.13	182.48	-89.57	-45.20	-6,540.08	1,150.08	784.57	365.50	3.147		
13,600.00	7,237.37	13,464.44	7,228.75	185.93	185.29	-89.57	-45.97	-6,640.07	1,149.19	778.06	371.13	3.096		
13,700.00	7,236.95	13,564.44	7,228.44	188.74	188.11	-89.58	-46.74	-6,740.07	1,148.29	771.54	376.75	3.048		
13,800.00	7,236.53	13,664.44	7,228.12	191.55	190.92	-89.58	-47.51	-6,840.06	1,147.40	765.02	382.38	3.001		
13,900.00	7,236.11	13,764.43	7,227.81	194.36	193.74	-89.59	-48.27	-6,940.05	1,146.51	758.50	388.01	2.955		
14,000.00	7,235.69	13,864.43	7,227.50	197.17	196.56	-89.59	-49.04	-7,040.04	1,145.62	751.98	393.64	2.910		
14,100.00	7,235.27	13,964.42	7,227.19	199.98	199.38	-89.60	-49.81	-7,140.04	1,144.73	745.45	399.27	2.867		
14,200.00	7,234.85	14,064.42	7,226.88	202.80	202.20	-89.60	-50.58	-7,240.03	1,143.83	738.92	404.91	2.825		
14,300.00	7,234.43	14,164.42	7,226.56	205.61	205.02	-89.61	-51.34	-7,340.02	1,142.94	732.39	410.55	2.784		
14,400.00	7,234.01	14,264.41	7,226.25	208.43	207.85	-89.61	-52.11	-7,440.01	1,142.05	725.86	416.19	2.744		
14,500.00	7,233.59	14,364.41	7,225.94	211.25	210.67	-89.62	-52.88	-7,540.01	1,141.16	719.32	421.83	2.705		
14,600.00	7,233.17	14,464.40	7,225.63	214.06	213.50	-89.62	-53.65	-7,640.00	1,140.27	712.79	427.48	2.667		
14,700.00	7,232.75	14,564.40	7,225.32	216.88	216.32	-89.63	-54.41	-7,739.99	1,139.38	706.25	433.13	2.631		
14,800.00	7,232.33	14,664.40	7,225.01	219.70	219.15	-89.63	-55.18	-7,839.98	1,138.48	699.71	438.77	2.595		
14,900.00	7,231.91	14,764.39	7,224.69	222.52	221.98	-89.64	-55.95	-7,939.98	1,137.59	693.17	444.42	2.560		
15,000.00	7,231.49	14,864.39	7,224.38	225.35	224.80	-89.64	-56.72	-8,039.97	1,136.70	686.62	450.08	2.526		
15,100.00	7,231.07	14,964.38	7,224.07	228.17	227.63	-89.65	-57.48	-8,139.96	1,135.81	680.08	455.73	2.492		
15,116.21	7,231.00	14,980.60	7,224.02	228.63	228.09	-89.65	-57.61	-8,156.17	1,135.66	679.02	456.65	2.487 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	0.00	3.28	-179.53	-340.26	-2.78	340.27					
100.00	100.00	102.00	100.00	0.18	3.29	-179.53	-340.26	-2.78	340.27	336.81	3.46	98.324		
200.00	200.00	198.00	200.00	0.61	3.34	-179.53	-340.26	-2.78	340.27	336.32	3.95	86.151	CC, ES	
300.00	300.00	287.60	289.59	1.05	3.42	-179.51	-341.59	-2.91	341.76	337.26	4.50	75.924		
400.00	400.00	376.82	378.71	1.49	3.55	-179.45	-345.69	-3.29	346.36	341.25	5.11	67.774		
500.00	500.00	465.70	467.32	1.93	3.72	-179.36	-352.52	-3.94	354.05	348.29	5.76	61.474		
600.00	599.98	553.87	554.97	2.37	3.92	-171.49	-361.99	-4.83	366.52	360.08	6.44	56.885		
700.00	699.84	640.71	640.97	2.81	4.14	-171.39	-373.94	-5.95	385.41	378.26	7.15	53.884		
800.00	799.45	725.71	724.77	3.26	4.39	-171.30	-388.15	-7.29	410.58	402.71	7.87	52.180		
900.00	898.70	808.43	805.86	3.70	4.67	-171.24	-404.34	-8.82	441.86	433.28	8.58	51.493		
1,000.00	997.47	888.44	883.83	4.15	4.96	-171.18	-422.22	-10.50	479.04	469.76	9.28	51.616		
1,100.00	1,095.78	969.44	962.25	4.60	5.27	-171.21	-442.41	-12.40	521.09	511.12	9.97	52.260		
1,200.00	1,194.05	1,059.78	1,049.55	5.05	5.64	-171.28	-465.54	-14.58	563.95	553.29	10.67	52.870		
1,300.00	1,292.33	1,150.13	1,136.86	5.50	6.03	-171.35	-488.67	-16.76	606.82	595.43	11.39	53.290		
1,400.00	1,390.61	1,240.47	1,224.17	5.96	6.43	-171.40	-511.80	-18.94	649.68	637.56	12.13	53.575		
1,500.00	1,488.89	1,330.82	1,311.47	6.43	6.85	-171.45	-534.93	-21.12	692.55	679.67	12.88	53.759		
1,600.00	1,587.16	1,421.16	1,398.78	6.89	7.27	-171.49	-558.06	-23.30	735.42	721.77	13.65	53.869		
1,700.00	1,685.44	1,511.51	1,486.09	7.36	7.70	-171.53	-581.19	-25.48	778.29	763.85	14.43	53.924		
1,800.00	1,783.72	1,601.85	1,573.40	7.83	8.14	-171.56	-604.31	-27.66	821.15	805.93	15.22	53.939		
1,900.00	1,882.00	1,692.20	1,660.70	8.30	8.58	-171.59	-627.44	-29.83	864.02	848.00	16.02	53.925		
2,000.00	1,980.27	1,782.54	1,748.01	8.77	9.03	-171.62	-650.57	-32.01	906.89	890.06	16.83	53.888		
2,100.00	2,078.55	1,872.89	1,835.32	9.25	9.49	-171.64	-673.70	-34.19	949.76	932.11	17.64	53.837		
2,200.00	2,176.83	1,963.23	1,922.62	9.72	9.94	-171.67	-696.83	-36.37	992.62	974.17	18.46	53.774		
2,300.00	2,275.11	2,053.58	2,009.93	10.19	10.40	-171.69	-719.96	-38.55	1,035.49	1,016.21	19.28	53.704		
2,400.00	2,373.38	2,143.92	2,097.24	10.66	10.86	-171.71	-743.09	-40.73	1,078.36	1,058.25	20.11	53.628		
2,500.00	2,471.66	2,234.26	2,184.54	11.14	11.33	-171.72	-766.22	-42.91	1,121.23	1,100.29	20.94	53.549		
2,600.00	2,569.94	2,324.61	2,271.85	11.61	11.79	-171.74	-789.34	-45.08	1,164.10	1,142.33	21.77	53.469		
2,700.00	2,668.22	2,414.95	2,359.16	12.09	12.26	-171.76	-812.47	-47.26	1,206.97	1,184.36	22.61	53.387		
2,800.00	2,766.49	2,505.30	2,446.47	12.56	12.73	-171.77	-835.60	-49.44	1,249.84	1,226.39	23.45	53.306		
2,900.00	2,864.77	2,595.64	2,533.77	13.04	13.20	-171.78	-858.73	-51.62	1,292.70	1,268.42	24.29	53.225		
3,000.00	2,963.05	2,685.99	2,621.08	13.51	13.67	-171.80	-881.86	-53.80	1,335.57	1,310.44	25.13	53.145		
3,100.00	3,061.33	2,776.33	2,708.39	13.99	14.15	-171.81	-904.99	-55.98	1,378.44	1,352.47	25.98	53.066		
3,200.00	3,159.60	2,866.68	2,795.69	14.46	14.62	-171.82	-928.12	-58.16	1,421.31	1,394.49	26.82	52.989		
3,300.00	3,257.88	2,957.02	2,883.00	14.94	15.10	-171.83	-951.25	-60.34	1,464.18	1,436.51	27.67	52.914		
3,400.00	3,356.16	3,047.37	2,970.31	15.41	15.57	-171.84	-974.37	-62.51	1,507.05	1,478.53	28.52	52.841		
3,500.00	3,454.43	3,137.71	3,057.61	15.89	16.05	-171.85	-997.50	-64.69	1,549.92	1,520.55	29.37	52.769		
3,600.00	3,552.71	3,228.06	3,144.92	16.36	16.53	-171.86	-1,020.63	-66.87	1,592.79	1,562.56	30.22	52.700		
3,700.00	3,650.99	3,318.40	3,232.23	16.84	17.01	-171.86	-1,043.76	-69.05	1,635.66	1,604.58	31.08	52.632		
3,800.00	3,749.27	3,408.75	3,319.54	17.32	17.49	-171.87	-1,066.89	-71.23	1,678.52	1,646.59	31.93	52.567		
3,900.00	3,847.54	3,500.91	3,406.84	17.79	17.97	-171.88	-1,090.02	-73.41	1,721.39	1,688.60	32.80	52.489		
4,000.00	3,945.82	3,589.44	3,494.15	18.27	18.45	-171.89	-1,113.15	-75.59	1,764.26	1,730.62	33.64	52.441		
4,100.00	4,044.10	3,679.78	3,581.46	18.75	18.93	-171.89	-1,136.27	-77.77	1,807.13	1,772.63	34.50	52.381		
4,200.00	4,142.38	3,770.13	3,668.76	19.22	19.41	-171.90	-1,159.40	-79.94	1,850.00	1,814.64	35.36	52.323		
4,300.00	4,240.65	3,860.47	3,756.07	19.70	19.89	-171.91	-1,182.53	-82.12	1,892.87	1,856.65	36.22	52.266		
4,400.00	4,338.93	3,950.82	3,843.38	20.18	20.37	-171.91	-1,205.66	-84.30	1,935.74	1,898.66	37.07	52.212		
4,500.00	4,437.21	4,041.16	3,930.68	20.65	20.85	-171.92	-1,228.79	-86.48	1,978.61	1,940.67	37.93	52.158		
4,600.00	4,535.49	4,131.51	4,017.99	21.13	21.34	-171.92	-1,251.92	-88.66	2,021.48	1,982.68	38.80	52.107		
4,700.00	4,633.76	4,221.85	4,105.30	21.61	21.82	-171.93	-1,275.05	-90.84	2,064.35	2,024.69	39.66	52.056		
4,800.00	4,732.04	4,312.20	4,192.61	22.08	22.30	-171.93	-1,298.18	-93.02	2,107.22	2,066.70	40.52	52.008		
4,900.00	4,830.32	4,402.54	4,279.91	22.56	22.79	-171.94	-1,321.30	-95.19	2,150.09	2,108.71	41.38	51.960		
5,000.00	4,928.60	4,492.89	4,367.22	23.04	23.27	-171.94	-1,344.43	-97.37	2,192.95	2,150.71	42.24	51.914		
5,100.00	5,026.87	4,583.23	4,454.53	23.51	23.75	-171.95	-1,367.56	-99.55	2,235.82	2,192.72	43.10	51.869		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,673.58	4,541.83	23.99	24.24	-171.95	-1,390.69	-101.73	2,278.69	2,234.73	43.97	51.826		
5,300.00	5,223.43	4,763.92	4,629.14	24.47	24.72	-171.95	-1,413.82	-103.91	2,321.56	2,276.73	44.83	51.783		
5,400.00	5,321.71	4,854.27	4,716.45	24.94	25.21	-171.96	-1,436.95	-106.09	2,364.43	2,318.74	45.70	51.742		
5,500.00	5,419.98	4,944.61	4,803.76	25.42	25.69	-171.96	-1,460.08	-108.27	2,407.30	2,360.74	46.56	51.702		
5,600.00	5,518.26	5,034.96	4,891.06	25.90	26.18	-171.97	-1,483.21	-110.45	2,450.17	2,402.74	47.43	51.663		
5,700.00	5,616.54	5,125.30	4,978.37	26.38	26.66	-171.97	-1,506.33	-112.62	2,493.04	2,444.75	48.29	51.625		
5,800.00	5,714.82	5,215.65	5,065.68	26.85	27.15	-171.97	-1,529.46	-114.80	2,535.91	2,486.75	49.16	51.587		
5,900.00	5,813.09	5,305.99	5,152.98	27.33	27.63	-171.98	-1,552.59	-116.98	2,578.78	2,528.75	50.02	51.551		
6,000.00	5,911.37	5,396.34	5,240.29	27.81	28.12	-171.98	-1,575.72	-119.16	2,621.65	2,570.76	50.89	51.516		
6,100.00	6,009.65	5,486.68	5,327.60	28.28	28.60	-171.98	-1,598.85	-121.34	2,664.52	2,612.76	51.76	51.481		
6,200.00	6,107.93	5,577.03	5,414.90	28.76	29.09	-171.99	-1,621.98	-123.52	2,707.39	2,654.76	52.62	51.447		
6,300.00	6,206.20	5,667.37	5,502.21	29.24	29.57	-171.99	-1,645.11	-125.70	2,750.26	2,696.76	53.49	51.414		
6,400.00	6,304.48	5,757.72	5,589.52	29.72	30.06	-171.99	-1,668.24	-127.88	2,793.13	2,738.77	54.36	51.382		
6,500.00	6,402.76	5,848.06	5,676.83	30.19	30.55	-171.99	-1,691.36	-130.05	2,835.99	2,780.77	55.23	51.350		
6,600.00	6,501.04	5,938.41	5,764.13	30.67	31.03	-172.00	-1,714.49	-132.23	2,878.86	2,822.77	56.10	51.319		
6,700.00	6,599.31	6,028.75	5,851.44	31.15	31.52	-172.00	-1,737.62	-134.41	2,921.73	2,864.77	56.97	51.289		
6,800.00	6,697.50	6,119.07	5,938.72	31.63	32.01	-149.02	-1,760.74	-136.59	2,964.55	2,906.71	57.84	51.258		
6,900.00	6,794.18	6,208.37	6,025.02	32.10	32.49	-119.36	-1,783.60	-138.74	3,006.60	2,947.90	58.70	51.218		
7,000.00	6,886.96	6,305.47	6,108.28	32.55	33.01	-104.51	-1,805.66	-140.82	3,047.08	2,987.47	59.60	51.124		
7,100.00	6,973.57	6,375.42	6,186.45	32.99	33.39	-95.76	-1,826.37	-142.77	3,085.41	3,025.04	60.37	51.111		
7,200.00	7,051.87	6,449.04	6,257.60	33.41	33.78	-89.90	-1,845.22	-144.55	3,121.23	3,060.06	61.17	51.029		
7,300.00	7,119.93	6,513.60	6,319.99	33.85	34.13	-85.67	-1,861.75	-146.10	3,154.32	3,092.36	61.96	50.906		
7,400.00	7,176.09	6,585.07	6,389.00	34.39	34.52	-82.71	-1,880.04	-148.95	3,184.51	3,121.55	62.96	50.581		
7,500.00	7,218.95	6,701.56	6,499.70	35.09	35.12	-81.30	-1,909.48	-169.20	3,210.98	3,146.45	64.53	49.760		
7,600.00	7,247.46	6,882.80	6,659.80	35.98	35.95	-81.46	-1,952.37	-241.00	3,232.59	3,165.85	66.74	48.434		
7,700.00	7,260.92	7,229.99	6,884.58	37.04	37.17	-83.58	-2,013.64	-492.60	3,246.57	3,176.32	70.25	46.216		
7,800.00	7,261.75	7,577.83	6,951.83	38.23	38.83	-84.53	-2,033.79	-829.24	3,248.03	3,173.09	74.94	43.342		
7,900.00	7,261.33	7,677.82	6,951.45	39.59	39.81	-84.53	-2,034.39	-929.23	3,246.97	3,169.33	77.64	41.821		
8,000.00	7,260.91	7,777.82	6,951.08	41.10	41.05	-84.52	-2,034.99	-1,029.22	3,245.91	3,165.26	80.64	40.249		
8,100.00	7,260.49	7,877.81	6,950.70	42.75	42.52	-84.52	-2,035.59	-1,129.21	3,244.85	3,160.92	83.93	38.662		
8,200.00	7,260.07	7,977.80	6,950.32	44.53	44.16	-84.52	-2,036.19	-1,229.21	3,243.79	3,156.33	87.46	37.089		
8,300.00	7,259.65	8,077.80	6,949.94	46.41	45.94	-84.52	-2,036.79	-1,329.20	3,242.73	3,151.52	91.21	35.553		
8,400.00	7,259.23	8,177.79	6,949.56	48.39	47.83	-84.52	-2,037.39	-1,429.19	3,241.67	3,146.52	95.15	34.069		
8,500.00	7,258.81	8,277.79	6,949.18	50.45	49.83	-84.52	-2,037.99	-1,529.18	3,240.61	3,141.35	99.26	32.647		
8,600.00	7,258.39	8,377.78	6,948.80	52.59	51.92	-84.52	-2,038.58	-1,629.17	3,239.56	3,136.03	103.52	31.293		
8,700.00	7,257.97	8,477.78	6,948.42	54.79	54.08	-84.52	-2,039.18	-1,729.17	3,238.50	3,130.58	107.92	30.009		
8,800.00	7,257.55	8,577.77	6,948.04	57.05	56.30	-84.52	-2,039.78	-1,829.16	3,237.44	3,125.01	112.43	28.796		
8,900.00	7,257.13	8,677.77	6,947.66	59.36	58.59	-84.52	-2,040.38	-1,929.15	3,236.38	3,119.34	117.04	27.652		
9,000.00	7,256.71	8,777.76	6,947.28	61.72	60.92	-84.51	-2,040.98	-2,029.14	3,235.32	3,113.58	121.74	26.575		
9,100.00	7,256.29	8,877.75	6,946.90	64.12	63.30	-84.51	-2,041.58	-2,129.13	3,234.26	3,107.73	126.53	25.562		
9,200.00	7,255.87	8,977.75	6,946.52	66.56	65.71	-84.51	-2,042.18	-2,229.13	3,233.20	3,101.82	131.38	24.609		
9,300.00	7,255.45	9,077.74	6,946.14	69.02	68.16	-84.51	-2,042.77	-2,329.12	3,232.14	3,095.84	136.30	23.713		
9,400.00	7,255.03	9,177.74	6,945.77	71.52	70.65	-84.51	-2,043.37	-2,429.11	3,231.08	3,089.80	141.28	22.870		
9,500.00	7,254.61	9,277.73	6,945.39	74.04	73.16	-84.51	-2,043.97	-2,529.10	3,230.02	3,083.71	146.31	22.076		
9,600.00	7,254.19	9,377.73	6,945.01	76.58	75.69	-84.51	-2,044.57	-2,629.09	3,228.96	3,077.58	151.39	21.329		
9,700.00	7,253.77	9,477.72	6,944.63	79.15	78.25	-84.51	-2,045.17	-2,729.08	3,227.90	3,071.40	156.51	20.625		
9,800.00	7,253.35	9,577.71	6,944.25	81.74	80.83	-84.51	-2,045.77	-2,829.08	3,226.85	3,065.18	161.66	19.960		
9,900.00	7,252.92	9,677.71	6,943.87	84.34	83.42	-84.50	-2,046.37	-2,929.07	3,225.79	3,058.93	166.86	19.333		
10,000.00	7,252.50	9,777.70	6,943.49	86.96	86.04	-84.50	-2,046.96	-3,029.06	3,224.73	3,052.65	172.08	18.740		
10,100.00	7,252.08	9,877.70	6,943.11	89.59	88.67	-84.50	-2,047.56	-3,129.05	3,223.67	3,046.34	177.33	18.179		
10,200.00	7,251.66	9,977.69	6,942.73	92.24	91.31	-84.50	-2,048.16	-3,229.04	3,222.61	3,040.00	182.61	17.648		
10,300.00	7,251.24	10,077.69	6,942.35	94.90	93.96	-84.50	-2,048.76	-3,329.04	3,221.55	3,033.64	187.91	17.144		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,177.68	6,941.97	97.57	96.63	-84.50	-2,049.36	-3,429.03	3,220.49	3,027.26	193.23	16.666		
10,500.00	7,250.40	10,277.68	6,941.59	100.25	99.31	-84.50	-2,049.96	-3,529.02	3,219.43	3,020.85	198.58	16.212		
10,600.00	7,249.98	10,377.67	6,941.21	102.93	102.00	-84.50	-2,050.56	-3,629.01	3,218.37	3,014.43	203.94	15.781		
10,700.00	7,249.56	10,477.66	6,940.83	105.63	104.69	-84.50	-2,051.15	-3,729.00	3,217.31	3,007.99	209.32	15.370		
10,800.00	7,249.14	10,577.66	6,940.45	108.34	107.40	-84.49	-2,051.75	-3,828.99	3,216.25	3,001.54	214.72	14.979		
10,900.00	7,248.72	10,677.65	6,940.08	111.05	110.11	-84.49	-2,052.35	-3,928.99	3,215.20	2,995.07	220.13	14.606		
11,000.00	7,248.30	10,777.65	6,939.70	113.77	112.83	-84.49	-2,052.95	-4,028.98	3,214.14	2,988.59	225.55	14.250		
11,100.00	7,247.88	10,877.64	6,939.32	116.50	115.56	-84.49	-2,053.55	-4,128.97	3,213.08	2,982.09	230.99	13.910		
11,200.00	7,247.46	10,977.64	6,938.94	119.23	118.29	-84.49	-2,054.15	-4,228.96	3,212.02	2,975.58	236.44	13.585		
11,300.00	7,247.04	11,077.63	6,938.56	121.97	121.03	-84.49	-2,054.75	-4,328.95	3,210.96	2,969.06	241.89	13.274		
11,400.00	7,246.62	11,177.62	6,938.18	124.72	123.78	-84.49	-2,055.34	-4,428.95	3,209.90	2,962.54	247.36	12.976		
11,500.00	7,246.20	11,277.62	6,937.80	127.46	126.53	-84.49	-2,055.94	-4,528.94	3,208.84	2,956.00	252.84	12.691		
11,600.00	7,245.78	11,377.61	6,937.42	130.22	129.28	-84.49	-2,056.54	-4,628.93	3,207.78	2,949.45	258.33	12.417		
11,700.00	7,245.36	11,477.61	6,937.04	132.98	132.04	-84.48	-2,057.14	-4,728.92	3,206.72	2,942.89	263.83	12.155		
11,800.00	7,244.94	11,577.60	6,936.66	135.74	134.80	-84.48	-2,057.74	-4,828.91	3,205.66	2,936.33	269.33	11.902		
11,900.00	7,244.52	11,677.60	6,936.28	138.50	137.57	-84.48	-2,058.34	-4,928.91	3,204.61	2,929.76	274.85	11.660		
12,000.00	7,244.10	11,777.59	6,935.90	141.27	140.34	-84.48	-2,058.94	-5,028.90	3,203.55	2,923.18	280.37	11.426		
12,100.00	7,243.68	11,877.59	6,935.52	144.04	143.11	-84.48	-2,059.53	-5,128.89	3,202.49	2,916.59	285.89	11.202		
12,200.00	7,243.26	11,977.58	6,935.14	146.82	145.89	-84.48	-2,060.13	-5,228.88	3,201.43	2,910.00	291.42	10.985		
12,300.00	7,242.84	12,077.57	6,934.77	149.60	148.67	-84.48	-2,060.73	-5,328.87	3,200.37	2,903.41	296.96	10.777		
12,400.00	7,242.42	12,177.57	6,934.39	152.38	151.45	-84.48	-2,061.33	-5,428.86	3,199.31	2,896.80	302.51	10.576		
12,500.00	7,242.00	12,277.56	6,934.01	155.16	154.24	-84.48	-2,061.93	-5,528.86	3,198.25	2,890.20	308.06	10.382		
12,600.00	7,241.58	12,377.56	6,933.63	157.95	157.03	-84.47	-2,062.53	-5,628.85	3,197.19	2,883.58	313.61	10.195		
12,700.00	7,241.16	12,477.55	6,933.25	160.74	159.82	-84.47	-2,063.13	-5,728.84	3,196.13	2,876.96	319.17	10.014		
12,800.00	7,240.74	12,577.55	6,932.87	163.53	162.61	-84.47	-2,063.72	-5,828.83	3,195.07	2,870.34	324.73	9.839		
12,900.00	7,240.32	12,677.54	6,932.49	166.32	165.41	-84.47	-2,064.32	-5,928.82	3,194.01	2,863.72	330.30	9.670		
13,000.00	7,239.89	12,777.53	6,932.11	169.12	168.21	-84.47	-2,064.92	-6,028.82	3,192.96	2,857.09	335.87	9.507		
13,100.00	7,239.47	12,877.53	6,931.73	171.92	171.01	-84.47	-2,065.52	-6,128.81	3,191.90	2,850.45	341.44	9.348		
13,200.00	7,239.05	12,977.52	6,931.35	174.72	173.81	-84.47	-2,066.12	-6,228.80	3,190.84	2,843.81	347.02	9.195		
13,300.00	7,238.63	13,077.52	6,930.97	177.52	176.61	-84.47	-2,066.72	-6,328.79	3,189.78	2,837.17	352.61	9.046		
13,400.00	7,238.21	13,177.51	6,930.59	180.32	179.42	-84.47	-2,067.32	-6,428.78	3,188.72	2,830.53	358.19	8.902		
13,500.00	7,237.79	13,277.51	6,930.21	183.13	182.23	-84.47	-2,067.92	-6,528.78	3,187.66	2,823.88	363.78	8.763		
13,600.00	7,237.37	13,377.50	6,929.83	185.93	185.03	-84.46	-2,068.51	-6,628.77	3,186.60	2,817.23	369.37	8.627		
13,700.00	7,236.95	13,477.50	6,929.46	188.74	187.84	-84.46	-2,069.11	-6,728.76	3,185.54	2,810.58	374.97	8.496		
13,800.00	7,236.53	13,577.49	6,929.08	191.55	190.66	-84.46	-2,069.71	-6,828.75	3,184.48	2,803.92	380.56	8.368		
13,900.00	7,236.11	13,677.48	6,928.70	194.36	193.47	-84.46	-2,070.31	-6,928.74	3,183.42	2,797.26	386.16	8.244		
14,000.00	7,235.69	13,777.48	6,928.32	197.17	196.28	-84.46	-2,070.91	-7,028.73	3,182.36	2,790.60	391.77	8.123		
14,100.00	7,235.27	13,877.47	6,927.94	199.98	199.10	-84.46	-2,071.51	-7,128.73	3,181.31	2,783.93	397.37	8.006		
14,200.00	7,234.85	13,977.47	6,927.56	202.80	201.92	-84.46	-2,072.11	-7,228.72	3,180.25	2,777.27	402.98	7.892		
14,300.00	7,234.43	14,077.46	6,927.18	205.61	204.73	-84.46	-2,072.70	-7,328.71	3,179.19	2,770.60	408.59	7.781		
14,400.00	7,234.01	14,177.46	6,926.80	208.43	207.55	-84.46	-2,073.30	-7,428.70	3,178.13	2,763.93	414.20	7.673		
14,500.00	7,233.59	14,277.45	6,926.42	211.25	210.37	-84.45	-2,073.90	-7,528.69	3,177.07	2,757.26	419.81	7.568		
14,600.00	7,233.17	14,377.44	6,926.04	214.06	213.19	-84.45	-2,074.50	-7,628.68	3,176.01	2,750.58	425.43	7.465		
14,700.00	7,232.75	14,477.44	6,925.66	216.88	216.02	-84.45	-2,075.10	-7,728.68	3,174.95	2,743.91	431.05	7.366		
14,800.00	7,232.33	14,577.43	6,925.28	219.70	218.84	-84.45	-2,075.70	-7,828.67	3,173.89	2,737.23	436.66	7.268		
14,900.00	7,231.91	14,677.43	6,924.90	222.52	221.66	-84.45	-2,076.30	-7,928.66	3,172.83	2,730.55	442.29	7.174		
15,000.00	7,231.49	14,777.42	6,924.52	225.35	224.49	-84.45	-2,076.89	-8,028.65	3,171.77	2,723.87	447.91	7.081		
15,100.00	7,231.07	14,877.42	6,924.14	228.17	227.31	-84.45	-2,077.49	-8,128.65	3,170.72	2,717.18	453.53	6.991		
15,116.21	7,231.00	14,893.63	6,924.08	228.63	227.77	-84.45	-2,077.59	-8,144.86	3,170.54	2,716.10	454.44	6.977 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	0.00	3.28	-179.50	-320.23	-2.78	320.24					
100.00	100.00	102.00	100.00	0.18	3.29	-179.50	-320.23	-2.78	320.24	316.78	3.46	92.537		
200.00	200.00	198.00	200.00	0.61	3.34	-179.50	-320.23	-2.78	320.24	316.29	3.95	81.080 CC, ES		
300.00	300.00	288.16	290.15	1.05	3.43	-179.48	-321.58	-2.93	321.74	317.24	4.50	71.462		
400.00	400.00	377.95	379.83	1.49	3.55	-179.41	-325.72	-3.37	326.36	321.25	5.11	63.830		
500.00	500.00	467.39	469.00	1.93	3.72	-179.29	-332.63	-4.10	334.09	328.33	5.76	57.963		
600.00	599.98	556.10	557.18	2.37	3.92	-171.40	-342.21	-5.13	346.62	340.17	6.45	53.739		
700.00	699.84	643.47	643.70	2.81	4.15	-171.27	-354.29	-6.41	365.58	358.42	7.16	51.045		
800.00	799.45	728.98	727.98	3.26	4.40	-171.16	-368.65	-7.95	390.84	382.96	7.88	49.596		
900.00	898.70	812.17	809.53	3.70	4.68	-171.08	-385.02	-9.69	422.21	413.62	8.59	49.124		
1,000.00	997.47	900.50	894.67	4.15	5.00	-171.01	-404.30	-11.75	459.12	449.82	9.30	49.367		
1,100.00	1,095.78	1,008.70	984.12	4.60	5.42	-171.06	-424.83	-13.94	498.77	488.71	10.07	49.534		
1,200.00	1,194.05	1,083.03	1,073.50	5.05	5.72	-171.15	-445.33	-16.12	538.59	527.87	10.72	50.225		
1,300.00	1,292.33	1,174.76	1,162.88	5.50	6.11	-171.23	-465.84	-18.31	578.41	566.95	11.46	50.465		
1,400.00	1,390.61	1,266.48	1,252.26	5.96	6.51	-171.29	-486.34	-20.50	618.23	606.02	12.22	50.604		
1,500.00	1,488.89	1,358.21	1,341.64	6.43	6.92	-171.35	-506.85	-22.68	658.06	645.07	12.99	50.670		
1,600.00	1,587.16	1,449.94	1,431.02	6.89	7.33	-171.40	-527.35	-24.87	697.88	684.11	13.77	50.683		
1,700.00	1,685.44	1,541.67	1,520.40	7.36	7.76	-171.45	-547.86	-27.06	737.70	723.14	14.56	50.660		
1,800.00	1,783.72	1,633.39	1,609.78	7.83	8.19	-171.49	-568.36	-29.24	777.52	762.16	15.36	50.611		
1,900.00	1,882.00	1,725.12	1,699.16	8.30	8.62	-171.52	-588.87	-31.43	817.34	801.17	16.17	50.544		
2,000.00	1,980.27	1,816.85	1,788.54	8.77	9.06	-171.56	-609.38	-33.62	857.17	840.18	16.99	50.464		
2,100.00	2,078.55	1,908.58	1,877.91	9.25	9.50	-171.59	-629.88	-35.80	896.99	879.19	17.81	50.376		
2,200.00	2,176.83	2,000.30	1,967.29	9.72	9.95	-171.61	-650.39	-37.99	936.81	918.18	18.63	50.283		
2,300.00	2,275.11	2,107.97	2,056.67	10.19	10.48	-171.64	-670.89	-40.18	976.64	957.11	19.53	50.003		
2,400.00	2,373.38	2,183.76	2,146.05	10.66	10.85	-171.66	-691.40	-42.36	1,016.46	996.17	20.29	50.090		
2,500.00	2,471.66	2,275.49	2,235.43	11.14	11.30	-171.69	-711.90	-44.55	1,056.29	1,035.16	21.13	49.993		
2,600.00	2,569.94	2,367.21	2,324.81	11.61	11.76	-171.71	-732.41	-46.74	1,096.11	1,074.14	21.97	49.896		
2,700.00	2,668.22	2,458.94	2,414.19	12.09	12.21	-171.72	-752.91	-48.92	1,135.93	1,113.13	22.81	49.802		
2,800.00	2,766.49	2,550.67	2,503.57	12.56	12.67	-171.74	-773.42	-51.11	1,175.76	1,152.11	23.65	49.709		
2,900.00	2,864.77	2,642.39	2,592.95	13.04	13.13	-171.76	-793.92	-53.30	1,215.58	1,191.08	24.50	49.618		
3,000.00	2,963.05	2,734.12	2,682.33	13.51	13.59	-171.77	-814.43	-55.48	1,255.41	1,230.06	25.35	49.530		
3,100.00	3,061.33	2,825.85	2,771.71	13.99	14.06	-171.79	-834.94	-57.67	1,295.23	1,269.04	26.20	49.445		
3,200.00	3,159.60	2,917.58	2,861.09	14.46	14.52	-171.80	-855.44	-59.86	1,335.06	1,308.01	27.05	49.362		
3,300.00	3,257.88	3,009.30	2,950.47	14.94	14.98	-171.81	-875.95	-62.04	1,374.88	1,346.98	27.90	49.281		
3,400.00	3,356.16	3,101.03	3,039.85	15.41	15.45	-171.83	-896.45	-64.23	1,414.71	1,385.95	28.75	49.203		
3,500.00	3,454.43	3,207.24	3,129.23	15.89	15.99	-171.84	-916.96	-66.42	1,454.53	1,424.86	29.67	49.016		
3,600.00	3,552.71	3,284.49	3,218.60	16.36	16.38	-171.85	-937.46	-68.60	1,494.36	1,463.89	30.46	49.056		
3,700.00	3,650.99	3,376.21	3,307.98	16.84	16.85	-171.86	-957.97	-70.79	1,534.18	1,502.86	31.32	48.985		
3,800.00	3,749.27	3,467.94	3,397.36	17.32	17.31	-171.87	-978.47	-72.98	1,574.01	1,541.83	32.18	48.917		
3,900.00	3,847.54	3,559.67	3,486.74	17.79	17.78	-171.88	-998.98	-75.16	1,613.83	1,580.80	33.04	48.852		
4,000.00	3,945.82	3,651.40	3,576.12	18.27	18.25	-171.89	-1,019.48	-77.35	1,653.66	1,619.76	33.89	48.788		
4,100.00	4,044.10	3,743.12	3,665.50	18.75	18.72	-171.90	-1,039.99	-79.54	1,693.48	1,658.73	34.75	48.727		
4,200.00	4,142.38	3,834.85	3,754.88	19.22	19.19	-171.90	-1,060.49	-81.72	1,733.31	1,697.69	35.62	48.668		
4,300.00	4,240.65	3,926.58	3,844.26	19.70	19.66	-171.91	-1,081.00	-83.91	1,773.13	1,736.65	36.48	48.610		
4,400.00	4,338.93	4,018.31	3,933.64	20.18	20.13	-171.92	-1,101.51	-86.10	1,812.96	1,775.62	37.34	48.555		
4,500.00	4,437.21	4,110.03	4,023.02	20.65	20.60	-171.93	-1,122.01	-88.28	1,852.78	1,814.58	38.20	48.501		
4,600.00	4,535.49	4,201.76	4,112.40	21.13	21.07	-171.93	-1,142.52	-90.47	1,892.61	1,853.54	39.06	48.449		
4,700.00	4,633.76	4,293.49	4,201.78	21.61	21.54	-171.94	-1,163.02	-92.66	1,932.43	1,892.50	39.93	48.398		
4,800.00	4,732.04	4,385.22	4,291.16	22.08	22.01	-171.94	-1,183.53	-94.84	1,972.26	1,931.46	40.79	48.350		
4,900.00	4,830.32	4,476.94	4,380.54	22.56	22.48	-171.95	-1,204.03	-97.03	2,012.08	1,970.43	41.66	48.302		
5,000.00	4,928.60	4,568.67	4,469.92	23.04	22.95	-171.96	-1,224.54	-99.22	2,051.91	2,009.39	42.52	48.256		
5,100.00	5,026.87	4,660.40	4,559.29	23.51	23.42	-171.96	-1,245.04	-101.40	2,091.73	2,048.35	43.39	48.212		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,752.13	4,648.67	23.99	23.90	-171.97	-1,265.55	-103.59	2,131.56	2,087.30	44.25	48.168		
5,300.00	5,223.43	4,843.85	4,738.05	24.47	24.37	-171.97	-1,286.05	-105.78	2,171.38	2,126.26	45.12	48.126		
5,400.00	5,321.71	4,935.58	4,827.43	24.94	24.84	-171.98	-1,306.56	-107.96	2,211.21	2,165.22	45.99	48.085		
5,500.00	5,419.98	5,027.31	4,916.81	25.42	25.31	-171.98	-1,327.07	-110.15	2,251.03	2,204.18	46.85	48.046		
5,600.00	5,518.26	5,119.04	5,006.19	25.90	25.79	-171.99	-1,347.57	-112.34	2,290.86	2,243.14	47.72	48.007		
5,700.00	5,616.54	5,210.76	5,095.57	26.38	26.26	-171.99	-1,368.08	-114.52	2,330.68	2,282.10	48.59	47.969		
5,800.00	5,714.82	5,302.49	5,184.95	26.85	26.73	-171.99	-1,388.58	-116.71	2,370.51	2,321.05	49.45	47.933		
5,900.00	5,813.09	5,405.78	5,274.33	27.33	27.27	-172.00	-1,409.09	-118.90	2,410.33	2,359.96	50.38	47.845		
6,000.00	5,911.37	5,485.95	5,363.71	27.81	27.68	-172.00	-1,429.59	-121.08	2,450.16	2,398.97	51.19	47.862		
6,100.00	6,009.65	5,577.67	5,453.09	28.28	28.15	-172.01	-1,450.10	-123.27	2,489.98	2,437.92	52.06	47.829		
6,200.00	6,107.93	5,669.40	5,542.47	28.76	28.63	-172.01	-1,470.60	-125.46	2,529.81	2,476.88	52.93	47.796		
6,300.00	6,206.20	5,761.13	5,631.85	29.24	29.10	-172.01	-1,491.11	-127.64	2,569.64	2,515.84	53.80	47.763		
6,400.00	6,304.48	5,852.85	5,721.23	29.72	29.57	-172.02	-1,511.61	-129.83	2,609.46	2,554.79	54.67	47.732		
6,500.00	6,402.76	5,944.58	5,810.61	30.19	30.05	-172.02	-1,532.12	-132.02	2,649.29	2,593.75	55.54	47.701		
6,600.00	6,501.04	6,036.31	5,899.99	30.67	30.52	-172.02	-1,552.63	-134.20	2,689.11	2,632.70	56.41	47.671		
6,700.00	6,599.31	6,128.04	5,989.36	31.15	31.00	-172.03	-1,573.13	-136.39	2,728.94	2,671.66	57.28	47.642		
6,800.00	6,697.50	6,219.73	6,078.71	31.63	31.47	-149.23	-1,593.63	-138.58	2,768.71	2,710.56	58.15	47.612		
6,900.00	6,794.18	6,310.38	6,167.04	32.10	31.94	-119.93	-1,613.89	-140.74	2,807.76	2,748.74	59.02	47.573		
7,000.00	6,886.96	6,402.18	6,252.24	32.55	32.42	-105.44	-1,633.44	-142.82	2,845.37	2,785.48	59.89	47.510		
7,100.00	6,973.57	6,479.89	6,332.21	32.99	32.82	-97.01	-1,651.79	-144.78	2,881.07	2,820.38	60.69	47.471		
7,200.00	7,051.87	6,554.58	6,404.99	33.41	33.20	-91.44	-1,668.48	-146.56	2,914.60	2,853.11	61.49	47.398		
7,300.00	7,119.93	6,623.51	6,472.16	33.85	33.56	-87.49	-1,683.89	-148.28	2,945.85	2,883.52	62.33	47.264		
7,400.00	7,176.09	6,727.11	6,572.27	34.39	34.09	-85.16	-1,706.93	-160.81	2,974.24	2,910.64	63.61	46.760		
7,500.00	7,218.95	7,500.00	6,678.54	35.09	37.67	-83.77	-1,731.51	-193.93	2,998.81	2,930.65	68.16	43.995		
7,600.00	7,247.46	7,600.00	6,841.90	35.98	37.66	-84.10	-1,769.61	-293.66	3,018.21	2,948.25	69.95	43.147		
7,700.00	7,260.92	7,379.14	7,030.97	37.04	36.57	-85.83	-1,814.75	-569.73	3,029.64	2,958.77	70.86	42.753		
7,800.00	7,261.75	7,644.92	7,066.90	38.23	38.25	-86.32	-1,824.69	-831.21	3,030.37	2,955.47	74.90	40.460		
7,900.00	7,261.33	7,744.92	7,066.67	39.59	39.36	-86.32	-1,825.29	-931.20	3,029.30	2,951.70	77.60	39.035		
8,000.00	7,260.91	7,844.91	7,066.44	41.10	40.71	-86.32	-1,825.89	-1,031.20	3,028.23	2,947.61	80.62	37.560		
8,100.00	7,260.49	7,944.91	7,066.21	42.75	42.24	-86.32	-1,826.49	-1,131.19	3,027.16	2,943.24	83.92	36.071		
8,200.00	7,260.07	8,044.90	7,065.98	44.53	43.92	-86.32	-1,827.09	-1,231.18	3,026.09	2,938.62	87.47	34.596		
8,300.00	7,259.65	8,144.90	7,065.75	46.41	45.74	-86.33	-1,827.69	-1,331.17	3,025.02	2,933.79	91.23	33.157		
8,400.00	7,259.23	8,244.89	7,065.52	48.39	47.67	-86.33	-1,828.29	-1,431.16	3,023.95	2,928.76	95.19	31.767		
8,500.00	7,258.81	8,344.88	7,065.28	50.45	49.69	-86.33	-1,828.89	-1,531.16	3,022.88	2,923.56	99.32	30.436		
8,600.00	7,258.39	8,444.88	7,065.05	52.59	51.79	-86.33	-1,829.49	-1,631.15	3,021.81	2,918.21	103.60	29.169		
8,700.00	7,257.97	8,544.87	7,064.82	54.79	53.96	-86.34	-1,830.08	-1,731.14	3,020.74	2,912.73	108.01	27.968		
8,800.00	7,257.55	8,644.87	7,064.59	57.05	56.20	-86.34	-1,830.68	-1,831.13	3,019.67	2,907.14	112.53	26.833		
8,900.00	7,257.13	8,744.86	7,064.36	59.36	58.50	-86.34	-1,831.28	-1,931.13	3,018.60	2,901.44	117.16	25.764		
9,000.00	7,256.71	8,844.85	7,064.13	61.72	60.84	-86.34	-1,831.88	-2,031.12	3,017.53	2,895.65	121.88	24.758		
9,100.00	7,256.29	8,944.85	7,063.90	64.12	63.22	-86.35	-1,832.48	-2,131.11	3,016.46	2,889.78	126.68	23.811		
9,200.00	7,255.87	9,044.84	7,063.67	66.56	65.65	-86.35	-1,833.08	-2,231.10	3,015.39	2,883.84	131.56	22.921		
9,300.00	7,255.45	9,144.84	7,063.44	69.02	68.11	-86.35	-1,833.68	-2,331.09	3,014.32	2,877.83	136.49	22.084		
9,400.00	7,255.03	9,244.83	7,063.21	71.52	70.60	-86.35	-1,834.28	-2,431.08	3,013.25	2,871.77	141.49	21.297		
9,500.00	7,254.61	9,344.83	7,062.98	74.04	73.11	-86.35	-1,834.87	-2,531.08	3,012.18	2,865.65	146.53	20.556		
9,600.00	7,254.19	9,444.82	7,062.75	76.58	75.65	-86.36	-1,835.47	-2,631.07	3,011.11	2,859.49	151.63	19.859		
9,700.00	7,253.77	9,544.81	7,062.52	79.15	78.21	-86.36	-1,836.07	-2,731.06	3,010.04	2,853.28	156.76	19.201		
9,800.00	7,253.35	9,644.81	7,062.29	81.74	80.80	-86.36	-1,836.67	-2,831.05	3,008.97	2,847.04	161.94	18.581		
9,900.00	7,252.92	9,744.80	7,062.06	84.34	83.40	-86.36	-1,837.27	-2,931.05	3,007.91	2,840.76	167.14	17.996		
10,000.00	7,252.50	9,844.80	7,061.83	86.96	86.02	-86.37	-1,837.87	-3,031.04	3,006.84	2,834.45	172.38	17.443		
10,100.00	7,252.08	9,944.79	7,061.60	89.59	88.65	-86.37	-1,838.47	-3,131.03	3,005.77	2,828.12	177.65	16.920		
10,200.00	7,251.66	10,044.79	7,061.37	92.24	91.29	-86.37	-1,839.07	-3,231.02	3,004.70	2,821.75	182.94	16.424		
10,300.00	7,251.24	10,144.78	7,061.14	94.90	93.95	-86.37	-1,839.66	-3,331.02	3,003.63	2,815.36	188.26	15.954		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,244.77	7,060.91	97.57	96.62	-86.38	-1,840.26	-3,431.01	3,002.56	2,808.95	193.60	15.509		
10,500.00	7,250.40	10,344.77	7,060.68	100.25	99.30	-86.38	-1,840.86	-3,531.00	3,001.49	2,802.52	198.96	15.086		
10,600.00	7,249.98	10,444.76	7,060.45	102.93	101.99	-86.38	-1,841.46	-3,630.99	3,000.42	2,796.08	204.34	14.683		
10,700.00	7,249.56	10,544.76	7,060.22	105.63	104.69	-86.38	-1,842.06	-3,730.98	2,999.35	2,789.61	209.74	14.301		
10,800.00	7,249.14	10,644.75	7,059.99	108.34	107.40	-86.39	-1,842.66	-3,830.98	2,998.28	2,783.13	215.15	13.936		
10,900.00	7,248.72	10,744.74	7,059.76	111.05	110.12	-86.39	-1,843.26	-3,930.97	2,997.21	2,776.63	220.57	13.588		
11,000.00	7,248.30	10,844.74	7,059.53	113.77	112.84	-86.39	-1,843.86	-4,030.96	2,996.14	2,770.12	226.01	13.256		
11,100.00	7,247.88	10,944.73	7,059.30	116.50	115.57	-86.39	-1,844.46	-4,130.95	2,995.07	2,763.60	231.47	12.940		
11,200.00	7,247.46	11,044.73	7,059.06	119.23	118.30	-86.39	-1,845.05	-4,230.94	2,994.00	2,757.07	236.93	12.637		
11,300.00	7,247.04	11,144.72	7,058.83	121.97	121.04	-86.40	-1,845.65	-4,330.94	2,992.93	2,750.52	242.41	12.347		
11,400.00	7,246.62	11,244.72	7,058.60	124.72	123.79	-86.40	-1,846.25	-4,430.93	2,991.86	2,743.97	247.89	12.069		
11,500.00	7,246.20	11,344.71	7,058.37	127.46	126.54	-86.40	-1,846.85	-4,530.92	2,990.79	2,737.40	253.39	11.803		
11,600.00	7,245.78	11,444.70	7,058.14	130.22	129.30	-86.40	-1,847.45	-4,630.91	2,989.72	2,730.83	258.89	11.548		
11,700.00	7,245.36	11,544.70	7,057.91	132.98	132.06	-86.41	-1,848.05	-4,730.91	2,988.65	2,724.25	264.40	11.303		
11,800.00	7,244.94	11,644.69	7,057.68	135.74	134.82	-86.41	-1,848.65	-4,830.90	2,987.58	2,717.65	269.93	11.068		
11,900.00	7,244.52	11,744.69	7,057.45	138.50	137.59	-86.41	-1,849.25	-4,930.89	2,986.51	2,711.06	275.45	10.842		
12,000.00	7,244.10	11,844.68	7,057.22	141.27	140.36	-86.41	-1,849.84	-5,030.88	2,985.44	2,704.45	280.99	10.625		
12,100.00	7,243.68	11,944.68	7,056.99	144.04	143.14	-86.42	-1,850.44	-5,130.87	2,984.37	2,697.84	286.53	10.416		
12,200.00	7,243.26	12,044.67	7,056.76	146.82	145.92	-86.42	-1,851.04	-5,230.87	2,983.30	2,691.22	292.08	10.214		
12,300.00	7,242.84	12,144.66	7,056.53	149.60	148.70	-86.42	-1,851.64	-5,330.86	2,982.23	2,684.60	297.63	10.020		
12,400.00	7,242.42	12,244.66	7,056.30	152.38	151.48	-86.42	-1,852.24	-5,430.85	2,981.16	2,677.97	303.19	9.833		
12,500.00	7,242.00	12,344.65	7,056.07	155.16	154.27	-86.43	-1,852.84	-5,530.84	2,980.09	2,671.34	308.76	9.652		
12,600.00	7,241.58	12,444.65	7,055.84	157.95	157.06	-86.43	-1,853.44	-5,630.83	2,979.02	2,664.70	314.33	9.477		
12,700.00	7,241.16	12,544.64	7,055.61	160.74	159.85	-86.43	-1,854.04	-5,730.83	2,977.95	2,658.05	319.90	9.309		
12,800.00	7,240.74	12,644.63	7,055.38	163.53	162.65	-86.43	-1,854.63	-5,830.82	2,976.88	2,651.40	325.48	9.146		
12,900.00	7,240.32	12,744.63	7,055.15	166.32	165.44	-86.43	-1,855.23	-5,930.81	2,975.81	2,644.75	331.06	8.989		
13,000.00	7,239.89	12,844.62	7,054.92	169.12	168.24	-86.44	-1,855.83	-6,030.80	2,974.74	2,638.09	336.65	8.836		
13,100.00	7,239.47	12,944.62	7,054.69	171.92	171.04	-86.44	-1,856.43	-6,130.80	2,973.68	2,631.43	342.24	8.689		
13,200.00	7,239.05	13,044.61	7,054.46	174.72	173.84	-86.44	-1,857.03	-6,230.79	2,972.61	2,624.77	347.84	8.546		
13,300.00	7,238.63	13,144.61	7,054.23	177.52	176.65	-86.44	-1,857.63	-6,330.78	2,971.54	2,618.10	353.44	8.408		
13,400.00	7,238.21	13,244.60	7,054.00	180.32	179.45	-86.45	-1,858.23	-6,430.77	2,970.47	2,611.43	359.04	8.273		
13,500.00	7,237.79	13,344.59	7,053.77	183.13	182.26	-86.45	-1,858.83	-6,530.76	2,969.40	2,604.75	364.64	8.143		
13,600.00	7,237.37	13,444.59	7,053.54	185.93	185.07	-86.45	-1,859.42	-6,630.76	2,968.33	2,598.07	370.25	8.017		
13,700.00	7,236.95	13,544.58	7,053.31	188.74	187.88	-86.45	-1,860.02	-6,730.75	2,967.26	2,591.39	375.86	7.895		
13,800.00	7,236.53	13,644.58	7,053.07	191.55	190.69	-86.46	-1,860.62	-6,830.74	2,966.19	2,584.71	381.48	7.776		
13,900.00	7,236.11	13,744.57	7,052.84	194.36	193.51	-86.46	-1,861.22	-6,930.73	2,965.12	2,578.03	387.09	7.660		
14,000.00	7,235.69	13,844.57	7,052.61	197.17	196.32	-86.46	-1,861.82	-7,030.72	2,964.05	2,571.34	392.71	7.548		
14,100.00	7,235.27	13,944.56	7,052.38	199.98	199.14	-86.46	-1,862.42	-7,130.72	2,962.98	2,564.65	398.33	7.438		
14,200.00	7,234.85	14,044.55	7,052.15	202.80	201.96	-86.47	-1,863.02	-7,230.71	2,961.91	2,557.95	403.96	7.332		
14,300.00	7,234.43	14,144.55	7,051.92	205.61	204.78	-86.47	-1,863.62	-7,330.70	2,960.84	2,551.26	409.58	7.229		
14,400.00	7,234.01	14,244.54	7,051.69	208.43	207.60	-86.47	-1,864.22	-7,430.69	2,959.77	2,544.56	415.21	7.128		
14,500.00	7,233.59	14,344.54	7,051.46	211.25	210.42	-86.47	-1,864.81	-7,530.69	2,958.70	2,537.86	420.84	7.030		
14,600.00	7,233.17	14,444.53	7,051.23	214.06	213.24	-86.48	-1,865.41	-7,630.68	2,957.63	2,531.16	426.47	6.935		
14,700.00	7,232.75	14,544.52	7,051.00	216.88	216.06	-86.48	-1,866.01	-7,730.67	2,956.56	2,524.45	432.11	6.842		
14,800.00	7,232.33	14,644.52	7,050.77	219.70	218.88	-86.48	-1,866.61	-7,830.66	2,955.49	2,517.75	437.74	6.752		
14,900.00	7,231.91	14,744.51	7,050.54	222.52	221.71	-86.48	-1,867.21	-7,930.65	2,954.42	2,511.04	443.38	6.663		
15,000.00	7,231.49	14,844.51	7,050.31	225.35	224.53	-86.49	-1,867.81	-8,030.65	2,953.35	2,504.33	449.02	6.577		
15,100.00	7,231.07	14,944.50	7,050.08	228.17	227.36	-86.49	-1,868.41	-8,130.64	2,952.28	2,497.62	454.66	6.493		
15,116.21	7,231.00	14,960.71	7,050.04	228.63	227.82	-86.49	-1,868.50	-8,146.85	2,952.11	2,496.53	455.58	6.480 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	0.00	3.28	-179.52	-300.18	-2.50	300.19					
100.00	100.00	102.00	100.00	0.18	3.29	-179.52	-300.18	-2.50	300.19	296.73	3.46	86.743		
200.00	200.00	198.00	200.00	0.61	3.34	-179.52	-300.18	-2.50	300.19	296.24	3.95	76.003 CC, ES		
300.00	300.00	288.74	290.72	1.05	3.43	-179.49	-301.54	-2.68	301.70	297.19	4.50	66.996		
400.00	400.00	379.11	380.99	1.49	3.56	-179.40	-305.73	-3.22	306.34	301.22	5.12	59.885		
500.00	500.00	469.12	470.73	1.93	3.73	-179.25	-312.71	-4.12	314.10	308.33	5.77	54.452		
600.00	599.98	558.40	559.47	2.37	3.93	-171.30	-322.39	-5.37	326.68	320.22	6.46	50.593		
700.00	699.84	646.32	646.52	2.81	4.16	-171.13	-334.59	-6.94	345.70	338.52	7.17	48.205		
800.00	799.45	732.99	731.92	3.26	4.42	-170.98	-349.21	-8.83	371.02	363.13	7.89	47.028		
900.00	898.70	828.40	825.72	3.70	4.73	-170.87	-366.53	-11.06	400.92	392.34	8.58	46.701		
1,000.00	997.47	922.73	918.46	4.15	5.07	-170.83	-383.66	-13.27	434.10	424.80	9.31	46.649		
1,100.00	1,095.78	1,016.15	1,010.29	4.60	5.42	-170.91	-400.62	-15.46	469.78	459.74	10.04	46.792		
1,200.00	1,194.05	1,109.50	1,102.06	5.05	5.79	-171.01	-417.58	-17.65	505.63	494.85	10.78	46.912		
1,300.00	1,292.33	1,202.84	1,193.83	5.50	6.17	-171.10	-434.53	-19.83	541.48	529.95	11.54	46.942		
1,400.00	1,390.61	1,303.81	1,285.60	5.96	6.60	-171.18	-451.48	-22.02	577.34	565.00	12.34	46.795		
1,500.00	1,488.89	1,389.54	1,377.38	6.43	6.96	-171.24	-468.43	-24.21	613.19	600.10	13.09	46.836		
1,600.00	1,587.16	1,482.89	1,469.15	6.89	7.37	-171.31	-485.38	-26.39	649.04	635.16	13.89	46.735		
1,700.00	1,685.44	1,576.24	1,560.92	7.36	7.78	-171.36	-502.33	-28.58	684.90	670.21	14.69	46.616		
1,800.00	1,783.72	1,669.59	1,652.69	7.83	8.20	-171.41	-519.28	-30.77	720.75	705.25	15.50	46.488		
1,900.00	1,882.00	1,762.94	1,744.46	8.30	8.63	-171.46	-536.23	-32.95	756.61	740.29	16.32	46.354		
2,000.00	1,980.27	1,856.29	1,836.23	8.77	9.05	-171.50	-553.19	-35.14	792.47	775.32	17.15	46.218		
2,100.00	2,078.55	1,949.64	1,928.00	9.25	9.48	-171.53	-570.14	-37.33	828.32	810.35	17.97	46.082		
2,200.00	2,176.83	2,042.99	2,019.77	9.72	9.92	-171.57	-587.09	-39.51	864.18	845.37	18.81	45.948		
2,300.00	2,275.11	2,136.34	2,111.55	10.19	10.35	-171.60	-604.04	-41.70	900.04	880.39	19.64	45.817		
2,400.00	2,373.38	2,229.69	2,203.32	10.66	10.79	-171.63	-620.99	-43.88	935.89	915.41	20.48	45.690		
2,500.00	2,471.66	2,323.03	2,295.09	11.14	11.23	-171.66	-637.94	-46.07	971.75	950.43	21.33	45.566		
2,600.00	2,569.94	2,416.38	2,386.86	11.61	11.67	-171.68	-654.89	-48.26	1,007.61	985.44	22.17	45.447		
2,700.00	2,668.22	2,509.73	2,478.63	12.09	12.12	-171.70	-671.84	-50.44	1,043.47	1,020.45	23.02	45.332		
2,800.00	2,766.49	2,603.08	2,570.40	12.56	12.56	-171.73	-688.79	-52.63	1,079.32	1,055.46	23.87	45.222		
2,900.00	2,864.77	2,703.57	2,662.17	13.04	13.04	-171.75	-705.75	-54.82	1,115.18	1,090.43	24.75	45.057		
3,000.00	2,963.05	2,789.78	2,753.94	13.51	13.46	-171.77	-722.70	-57.00	1,151.04	1,125.47	25.57	45.013		
3,100.00	3,061.33	2,883.13	2,845.71	13.99	13.90	-171.78	-739.65	-59.19	1,186.90	1,160.47	26.43	44.915		
3,200.00	3,159.60	2,976.48	2,937.49	14.46	14.35	-171.80	-756.60	-61.38	1,222.76	1,195.48	27.28	44.821		
3,300.00	3,257.88	3,069.83	3,029.26	14.94	14.80	-171.82	-773.55	-63.56	1,258.62	1,230.48	28.14	44.731		
3,400.00	3,356.16	3,163.18	3,121.03	15.41	15.25	-171.83	-790.50	-65.75	1,294.47	1,265.48	29.00	44.645		
3,500.00	3,454.43	3,256.53	3,212.80	15.89	15.71	-171.84	-807.45	-67.94	1,330.33	1,300.48	29.85	44.561		
3,600.00	3,552.71	3,349.88	3,304.57	16.36	16.16	-171.86	-824.40	-70.12	1,366.19	1,335.48	30.71	44.482		
3,700.00	3,650.99	3,443.22	3,396.34	16.84	16.61	-171.87	-841.36	-72.31	1,402.05	1,370.48	31.57	44.405		
3,800.00	3,749.27	3,536.57	3,488.11	17.32	17.06	-171.88	-858.31	-74.50	1,437.91	1,405.47	32.44	44.331		
3,900.00	3,847.54	3,629.92	3,579.88	17.79	17.52	-171.89	-875.26	-76.68	1,473.77	1,440.47	33.30	44.260		
4,000.00	3,945.82	3,723.27	3,671.65	18.27	17.97	-171.91	-892.21	-78.87	1,509.63	1,475.47	34.16	44.192		
4,100.00	4,044.10	3,816.62	3,763.43	18.75	18.43	-171.92	-909.16	-81.06	1,545.49	1,510.46	35.02	44.126		
4,200.00	4,142.38	3,909.97	3,855.20	19.22	18.88	-171.93	-926.11	-83.24	1,581.35	1,545.46	35.89	44.063		
4,300.00	4,240.65	4,003.32	3,946.97	19.70	19.34	-171.94	-943.06	-85.43	1,617.20	1,580.45	36.75	44.002		
4,400.00	4,338.93	4,096.67	4,038.74	20.18	19.79	-171.95	-960.01	-87.62	1,653.06	1,615.45	37.62	43.943		
4,500.00	4,437.21	4,190.02	4,130.51	20.65	20.25	-171.95	-976.96	-89.80	1,688.92	1,650.44	38.48	43.886		
4,600.00	4,535.49	4,283.37	4,222.28	21.13	20.70	-171.96	-993.92	-91.99	1,724.78	1,685.43	39.35	43.832		
4,700.00	4,633.76	4,376.72	4,314.05	21.61	21.16	-171.97	-1,010.87	-94.17	1,760.64	1,720.42	40.22	43.779		
4,800.00	4,732.04	4,470.07	4,405.82	22.08	21.62	-171.98	-1,027.82	-96.36	1,796.50	1,755.42	41.08	43.727		
4,900.00	4,830.32	4,563.41	4,497.60	22.56	22.07	-171.99	-1,044.77	-98.55	1,832.36	1,790.41	41.95	43.678		
5,000.00	4,928.60	4,656.76	4,589.37	23.04	22.53	-171.99	-1,061.72	-100.73	1,868.22	1,825.40	42.82	43.630		
5,100.00	5,026.87	4,750.11	4,681.14	23.51	22.99	-172.00	-1,078.67	-102.92	1,904.08	1,860.39	43.69	43.584		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,843.46	4,772.91	23.99	23.45	-172.01	-1,095.62	-105.11	1,939.94	1,895.38	44.56	43.539		
5,300.00	5,223.43	4,936.81	4,864.68	24.47	23.90	-172.01	-1,112.57	-107.29	1,975.80	1,930.37	45.43	43.496		
5,400.00	5,321.71	5,030.16	4,956.45	24.94	24.36	-172.02	-1,129.53	-109.48	2,011.66	1,965.36	46.29	43.453		
5,500.00	5,419.98	5,123.51	5,048.22	25.42	24.82	-172.02	-1,146.48	-111.67	2,047.52	2,000.35	47.16	43.413		
5,600.00	5,518.26	5,216.86	5,139.99	25.90	25.28	-172.03	-1,163.43	-113.85	2,083.37	2,035.34	48.03	43.373		
5,700.00	5,616.54	5,310.21	5,231.76	26.38	25.74	-172.04	-1,180.38	-116.04	2,119.23	2,070.33	48.90	43.334		
5,800.00	5,714.82	5,403.56	5,323.54	26.85	26.20	-172.04	-1,197.33	-118.23	2,155.09	2,105.32	49.77	43.297		
5,900.00	5,813.09	5,503.09	5,415.31	27.33	26.68	-172.05	-1,214.28	-120.41	2,190.95	2,140.28	50.67	43.236		
6,000.00	5,911.37	5,609.74	5,507.08	27.81	27.21	-172.05	-1,231.23	-122.60	2,226.81	2,175.21	51.61	43.150		
6,100.00	6,009.65	5,683.61	5,598.85	28.28	27.57	-172.06	-1,248.18	-124.79	2,262.67	2,210.28	52.39	43.191		
6,200.00	6,107.93	5,776.95	5,690.62	28.76	28.03	-172.06	-1,265.13	-126.97	2,298.53	2,245.27	53.26	43.157		
6,300.00	6,206.20	5,870.30	5,782.39	29.24	28.49	-172.07	-1,282.09	-129.16	2,334.39	2,280.26	54.13	43.125		
6,400.00	6,304.48	5,963.65	5,874.16	29.72	28.95	-172.07	-1,299.04	-131.35	2,370.25	2,315.25	55.00	43.093		
6,500.00	6,402.76	6,057.00	5,965.93	30.19	29.41	-172.07	-1,315.99	-133.53	2,406.11	2,350.23	55.88	43.062		
6,600.00	6,501.04	6,150.35	6,057.70	30.67	29.87	-172.08	-1,332.94	-135.72	2,441.97	2,385.22	56.75	43.032		
6,700.00	6,599.31	6,243.70	6,149.48	31.15	30.33	-172.08	-1,349.89	-137.91	2,477.83	2,420.21	57.62	43.002		
6,800.00	6,697.59	6,337.02	6,241.21	31.63	30.79	-149.50	-1,366.84	-140.09	2,513.64	2,455.14	58.49	42.972		
6,900.00	6,794.18	6,429.24	6,331.88	32.10	31.24	-120.67	-1,383.58	-142.25	2,548.79	2,489.43	59.37	42.934		
7,000.00	6,886.96	6,518.18	6,419.32	32.55	31.68	-106.63	-1,399.73	-144.33	2,582.69	2,522.47	60.22	42.890		
7,100.00	6,973.57	6,601.63	6,501.36	32.99	32.09	-98.63	-1,414.89	-146.29	2,614.99	2,553.95	61.04	42.839		
7,200.00	7,051.87	6,687.63	6,585.78	33.41	32.52	-93.55	-1,430.52	-150.62	2,645.51	2,583.57	61.94	42.712		
7,300.00	7,119.93	6,787.94	6,682.54	33.85	32.99	-90.20	-1,448.67	-169.30	2,673.60	2,610.57	63.03	42.415		
7,400.00	7,176.09	6,904.40	6,789.55	34.39	33.51	-88.07	-1,469.07	-210.02	2,698.54	2,634.19	64.35	41.935		
7,500.00	7,218.95	7,044.45	6,905.84	35.09	34.06	-86.96	-1,491.74	-284.17	2,719.46	2,653.52	65.95	41.238		
7,600.00	7,247.46	7,217.38	7,022.97	35.98	34.66	-86.74	-1,515.41	-408.44	2,735.26	2,667.30	67.95	40.253		
7,700.00	7,260.92	7,429.59	7,115.23	37.04	35.49	-87.13	-1,535.57	-597.38	2,744.45	2,673.74	70.71	38.814		
7,800.00	7,261.75	7,641.04	7,141.88	38.23	37.19	-87.50	-1,543.96	-806.04	2,746.28	2,672.07	74.21	37.008		
7,900.00	7,261.33	7,741.04	7,141.34	39.59	38.38	-87.50	-1,545.53	-906.03	2,746.19	2,669.30	76.90	35.711		
8,000.00	7,260.91	7,841.04	7,140.80	41.10	39.78	-87.49	-1,547.10	-1,006.02	2,746.11	2,666.21	79.90	34.369		
8,100.00	7,260.49	7,941.04	7,140.26	42.75	41.34	-87.49	-1,548.67	-1,106.00	2,746.03	2,662.84	83.19	33.011		
8,200.00	7,260.07	8,041.04	7,139.71	44.53	43.04	-87.49	-1,550.24	-1,205.99	2,745.95	2,659.22	86.72	31.664		
8,300.00	7,259.65	8,141.04	7,139.17	46.41	44.87	-87.49	-1,551.81	-1,305.97	2,745.86	2,655.38	90.48	30.348		
8,400.00	7,259.23	8,241.04	7,138.63	48.39	46.80	-87.48	-1,553.38	-1,405.96	2,745.78	2,651.35	94.43	29.076		
8,500.00	7,258.81	8,341.04	7,138.09	50.45	48.83	-87.48	-1,554.95	-1,505.95	2,745.70	2,647.14	98.56	27.858		
8,600.00	7,258.39	8,441.04	7,137.55	52.59	50.94	-87.48	-1,556.52	-1,605.93	2,745.61	2,642.78	102.84	26.699		
8,700.00	7,257.97	8,541.04	7,137.00	54.79	53.12	-87.47	-1,558.09	-1,705.92	2,745.53	2,638.28	107.25	25.600		
8,800.00	7,257.55	8,641.04	7,136.46	57.05	55.36	-87.47	-1,559.66	-1,805.90	2,745.45	2,633.67	111.77	24.563		
8,900.00	7,257.13	8,741.04	7,135.92	59.36	57.66	-87.47	-1,561.23	-1,905.89	2,745.36	2,628.96	116.40	23.585		
9,000.00	7,256.71	8,841.04	7,135.38	61.72	60.01	-87.47	-1,562.80	-2,005.88	2,745.28	2,624.15	121.13	22.665		
9,100.00	7,256.29	8,941.04	7,134.84	64.12	62.40	-87.46	-1,564.37	-2,105.86	2,745.20	2,619.27	125.93	21.799		
9,200.00	7,255.87	9,041.04	7,134.29	66.56	64.82	-87.46	-1,565.94	-2,205.85	2,745.11	2,614.31	130.81	20.986		
9,300.00	7,255.45	9,141.04	7,133.75	69.02	67.28	-87.46	-1,567.51	-2,305.83	2,745.03	2,609.28	135.75	20.222		
9,400.00	7,255.03	9,241.04	7,133.21	71.52	69.77	-87.46	-1,569.08	-2,405.82	2,744.95	2,604.20	140.75	19.503		
9,500.00	7,254.61	9,341.04	7,132.67	74.04	72.29	-87.45	-1,570.65	-2,505.81	2,744.86	2,599.07	145.80	18.827		
9,600.00	7,254.19	9,441.04	7,132.13	76.58	74.84	-87.45	-1,572.22	-2,605.79	2,744.78	2,593.89	150.89	18.190		
9,700.00	7,253.77	9,541.04	7,131.59	79.15	77.40	-87.45	-1,573.79	-2,705.78	2,744.70	2,588.67	156.03	17.591		
9,800.00	7,253.35	9,641.04	7,131.04	81.74	79.98	-87.45	-1,575.36	-2,805.77	2,744.62	2,583.41	161.21	17.025		
9,900.00	7,252.92	9,741.04	7,130.50	84.34	82.59	-87.44	-1,576.93	-2,905.75	2,744.53	2,578.11	166.42	16.491		
10,000.00	7,252.50	9,841.04	7,129.96	86.96	85.21	-87.44	-1,578.50	-3,005.74	2,744.45	2,572.78	171.67	15.987		
10,100.00	7,252.08	9,941.04	7,129.42	89.59	87.84	-87.44	-1,580.07	-3,105.72	2,744.37	2,567.43	176.94	15.510		
10,200.00	7,251.66	10,041.04	7,128.88	92.24	90.49	-87.44	-1,581.64	-3,205.71	2,744.28	2,562.05	182.23	15.059		
10,300.00	7,251.24	10,141.04	7,128.33	94.90	93.15	-87.43	-1,583.21	-3,305.70	2,744.20	2,556.64	187.56	14.631		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)				Between Centres (ft)	Between Ellipses (ft)				
10,400.00	7,250.82	10,241.04	7,127.79	97.57	95.82	-87.43	-1,584.78	-3,405.68	2,744.12	2,551.22	192.90	14.226		
10,500.00	7,250.40	10,341.04	7,127.25	100.25	98.50	-87.43	-1,586.35	-3,505.67	2,744.03	2,545.77	198.26	13.840		
10,600.00	7,249.98	10,441.04	7,126.71	102.93	101.19	-87.43	-1,587.92	-3,605.65	2,743.95	2,540.31	203.65	13.474		
10,700.00	7,249.56	10,541.04	7,126.17	105.63	103.89	-87.42	-1,589.49	-3,705.64	2,743.87	2,534.82	209.04	13.126		
10,800.00	7,249.14	10,641.04	7,125.62	108.34	106.60	-87.42	-1,591.06	-3,805.63	2,743.78	2,529.32	214.46	12.794		
10,900.00	7,248.72	10,741.04	7,125.08	111.05	109.31	-87.42	-1,592.63	-3,905.61	2,743.70	2,523.81	219.89	12.478		
11,000.00	7,248.30	10,841.04	7,124.54	113.77	112.03	-87.41	-1,594.20	-4,005.60	2,743.62	2,518.29	225.33	12.176		
11,100.00	7,247.88	10,941.04	7,124.00	116.50	114.76	-87.41	-1,595.77	-4,105.58	2,743.54	2,512.75	230.79	11.888		
11,200.00	7,247.46	11,041.04	7,123.46	119.23	117.50	-87.41	-1,597.34	-4,205.57	2,743.45	2,507.20	236.26	11.612		
11,300.00	7,247.04	11,141.04	7,122.91	121.97	120.24	-87.41	-1,598.91	-4,305.56	2,743.37	2,501.63	241.73	11.349		
11,400.00	7,246.62	11,241.04	7,122.37	124.72	122.98	-87.40	-1,600.48	-4,405.54	2,743.29	2,496.06	247.22	11.096		
11,500.00	7,246.20	11,341.04	7,121.83	127.46	125.73	-87.40	-1,602.06	-4,505.53	2,743.20	2,490.48	252.72	10.855		
11,600.00	7,245.78	11,441.04	7,121.29	130.22	128.49	-87.40	-1,603.63	-4,605.51	2,743.12	2,484.89	258.23	10.623		
11,700.00	7,245.36	11,541.04	7,120.75	132.98	131.25	-87.40	-1,605.20	-4,705.50	2,743.04	2,479.29	263.74	10.400		
11,800.00	7,244.94	11,641.04	7,120.20	135.74	134.01	-87.39	-1,606.77	-4,805.49	2,742.95	2,473.69	269.27	10.187		
11,900.00	7,244.52	11,741.04	7,119.66	138.50	136.78	-87.39	-1,608.34	-4,905.47	2,742.87	2,468.07	274.80	9.981		
12,000.00	7,244.10	11,841.04	7,119.12	141.27	139.55	-87.39	-1,609.91	-5,005.46	2,742.79	2,462.45	280.34	9.784		
12,100.00	7,243.68	11,941.04	7,118.58	144.04	142.32	-87.39	-1,611.48	-5,105.45	2,742.71	2,456.83	285.88	9.594		
12,200.00	7,243.26	12,041.04	7,118.04	146.82	145.10	-87.38	-1,613.05	-5,205.43	2,742.62	2,451.19	291.43	9.411		
12,300.00	7,242.84	12,141.04	7,117.49	149.60	147.88	-87.38	-1,614.62	-5,305.42	2,742.54	2,445.55	296.99	9.235		
12,400.00	7,242.42	12,241.04	7,116.95	152.38	150.66	-87.38	-1,616.19	-5,405.40	2,742.46	2,439.91	302.55	9.065		
12,500.00	7,242.00	12,341.04	7,116.41	155.16	153.45	-87.38	-1,617.76	-5,505.39	2,742.37	2,434.26	308.12	8.900		
12,600.00	7,241.58	12,441.04	7,115.87	157.95	156.24	-87.37	-1,619.33	-5,605.38	2,742.29	2,428.60	313.69	8.742		
12,700.00	7,241.16	12,541.04	7,115.33	160.74	159.03	-87.37	-1,620.90	-5,705.36	2,742.21	2,422.94	319.26	8.589		
12,800.00	7,240.74	12,641.04	7,114.78	163.53	161.82	-87.37	-1,622.47	-5,805.35	2,742.13	2,417.28	324.84	8.441		
12,900.00	7,240.32	12,741.04	7,114.24	166.32	164.62	-87.36	-1,624.04	-5,905.33	2,742.04	2,411.61	330.43	8.298		
13,000.00	7,239.89	12,841.04	7,113.70	169.12	167.41	-87.36	-1,625.61	-6,005.32	2,741.96	2,405.94	336.02	8.160		
13,100.00	7,239.47	12,941.04	7,113.16	171.92	170.21	-87.36	-1,627.18	-6,105.31	2,741.88	2,400.27	341.61	8.026		
13,200.00	7,239.05	13,041.04	7,112.62	174.72	173.01	-87.36	-1,628.75	-6,205.29	2,741.79	2,394.59	347.21	7.897		
13,300.00	7,238.63	13,141.04	7,112.07	177.52	175.82	-87.35	-1,630.32	-6,305.28	2,741.71	2,388.90	352.81	7.771		
13,400.00	7,238.21	13,241.03	7,111.53	180.32	178.62	-87.35	-1,631.89	-6,405.26	2,741.63	2,383.22	358.41	7.649		
13,500.00	7,237.79	13,341.03	7,110.99	183.13	181.43	-87.35	-1,633.46	-6,505.25	2,741.55	2,377.53	364.02	7.531		
13,600.00	7,237.37	13,441.03	7,110.45	185.93	184.24	-87.35	-1,635.03	-6,605.24	2,741.46	2,371.84	369.63	7.417		
13,700.00	7,236.95	13,541.03	7,109.91	188.74	187.04	-87.34	-1,636.60	-6,705.22	2,741.38	2,366.14	375.24	7.306		
13,800.00	7,236.53	13,641.03	7,109.36	191.55	189.85	-87.34	-1,638.17	-6,805.21	2,741.30	2,360.44	380.85	7.198		
13,900.00	7,236.11	13,741.03	7,108.82	194.36	192.67	-87.34	-1,639.74	-6,905.19	2,741.21	2,354.74	386.47	7.093		
14,000.00	7,235.69	13,841.03	7,108.28	197.17	195.48	-87.34	-1,641.31	-7,005.18	2,741.13	2,349.04	392.09	6.991		
14,100.00	7,235.27	13,941.03	7,107.74	199.98	198.29	-87.33	-1,642.88	-7,105.17	2,741.05	2,343.34	397.71	6.892		
14,200.00	7,234.85	14,041.03	7,107.20	202.80	201.11	-87.33	-1,644.45	-7,205.15	2,740.97	2,337.63	403.34	6.796		
14,300.00	7,234.43	14,141.03	7,106.65	205.61	203.93	-87.33	-1,646.02	-7,305.14	2,740.88	2,331.92	408.96	6.702		
14,400.00	7,234.01	14,241.03	7,106.11	208.43	206.74	-87.33	-1,647.59	-7,405.13	2,740.80	2,326.21	414.59	6.611		
14,500.00	7,233.59	14,341.03	7,105.57	211.25	209.56	-87.32	-1,649.16	-7,505.11	2,740.72	2,320.50	420.22	6.522		
14,600.00	7,233.17	14,441.03	7,105.03	214.06	212.38	-87.32	-1,650.73	-7,605.10	2,740.63	2,314.78	425.85	6.436		
14,700.00	7,232.75	14,541.03	7,104.49	216.88	215.20	-87.32	-1,652.30	-7,705.08	2,740.55	2,309.06	431.49	6.351		
14,800.00	7,232.33	14,641.03	7,103.94	219.70	218.02	-87.32	-1,653.87	-7,805.07	2,740.47	2,303.34	437.12	6.269		
14,900.00	7,231.91	14,741.03	7,103.40	222.52	220.85	-87.31	-1,655.44	-7,905.06	2,740.39	2,297.62	442.76	6.189		
15,000.00	7,231.49	14,841.03	7,102.86	225.35	223.67	-87.31	-1,657.01	-8,005.04	2,740.30	2,291.90	448.40	6.111		
15,100.00	7,231.07	14,941.03	7,102.32	228.17	226.49	-87.31	-1,658.58	-8,105.03	2,740.22	2,286.18	454.04	6.035		
15,116.21	7,231.00	14,957.24	7,102.23	228.63	226.95	-87.31	-1,658.83	-8,121.24	2,740.21	2,285.25	454.96	6.023 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	0.00	3.28	-179.51	-420.05	-3.62	420.06					
100.00	100.00	103.00	100.00	0.18	3.29	-179.51	-420.05	-3.62	420.06	416.60	3.46	121.373		
200.00	200.00	197.00	200.00	0.61	3.33	-179.51	-420.05	-3.62	420.06	416.11	3.95	106.375 CC, ES		
300.00	300.00	284.59	287.58	1.05	3.42	-179.50	-421.29	-3.70	421.49	417.00	4.50	93.743		
400.00	400.00	371.64	374.53	1.49	3.54	-179.47	-425.18	-3.94	425.96	420.86	5.10	83.543		
500.00	500.00	458.37	461.02	1.93	3.70	-179.42	-431.67	-4.35	433.45	427.71	5.74	75.525		
600.00	599.98	544.43	546.60	2.37	3.90	-171.61	-440.69	-4.93	445.65	439.24	6.41	69.485		
700.00	699.84	629.24	630.64	2.81	4.11	-171.56	-452.08	-5.65	464.21	457.09	7.11	65.260		
800.00	799.45	712.32	712.59	3.26	4.35	-171.52	-465.64	-6.51	488.99	481.17	7.82	62.536		
900.00	898.70	793.22	791.99	3.70	4.61	-171.50	-481.12	-7.50	519.84	511.31	8.52	60.992		
1,000.00	997.47	871.54	868.41	4.15	4.89	-171.49	-498.24	-8.59	556.54	547.33	9.21	60.399		
1,100.00	1,095.78	947.23	941.78	4.60	5.18	-171.55	-516.75	-9.76	598.17	588.28	9.89	60.453		
1,200.00	1,194.05	1,021.01	1,012.82	5.05	5.49	-171.64	-536.65	-11.03	642.32	631.78	10.55	60.909		
1,300.00	1,292.33	1,092.91	1,081.52	5.50	5.80	-171.70	-557.80	-12.37	688.74	677.55	11.19	61.572		
1,400.00	1,390.61	1,162.92	1,147.89	5.96	6.12	-171.75	-580.04	-13.78	737.33	725.51	11.81	62.409		
1,500.00	1,488.89	1,231.65	1,211.85	6.43	6.45	-171.78	-603.19	-15.26	788.01	775.58	12.43	63.392		
1,600.00	1,587.16	1,316.56	1,291.96	6.89	6.87	-171.81	-633.28	-17.17	839.71	826.57	13.14	63.897		
1,700.00	1,685.44	1,402.15	1,372.07	7.36	7.31	-171.84	-663.38	-19.08	891.42	877.54	13.87	64.257		
1,800.00	1,783.72	1,487.75	1,452.18	7.83	7.77	-171.86	-693.47	-20.99	943.12	928.50	14.62	64.516		
1,900.00	1,882.00	1,573.34	1,532.29	8.30	8.23	-171.88	-723.56	-22.91	994.82	979.45	15.38	64.698		
2,000.00	1,980.27	1,658.94	1,612.40	8.77	8.70	-171.90	-753.65	-24.82	1,046.53	1,030.38	16.15	64.819		
2,100.00	2,078.55	1,744.53	1,692.50	9.25	9.18	-171.92	-783.74	-26.73	1,098.23	1,081.31	16.92	64.894		
2,200.00	2,176.83	1,830.13	1,772.61	9.72	9.66	-171.94	-813.84	-28.64	1,149.94	1,132.23	17.71	64.933		
2,300.00	2,275.11	1,915.73	1,852.72	10.19	10.14	-171.95	-843.93	-30.56	1,201.64	1,183.14	18.50	64.944		
2,400.00	2,373.38	2,001.32	1,932.83	10.66	10.63	-171.96	-874.02	-32.47	1,253.34	1,234.04	19.30	64.934		
2,500.00	2,471.66	2,086.92	2,012.94	11.14	11.13	-171.98	-904.11	-34.38	1,305.05	1,284.94	20.11	64.907		
2,600.00	2,569.94	2,172.51	2,093.05	11.61	11.62	-171.99	-934.20	-36.29	1,356.75	1,335.84	20.92	64.867		
2,700.00	2,668.22	2,258.11	2,173.16	12.09	12.12	-172.00	-964.30	-38.21	1,408.46	1,386.73	21.73	64.817		
2,800.00	2,766.49	2,343.70	2,253.27	12.56	12.62	-172.01	-994.39	-40.12	1,460.16	1,437.61	22.55	64.761		
2,900.00	2,864.77	2,429.30	2,333.38	13.04	13.12	-172.02	-1,024.48	-42.03	1,511.87	1,488.50	23.37	64.699		
3,000.00	2,963.05	2,514.89	2,413.48	13.51	13.63	-172.02	-1,054.57	-43.94	1,563.57	1,539.38	24.19	64.633		
3,100.00	3,061.33	2,600.49	2,493.59	13.99	14.14	-172.03	-1,084.66	-45.86	1,615.28	1,590.26	25.02	64.564		
3,200.00	3,159.60	2,686.09	2,573.70	14.46	14.64	-172.04	-1,114.75	-47.77	1,666.98	1,641.13	25.85	64.494		
3,300.00	3,257.88	2,771.68	2,653.81	14.94	15.15	-172.05	-1,144.85	-49.68	1,718.68	1,692.01	26.68	64.422		
3,400.00	3,356.16	2,857.28	2,733.92	15.41	15.67	-172.05	-1,174.94	-51.60	1,770.39	1,742.88	27.51	64.350		
3,500.00	3,454.43	2,942.87	2,814.03	15.89	16.18	-172.06	-1,205.03	-53.51	1,822.09	1,793.75	28.35	64.278		
3,600.00	3,552.71	3,028.47	2,894.14	16.36	16.69	-172.07	-1,235.12	-55.42	1,873.80	1,844.61	29.18	64.207		
3,700.00	3,650.99	3,114.06	2,974.25	16.84	17.20	-172.07	-1,265.21	-57.33	1,925.50	1,895.48	30.02	64.136		
3,800.00	3,749.27	3,199.66	3,054.36	17.32	17.72	-172.08	-1,295.31	-59.25	1,977.21	1,946.35	30.86	64.066		
3,900.00	3,847.54	3,285.26	3,134.46	17.79	18.23	-172.08	-1,325.40	-61.16	2,028.91	1,997.21	31.70	63.996		
4,000.00	3,945.82	3,370.85	3,214.57	18.27	18.75	-172.09	-1,355.49	-63.07	2,080.62	2,048.07	32.55	63.928		
4,100.00	4,044.10	3,456.45	3,294.68	18.75	19.27	-172.09	-1,385.58	-64.98	2,132.32	2,098.93	33.39	63.861		
4,200.00	4,142.38	3,542.04	3,374.79	19.22	19.78	-172.09	-1,415.67	-66.90	2,184.03	2,149.79	34.23	63.795		
4,300.00	4,240.65	3,627.64	3,454.90	19.70	20.30	-172.10	-1,445.77	-68.81	2,235.73	2,200.65	35.08	63.731		
4,400.00	4,338.93	3,713.23	3,535.01	20.18	20.82	-172.10	-1,475.86	-70.72	2,287.44	2,251.51	35.93	63.668		
4,500.00	4,437.21	3,801.17	3,615.12	20.65	21.35	-172.11	-1,505.95	-72.63	2,339.14	2,302.35	36.79	63.585		
4,600.00	4,535.49	3,884.42	3,695.23	21.13	21.86	-172.11	-1,536.04	-74.55	2,390.84	2,353.22	37.62	63.546		
4,700.00	4,633.76	3,970.02	3,775.34	21.61	22.38	-172.11	-1,566.13	-76.46	2,442.55	2,404.08	38.47	63.487		
4,800.00	4,732.04	4,055.62	3,855.44	22.08	22.90	-172.12	-1,596.22	-78.37	2,494.25	2,454.93	39.32	63.429		
4,900.00	4,830.32	4,141.21	3,935.55	22.56	23.42	-172.12	-1,626.32	-80.28	2,545.96	2,505.78	40.17	63.372		
5,000.00	4,928.60	4,226.81	4,015.66	23.04	23.94	-172.12	-1,656.41	-82.20	2,597.66	2,556.64	41.03	63.317		
5,100.00	5,026.87	4,312.40	4,095.77	23.51	24.46	-172.13	-1,686.50	-84.11	2,649.37	2,607.49	41.88	63.263		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,398.00	4,175.88	23.99	24.98	-172.13	-1,716.59	-86.02	2,701.07	2,658.34	42.73	63.210		
5,300.00	5,223.43	4,483.59	4,255.99	24.47	25.50	-172.13	-1,746.68	-87.93	2,752.78	2,709.19	43.59	63.158		
5,400.00	5,321.71	4,569.19	4,336.10	24.94	26.02	-172.13	-1,776.78	-89.85	2,804.48	2,760.04	44.44	63.108		
5,500.00	5,419.98	4,654.79	4,416.21	25.42	26.54	-172.14	-1,806.87	-91.76	2,856.19	2,810.89	45.29	63.058		
5,600.00	5,518.26	4,740.38	4,496.31	25.90	27.06	-172.14	-1,836.96	-93.67	2,907.89	2,861.74	46.15	63.010		
5,700.00	5,616.54	4,825.98	4,576.42	26.38	27.59	-172.14	-1,867.05	-95.58	2,959.60	2,912.59	47.01	62.962		
5,800.00	5,714.82	4,911.57	4,656.53	26.85	28.11	-172.14	-1,897.14	-97.50	3,011.30	2,963.44	47.86	62.916		
5,900.00	5,813.09	5,002.83	4,736.64	27.33	28.67	-172.15	-1,927.24	-99.41	3,063.01	3,014.26	48.75	62.832		
6,000.00	5,911.37	5,082.76	4,816.75	27.81	29.15	-172.15	-1,957.33	-101.32	3,114.71	3,065.13	49.58	62.826		
6,100.00	6,009.65	5,168.36	4,896.86	28.28	29.68	-172.15	-1,987.42	-103.23	3,166.42	3,115.98	50.43	62.782		
6,200.00	6,107.93	5,253.95	4,976.97	28.76	30.20	-172.15	-2,017.51	-105.15	3,218.12	3,166.83	51.29	62.739		
6,300.00	6,206.20	5,339.55	5,057.08	29.24	30.72	-172.15	-2,047.60	-107.06	3,269.82	3,217.67	52.15	62.697		
6,400.00	6,304.48	5,425.15	5,137.19	29.72	31.25	-172.16	-2,077.69	-108.97	3,321.53	3,268.52	53.01	62.656		
6,500.00	6,402.76	5,510.74	5,217.29	30.19	31.77	-172.16	-2,107.79	-110.88	3,373.23	3,319.36	53.87	62.616		
6,600.00	6,501.04	5,603.66	5,297.40	30.67	32.34	-172.16	-2,137.88	-112.80	3,424.94	3,370.17	54.77	62.532		
6,700.00	6,599.31	5,681.93	5,377.51	31.15	32.82	-172.16	-2,167.97	-114.71	3,476.64	3,421.05	55.59	62.537		
6,800.00	6,697.50	5,767.51	5,457.60	31.63	33.34	-148.61	-2,198.05	-116.62	3,528.29	3,471.84	56.46	62.497		
6,900.00	6,794.18	5,852.13	5,536.80	32.10	33.86	-117.79	-2,227.81	-118.51	3,579.12	3,521.80	57.31	62.449		
7,000.00	6,886.96	5,933.80	5,613.23	32.55	34.36	-101.84	-2,256.52	-120.34	3,628.04	3,569.90	58.15	62.394		
7,100.00	6,973.57	6,010.49	5,685.01	32.99	34.83	-92.11	-2,283.48	-122.05	3,674.24	3,615.29	58.95	62.326		
7,200.00	7,051.87	6,080.32	5,750.36	33.41	35.26	-85.43	-2,308.03	-123.61	3,717.04	3,657.31	59.73	62.228		
7,300.00	7,119.93	6,141.57	5,807.68	33.85	35.63	-80.53	-2,329.56	-124.98	3,755.97	3,695.46	60.51	62.071		
7,400.00	7,176.09	6,192.73	5,855.56	34.39	35.95	-76.82	-2,347.54	-126.12	3,790.64	3,729.32	61.32	61.820		
7,500.00	7,218.95	6,232.54	5,892.82	35.09	36.19	-73.97	-2,361.54	-127.01	3,820.74	3,758.57	62.18	61.448		
7,600.00	7,247.46	6,260.02	5,918.54	35.98	36.36	-71.79	-2,371.20	-127.63	3,846.03	3,782.92	63.11	60.942		
7,700.00	7,260.92	6,274.49	5,932.09	37.04	36.45	-70.16	-2,376.29	-127.95	3,866.25	3,802.15	64.10	60.316		
7,800.00	7,261.75	6,278.00	5,935.38	38.23	36.47	-69.68	-2,377.52	-128.03	3,882.55	3,817.40	65.15	59.596		
7,900.00	7,261.33	6,280.43	5,937.64	39.59	36.48	-69.71	-2,378.38	-128.08	3,900.71	3,834.37	66.34	58.802		
8,000.00	7,260.91	6,282.85	5,939.91	41.10	36.50	-69.75	-2,379.23	-128.14	3,921.34	3,853.69	67.65	57.965		
8,100.00	7,260.49	6,285.28	5,942.18	42.75	36.51	-69.78	-2,380.08	-128.19	3,944.39	3,875.32	69.07	57.110		
8,200.00	7,260.07	6,287.70	5,944.45	44.53	36.53	-69.82	-2,380.93	-128.25	3,969.82	3,899.26	70.57	56.256		
8,300.00	7,259.65	6,290.12	5,946.72	46.41	36.54	-69.86	-2,381.79	-128.30	3,997.60	3,925.47	72.13	55.420		
8,400.00	7,259.23	6,292.55	5,948.99	48.39	36.56	-69.89	-2,382.64	-128.35	4,027.66	3,953.92	73.75	54.615		
8,500.00	7,258.81	6,305.03	5,951.25	50.45	36.63	-69.93	-2,383.49	-128.41	4,059.97	3,984.52	75.45	53.811		
8,600.00	7,258.39	6,317.51	5,953.51	52.59	36.69	-69.97	-2,384.34	-128.47	4,093.52	4,016.43	77.24	53.000		
8,700.00	7,257.97	6,329.99	5,955.77	54.79	36.90	-69.80	-2,385.19	-128.53	4,127.65	4,048.94	79.11	52.184		
8,800.00	7,257.55	6,342.47	5,958.03	57.05	38.96	-89.79	-2,386.04	-128.59	4,162.38	4,082.05	81.04	51.363		
8,900.00	7,257.13	6,354.95	5,960.29	59.36	61.10	-89.79	-2,386.89	-128.65	4,196.71	4,115.36	83.02	50.538		
9,000.00	7,256.71	6,367.43	5,962.55	61.72	63.31	-89.79	-2,387.74	-128.71	4,230.74	4,148.67	85.04	49.709		
9,100.00	7,256.29	6,379.91	5,964.81	64.12	65.57	-89.79	-2,388.59	-128.77	4,264.37	4,181.98	87.10	48.876		
9,200.00	7,255.87	6,392.39	5,967.07	66.56	67.88	-89.79	-2,389.44	-128.83	4,297.60	4,215.29	89.20	48.039		
9,300.00	7,255.45	6,404.87	5,969.33	69.02	70.23	-89.79	-2,390.29	-128.89	4,330.43	4,248.60	91.33	47.198		
9,400.00	7,255.03	6,417.35	5,971.59	71.52	72.62	-89.79	-2,391.14	-128.95	4,362.86	4,281.91	93.49	46.353		
9,500.00	7,254.61	6,429.83	5,973.85	74.04	75.05	-89.79	-2,391.99	-129.01	4,394.89	4,315.22	95.67	45.504		
9,600.00	7,254.19	6,442.31	5,976.11	76.58	77.50	-89.78	-2,392.84	-129.07	4,426.52	4,348.53	97.87	44.651		
9,700.00	7,253.77	6,454.79	5,978.37	79.15	79.99	-89.78	-2,393.69	-129.13	4,457.75	4,381.84	100.09	43.794		
9,800.00	7,253.35	6,467.27	5,980.63	81.74	82.50	-89.78	-2,394.54	-129.19	4,488.58	4,415.15	102.33	42.933		
9,900.00	7,252.92	6,479.75	5,982.89	84.34	85.03	-89.78	-2,395.39	-129.25	4,518.91	4,448.46	104.59	42.068		
10,000.00	7,252.50	6,492.23	5,985.15	86.96	87.58	-89.78	-2,396.24	-129.31	4,548.84	4,481.77	106.86	41.200		
10,100.00	7,252.08	6,504.71	5,987.41	89.59	90.16	-89.78	-2,397.09	-129.37	4,578.37	4,515.08	109.14	40.329		
10,200.00	7,251.66	6,517.19	5,989.67	92.24	92.75	-89.78	-2,397.94	-129.43	4,607.50	4,548.39	111.43	39.455		
10,300.00	7,251.24	6,529.67	5,991.93	94.90	95.35	-89.78	-2,398.79	-129.49	4,636.23	4,581.70	113.73	38.578		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,689.10	7,234.77	97.57	97.97	-89.78	-2,890.98	-3,425.50	4,047.31	3,852.26	195.05	20.750		
10,500.00	7,250.40	10,789.10	7,234.27	100.25	100.60	-89.77	-2,891.57	-3,525.49	4,046.24	3,845.86	200.38	20.193		
10,600.00	7,249.98	10,889.09	7,233.77	102.93	103.25	-89.77	-2,892.16	-3,625.49	4,045.17	3,839.43	205.73	19.662		
10,700.00	7,249.56	10,989.09	7,233.27	105.63	105.91	-89.77	-2,892.74	-3,725.48	4,044.10	3,832.99	211.10	19.157		
10,800.00	7,249.14	11,089.08	7,232.77	108.34	108.57	-89.77	-2,893.33	-3,825.47	4,043.02	3,826.54	216.49	18.675		
10,900.00	7,248.72	11,189.07	7,232.27	111.05	111.25	-89.77	-2,893.92	-3,925.46	4,041.95	3,820.06	221.89	18.216		
11,000.00	7,248.30	11,289.07	7,231.77	113.77	113.94	-89.77	-2,894.51	-4,025.45	4,040.88	3,813.57	227.31	17.777		
11,100.00	7,247.88	11,389.06	7,231.27	116.50	116.63	-89.77	-2,895.10	-4,125.44	4,039.81	3,807.07	232.74	17.357		
11,200.00	7,247.46	11,489.06	7,230.76	119.23	119.33	-89.77	-2,895.68	-4,225.43	4,038.74	3,800.55	238.19	16.956		
11,300.00	7,247.04	11,589.05	7,230.26	121.97	122.04	-89.76	-2,896.27	-4,325.42	4,037.67	3,794.02	243.65	16.572		
11,400.00	7,246.62	11,689.05	7,229.76	124.72	124.76	-89.76	-2,896.86	-4,425.42	4,036.60	3,787.48	249.12	16.203		
11,500.00	7,246.20	11,789.04	7,229.26	127.46	127.48	-89.76	-2,897.45	-4,525.41	4,035.53	3,780.93	254.60	15.850		
11,600.00	7,245.78	11,889.03	7,228.76	130.22	130.21	-89.76	-2,898.04	-4,625.40	4,034.46	3,774.37	260.09	15.512		
11,700.00	7,245.36	11,989.03	7,228.26	132.98	132.94	-89.76	-2,898.62	-4,725.39	4,033.39	3,767.80	265.59	15.186		
11,800.00	7,244.94	12,089.02	7,227.76	135.74	135.68	-89.76	-2,899.21	-4,825.38	4,032.32	3,761.22	271.10	14.874		
11,900.00	7,244.52	12,189.02	7,227.26	138.50	138.42	-89.76	-2,899.80	-4,925.37	4,031.25	3,754.64	276.62	14.573		
12,000.00	7,244.10	12,289.01	7,226.76	141.27	141.17	-89.76	-2,900.39	-5,025.36	4,030.18	3,748.04	282.14	14.284		
12,100.00	7,243.68	12,389.00	7,226.26	144.04	143.92	-89.75	-2,900.98	-5,125.35	4,029.11	3,741.44	287.68	14.006		
12,200.00	7,243.26	12,489.00	7,225.76	146.82	146.68	-89.75	-2,901.57	-5,225.35	4,028.04	3,734.83	293.22	13.737		
12,300.00	7,242.84	12,588.99	7,225.26	149.60	149.44	-89.75	-2,902.15	-5,325.34	4,026.97	3,728.21	298.76	13.479		
12,400.00	7,242.42	12,688.99	7,224.76	152.38	152.20	-89.75	-2,902.74	-5,425.33	4,025.90	3,721.59	304.31	13.229		
12,500.00	7,242.00	12,788.98	7,224.26	155.16	154.97	-89.75	-2,903.33	-5,525.32	4,024.83	3,714.96	309.87	12.989		
12,600.00	7,241.58	12,888.98	7,223.76	157.95	157.74	-89.75	-2,903.92	-5,625.31	4,023.76	3,708.33	315.44	12.756		
12,700.00	7,241.16	12,988.97	7,223.26	160.74	160.52	-89.75	-2,904.51	-5,725.30	4,022.69	3,701.69	321.00	12.532		
12,800.00	7,240.74	13,088.96	7,222.75	163.53	163.29	-89.75	-2,905.09	-5,825.29	4,021.62	3,695.04	326.58	12.314		
12,900.00	7,240.32	13,188.96	7,222.25	166.32	166.07	-89.75	-2,905.68	-5,925.29	4,020.55	3,688.40	332.16	12.104		
13,000.00	7,239.89	13,288.95	7,221.75	169.12	168.86	-89.74	-2,906.27	-6,025.28	4,019.48	3,681.74	337.74	11.901		
13,100.00	7,239.47	13,388.95	7,221.25	171.92	171.64	-89.74	-2,906.86	-6,125.27	4,018.41	3,675.08	343.33	11.704		
13,200.00	7,239.05	13,488.94	7,220.75	174.72	174.43	-89.74	-2,907.45	-6,225.26	4,017.34	3,668.42	348.92	11.514		
13,300.00	7,238.63	13,588.94	7,220.25	177.52	177.22	-89.74	-2,908.04	-6,325.25	4,016.27	3,661.76	354.51	11.329		
13,400.00	7,238.21	13,688.93	7,219.75	180.32	180.01	-89.74	-2,908.62	-6,425.24	4,015.20	3,655.09	360.11	11.150		
13,500.00	7,237.79	13,788.92	7,219.25	183.13	182.80	-89.74	-2,909.21	-6,525.23	4,014.13	3,648.41	365.72	10.976		
13,600.00	7,237.37	13,888.92	7,218.75	185.93	185.60	-89.74	-2,909.80	-6,625.22	4,013.06	3,641.74	371.32	10.807		
13,700.00	7,236.95	13,988.91	7,218.25	188.74	188.40	-89.74	-2,910.39	-6,725.22	4,011.99	3,635.06	376.93	10.644		
13,800.00	7,236.53	14,088.91	7,217.75	191.55	191.20	-89.73	-2,910.98	-6,825.21	4,010.92	3,628.38	382.54	10.485		
13,900.00	7,236.11	14,188.90	7,217.25	194.36	194.00	-89.73	-2,911.56	-6,925.20	4,009.85	3,621.69	388.16	10.330		
14,000.00	7,235.69	14,288.90	7,216.75	197.17	196.80	-89.73	-2,912.15	-7,025.19	4,008.78	3,615.00	393.78	10.180		
14,100.00	7,235.27	14,388.89	7,216.25	199.98	199.61	-89.73	-2,912.74	-7,125.18	4,007.71	3,608.31	399.40	10.034		
14,200.00	7,234.85	14,488.88	7,215.75	202.80	202.41	-89.73	-2,913.33	-7,225.17	4,006.64	3,601.62	405.02	9.892		
14,300.00	7,234.43	14,588.88	7,215.24	205.61	205.22	-89.73	-2,913.92	-7,325.16	4,005.57	3,594.92	410.65	9.754		
14,400.00	7,234.01	14,688.87	7,214.74	208.43	208.03	-89.73	-2,914.50	-7,425.15	4,004.50	3,588.22	416.28	9.620		
14,500.00	7,233.59	14,788.87	7,214.24	211.25	210.84	-89.73	-2,915.09	-7,525.15	4,003.43	3,581.52	421.91	9.489		
14,600.00	7,233.17	14,888.86	7,213.74	214.06	213.65	-89.72	-2,915.68	-7,625.14	4,002.36	3,574.82	427.54	9.361		
14,700.00	7,232.75	14,988.85	7,213.24	216.88	216.46	-89.72	-2,916.27	-7,725.13	4,001.29	3,568.12	433.17	9.237		
14,800.00	7,232.33	15,088.85	7,212.74	219.70	219.28	-89.72	-2,916.86	-7,825.12	4,000.22	3,561.41	438.81	9.116		
14,900.00	7,231.91	15,188.84	7,212.24	222.52	222.09	-89.72	-2,917.45	-7,925.11	3,999.15	3,554.70	444.45	8.998		
15,000.00	7,231.49	15,288.84	7,211.74	225.35	224.91	-89.72	-2,918.03	-8,025.10	3,998.08	3,547.99	450.09	8.883		
15,100.00	7,231.07	15,388.83	7,211.24	228.17	227.73	-89.72	-2,918.62	-8,125.09	3,997.01	3,541.28	455.73	8.770		
15,116.21	7,231.00	15,405.04	7,211.16	228.63	228.18	-89.72	-2,918.72	-8,141.30	3,996.84	3,540.19	456.65	8.753 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	3.00	0.00	0.00	3.28	-179.53	-440.07	-3.62	440.09				
100.00	100.00	103.00	100.00	0.18	3.29	-179.53	-440.07	-3.62	440.09	436.63	3.46	127.159	
200.00	200.00	197.00	200.00	0.61	3.33	-179.53	-440.07	-3.62	440.09	436.14	3.95	111.445 CC, ES	
300.00	300.00	284.07	287.06	1.05	3.42	-179.52	-441.30	-3.69	441.51	437.01	4.50	98.214	
400.00	400.00	370.59	373.49	1.49	3.54	-179.50	-445.14	-3.92	445.95	440.85	5.10	87.504	
500.00	500.00	456.81	459.46	1.93	3.70	-179.45	-451.55	-4.30	453.39	447.66	5.73	79.060	
600.00	599.98	542.36	544.55	2.37	3.89	-171.64	-460.47	-4.83	465.53	459.13	6.41	72.660	
700.00	699.84	626.68	628.10	2.81	4.11	-171.60	-471.73	-5.50	484.01	476.91	7.10	68.130	
800.00	799.45	709.28	709.61	3.26	4.34	-171.57	-485.14	-6.30	508.71	500.90	7.81	65.151	
900.00	898.70	789.74	788.58	3.70	4.60	-171.55	-500.45	-7.21	539.45	530.94	8.51	63.389	
1,000.00	997.47	867.65	864.62	4.15	4.88	-171.54	-517.38	-8.22	576.04	566.84	9.20	62.617	
1,100.00	1,095.78	942.96	937.66	4.60	5.17	-171.61	-535.70	-9.31	617.55	607.67	9.88	62.516	
1,200.00	1,194.05	1,016.38	1,008.38	5.05	5.47	-171.69	-555.41	-10.49	661.57	651.04	10.53	62.841	
1,300.00	1,292.33	1,087.95	1,076.80	5.50	5.77	-171.76	-576.35	-11.74	707.84	696.67	11.17	63.388	
1,400.00	1,390.61	1,157.66	1,142.92	5.96	6.09	-171.81	-598.37	-13.05	756.28	744.49	11.79	64.123	
1,500.00	1,488.89	1,225.49	1,206.73	6.43	6.42	-171.85	-621.34	-14.42	806.81	794.40	12.41	65.023	
1,600.00	1,587.16	1,291.44	1,268.23	6.89	6.75	-171.87	-645.12	-15.83	859.33	846.32	13.01	66.068	
1,700.00	1,685.44	1,360.48	1,332.03	7.36	7.11	-171.89	-671.44	-17.40	913.71	900.09	13.62	67.072	
1,800.00	1,783.72	1,444.05	1,409.07	7.83	7.56	-171.90	-703.77	-19.33	968.63	954.28	14.34	67.526	
1,900.00	1,882.00	1,527.62	1,486.11	8.30	8.03	-171.92	-736.10	-21.25	1,023.54	1,008.46	15.08	67.871	
2,000.00	1,980.27	1,611.19	1,563.15	8.77	8.50	-171.93	-768.43	-23.18	1,078.46	1,062.63	15.83	68.129	
2,100.00	2,078.55	1,705.24	1,640.19	9.25	9.04	-171.94	-800.76	-25.11	1,133.37	1,116.73	16.64	68.114	
2,200.00	2,176.83	1,778.34	1,717.24	9.72	9.47	-171.95	-833.08	-27.03	1,188.29	1,170.93	17.36	68.455	
2,300.00	2,275.11	1,861.91	1,794.28	10.19	9.96	-171.96	-865.41	-28.96	1,243.20	1,225.07	18.14	68.549	
2,400.00	2,373.38	1,945.48	1,871.32	10.66	10.46	-171.97	-897.74	-30.88	1,298.12	1,279.20	18.92	68.609	
2,500.00	2,471.66	2,029.05	1,948.36	11.14	10.96	-171.97	-930.07	-32.81	1,353.03	1,333.32	19.71	68.642	
2,600.00	2,569.94	2,112.62	2,025.40	11.61	11.46	-171.98	-962.40	-34.74	1,407.95	1,387.44	20.51	68.654	
2,700.00	2,668.22	2,203.80	2,102.45	12.09	12.02	-171.99	-994.73	-36.66	1,462.86	1,441.52	21.35	68.524	
2,800.00	2,766.49	2,279.77	2,179.49	12.56	12.48	-171.99	-1,027.05	-38.59	1,517.78	1,495.66	22.12	68.630	
2,900.00	2,864.77	2,363.34	2,256.53	13.04	13.00	-172.00	-1,059.38	-40.52	1,572.70	1,549.77	22.93	68.601	
3,000.00	2,963.05	2,446.91	2,333.57	13.51	13.51	-172.00	-1,091.71	-42.44	1,627.61	1,603.87	23.74	68.564	
3,100.00	3,061.33	2,530.48	2,410.61	13.99	14.03	-172.01	-1,124.04	-44.37	1,682.53	1,657.97	24.55	68.521	
3,200.00	3,159.60	2,614.06	2,487.66	14.46	14.55	-172.01	-1,156.37	-46.29	1,737.44	1,712.07	25.37	68.473	
3,300.00	3,257.88	2,702.37	2,564.70	14.94	15.10	-172.02	-1,188.70	-48.22	1,792.36	1,766.14	26.22	68.355	
3,400.00	3,356.16	2,781.20	2,641.74	15.41	15.59	-172.02	-1,221.02	-50.15	1,847.27	1,820.25	27.02	68.365	
3,500.00	3,454.43	2,864.77	2,718.78	15.89	16.11	-172.03	-1,253.35	-52.07	1,902.19	1,874.34	27.85	68.308	
3,600.00	3,552.71	2,948.34	2,795.82	16.36	16.64	-172.03	-1,285.68	-54.00	1,957.10	1,928.43	28.68	68.249	
3,700.00	3,650.99	3,031.92	2,872.86	16.84	17.16	-172.03	-1,318.01	-55.93	2,012.02	1,982.51	29.51	68.190	
3,800.00	3,749.27	3,115.49	2,949.91	17.32	17.69	-172.04	-1,350.34	-57.85	2,066.94	2,036.60	30.34	68.130	
3,900.00	3,847.54	3,200.94	3,026.95	17.79	18.23	-172.04	-1,382.66	-59.78	2,121.85	2,090.67	31.18	68.047	
4,000.00	3,945.82	3,282.63	3,103.99	18.27	18.75	-172.04	-1,414.99	-61.70	2,176.77	2,144.76	32.01	68.009	
4,100.00	4,044.10	3,366.20	3,181.03	18.75	19.27	-172.04	-1,447.32	-63.63	2,231.68	2,198.84	32.84	67.949	
4,200.00	4,142.38	3,449.78	3,258.07	19.22	19.80	-172.05	-1,479.65	-65.56	2,286.60	2,252.92	33.68	67.889	
4,300.00	4,240.65	3,533.35	3,335.12	19.70	20.33	-172.05	-1,511.98	-67.48	2,341.51	2,306.99	34.52	67.830	
4,400.00	4,338.93	3,616.92	3,412.16	20.18	20.86	-172.05	-1,544.31	-69.41	2,396.43	2,361.07	35.36	67.772	
4,500.00	4,437.21	3,700.49	3,489.20	20.65	21.40	-172.05	-1,576.63	-71.34	2,451.34	2,415.14	36.20	67.714	
4,600.00	4,535.49	3,784.06	3,566.24	21.13	21.93	-172.06	-1,608.96	-73.26	2,506.26	2,469.22	37.04	67.657	
4,700.00	4,633.76	3,867.64	3,643.28	21.61	22.46	-172.06	-1,641.29	-75.19	2,561.18	2,523.29	37.89	67.601	
4,800.00	4,732.04	3,951.21	3,720.33	22.08	22.99	-172.06	-1,673.62	-77.11	2,616.09	2,577.36	38.73	67.546	
4,900.00	4,830.32	4,034.78	3,797.37	22.56	23.52	-172.06	-1,705.95	-79.04	2,671.01	2,631.43	39.58	67.492	
5,000.00	4,928.60	4,118.35	3,874.41	23.04	24.06	-172.06	-1,738.28	-80.97	2,725.92	2,685.50	40.42	67.439	
5,100.00	5,026.87	4,201.92	3,951.45	23.51	24.59	-172.07	-1,770.60	-82.89	2,780.84	2,739.57	41.27	67.386	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,285.50	4,028.49	23.99	25.13	-172.07	-1,802.93	-84.82	2,835.75	2,793.64	42.11	67.335		
5,300.00	5,223.43	4,369.07	4,105.53	24.47	25.66	-172.07	-1,835.26	-86.74	2,890.67	2,847.71	42.96	67.284		
5,400.00	5,321.71	4,452.64	4,182.58	24.94	26.19	-172.07	-1,867.59	-88.67	2,945.58	2,901.77	43.81	67.235		
5,500.00	5,419.98	4,536.21	4,259.62	25.42	26.73	-172.07	-1,899.92	-90.60	3,000.50	2,955.84	44.66	67.186		
5,600.00	5,518.26	4,619.78	4,336.66	25.90	27.26	-172.07	-1,932.24	-92.52	3,055.42	3,009.91	45.51	67.138		
5,700.00	5,616.54	4,703.36	4,413.70	26.38	27.80	-172.07	-1,964.57	-94.45	3,110.33	3,063.97	46.36	67.091		
5,800.00	5,714.82	4,786.93	4,490.74	26.85	28.33	-172.08	-1,996.90	-96.38	3,165.25	3,118.04	47.21	67.045		
5,900.00	5,813.09	4,870.50	4,567.79	27.33	28.87	-172.08	-2,029.23	-98.30	3,220.16	3,172.10	48.06	66.999		
6,000.00	5,911.37	4,954.07	4,644.83	27.81	29.41	-172.08	-2,061.56	-100.23	3,275.08	3,226.16	48.92	66.954		
6,100.00	6,009.65	5,037.64	4,721.87	28.28	29.94	-172.08	-2,093.89	-102.15	3,329.99	3,280.23	49.77	66.910		
6,200.00	6,107.93	5,121.22	4,798.91	28.76	30.48	-172.08	-2,126.21	-104.08	3,384.91	3,334.29	50.62	66.867		
6,300.00	6,206.20	5,204.79	4,875.95	29.24	31.01	-172.08	-2,158.54	-106.01	3,439.82	3,388.35	51.48	66.825		
6,400.00	6,304.48	5,288.36	4,952.99	29.72	31.55	-172.08	-2,190.87	-107.93	3,494.74	3,442.41	52.33	66.783		
6,500.00	6,402.76	5,371.93	5,030.04	30.19	32.09	-172.08	-2,223.20	-109.86	3,549.66	3,496.47	53.18	66.742		
6,600.00	6,501.04	5,455.50	5,107.08	30.67	32.62	-172.09	-2,255.53	-111.79	3,604.57	3,550.53	54.04	66.701		
6,700.00	6,599.31	5,539.08	5,184.12	31.15	33.16	-172.09	-2,287.86	-113.71	3,659.49	3,604.59	54.90	66.661		
6,800.00	6,697.59	5,622.63	5,261.14	31.63	33.70	-148.31	-2,320.18	-115.64	3,714.35	3,658.59	55.75	66.620		
6,900.00	6,794.18	5,705.28	5,337.34	32.10	34.23	-117.02	-2,352.15	-117.54	3,768.32	3,711.72	56.61	66.571		
7,000.00	6,886.96	5,785.08	5,410.90	32.55	34.74	-100.67	-2,383.02	-119.38	3,820.27	3,762.83	57.44	66.513		
7,100.00	6,973.57	5,860.04	5,480.01	32.99	35.22	-90.58	-2,412.01	-121.11	3,869.25	3,811.01	58.23	66.443		
7,200.00	7,051.87	5,928.33	5,542.96	33.41	35.66	-83.62	-2,438.43	-122.68	3,914.51	3,855.51	59.01	66.340		
7,300.00	7,119.93	5,988.27	5,598.21	33.85	36.05	-78.51	-2,461.62	-124.06	3,955.48	3,895.71	59.78	66.171		
7,400.00	7,176.09	6,038.37	5,644.40	34.39	36.37	-74.66	-2,481.00	-125.22	3,991.70	3,931.13	60.57	65.898		
7,500.00	7,218.95	6,077.41	5,680.39	35.09	36.62	-71.73	-2,496.10	-126.12	4,022.80	3,961.37	61.43	65.489		
7,600.00	7,247.46	6,104.43	5,705.30	35.98	36.80	-69.53	-2,506.55	-126.74	4,048.47	3,986.12	62.35	64.930		
7,700.00	7,260.92	6,118.75	5,718.50	37.04	36.89	-67.95	-2,512.09	-127.07	4,068.44	4,005.11	63.34	64.236		
7,800.00	7,261.75	6,122.37	5,721.84	38.23	36.91	-67.50	-2,513.49	-127.16	4,083.95	4,019.57	64.38	63.434		
7,900.00	7,261.33	6,124.93	5,724.20	39.59	36.93	-67.54	-2,514.48	-127.21	4,101.17	4,035.60	65.57	62.546		
8,000.00	7,260.91	6,127.49	5,726.56	41.10	36.95	-67.57	-2,515.47	-127.27	4,120.73	4,053.85	66.89	61.606		
8,100.00	7,260.49	6,130.05	5,728.92	42.75	36.96	-67.61	-2,516.46	-127.33	4,142.62	4,074.31	68.31	60.642		
8,200.00	7,260.07	6,132.61	5,731.27	44.53	36.98	-67.65	-2,517.45	-127.39	4,166.79	4,096.97	69.82	59.676		
8,300.00	7,259.65	6,135.16	5,733.63	46.41	36.99	-67.68	-2,518.44	-127.45	4,193.21	4,121.80	71.40	58.725		
8,400.00	7,259.23	6,137.72	5,735.99	48.39	37.01	-67.72	-2,519.43	-127.51	4,221.82	4,148.79	73.04	57.805		
8,500.00	7,258.81	6,140.28	5,738.35	50.45	37.03	-67.75	-2,520.42	-127.57	4,252.60	4,177.89	74.71	56.924		
8,600.00	7,258.39	6,142.84	5,740.71	52.59	37.05	-67.78	-2,521.41	-127.63	4,283.38	4,207.99	76.42	56.000		
8,700.00	7,257.97	6,145.39	5,743.08	54.79	37.07	-67.81	-2,522.40	-127.69	4,314.16	4,238.19	78.17	55.031		
8,800.00	7,257.55	6,147.94	5,745.45	57.05	37.09	-67.84	-2,523.39	-127.75	4,344.94	4,268.39	80.00	54.026		
8,900.00	7,257.13	6,150.49	5,747.82	59.36	37.11	-67.87	-2,524.38	-127.81	4,375.72	4,298.59	81.87	53.000		
9,000.00	7,256.71	6,153.04	5,750.19	61.72	37.13	-67.90	-2,525.37	-127.87	4,406.50	4,328.79	83.78	52.000		
9,100.00	7,256.29	6,155.59	5,752.56	64.12	37.15	-67.93	-2,526.36	-127.93	4,437.28	4,358.99	85.71	51.000		
9,200.00	7,255.87	6,158.14	5,754.93	66.56	37.17	-67.96	-2,527.35	-127.99	4,468.06	4,389.19	87.67	50.000		
9,300.00	7,255.45	6,160.69	5,757.30	69.02	37.19	-67.99	-2,528.34	-128.05	4,498.84	4,419.39	89.65	49.000		
9,400.00	7,255.03	6,163.24	5,759.67	71.52	37.21	-68.02	-2,529.33	-128.11	4,529.62	4,449.59	91.65	48.000		
9,500.00	7,254.61	6,165.79	5,762.04	74.04	37.23	-68.05	-2,530.32	-128.17	4,560.40	4,479.79	93.67	47.000		
9,600.00	7,254.19	6,168.34	5,764.41	76.58	37.25	-68.08	-2,531.31	-128.23	4,591.18	4,509.99	95.69	46.000		
9,700.00	7,253.77	6,170.89	5,766.78	79.15	37.27	-68.11	-2,532.30	-128.29	4,621.96	4,540.19	97.73	45.000		
9,800.00	7,253.35	6,173.44	5,769.15	81.74	37.29	-68.14	-2,533.29	-128.35	4,652.74	4,570.39	99.78	44.000		
9,900.00	7,252.93	6,175.99	5,771.52	84.34	37.31	-68.17	-2,534.28	-128.41	4,683.52	4,600.59	101.84	43.000		
10,000.00	7,252.51	6,178.54	5,773.89	86.96	37.33	-68.20	-2,535.27	-128.47	4,714.30	4,630.79	103.91	42.000		
10,100.00	7,252.09	6,181.09	5,776.26	89.59	37.35	-68.23	-2,536.26	-128.53	4,745.08	4,660.99	106.00	41.000		
10,200.00	7,251.67	6,183.64	5,778.63	92.24	37.37	-68.26	-2,537.25	-128.59	4,775.86	4,691.19	108.09	40.000		
10,300.00	7,251.25	6,186.19	5,780.99	94.90	37.39	-68.29	-2,538.24	-128.65	4,806.64	4,721.39	110.19	39.000		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,607.69	7,064.14	97.57	98.29	-87.49	-3,100.33	-3,423.38	4,260.72	4,065.31	195.42	21.803		
10,500.00	7,250.40	10,707.69	7,063.84	100.25	100.93	-87.49	-3,100.93	-3,523.37	4,259.66	4,058.92	200.74	21.220		
10,600.00	7,249.98	10,807.70	7,063.54	102.93	103.57	-87.49	-3,101.52	-3,623.37	4,258.59	4,052.51	206.09	20.664		
10,700.00	7,249.56	10,907.70	7,063.25	105.63	106.23	-87.49	-3,102.12	-3,723.36	4,257.53	4,046.08	211.45	20.135		
10,800.00	7,249.14	11,007.71	7,062.95	108.34	108.89	-87.50	-3,102.72	-3,823.35	4,256.46	4,039.63	216.83	19.630		
10,900.00	7,248.72	11,107.71	7,062.65	111.05	111.57	-87.50	-3,103.32	-3,923.34	4,255.40	4,033.17	222.23	19.149		
11,000.00	7,248.30	11,192.28	7,062.35	113.77	113.84	-87.50	-3,103.92	-4,023.33	4,254.33	4,027.11	227.22	18.723		
11,100.00	7,247.88	11,307.73	7,062.06	116.50	116.95	-87.50	-3,104.51	-4,123.33	4,253.27	4,020.20	233.07	18.249		
11,200.00	7,247.46	11,407.73	7,061.76	119.23	119.65	-87.50	-3,105.11	-4,223.32	4,252.20	4,013.70	238.51	17.828		
11,300.00	7,247.04	11,507.74	7,061.46	121.97	122.36	-87.50	-3,105.71	-4,323.31	4,251.14	4,007.18	243.96	17.426		
11,400.00	7,246.62	11,607.74	7,061.16	124.72	125.07	-87.50	-3,106.31	-4,423.30	4,250.07	4,000.65	249.42	17.040		
11,500.00	7,246.20	11,707.75	7,060.87	127.46	127.79	-87.50	-3,106.91	-4,523.30	4,249.01	3,994.11	254.90	16.670		
11,600.00	7,245.78	11,807.75	7,060.57	130.22	130.52	-87.50	-3,107.50	-4,623.29	4,247.94	3,987.56	260.38	16.314		
11,700.00	7,245.36	11,907.76	7,060.27	132.98	133.25	-87.50	-3,108.10	-4,723.28	4,246.88	3,981.00	265.88	15.973		
11,800.00	7,244.94	12,007.77	7,059.97	135.74	135.99	-87.51	-3,108.70	-4,823.27	4,245.81	3,974.43	271.38	15.645		
11,900.00	7,244.52	12,092.23	7,059.68	138.50	138.31	-87.51	-3,109.30	-4,923.26	4,244.75	3,968.28	276.46	15.354		
12,000.00	7,244.10	12,207.78	7,059.38	141.27	141.48	-87.51	-3,109.89	-5,023.26	4,243.68	3,961.27	282.41	15.027		
12,100.00	7,243.68	12,307.78	7,059.08	144.04	144.24	-87.51	-3,110.49	-5,123.25	4,242.62	3,954.68	287.93	14.735		
12,200.00	7,243.26	12,407.79	7,058.78	146.82	146.99	-87.51	-3,111.09	-5,223.24	4,241.55	3,948.08	293.47	14.453		
12,300.00	7,242.84	12,507.79	7,058.49	149.60	149.75	-87.51	-3,111.69	-5,323.23	4,240.49	3,941.48	299.01	14.182		
12,400.00	7,242.42	12,607.80	7,058.19	152.38	152.52	-87.51	-3,112.29	-5,423.22	4,239.42	3,934.87	304.55	13.920		
12,500.00	7,242.00	12,692.19	7,057.89	155.16	154.85	-87.51	-3,112.88	-5,523.22	4,238.36	3,928.68	309.67	13.687		
12,600.00	7,241.58	12,807.81	7,057.59	157.95	158.06	-87.51	-3,113.48	-5,623.21	4,237.29	3,921.63	315.66	13.423		
12,700.00	7,241.16	12,907.82	7,057.30	160.74	160.83	-87.51	-3,114.08	-5,723.20	4,236.23	3,915.00	321.23	13.188		
12,800.00	7,240.74	13,007.82	7,057.00	163.53	163.61	-87.52	-3,114.68	-5,823.19	4,235.16	3,908.37	326.79	12.960		
12,900.00	7,240.32	13,092.17	7,056.70	166.32	165.95	-87.52	-3,115.28	-5,923.18	4,234.10	3,902.16	331.93	12.756		
13,000.00	7,239.89	13,207.83	7,056.40	169.12	169.17	-87.52	-3,115.87	-6,023.18	4,233.03	3,895.09	337.94	12.526		
13,100.00	7,239.47	13,307.84	7,056.11	171.92	171.95	-87.52	-3,116.47	-6,123.17	4,231.97	3,888.44	343.53	12.319		
13,200.00	7,239.05	13,407.85	7,055.81	174.72	174.74	-87.52	-3,117.07	-6,223.16	4,230.90	3,881.79	349.11	12.119		
13,300.00	7,238.63	13,507.85	7,055.51	177.52	177.53	-87.52	-3,117.67	-6,323.15	4,229.84	3,875.13	354.70	11.925		
13,400.00	7,238.21	13,607.86	7,055.21	180.32	180.32	-87.52	-3,118.26	-6,423.14	4,228.77	3,868.48	360.30	11.737		
13,500.00	7,237.79	13,707.86	7,054.92	183.13	183.12	-87.52	-3,118.86	-6,523.14	4,227.71	3,861.81	365.89	11.555		
13,600.00	7,237.37	13,807.87	7,054.62	185.93	185.91	-87.52	-3,119.46	-6,623.13	4,226.64	3,855.15	371.49	11.377		
13,700.00	7,236.95	13,907.87	7,054.32	188.74	188.71	-87.53	-3,120.06	-6,723.12	4,225.58	3,848.48	377.10	11.206		
13,800.00	7,236.53	14,007.88	7,054.02	191.55	191.51	-87.53	-3,120.66	-6,823.11	4,224.51	3,841.81	382.70	11.039		
13,900.00	7,236.11	14,092.11	7,053.72	194.36	193.87	-87.53	-3,121.25	-6,923.11	4,223.45	3,835.57	387.87	10.889		
14,000.00	7,235.69	14,207.89	7,053.43	197.17	197.11	-87.53	-3,121.85	-7,023.10	4,222.38	3,828.45	393.93	10.719		
14,100.00	7,235.27	14,307.90	7,053.13	199.98	199.92	-87.53	-3,122.45	-7,123.09	4,221.32	3,821.77	399.54	10.565		
14,200.00	7,234.85	14,407.90	7,052.83	202.80	202.72	-87.53	-3,123.05	-7,223.08	4,220.25	3,815.09	405.16	10.416		
14,300.00	7,234.43	14,507.91	7,052.53	205.61	205.53	-87.53	-3,123.65	-7,323.07	4,219.19	3,808.41	410.78	10.271		
14,400.00	7,234.01	14,607.91	7,052.24	208.43	208.34	-87.53	-3,124.24	-7,423.07	4,218.12	3,801.72	416.40	10.130		
14,500.00	7,233.59	14,707.92	7,051.94	211.25	211.15	-87.53	-3,124.84	-7,523.06	4,217.05	3,795.03	422.03	9.992		
14,600.00	7,233.17	14,792.08	7,051.64	214.06	213.52	-87.53	-3,125.44	-7,623.05	4,215.99	3,788.78	427.21	9.869		
14,700.00	7,232.75	14,907.93	7,051.34	216.88	216.78	-87.54	-3,126.04	-7,723.04	4,214.92	3,781.64	433.28	9.728		
14,800.00	7,232.33	15,007.94	7,051.05	219.70	219.59	-87.54	-3,126.64	-7,823.03	4,213.86	3,774.94	438.92	9.601		
14,900.00	7,231.91	15,107.94	7,050.75	222.52	222.40	-87.54	-3,127.23	-7,923.03	4,212.79	3,768.24	444.55	9.477		
15,000.00	7,231.49	15,207.95	7,050.45	225.35	225.22	-87.54	-3,127.83	-8,023.02	4,211.73	3,761.54	450.19	9.356		
15,100.00	7,231.07	15,292.05	7,050.15	228.17	227.59	-87.54	-3,128.43	-8,123.01	4,210.66	3,755.29	455.37	9.247		
15,116.21	7,231.00	15,308.26	7,050.11	228.63	228.05	-87.54	-3,128.53	-8,139.22	4,210.49	3,754.20	456.29	9.228 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	0.00	3.28	-179.60	-80.14	-0.56	80.14					
100.00	100.00	101.00	100.00	0.18	3.28	-179.60	-80.14	-0.56	80.14	76.68	3.46	23.158		
200.00	200.00	201.00	200.00	0.61	3.34	-179.60	-80.14	-0.56	80.14	76.18	3.95	20.277		
300.00	300.00	301.00	300.00	1.05	3.45	-179.60	-80.14	-0.56	80.14	75.64	4.50	17.811		
400.00	400.00	401.00	400.00	1.49	3.61	-179.60	-80.14	-0.56	80.14	75.04	5.10	15.723		
500.00	500.00	499.00	500.00	1.93	3.80	-179.60	-80.14	-0.56	80.14	74.40	5.73	13.975 CC		
600.00	599.98	601.51	602.49	2.37	4.05	-171.44	-78.54	-1.38	80.31	73.89	6.43	12.494 ES		
700.00	699.84	702.72	703.57	2.81	4.33	-170.35	-74.18	-3.64	81.23	74.08	7.15	11.360		
800.00	799.45	802.62	803.34	3.26	4.62	-169.59	-69.50	-6.06	85.23	77.35	7.89	10.805		
900.00	898.70	902.34	902.92	3.70	4.94	-169.29	-64.83	-8.48	92.68	84.02	8.65	10.712		
1,000.00	997.47	1,001.74	1,002.19	4.15	5.28	-169.39	-60.18	-10.89	103.53	94.10	9.43	10.974		
1,100.00	1,095.78	1,100.83	1,101.13	4.60	5.62	-169.73	-55.54	-13.29	117.03	106.79	10.23	11.436		
1,200.00	1,194.05	1,200.11	1,200.05	5.05	5.98	-170.03	-50.90	-15.70	130.70	119.66	11.04	11.837		
1,300.00	1,292.33	1,301.06	1,298.97	5.50	6.36	-170.27	-46.26	-18.10	144.38	132.51	11.87	12.166		
1,400.00	1,390.61	1,402.00	1,397.89	5.96	6.75	-170.47	-41.63	-20.50	158.06	145.35	12.70	12.441		
1,500.00	1,488.89	1,502.94	1,496.82	6.43	7.14	-170.64	-36.99	-22.90	171.74	158.19	13.55	12.674		
1,600.00	1,587.16	1,603.88	1,595.74	6.89	7.54	-170.78	-32.35	-25.30	185.42	171.02	14.40	12.873		
1,700.00	1,685.44	1,704.82	1,694.66	7.36	7.94	-170.90	-27.71	-27.71	199.11	183.84	15.26	13.045		
1,800.00	1,783.72	1,805.76	1,793.58	7.83	8.35	-171.01	-23.07	-30.11	212.79	196.66	16.13	13.194		
1,900.00	1,882.00	1,906.70	1,892.50	8.30	8.76	-171.10	-18.44	-32.51	226.47	209.48	17.00	13.325		
2,000.00	1,980.27	2,007.65	1,991.42	8.77	9.17	-171.19	-13.80	-34.91	240.16	222.29	17.87	13.439		
2,100.00	2,078.55	2,108.59	2,090.34	9.25	9.59	-171.26	-9.16	-37.31	253.85	235.10	18.75	13.541		
2,200.00	2,176.83	2,209.53	2,189.26	9.72	10.01	-171.33	-4.52	-39.72	267.53	247.91	19.63	13.632		
2,300.00	2,275.11	2,289.53	2,288.18	10.19	10.34	-171.39	0.12	-42.12	281.22	260.80	20.42	13.772		
2,400.00	2,373.38	2,388.59	2,387.10	10.66	10.76	-171.44	4.75	-44.52	294.91	273.61	21.29	13.849		
2,500.00	2,471.66	2,487.65	2,486.02	11.14	11.17	-171.49	9.39	-46.92	308.59	286.42	22.17	13.918		
2,600.00	2,569.94	2,586.71	2,584.94	11.61	11.59	-171.54	14.03	-49.32	322.28	299.23	23.05	13.981		
2,700.00	2,668.22	2,685.76	2,683.86	12.09	12.01	-171.58	18.67	-51.73	335.97	312.03	23.93	14.038		
2,800.00	2,766.49	2,784.82	2,782.78	12.56	12.43	-171.62	23.31	-54.13	349.66	324.84	24.82	14.090		
2,900.00	2,864.77	2,883.88	2,881.71	13.04	12.86	-171.65	27.95	-56.53	363.34	337.64	25.70	14.138		
3,000.00	2,963.05	2,982.94	2,980.63	13.51	13.28	-171.69	32.58	-58.93	377.03	350.45	26.58	14.183		
3,100.00	3,061.33	3,082.00	3,079.55	13.99	13.70	-171.72	37.22	-61.33	390.72	363.25	27.47	14.224		
3,200.00	3,159.60	3,181.06	3,178.47	14.46	14.13	-171.75	41.86	-63.74	404.41	376.05	28.36	14.261		
3,300.00	3,257.88	3,280.12	3,277.39	14.94	14.55	-171.77	46.50	-66.14	418.10	388.85	29.24	14.297		
3,400.00	3,356.16	3,379.17	3,376.31	15.41	14.98	-171.80	51.14	-68.54	431.78	401.65	30.13	14.329		
3,500.00	3,454.43	3,478.23	3,475.23	15.89	15.41	-171.82	55.77	-70.94	445.47	414.45	31.02	14.360		
3,600.00	3,552.71	3,577.29	3,574.15	16.36	15.83	-171.84	60.41	-73.34	459.16	427.25	31.91	14.388		
3,700.00	3,650.99	3,676.35	3,673.07	16.84	16.26	-171.86	65.05	-75.75	472.85	440.05	32.80	14.415		
3,800.00	3,749.27	3,775.41	3,771.99	17.32	16.69	-171.88	69.69	-78.15	486.54	452.84	33.69	14.440		
3,900.00	3,847.54	3,874.47	3,870.91	17.79	17.12	-171.90	74.33	-80.55	500.23	465.64	34.59	14.464		
4,000.00	3,945.82	3,973.53	3,969.83	18.27	17.55	-171.92	78.96	-82.95	513.92	478.44	35.48	14.486		
4,100.00	4,044.10	4,072.58	4,068.75	18.75	17.98	-171.94	83.60	-85.35	527.60	491.23	36.37	14.507		
4,200.00	4,142.38	4,171.64	4,167.68	19.22	18.41	-171.95	88.24	-87.76	541.29	504.03	37.26	14.526		
4,300.00	4,240.65	4,270.70	4,266.60	19.70	18.84	-171.97	92.88	-90.16	554.98	516.83	38.16	14.545		
4,400.00	4,338.93	4,369.76	4,365.52	20.18	19.27	-171.98	97.52	-92.56	568.67	529.62	39.05	14.563		
4,500.00	4,437.21	4,468.82	4,464.44	20.65	19.70	-172.00	102.15	-94.96	582.36	542.42	39.94	14.579		
4,600.00	4,535.49	4,567.88	4,563.36	21.13	20.13	-172.01	106.79	-97.36	596.05	555.21	40.84	14.595		
4,700.00	4,633.76	4,666.94	4,662.28	21.61	20.56	-172.02	111.43	-99.77	609.74	568.00	41.73	14.610		
4,800.00	4,732.04	4,765.99	4,761.20	22.08	20.99	-172.03	116.07	-102.17	623.43	580.80	42.63	14.625		
4,900.00	4,830.32	4,865.05	4,860.12	22.56	21.43	-172.04	120.71	-104.57	637.11	593.59	43.52	14.639		
5,000.00	4,928.60	4,964.11	4,959.04	23.04	21.86	-172.06	125.35	-106.97	650.80	606.39	44.42	14.652		
5,100.00	5,026.87	5,063.17	5,057.96	23.51	22.29	-172.07	129.98	-109.37	664.49	619.18	45.31	14.664		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,162.23	5,156.88	23.99	22.72	-172.08	134.62	-111.78	678.18	631.97	46.21	14.676		
5,300.00	5,223.43	5,261.29	5,255.80	24.47	23.15	-172.09	139.26	-114.18	691.87	644.76	47.11	14.687		
5,400.00	5,321.71	5,360.35	5,354.72	24.94	23.59	-172.10	143.90	-116.58	705.56	657.56	48.00	14.698		
5,500.00	5,419.98	5,459.40	5,453.65	25.42	24.02	-172.10	148.54	-118.98	719.25	670.35	48.90	14.709		
5,600.00	5,518.26	5,558.46	5,552.57	25.90	24.45	-172.11	153.17	-121.38	732.94	683.14	49.80	14.719		
5,700.00	5,616.54	5,657.52	5,651.49	26.38	24.89	-172.12	157.81	-123.79	746.63	695.93	50.69	14.728		
5,800.00	5,714.82	5,756.58	5,750.41	26.85	25.32	-172.13	162.45	-126.19	760.32	708.73	51.59	14.738		
5,900.00	5,813.09	5,855.64	5,849.33	27.33	25.75	-172.14	167.09	-128.59	774.01	721.52	52.49	14.747		
6,000.00	5,911.37	5,954.70	5,948.25	27.81	26.19	-172.14	171.73	-130.99	787.70	734.31	53.38	14.755		
6,100.00	6,009.65	6,053.76	6,047.17	28.28	26.62	-172.15	176.36	-133.39	801.38	747.10	54.28	14.763		
6,200.00	6,107.93	6,152.81	6,146.09	28.76	27.06	-172.16	181.00	-135.80	815.07	759.89	55.18	14.771		
6,300.00	6,206.20	6,251.87	6,245.01	29.24	27.49	-172.17	185.64	-138.20	828.76	772.69	56.08	14.779		
6,400.00	6,304.48	6,350.93	6,343.93	29.72	27.92	-172.17	190.28	-140.60	842.45	785.48	56.98	14.786		
6,500.00	6,402.76	6,449.98	6,442.84	30.19	28.36	-172.18	194.92	-143.00	856.14	798.27	57.87	14.793		
6,600.00	6,501.04	6,547.33	6,539.48	30.67	28.79	-171.68	199.40	-153.00	869.92	811.16	58.76	14.805		
6,700.00	6,599.31	6,640.26	6,629.30	31.15	29.20	-170.31	203.47	-176.19	884.24	824.63	59.61	14.835		
6,800.00	6,697.50	6,726.18	6,708.53	31.63	29.58	-146.77	206.97	-209.06	899.90	839.53	60.37	14.907		
6,900.00	6,794.18	6,808.23	6,779.42	32.10	29.96	-117.74	210.03	-250.14	916.38	855.32	61.05	15.010		
7,000.00	6,886.96	6,887.70	6,842.51	32.55	30.34	-103.31	212.68	-298.31	932.85	871.19	61.66	15.129		
7,100.00	6,973.57	6,965.16	6,897.77	32.99	30.76	-94.81	214.92	-352.47	948.66	886.43	62.22	15.247		
7,200.00	7,051.87	7,041.01	6,945.14	33.41	31.22	-89.13	216.75	-411.63	963.18	900.39	62.79	15.340		
7,300.00	7,119.93	7,115.63	6,984.56	33.85	31.74	-85.11	218.18	-474.92	975.88	912.44	63.44	15.383		
7,400.00	7,176.09	7,189.31	7,015.96	34.39	32.34	-82.23	219.21	-541.52	986.31	922.05	64.25	15.351		
7,500.00	7,218.95	7,262.30	7,039.29	35.09	33.03	-80.25	219.84	-610.63	994.11	928.80	65.31	15.221		
7,600.00	7,247.46	7,334.81	7,054.50	35.98	33.80	-79.03	220.08	-681.49	999.03	932.36	66.67	14.985		
7,700.00	7,260.92	7,407.05	7,061.56	37.04	34.64	-78.50	219.93	-753.34	1,000.90	932.57	68.33	14.649		
7,800.00	7,261.75	7,507.40	7,061.16	38.23	35.94	-78.43	219.34	-838.88	1,000.38	929.69	70.69	14.152		
7,900.00	7,261.33	7,607.41	7,059.41	39.59	37.40	-78.35	218.59	-938.85	999.76	926.33	73.44	13.613		
8,000.00	7,260.91	7,707.42	7,057.66	41.10	39.02	-78.26	217.84	-1,038.82	999.15	922.65	76.50	13.061		
8,100.00	7,260.49	7,807.44	7,055.91	42.75	40.77	-78.18	217.08	-1,138.79	998.53	918.71	79.83	12.509		
8,200.00	7,260.07	7,907.45	7,054.16	44.53	42.64	-78.09	216.33	-1,238.76	997.92	914.52	83.39	11.966		
8,300.00	7,259.65	8,007.46	7,052.41	46.41	44.62	-78.01	215.58	-1,338.73	997.31	910.14	87.17	11.441		
8,400.00	7,259.23	8,107.47	7,050.66	48.39	46.69	-77.92	214.83	-1,438.70	996.70	905.57	91.13	10.937		
8,500.00	7,258.81	8,207.49	7,048.91	50.45	48.84	-77.84	214.07	-1,538.67	996.09	900.84	95.25	10.458		
8,600.00	7,258.39	8,307.50	7,047.16	52.59	51.06	-77.75	213.32	-1,638.63	995.49	895.98	99.51	10.004		
8,700.00	7,257.97	8,407.51	7,045.41	54.79	53.33	-77.66	212.57	-1,738.60	994.89	891.00	103.88	9.577		
8,800.00	7,257.55	8,507.53	7,043.66	57.05	55.67	-77.58	211.82	-1,838.57	994.29	885.92	108.37	9.175		
8,900.00	7,257.13	8,607.54	7,041.91	59.36	58.05	-77.49	211.06	-1,938.54	993.69	880.74	112.94	8.798		
9,000.00	7,256.71	8,707.55	7,040.16	61.72	60.47	-77.41	210.31	-2,038.51	993.09	875.49	117.60	8.444		
9,100.00	7,256.29	8,807.56	7,038.42	64.12	62.93	-77.32	209.56	-2,138.48	992.50	870.17	122.33	8.113		
9,200.00	7,255.87	8,892.42	7,036.67	66.56	65.04	-77.23	208.81	-2,238.45	991.91	865.16	126.75	7.826		
9,300.00	7,255.45	9,007.59	7,034.92	69.02	67.94	-77.15	208.05	-2,338.42	991.32	859.35	131.97	7.512		
9,400.00	7,255.03	9,107.60	7,033.17	71.52	70.48	-77.06	207.30	-2,438.39	990.73	853.86	136.87	7.238		
9,500.00	7,254.61	9,207.62	7,031.42	74.04	73.05	-76.97	206.55	-2,538.35	990.15	848.34	141.81	6.982		
9,600.00	7,254.19	9,307.63	7,029.67	76.58	75.64	-76.89	205.80	-2,638.32	989.57	842.78	146.79	6.741		
9,700.00	7,253.77	9,407.64	7,027.92	79.15	78.25	-76.80	205.04	-2,738.29	988.99	837.18	151.81	6.515		
9,800.00	7,253.35	9,507.66	7,026.17	81.74	80.87	-76.71	204.29	-2,838.26	988.41	831.56	156.85	6.302		
9,900.00	7,252.92	9,607.67	7,024.42	84.34	83.51	-76.63	203.54	-2,938.23	987.84	825.91	161.92	6.101		
10,000.00	7,252.50	9,707.68	7,022.67	86.96	86.17	-76.54	202.79	-3,038.20	987.26	820.24	167.02	5.911		
10,100.00	7,252.08	9,807.69	7,020.92	89.59	88.83	-76.45	202.03	-3,138.17	986.69	814.55	172.14	5.732		
10,200.00	7,251.66	9,907.71	7,019.17	92.24	91.51	-76.36	201.28	-3,238.14	986.12	808.84	177.28	5.563		
10,300.00	7,251.24	9,992.28	7,017.42	94.90	93.79	-76.28	200.53	-3,338.11	985.56	803.53	182.03	5.414		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,107.73	7,015.67	97.57	96.90	-76.19	199.78	-3,438.07	985.00	797.39	187.61	5.250		
10,500.00	7,250.40	10,207.75	7,013.93	100.25	99.61	-76.10	199.02	-3,538.04	984.43	791.64	192.80	5.106		
10,600.00	7,249.98	10,307.76	7,012.18	102.93	102.32	-76.01	198.27	-3,638.01	983.87	785.88	198.00	4.969		
10,700.00	7,249.56	10,407.77	7,010.43	105.63	105.05	-75.93	197.52	-3,737.98	983.32	780.11	203.21	4.839		
10,800.00	7,249.14	10,507.78	7,008.68	108.34	107.78	-75.84	196.77	-3,837.95	982.76	774.34	208.43	4.715		
10,900.00	7,248.72	10,607.80	7,006.93	111.05	110.51	-75.75	196.01	-3,937.92	982.21	768.56	213.66	4.597		
11,000.00	7,248.30	10,707.81	7,005.18	113.77	113.26	-75.66	195.26	-4,037.89	981.66	762.77	218.89	4.485		
11,100.00	7,247.88	10,807.82	7,003.43	116.50	116.00	-75.57	194.51	-4,137.86	981.12	756.98	224.14	4.377		
11,200.00	7,247.46	10,907.84	7,001.68	119.23	118.76	-75.48	193.76	-4,237.83	980.57	751.18	229.39	4.275		
11,300.00	7,247.04	11,007.85	6,999.93	121.97	121.52	-75.40	193.00	-4,337.80	980.03	745.39	234.64	4.177		
11,400.00	7,246.62	11,107.86	6,998.18	124.72	124.28	-75.31	192.25	-4,437.76	979.49	739.58	239.90	4.083		
11,500.00	7,246.20	11,207.88	6,996.43	127.46	127.05	-75.22	191.50	-4,537.73	978.95	733.78	245.17	3.993		
11,600.00	7,245.78	11,307.89	6,994.68	130.22	129.82	-75.13	190.75	-4,637.70	978.41	727.98	250.43	3.907		
11,700.00	7,245.36	11,407.90	6,992.93	132.98	132.59	-75.04	189.99	-4,737.67	977.88	722.18	255.71	3.824		
11,800.00	7,244.94	11,507.91	6,991.18	135.74	135.37	-74.95	189.24	-4,837.64	977.35	716.37	260.98	3.745		
11,900.00	7,244.52	11,607.93	6,989.43	138.50	138.15	-74.86	188.49	-4,937.61	976.82	710.57	266.25	3.669		
12,000.00	7,244.10	11,707.94	6,987.69	141.27	140.94	-74.77	187.74	-5,037.58	976.29	704.77	271.53	3.596		
12,100.00	7,243.68	11,807.95	6,985.94	144.04	143.73	-74.68	186.98	-5,137.55	975.77	698.96	276.81	3.525		
12,200.00	7,243.26	11,907.97	6,984.19	146.82	146.52	-74.60	186.23	-5,237.52	975.25	693.16	282.09	3.457		
12,300.00	7,242.84	12,007.98	6,982.44	149.60	149.31	-74.51	185.48	-5,337.48	974.73	687.37	287.36	3.392		
12,400.00	7,242.42	12,107.99	6,980.69	152.38	152.10	-74.42	184.73	-5,437.45	974.21	681.57	292.64	3.329		
12,500.00	7,242.00	12,192.00	6,978.94	155.16	154.45	-74.33	183.97	-5,537.42	973.70	676.21	297.49	3.273		
12,600.00	7,241.58	12,308.02	6,977.19	157.95	157.70	-74.24	183.22	-5,637.39	973.19	669.99	303.20	3.210		
12,700.00	7,241.16	12,408.03	6,975.44	160.74	160.50	-74.15	182.47	-5,737.36	972.68	664.20	308.47	3.153		
12,800.00	7,240.74	12,508.04	6,973.69	163.53	163.31	-74.06	181.72	-5,837.33	972.17	658.42	313.75	3.099		
12,900.00	7,240.32	12,608.06	6,971.94	166.32	166.11	-73.97	180.96	-5,937.30	971.67	652.64	319.02	3.046		
13,000.00	7,239.89	12,708.07	6,970.19	169.12	168.92	-73.88	180.21	-6,037.27	971.16	646.87	324.30	2.995		
13,100.00	7,239.47	12,808.08	6,968.44	171.92	171.73	-73.79	179.46	-6,137.24	970.66	641.10	329.57	2.945		
13,200.00	7,239.05	12,908.10	6,966.69	174.72	174.54	-73.70	178.71	-6,237.20	970.17	635.33	334.84	2.897		
13,300.00	7,238.63	13,008.11	6,964.94	177.52	177.35	-73.61	177.95	-6,337.17	969.67	629.57	340.10	2.851		
13,400.00	7,238.21	13,108.12	6,963.19	180.32	180.17	-73.52	177.20	-6,437.14	969.18	623.81	345.37	2.806		
13,500.00	7,237.79	13,208.13	6,961.45	183.13	182.98	-73.43	176.45	-6,537.11	968.69	618.06	350.63	2.763		
13,600.00	7,237.37	13,291.85	6,959.70	185.93	185.34	-73.33	175.70	-6,637.08	968.20	612.76	355.44	2.724		
13,700.00	7,236.95	13,408.16	6,957.95	188.74	188.61	-73.24	174.94	-6,737.05	967.72	606.57	361.14	2.680		
13,800.00	7,236.53	13,508.17	6,956.20	191.55	191.43	-73.15	174.19	-6,837.02	967.23	600.84	366.39	2.640		
13,900.00	7,236.11	13,608.19	6,954.45	194.36	194.25	-73.06	173.44	-6,936.99	966.75	595.11	371.64	2.601		
14,000.00	7,235.69	13,708.20	6,952.70	197.17	197.07	-72.97	172.69	-7,036.96	966.27	589.39	376.89	2.564		
14,100.00	7,235.27	13,808.21	6,950.95	199.98	199.90	-72.88	171.93	-7,136.93	965.80	583.67	382.13	2.527		
14,200.00	7,234.85	13,908.22	6,949.20	202.80	202.72	-72.79	171.18	-7,236.89	965.32	577.96	387.37	2.492		
14,300.00	7,234.43	13,991.76	6,947.45	205.61	205.08	-72.70	170.43	-7,336.86	964.85	572.70	392.16	2.460		
14,400.00	7,234.01	14,108.25	6,945.70	208.43	208.37	-72.61	169.68	-7,436.83	964.39	566.55	397.83	2.424		
14,500.00	7,233.59	14,208.26	6,943.95	211.25	211.20	-72.51	168.92	-7,536.80	963.92	560.86	403.06	2.391		
14,600.00	7,233.17	14,308.28	6,942.20	214.06	214.02	-72.42	168.17	-7,636.77	963.46	555.17	408.28	2.360		
14,700.00	7,232.75	14,408.29	6,940.45	216.88	216.85	-72.33	167.42	-7,736.74	963.00	549.49	413.50	2.329		
14,800.00	7,232.33	14,508.30	6,938.70	219.70	219.68	-72.24	166.67	-7,836.71	962.54	543.82	418.71	2.299		
14,900.00	7,231.91	14,608.32	6,936.96	222.52	222.51	-72.15	165.91	-7,936.68	962.08	538.16	423.92	2.269		
15,000.00	7,231.49	14,708.33	6,935.21	225.35	225.34	-72.06	165.16	-8,036.65	961.63	532.50	429.13	2.241		
15,100.00	7,231.07	14,791.66	6,933.46	228.17	227.70	-71.96	164.41	-8,136.61	961.18	527.30	433.88	2.215		
15,116.21	7,231.00	14,807.87	6,933.17	228.63	228.15	-71.95	164.29	-8,152.82	961.10	526.38	434.72	2.211 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	0.00	3.28	-179.54	-280.14	-2.23	280.15					
100.00	100.00	102.00	100.00	0.18	3.29	-179.54	-280.14	-2.23	280.15	276.69	3.46	80.953		
200.00	200.00	198.00	200.00	0.61	3.34	-179.54	-280.14	-2.23	280.15	276.20	3.95	70.930 CC, ES		
300.00	300.00	289.31	291.30	1.05	3.43	-179.51	-281.52	-2.42	281.67	277.16	4.50	62.535		
400.00	400.00	380.26	382.15	1.49	3.56	-179.39	-285.76	-3.02	286.33	281.21	5.12	55.946		
500.00	500.00	470.86	472.45	1.93	3.73	-179.21	-292.81	-4.01	294.13	288.36	5.77	50.948		
600.00	599.98	560.70	561.75	2.37	3.95	-171.24	-302.60	-5.40	306.76	300.30	6.46	47.454		
700.00	699.84	649.16	649.32	2.81	4.21	-171.03	-314.94	-7.14	325.85	318.67	7.18	45.377		
800.00	799.45	743.47	742.37	3.26	4.53	-170.86	-330.16	-9.29	350.47	342.59	7.88	44.461		
900.00	898.70	839.45	837.05	3.70	4.90	-170.77	-345.75	-11.49	378.51	369.93	8.59	44.090		
1,000.00	997.47	934.41	930.72	4.15	5.29	-170.74	-361.17	-13.67	409.85	400.53	9.32	43.986		
1,100.00	1,095.78	1,028.50	1,023.54	4.60	5.70	-170.84	-376.46	-15.83	443.70	433.64	10.06	44.098		
1,200.00	1,194.05	1,122.53	1,116.29	5.05	6.13	-170.95	-391.73	-17.99	477.72	466.91	10.81	44.193		
1,300.00	1,292.33	1,216.56	1,209.05	5.50	6.58	-171.05	-407.00	-20.15	511.75	500.17	11.58	44.208		
1,400.00	1,390.61	1,310.58	1,301.80	5.96	7.03	-171.14	-422.27	-22.30	545.78	533.42	12.36	44.170		
1,500.00	1,488.89	1,404.61	1,394.56	6.43	7.50	-171.22	-437.54	-24.46	579.81	566.66	13.15	44.097		
1,600.00	1,587.16	1,501.36	1,487.32	6.89	7.98	-171.29	-452.81	-26.62	613.84	599.87	13.96	43.965		
1,700.00	1,685.44	1,607.33	1,580.07	7.36	8.52	-171.35	-468.09	-28.78	647.87	633.04	14.82	43.710		
1,800.00	1,783.72	1,686.70	1,672.83	7.83	8.93	-171.41	-483.36	-30.93	681.90	666.32	15.58	43.770		
1,900.00	1,882.00	1,780.73	1,765.58	8.30	9.42	-171.46	-498.63	-33.09	715.93	699.53	16.40	43.646		
2,000.00	1,980.27	1,874.76	1,858.34	8.77	9.91	-171.50	-513.90	-35.25	749.96	732.73	17.23	43.521		
2,100.00	2,078.55	1,968.79	1,951.09	9.25	10.41	-171.54	-529.17	-37.41	783.99	765.93	18.07	43.396		
2,200.00	2,176.83	2,062.82	2,043.85	9.72	10.91	-171.58	-544.44	-39.56	818.03	799.12	18.90	43.274		
2,300.00	2,275.11	2,156.85	2,136.61	10.19	11.41	-171.62	-559.71	-41.72	852.06	832.31	19.74	43.154		
2,400.00	2,373.38	2,250.88	2,229.36	10.66	11.92	-171.65	-574.99	-43.88	886.09	865.50	20.59	43.038		
2,500.00	2,471.66	2,344.91	2,322.12	11.14	12.42	-171.68	-590.26	-46.04	920.12	898.69	21.44	42.926		
2,600.00	2,569.94	2,438.94	2,414.87	11.61	12.93	-171.71	-605.53	-48.19	954.16	931.87	22.28	42.817		
2,700.00	2,668.22	2,532.97	2,507.63	12.09	13.44	-171.74	-620.80	-50.35	988.19	965.06	23.14	42.713		
2,800.00	2,766.49	2,627.00	2,600.39	12.56	13.95	-171.76	-636.07	-52.51	1,022.23	998.24	23.99	42.612		
2,900.00	2,864.77	2,721.03	2,693.14	13.04	14.46	-171.78	-651.34	-54.66	1,056.26	1,031.42	24.84	42.516		
3,000.00	2,963.05	2,815.06	2,785.90	13.51	14.97	-171.80	-666.62	-56.82	1,090.29	1,064.59	25.70	42.423		
3,100.00	3,061.33	2,909.08	2,878.65	13.99	15.49	-171.82	-681.89	-58.98	1,124.33	1,097.77	26.56	42.335		
3,200.00	3,159.60	3,003.11	2,971.41	14.46	16.00	-171.84	-697.16	-61.14	1,158.36	1,130.95	27.42	42.249		
3,300.00	3,257.88	3,102.86	3,064.17	14.94	16.55	-171.86	-712.43	-63.29	1,192.40	1,164.09	28.30	42.129		
3,400.00	3,356.16	3,208.83	3,156.92	15.41	17.13	-171.88	-727.70	-65.45	1,226.43	1,197.21	29.22	41.975		
3,500.00	3,454.43	3,285.20	3,249.68	15.89	17.55	-171.89	-742.97	-67.61	1,260.47	1,230.47	30.00	42.014		
3,600.00	3,552.71	3,379.23	3,342.43	16.36	18.07	-171.91	-758.24	-69.77	1,294.50	1,263.64	30.86	41.942		
3,700.00	3,650.99	3,473.26	3,435.19	16.84	18.59	-171.92	-773.52	-71.92	1,328.54	1,296.81	31.73	41.872		
3,800.00	3,749.27	3,567.29	3,527.95	17.32	19.11	-171.94	-788.79	-74.08	1,362.57	1,329.98	32.59	41.805		
3,900.00	3,847.54	3,661.32	3,620.70	17.79	19.63	-171.95	-804.06	-76.24	1,396.61	1,363.15	33.46	41.741		
4,000.00	3,945.82	3,755.35	3,713.46	18.27	20.15	-171.96	-819.33	-78.40	1,430.64	1,396.32	34.32	41.679		
4,100.00	4,044.10	3,849.38	3,806.21	18.75	20.67	-171.97	-834.60	-80.55	1,464.68	1,429.48	35.19	41.620		
4,200.00	4,142.38	3,943.41	3,898.97	19.22	21.19	-171.98	-849.87	-82.71	1,498.71	1,462.65	36.06	41.563		
4,300.00	4,240.65	4,037.44	3,991.72	19.70	21.71	-171.99	-865.15	-84.87	1,532.75	1,495.82	36.93	41.507		
4,400.00	4,338.93	4,131.47	4,084.48	20.18	22.23	-172.00	-880.42	-87.03	1,566.78	1,528.99	37.80	41.454		
4,500.00	4,437.21	4,225.50	4,177.24	20.65	22.75	-172.01	-895.69	-89.18	1,600.82	1,562.15	38.66	41.403		
4,600.00	4,535.49	4,319.53	4,269.99	21.13	23.27	-172.02	-910.96	-91.34	1,634.85	1,595.32	39.53	41.353		
4,700.00	4,633.76	4,413.56	4,362.75	21.61	23.79	-172.03	-926.23	-93.50	1,668.89	1,628.48	40.40	41.305		
4,800.00	4,732.04	4,507.59	4,455.50	22.08	24.32	-172.04	-941.50	-95.66	1,702.92	1,661.65	41.27	41.259		
4,900.00	4,830.32	4,601.61	4,548.26	22.56	24.84	-172.05	-956.77	-97.81	1,736.96	1,694.81	42.14	41.215		
5,000.00	4,928.60	4,704.36	4,641.02	23.04	25.41	-172.06	-972.05	-99.97	1,770.99	1,727.94	43.06	41.133		
5,100.00	5,026.87	4,789.67	4,733.77	23.51	25.88	-172.07	-987.32	-102.13	1,805.03	1,761.14	43.89	41.129		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWMD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,883.70	4,826.53	23.99	26.41	-172.07	-1,002.59	-104.29	1,839.07	1,794.31	44.76	41.089		
5,300.00	5,223.43	4,977.73	4,919.28	24.47	26.93	-172.08	-1,017.86	-106.44	1,873.10	1,827.47	45.63	41.050		
5,400.00	5,321.71	5,071.76	5,012.04	24.94	27.45	-172.09	-1,033.13	-108.60	1,907.14	1,860.63	46.50	41.012		
5,500.00	5,419.98	5,165.79	5,104.80	25.42	27.98	-172.09	-1,048.40	-110.76	1,941.17	1,893.80	47.38	40.975		
5,600.00	5,518.26	5,259.82	5,197.55	25.90	28.50	-172.10	-1,063.68	-112.92	1,975.21	1,926.96	48.25	40.939		
5,700.00	5,616.54	5,353.85	5,290.31	26.38	29.02	-172.11	-1,078.95	-115.07	2,009.24	1,960.12	49.12	40.904		
5,800.00	5,714.82	5,447.88	5,383.06	26.85	29.55	-172.11	-1,094.22	-117.23	2,043.28	1,993.29	49.99	40.870		
5,900.00	5,813.09	5,541.91	5,475.82	27.33	30.07	-172.12	-1,109.49	-119.39	2,077.32	2,026.45	50.87	40.837		
6,000.00	5,911.37	5,635.94	5,568.57	27.81	30.60	-172.12	-1,124.76	-121.55	2,111.35	2,059.61	51.74	40.805		
6,100.00	6,009.65	5,729.97	5,661.33	28.28	31.12	-172.13	-1,140.03	-123.70	2,145.39	2,092.77	52.62	40.774		
6,200.00	6,107.93	5,824.00	5,754.09	28.76	31.65	-172.13	-1,155.30	-125.86	2,179.42	2,125.93	53.49	40.744		
6,300.00	6,206.20	5,918.03	5,846.84	29.24	32.17	-172.14	-1,170.58	-128.02	2,213.46	2,159.09	54.37	40.715		
6,400.00	6,304.48	6,012.06	5,939.60	29.72	32.70	-172.14	-1,185.85	-130.17	2,247.49	2,192.25	55.24	40.686		
6,500.00	6,402.76	6,106.09	6,032.35	30.19	33.22	-172.15	-1,201.12	-132.33	2,281.53	2,225.41	56.12	40.658		
6,600.00	6,501.04	6,200.11	6,125.11	30.67	33.74	-172.15	-1,216.39	-134.49	2,315.57	2,258.58	56.99	40.631		
6,700.00	6,599.31	6,305.86	6,217.87	31.15	34.33	-172.16	-1,231.66	-136.65	2,349.60	2,291.68	57.92	40.566		
6,800.00	6,697.50	6,388.14	6,310.59	31.63	34.79	-149.68	-1,246.93	-138.80	2,383.59	2,324.85	58.74	40.576		
6,900.00	6,794.18	6,481.02	6,402.22	32.10	35.31	-121.06	-1,262.01	-140.93	2,416.97	2,357.34	59.63	40.536		
7,000.00	6,886.96	6,570.58	6,490.56	32.55	35.81	-107.22	-1,276.56	-142.99	2,449.18	2,388.68	60.50	40.483		
7,100.00	6,973.57	6,654.59	6,573.43	32.99	36.28	-99.42	-1,290.20	-144.92	2,479.98	2,418.62	61.36	40.418		
7,200.00	7,051.87	6,735.24	6,652.98	33.41	36.73	-94.46	-1,303.30	-147.03	2,509.30	2,447.06	62.25	40.310		
7,300.00	7,119.93	6,838.64	6,753.99	33.85	37.32	-91.39	-1,320.01	-160.72	2,536.65	2,473.20	63.45	39.978		
7,400.00	7,176.09	6,961.90	6,869.56	34.39	38.00	-89.56	-1,339.27	-198.37	2,561.15	2,496.19	64.96	39.429		
7,500.00	7,218.95	7,115.74	7,000.24	35.09	38.85	-88.80	-1,361.29	-275.76	2,581.79	2,514.92	66.88	38.605		
7,600.00	7,247.46	7,600.00	7,121.55	35.98	42.12	-88.73	-1,382.07	-399.64	2,597.14	2,525.21	71.93	36.105		
7,700.00	7,260.92	7,700.00	7,227.34	37.04	43.29	-89.41	-1,400.96	-621.47	2,605.11	2,529.86	75.26	34.617		
7,800.00	7,261.75	7,754.01	7,247.74	38.23	44.01	-89.69	-1,405.75	-834.47	2,605.18	2,527.69	77.49	33.618		
7,900.00	7,261.33	7,854.01	7,247.21	39.59	45.47	-89.69	-1,406.33	-934.46	2,604.10	2,523.33	80.77	32.240		
8,000.00	7,260.91	7,954.00	7,246.69	41.10	47.15	-89.69	-1,406.92	-1,034.45	2,603.03	2,518.66	84.38	30.851		
8,100.00	7,260.49	8,054.00	7,246.16	42.75	49.04	-89.69	-1,407.50	-1,134.45	2,601.96	2,513.69	88.26	29.479		
8,200.00	7,260.07	8,153.99	7,245.63	44.53	51.11	-89.68	-1,408.08	-1,234.44	2,600.88	2,508.48	92.40	28.147		
8,300.00	7,259.65	8,253.99	7,245.10	46.41	53.32	-89.68	-1,408.67	-1,334.43	2,599.81	2,503.05	96.76	26.868		
8,400.00	7,259.23	8,353.98	7,244.57	48.39	55.67	-89.68	-1,409.25	-1,434.42	2,598.74	2,497.43	101.31	25.652		
8,500.00	7,258.81	8,453.97	7,244.04	50.45	58.13	-89.68	-1,409.84	-1,534.41	2,597.66	2,491.64	106.02	24.501		
8,600.00	7,258.39	8,553.97	7,243.51	52.59	60.68	-89.67	-1,410.42	-1,634.40	2,596.59	2,485.71	110.88	23.418		
8,700.00	7,257.97	8,653.96	7,242.99	54.79	63.31	-89.67	-1,411.01	-1,734.39	2,595.52	2,479.65	115.86	22.401		
8,800.00	7,257.55	8,753.96	7,242.46	57.05	66.01	-89.67	-1,411.59	-1,834.38	2,594.44	2,473.48	120.96	21.449		
8,900.00	7,257.13	8,853.95	7,241.93	59.36	68.77	-89.67	-1,412.17	-1,934.37	2,593.37	2,467.22	126.15	20.557		
9,000.00	7,256.71	8,953.94	7,241.40	61.72	71.59	-89.66	-1,412.76	-2,034.37	2,592.29	2,460.86	131.43	19.724		
9,100.00	7,256.29	9,053.94	7,240.87	64.12	74.45	-89.66	-1,413.34	-2,134.36	2,591.22	2,454.43	136.79	18.944		
9,200.00	7,255.87	9,153.93	7,240.34	66.56	77.35	-89.66	-1,413.93	-2,234.35	2,590.15	2,447.94	142.21	18.214		
9,300.00	7,255.45	9,253.93	7,239.81	69.02	80.28	-89.66	-1,414.51	-2,334.34	2,589.07	2,441.38	147.69	17.530		
9,400.00	7,255.03	9,353.92	7,239.28	71.52	83.25	-89.65	-1,415.10	-2,434.33	2,588.00	2,434.77	153.23	16.890		
9,500.00	7,254.61	9,453.92	7,238.76	74.04	86.24	-89.65	-1,415.68	-2,534.32	2,586.93	2,428.12	158.81	16.289		
9,600.00	7,254.19	9,553.91	7,238.23	76.58	89.26	-89.65	-1,416.27	-2,634.31	2,585.85	2,421.41	164.44	15.725		
9,700.00	7,253.77	9,653.90	7,237.70	79.15	92.31	-89.65	-1,416.85	-2,734.30	2,584.78	2,414.67	170.10	15.195		
9,800.00	7,253.35	9,753.90	7,237.17	81.74	95.37	-89.64	-1,417.43	-2,834.29	2,583.70	2,407.90	175.81	14.696		
9,900.00	7,252.92	9,853.89	7,236.64	84.34	98.45	-89.64	-1,418.02	-2,934.28	2,582.63	2,401.09	181.54	14.226		
10,000.00	7,252.50	9,953.89	7,236.11	86.96	101.55	-89.64	-1,418.60	-3,034.28	2,581.56	2,394.26	187.30	13.783		
10,100.00	7,252.08	10,053.88	7,235.58	89.59	104.66	-89.64	-1,419.19	-3,134.27	2,580.48	2,387.40	193.09	13.364		
10,200.00	7,251.66	10,153.87	7,235.06	92.24	107.79	-89.63	-1,419.77	-3,234.26	2,579.41	2,380.51	198.90	12.968		
10,300.00	7,251.24	10,253.87	7,234.53	94.90	110.93	-89.63	-1,420.36	-3,334.25	2,578.34	2,373.60	204.74	12.594		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWMD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,353.86	7,234.00	97.57	114.08	-89.63	-1,420.94	-3,434.24	2,577.26	2,366.67	210.59	12.238		
10,500.00	7,250.40	10,453.86	7,233.47	100.25	117.24	-89.63	-1,421.52	-3,534.23	2,576.19	2,359.73	216.46	11.901		
10,600.00	7,249.98	10,553.85	7,232.94	102.93	120.41	-89.62	-1,422.11	-3,634.22	2,575.12	2,352.76	222.35	11.581		
10,700.00	7,249.56	10,653.85	7,232.41	105.63	123.59	-89.62	-1,422.69	-3,734.21	2,574.04	2,345.78	228.26	11.277		
10,800.00	7,249.14	10,753.84	7,231.88	108.34	126.77	-89.62	-1,423.28	-3,834.20	2,572.97	2,338.79	234.18	10.987		
10,900.00	7,248.72	10,853.83	7,231.35	111.05	129.97	-89.62	-1,423.86	-3,934.20	2,571.90	2,331.78	240.11	10.711		
11,000.00	7,248.30	10,953.83	7,230.83	113.77	133.17	-89.61	-1,424.45	-4,034.19	2,570.82	2,324.76	246.06	10.448		
11,100.00	7,247.88	11,053.82	7,230.30	116.50	136.38	-89.61	-1,425.03	-4,134.18	2,569.75	2,317.73	252.02	10.197		
11,200.00	7,247.46	11,153.82	7,229.77	119.23	139.59	-89.61	-1,425.61	-4,234.17	2,568.67	2,310.69	257.99	9.957		
11,300.00	7,247.04	11,253.81	7,229.24	121.97	142.81	-89.61	-1,426.20	-4,334.16	2,567.60	2,303.64	263.97	9.727		
11,400.00	7,246.62	11,353.80	7,228.71	124.72	146.03	-89.60	-1,426.78	-4,434.15	2,566.53	2,296.57	269.95	9.507		
11,500.00	7,246.20	11,453.80	7,228.18	127.46	149.26	-89.60	-1,427.37	-4,534.14	2,565.45	2,289.50	275.95	9.297		
11,600.00	7,245.78	11,553.79	7,227.65	130.22	152.50	-89.60	-1,427.95	-4,634.13	2,564.38	2,282.42	281.96	9.095		
11,700.00	7,245.36	11,653.79	7,227.12	132.98	155.73	-89.59	-1,428.54	-4,734.12	2,563.31	2,275.34	287.97	8.901		
11,800.00	7,244.94	11,753.78	7,226.60	135.74	158.98	-89.59	-1,429.12	-4,834.12	2,562.23	2,268.24	293.99	8.715		
11,900.00	7,244.52	11,853.78	7,226.07	138.50	162.22	-89.59	-1,429.70	-4,934.11	2,561.16	2,261.14	300.02	8.537		
12,000.00	7,244.10	11,953.77	7,225.54	141.27	165.47	-89.59	-1,430.29	-5,034.10	2,560.09	2,254.04	306.05	8.365		
12,100.00	7,243.68	12,053.76	7,225.01	144.04	168.73	-89.58	-1,430.87	-5,134.09	2,559.01	2,246.92	312.09	8.200		
12,200.00	7,243.26	12,153.76	7,224.48	146.82	171.98	-89.58	-1,431.46	-5,234.08	2,557.94	2,239.80	318.14	8.040		
12,300.00	7,242.84	12,253.75	7,223.95	149.60	175.24	-89.58	-1,432.04	-5,334.07	2,556.87	2,232.68	324.19	7.887		
12,400.00	7,242.42	12,353.75	7,223.42	152.38	178.50	-89.58	-1,432.63	-5,434.06	2,555.79	2,225.55	330.24	7.739		
12,500.00	7,242.00	12,453.74	7,222.90	155.16	181.77	-89.57	-1,433.21	-5,534.05	2,554.72	2,218.42	336.30	7.596		
12,600.00	7,241.58	12,553.73	7,222.37	157.95	185.03	-89.57	-1,433.79	-5,634.04	2,553.65	2,211.28	342.37	7.459		
12,700.00	7,241.16	12,653.73	7,221.84	160.74	188.30	-89.57	-1,434.38	-5,734.03	2,552.57	2,204.13	348.44	7.326		
12,800.00	7,240.74	12,753.72	7,221.31	163.53	191.57	-89.57	-1,434.96	-5,834.03	2,551.50	2,196.99	354.51	7.197		
12,900.00	7,240.32	12,853.72	7,220.78	166.32	194.85	-89.56	-1,435.55	-5,934.02	2,550.43	2,189.84	360.59	7.073		
13,000.00	7,239.89	12,953.71	7,220.25	169.12	198.12	-89.56	-1,436.13	-6,034.01	2,549.35	2,182.68	366.67	6.953		
13,100.00	7,239.47	13,053.71	7,219.72	171.92	201.40	-89.56	-1,436.72	-6,134.00	2,548.28	2,175.52	372.75	6.836		
13,200.00	7,239.05	13,153.70	7,219.19	174.72	204.68	-89.56	-1,437.30	-6,233.99	2,547.20	2,168.36	378.84	6.724		
13,300.00	7,238.63	13,253.69	7,218.67	177.52	207.96	-89.55	-1,437.88	-6,333.98	2,546.13	2,161.20	384.93	6.614		
13,400.00	7,238.21	13,353.69	7,218.14	180.32	211.24	-89.55	-1,438.47	-6,433.97	2,545.06	2,154.03	391.03	6.509		
13,500.00	7,237.79	13,453.68	7,217.61	183.13	214.53	-89.55	-1,439.05	-6,533.96	2,543.98	2,146.86	397.12	6.406		
13,600.00	7,237.37	13,553.68	7,217.08	185.93	217.81	-89.55	-1,439.64	-6,633.95	2,542.91	2,139.69	403.22	6.306		
13,700.00	7,236.95	13,653.67	7,216.55	188.74	221.10	-89.54	-1,440.22	-6,733.95	2,541.84	2,132.51	409.33	6.210		
13,800.00	7,236.53	13,753.66	7,216.02	191.55	224.39	-89.54	-1,440.81	-6,833.94	2,540.76	2,125.33	415.43	6.116		
13,900.00	7,236.11	13,853.66	7,215.49	194.36	227.68	-89.54	-1,441.39	-6,933.93	2,539.69	2,118.15	421.54	6.025		
14,000.00	7,235.69	13,953.65	7,214.97	197.17	230.97	-89.53	-1,441.98	-7,033.92	2,538.62	2,110.97	427.65	5.936		
14,100.00	7,235.27	14,053.65	7,214.44	199.98	234.26	-89.53	-1,442.56	-7,133.91	2,537.54	2,103.78	433.76	5.850		
14,200.00	7,234.85	14,153.64	7,213.91	202.80	237.55	-89.53	-1,443.14	-7,233.90	2,536.47	2,096.60	439.87	5.766		
14,300.00	7,234.43	14,253.64	7,213.38	205.61	240.85	-89.53	-1,443.73	-7,333.89	2,535.40	2,089.41	445.99	5.685		
14,400.00	7,234.01	14,353.63	7,212.85	208.43	244.14	-89.52	-1,444.31	-7,433.88	2,534.32	2,082.21	452.11	5.606		
14,500.00	7,233.59	14,453.62	7,212.32	211.25	247.44	-89.52	-1,444.90	-7,533.87	2,533.25	2,075.02	458.23	5.528		
14,600.00	7,233.17	14,553.62	7,211.79	214.06	250.74	-89.52	-1,445.48	-7,633.86	2,532.18	2,067.83	464.35	5.453		
14,700.00	7,232.75	14,653.61	7,211.26	216.88	254.04	-89.52	-1,446.07	-7,733.86	2,531.10	2,060.63	470.47	5.380		
14,800.00	7,232.33	14,753.61	7,210.74	219.70	257.34	-89.51	-1,446.65	-7,833.85	2,530.03	2,053.43	476.60	5.309		
14,900.00	7,231.91	14,853.60	7,210.21	222.52	260.64	-89.51	-1,447.23	-7,933.84	2,528.96	2,046.23	482.73	5.239		
15,000.00	7,231.49	14,953.59	7,209.68	225.35	263.94	-89.51	-1,447.82	-8,033.83	2,527.88	2,039.03	488.85	5.171		
15,100.00	7,231.07	15,053.59	7,209.15	228.17	267.24	-89.51	-1,448.40	-8,133.82	2,526.81	2,031.83	494.98	5.105		
15,116.21	7,231.00	15,069.80	7,209.06	228.63	267.78	-89.51	-1,448.50	-8,150.03	2,526.64	2,030.66	495.98	5.094 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	0.00	3.28	-179.50	-160.29	-1.39	160.29					
100.00	100.00	101.00	100.00	0.18	3.28	-179.50	-160.29	-1.39	160.29	156.83	3.46	46.321		
200.00	200.00	201.00	200.00	0.61	3.34	-179.50	-160.29	-1.39	160.29	156.34	3.95	40.559		
300.00	300.00	301.00	300.00	1.05	3.45	-179.50	-160.29	-1.39	160.29	155.79	4.50	35.626		
400.00	400.00	401.00	400.00	1.49	3.61	-179.50	-160.29	-1.39	160.29	155.20	5.10	31.449		
500.00	500.00	499.00	500.00	1.93	3.80	-179.50	-160.29	-1.39	160.29	154.56	5.73	27.953 CC, ES		
600.00	599.98	593.89	594.87	2.37	4.02	-171.67	-161.75	-1.87	163.57	157.16	6.40	25.552		
700.00	699.84	688.11	688.98	2.81	4.26	-171.41	-166.15	-3.32	173.42	166.32	7.10	24.410		
800.00	799.45	784.67	785.26	3.26	4.53	-171.08	-173.13	-5.60	189.24	181.42	7.82	24.195		
900.00	898.70	882.76	883.04	3.70	4.82	-170.90	-180.44	-8.00	208.70	200.14	8.55	24.399		
1,000.00	997.47	980.11	980.09	4.15	5.13	-170.88	-187.70	-10.38	231.52	222.22	9.30	24.885		
1,100.00	1,095.78	1,076.83	1,076.51	4.60	5.46	-170.99	-194.91	-12.75	256.93	246.86	10.07	25.520		
1,200.00	1,194.05	1,173.50	1,172.88	5.05	5.81	-171.11	-202.11	-15.11	282.51	271.67	10.84	26.070		
1,300.00	1,292.33	1,270.17	1,269.26	5.50	6.16	-171.21	-209.32	-17.48	308.10	296.48	11.62	26.512		
1,400.00	1,390.61	1,366.84	1,365.63	5.96	6.53	-171.29	-216.53	-19.84	333.68	321.27	12.42	26.871		
1,500.00	1,488.89	1,463.51	1,462.00	6.43	6.90	-171.36	-223.74	-22.21	359.27	346.05	13.23	27.166		
1,600.00	1,587.16	1,560.18	1,558.37	6.89	7.28	-171.42	-230.94	-24.57	384.86	370.82	14.04	27.410		
1,700.00	1,685.44	1,656.85	1,654.74	7.36	7.67	-171.48	-238.15	-26.94	410.45	395.58	14.86	27.613		
1,800.00	1,783.72	1,753.52	1,751.12	7.83	8.06	-171.53	-245.36	-29.30	436.03	420.34	15.69	27.784		
1,900.00	1,882.00	1,850.19	1,847.49	8.30	8.46	-171.57	-252.56	-31.67	461.62	445.09	16.53	27.929		
2,000.00	1,980.27	1,946.86	1,943.86	8.77	8.86	-171.61	-259.77	-34.03	487.21	469.84	17.37	28.053		
2,100.00	2,078.55	2,043.53	2,040.23	9.25	9.26	-171.64	-266.98	-36.39	512.80	494.59	18.21	28.159		
2,200.00	2,176.83	2,140.20	2,136.60	9.72	9.67	-171.67	-274.18	-38.76	538.39	519.33	19.06	28.250		
2,300.00	2,275.11	2,236.87	2,232.98	10.19	10.08	-171.70	-281.39	-41.12	563.98	544.07	19.91	28.329		
2,400.00	2,373.38	2,333.54	2,329.35	10.66	10.49	-171.73	-288.60	-43.49	589.57	568.81	20.76	28.398		
2,500.00	2,471.66	2,430.21	2,425.72	11.14	10.90	-171.75	-295.81	-45.85	615.16	593.54	21.62	28.459		
2,600.00	2,569.94	2,526.88	2,522.09	11.61	11.32	-171.77	-303.01	-48.22	640.75	618.27	22.47	28.512		
2,700.00	2,668.22	2,623.55	2,618.47	12.09	11.74	-171.79	-310.22	-50.58	666.34	643.00	23.33	28.559		
2,800.00	2,766.49	2,720.22	2,714.84	12.56	12.15	-171.81	-317.43	-52.95	691.93	667.73	24.19	28.601		
2,900.00	2,864.77	2,816.89	2,811.21	13.04	12.57	-171.83	-324.63	-55.31	717.52	692.46	25.06	28.638		
3,000.00	2,963.05	2,913.56	2,907.58	13.51	12.99	-171.85	-331.84	-57.68	743.11	717.19	25.92	28.671		
3,100.00	3,061.33	3,010.23	3,003.95	13.99	13.42	-171.86	-339.05	-60.04	768.70	741.91	26.78	28.700		
3,200.00	3,159.60	3,106.90	3,100.33	14.46	13.84	-171.88	-346.25	-62.40	794.29	766.64	27.65	28.727		
3,300.00	3,257.88	3,203.57	3,196.70	14.94	14.26	-171.89	-353.46	-64.77	819.88	791.36	28.52	28.750		
3,400.00	3,356.16	3,300.24	3,293.07	15.41	14.69	-171.90	-360.67	-67.13	845.47	816.08	29.39	28.772		
3,500.00	3,454.43	3,403.09	3,389.44	15.89	15.14	-171.91	-367.88	-69.50	871.06	840.78	30.28	28.766		
3,600.00	3,552.71	3,506.42	3,485.81	16.36	15.59	-171.92	-375.08	-71.86	896.65	865.47	31.18	28.758		
3,700.00	3,650.99	3,609.75	3,582.19	16.84	16.05	-171.93	-382.29	-74.23	922.24	890.16	32.08	28.749		
3,800.00	3,749.27	3,686.92	3,678.56	17.32	16.39	-171.94	-389.50	-76.59	947.83	914.96	32.87	28.840		
3,900.00	3,847.54	3,783.59	3,774.93	17.79	16.82	-171.95	-396.70	-78.96	973.42	939.68	33.74	28.853		
4,000.00	3,945.82	3,880.26	3,871.30	18.27	17.24	-171.96	-403.91	-81.32	999.01	964.40	34.61	28.865		
4,100.00	4,044.10	3,976.93	3,967.68	18.75	17.67	-171.97	-411.12	-83.69	1,024.60	989.11	35.48	28.876		
4,200.00	4,142.38	4,073.60	4,064.05	19.22	18.10	-171.98	-418.32	-86.05	1,050.19	1,013.83	36.36	28.886		
4,300.00	4,240.65	4,170.27	4,160.42	19.70	18.53	-171.99	-425.53	-88.41	1,075.78	1,038.55	37.23	28.895		
4,400.00	4,338.93	4,266.94	4,256.79	20.18	18.96	-171.99	-432.74	-90.78	1,101.37	1,063.26	38.10	28.904		
4,500.00	4,437.21	4,363.61	4,353.16	20.65	19.39	-172.00	-439.95	-93.14	1,126.96	1,087.98	38.98	28.912		
4,600.00	4,535.49	4,460.28	4,449.54	21.13	19.82	-172.01	-447.15	-95.51	1,152.55	1,112.69	39.85	28.919		
4,700.00	4,633.76	4,556.95	4,545.91	21.61	20.25	-172.01	-454.36	-97.87	1,178.14	1,137.41	40.73	28.926		
4,800.00	4,732.04	4,653.62	4,642.28	22.08	20.68	-172.02	-461.57	-100.24	1,203.73	1,162.12	41.61	28.932		
4,900.00	4,830.32	4,750.29	4,738.65	22.56	21.11	-172.03	-468.77	-102.60	1,229.32	1,186.84	42.48	28.937		
5,000.00	4,928.60	4,846.96	4,835.02	23.04	21.54	-172.03	-475.98	-104.97	1,254.91	1,211.55	43.36	28.942		
5,100.00	5,026.87	4,943.63	4,931.40	23.51	21.97	-172.04	-483.19	-107.33	1,280.50	1,236.26	44.24	28.947		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,040.30	5,027.77	23.99	22.40	-172.04	-490.39	-109.70	1,306.09	1,260.98	45.11	28.952		
5,300.00	5,223.43	5,136.97	5,124.14	24.47	22.83	-172.05	-497.60	-112.06	1,331.68	1,285.69	45.99	28.956		
5,400.00	5,321.71	5,233.64	5,220.51	24.94	23.27	-172.05	-504.81	-114.42	1,357.27	1,310.40	46.87	28.959		
5,500.00	5,419.98	5,330.31	5,316.89	25.42	23.70	-172.06	-512.02	-116.79	1,382.86	1,335.11	47.75	28.963		
5,600.00	5,518.26	5,426.98	5,413.26	25.90	24.13	-172.06	-519.22	-119.15	1,408.45	1,359.83	48.62	28.966		
5,700.00	5,616.54	5,523.65	5,509.63	26.38	24.56	-172.07	-526.43	-121.52	1,434.04	1,384.54	49.50	28.969		
5,800.00	5,714.82	5,620.33	5,606.00	26.85	25.00	-172.07	-533.64	-123.88	1,459.63	1,409.25	50.38	28.972		
5,900.00	5,813.09	5,717.00	5,702.37	27.33	25.43	-172.07	-540.84	-126.25	1,485.22	1,433.96	51.26	28.974		
6,000.00	5,911.37	5,813.67	5,798.75	27.81	25.86	-172.08	-548.05	-128.61	1,510.81	1,458.67	52.14	28.977		
6,100.00	6,009.65	5,910.34	5,895.12	28.28	26.29	-172.08	-555.26	-130.98	1,536.40	1,483.38	53.02	28.979		
6,200.00	6,107.93	6,007.01	5,991.49	28.76	26.73	-172.08	-562.46	-133.34	1,561.99	1,508.10	53.90	28.981		
6,300.00	6,206.20	6,103.68	6,087.86	29.24	27.16	-172.09	-569.67	-135.70	1,587.58	1,532.81	54.78	28.982		
6,400.00	6,304.48	6,200.35	6,184.23	29.72	27.59	-172.09	-576.88	-138.07	1,613.17	1,557.52	55.66	28.984		
6,500.00	6,402.76	6,302.98	6,280.61	30.19	28.05	-172.09	-584.09	-140.43	1,638.76	1,582.20	56.56	28.972		
6,600.00	6,501.04	6,406.31	6,376.98	30.67	28.52	-172.10	-591.29	-142.80	1,664.36	1,606.88	57.47	28.959		
6,700.00	6,599.31	6,509.64	6,473.35	31.15	28.98	-172.10	-598.50	-145.16	1,689.95	1,631.56	58.38	28.946		
6,800.00	6,697.50	6,586.99	6,569.69	31.63	29.33	-150.06	-605.70	-147.53	1,715.49	1,656.31	59.18	28.988		
6,900.00	6,794.18	6,682.81	6,665.15	32.10	29.76	-122.38	-612.85	-151.14	1,740.52	1,680.47	60.06	28.980		
7,000.00	6,886.96	6,780.39	6,761.04	32.55	30.19	-109.24	-620.14	-167.09	1,764.58	1,703.63	60.96	28.949		
7,100.00	6,973.57	6,881.17	6,856.32	32.99	30.62	-101.90	-627.50	-198.78	1,787.10	1,725.22	61.88	28.880		
7,200.00	7,051.87	6,985.60	6,948.50	33.41	31.04	-97.24	-634.77	-247.07	1,807.52	1,744.67	62.86	28.756		
7,300.00	7,119.93	7,094.01	7,034.52	33.85	31.45	-94.09	-641.71	-312.46	1,825.32	1,761.38	63.94	28.547		
7,400.00	7,176.09	7,206.49	7,110.73	34.39	31.91	-91.93	-648.06	-394.75	1,840.00	1,774.78	65.22	28.212		
7,500.00	7,218.95	7,322.87	7,173.12	35.09	32.56	-90.52	-653.51	-492.65	1,851.15	1,784.34	66.80	27.711		
7,600.00	7,247.46	7,442.58	7,217.67	35.98	33.49	-89.70	-657.73	-603.49	1,858.40	1,789.63	68.77	27.022		
7,700.00	7,260.92	7,564.70	7,241.01	37.04	34.73	-89.42	-660.45	-723.13	1,861.52	1,790.36	71.16	26.161		
7,800.00	7,261.75	7,676.81	7,243.81	38.23	36.09	-89.45	-661.56	-835.14	1,861.06	1,787.30	73.75	25.234		
7,900.00	7,261.33	7,776.81	7,243.42	39.59	37.48	-89.45	-662.35	-935.13	1,860.18	1,783.64	76.54	24.304		
8,000.00	7,260.91	7,876.80	7,243.03	41.10	39.03	-89.45	-663.13	-1,035.13	1,859.30	1,779.67	79.63	23.349		
8,100.00	7,260.49	7,976.80	7,242.63	42.75	40.72	-89.45	-663.91	-1,135.12	1,858.43	1,775.42	83.00	22.390		
8,200.00	7,260.07	8,076.80	7,242.24	44.53	42.54	-89.45	-664.69	-1,235.11	1,857.55	1,770.93	86.62	21.445		
8,300.00	7,259.65	8,176.79	7,241.85	46.41	44.47	-89.45	-665.47	-1,335.10	1,856.67	1,766.22	90.45	20.526		
8,400.00	7,259.23	8,276.79	7,241.45	48.39	46.49	-89.45	-666.26	-1,435.10	1,855.80	1,761.32	94.48	19.643		
8,500.00	7,258.81	8,376.78	7,241.06	50.45	48.60	-89.45	-667.04	-1,535.09	1,854.92	1,756.25	98.67	18.799		
8,600.00	7,258.39	8,476.78	7,240.67	52.59	50.78	-89.45	-667.82	-1,635.08	1,854.04	1,751.04	103.01	17.999		
8,700.00	7,257.97	8,576.78	7,240.27	54.79	53.03	-89.45	-668.60	-1,735.07	1,853.17	1,745.69	107.47	17.243		
8,800.00	7,257.55	8,676.77	7,239.88	57.05	55.33	-89.46	-669.39	-1,835.07	1,852.29	1,740.24	112.05	16.530		
8,900.00	7,257.13	8,776.77	7,239.49	59.36	57.69	-89.46	-670.17	-1,935.06	1,851.41	1,734.68	116.73	15.860		
9,000.00	7,256.71	8,876.77	7,239.09	61.72	60.08	-89.46	-670.95	-2,035.05	1,850.54	1,729.04	121.50	15.231		
9,100.00	7,256.29	8,976.76	7,238.70	64.12	62.52	-89.46	-671.73	-2,135.04	1,849.66	1,723.31	126.35	14.639		
9,200.00	7,255.87	9,076.76	7,238.31	66.56	64.99	-89.46	-672.51	-2,235.03	1,848.78	1,717.52	131.26	14.085		
9,300.00	7,255.45	9,176.75	7,237.91	69.02	67.49	-89.46	-673.30	-2,335.03	1,847.91	1,711.66	136.24	13.563		
9,400.00	7,255.03	9,276.75	7,237.52	71.52	70.02	-89.46	-674.08	-2,435.02	1,847.03	1,705.75	141.28	13.074		
9,500.00	7,254.61	9,376.75	7,237.13	74.04	72.57	-89.46	-674.86	-2,535.01	1,846.15	1,699.79	146.36	12.614		
9,600.00	7,254.19	9,476.74	7,236.73	76.58	75.14	-89.46	-675.64	-2,635.00	1,845.28	1,693.79	151.49	12.181		
9,700.00	7,253.77	9,576.74	7,236.34	79.15	77.74	-89.46	-676.43	-2,735.00	1,844.40	1,687.74	156.66	11.773		
9,800.00	7,253.35	9,676.73	7,235.95	81.74	80.35	-89.46	-677.21	-2,834.99	1,843.52	1,681.66	161.86	11.389		
9,900.00	7,252.92	9,776.73	7,235.55	84.34	82.98	-89.46	-677.99	-2,934.98	1,842.65	1,675.54	167.10	11.027		
10,000.00	7,252.50	9,876.73	7,235.16	86.96	85.62	-89.46	-678.77	-3,034.97	1,841.77	1,669.40	172.37	10.685		
10,100.00	7,252.08	9,976.72	7,234.77	89.59	88.28	-89.46	-679.55	-3,134.97	1,840.89	1,663.22	177.67	10.361		
10,200.00	7,251.66	10,076.72	7,234.37	92.24	90.95	-89.46	-680.34	-3,234.96	1,840.02	1,657.03	182.99	10.055		
10,300.00	7,251.24	10,176.72	7,233.98	94.90	93.63	-89.46	-681.12	-3,334.95	1,839.14	1,650.81	188.33	9.765		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,400.00	7,250.82	10,276.71	7,233.59	97.57	96.32	-89.46	-681.90	-3,434.94	1,838.26	1,644.56	193.70	9.490		
10,500.00	7,250.40	10,376.71	7,233.19	100.25	99.02	-89.47	-682.68	-3,534.94	1,837.39	1,638.30	199.08	9.229		
10,600.00	7,249.98	10,476.70	7,232.80	102.93	101.73	-89.47	-683.46	-3,634.93	1,836.51	1,632.02	204.49	8.981		
10,700.00	7,249.56	10,576.70	7,232.41	105.63	104.44	-89.47	-684.25	-3,734.92	1,835.63	1,625.73	209.90	8.745		
10,800.00	7,249.14	10,676.70	7,232.01	108.34	107.17	-89.47	-685.03	-3,834.91	1,834.76	1,619.42	215.34	8.520		
10,900.00	7,248.72	10,776.69	7,231.62	111.05	109.90	-89.47	-685.81	-3,934.90	1,833.88	1,613.09	220.79	8.306		
11,000.00	7,248.30	10,876.69	7,231.23	113.77	112.63	-89.47	-686.59	-4,034.90	1,833.00	1,606.75	226.25	8.102		
11,100.00	7,247.88	10,976.69	7,230.83	116.50	115.38	-89.47	-687.38	-4,134.89	1,832.13	1,600.40	231.72	7.907		
11,200.00	7,247.46	11,076.68	7,230.44	119.23	118.13	-89.47	-688.16	-4,234.88	1,831.25	1,594.04	237.21	7.720		
11,300.00	7,247.04	11,176.68	7,230.05	121.97	120.88	-89.47	-688.94	-4,334.87	1,830.37	1,587.67	242.70	7.542		
11,400.00	7,246.62	11,276.67	7,229.65	124.72	123.64	-89.47	-689.72	-4,434.87	1,829.50	1,581.29	248.21	7.371		
11,500.00	7,246.20	11,376.67	7,229.26	127.46	126.40	-89.47	-690.50	-4,534.86	1,828.62	1,574.90	253.72	7.207		
11,600.00	7,245.78	11,476.67	7,228.87	130.22	129.17	-89.47	-691.29	-4,634.85	1,827.74	1,568.50	259.24	7.050		
11,700.00	7,245.36	11,576.66	7,228.47	132.98	131.94	-89.47	-692.07	-4,734.84	1,826.87	1,562.09	264.78	6.900		
11,800.00	7,244.94	11,676.66	7,228.08	135.74	134.71	-89.47	-692.85	-4,834.84	1,825.99	1,555.67	270.31	6.755		
11,900.00	7,244.52	11,776.65	7,227.69	138.50	137.49	-89.47	-693.63	-4,934.83	1,825.11	1,549.25	275.86	6.616		
12,000.00	7,244.10	11,876.65	7,227.29	141.27	140.27	-89.47	-694.42	-5,034.82	1,824.24	1,542.82	281.41	6.482		
12,100.00	7,243.68	11,976.65	7,226.90	144.04	143.05	-89.47	-695.20	-5,134.81	1,823.36	1,536.39	286.97	6.354		
12,200.00	7,243.26	12,076.64	7,226.51	146.82	145.84	-89.48	-695.98	-5,234.80	1,822.48	1,529.95	292.54	6.230		
12,300.00	7,242.84	12,176.64	7,226.11	149.60	148.63	-89.48	-696.76	-5,334.80	1,821.61	1,523.50	298.11	6.111		
12,400.00	7,242.42	12,276.64	7,225.72	152.38	151.42	-89.48	-697.54	-5,434.79	1,820.73	1,517.05	303.68	5.996		
12,500.00	7,242.00	12,376.63	7,225.33	155.16	154.22	-89.48	-698.33	-5,534.78	1,819.85	1,510.59	309.26	5.885		
12,600.00	7,241.58	12,476.63	7,224.93	157.95	157.01	-89.48	-699.11	-5,634.77	1,818.98	1,504.13	314.85	5.777		
12,700.00	7,241.16	12,576.62	7,224.54	160.74	159.81	-89.48	-699.89	-5,734.77	1,818.10	1,497.66	320.44	5.674		
12,800.00	7,240.74	12,676.62	7,224.15	163.53	162.61	-89.48	-700.67	-5,834.76	1,817.22	1,491.19	326.03	5.574		
12,900.00	7,240.32	12,776.62	7,223.75	166.32	165.42	-89.48	-701.45	-5,934.75	1,816.34	1,484.72	331.63	5.477		
13,000.00	7,239.89	12,876.61	7,223.36	169.12	168.22	-89.48	-702.24	-6,034.74	1,815.47	1,478.24	337.23	5.383		
13,100.00	7,239.47	12,976.61	7,222.97	171.92	171.03	-89.48	-703.02	-6,134.74	1,814.59	1,471.75	342.84	5.293		
13,200.00	7,239.05	13,076.60	7,222.57	174.72	173.84	-89.48	-703.80	-6,234.73	1,813.71	1,465.27	348.45	5.205		
13,300.00	7,238.63	13,176.60	7,222.18	177.52	176.65	-89.48	-704.58	-6,334.72	1,812.84	1,458.78	354.06	5.120		
13,400.00	7,238.21	13,276.60	7,221.79	180.32	179.46	-89.48	-705.37	-6,434.71	1,811.96	1,452.29	359.67	5.038		
13,500.00	7,237.79	13,376.59	7,221.39	183.13	182.27	-89.48	-706.15	-6,534.70	1,811.08	1,445.79	365.29	4.958		
13,600.00	7,237.37	13,476.59	7,221.00	185.93	185.09	-89.48	-706.93	-6,634.70	1,810.21	1,439.29	370.91	4.880		
13,700.00	7,236.95	13,576.59	7,220.61	188.74	187.90	-89.48	-707.71	-6,734.69	1,809.33	1,432.79	376.54	4.805		
13,800.00	7,236.53	13,676.58	7,220.21	191.55	190.72	-89.49	-708.49	-6,834.68	1,808.45	1,426.29	382.17	4.732		
13,900.00	7,236.11	13,776.58	7,219.82	194.36	193.54	-89.49	-709.28	-6,934.67	1,807.58	1,419.78	387.79	4.661		
14,000.00	7,235.69	13,876.57	7,219.43	197.17	196.36	-89.49	-710.06	-7,034.67	1,806.70	1,413.27	393.43	4.592		
14,100.00	7,235.27	13,976.57	7,219.03	199.98	199.18	-89.49	-710.84	-7,134.66	1,805.82	1,406.76	399.06	4.525		
14,200.00	7,234.85	14,076.57	7,218.64	202.80	202.00	-89.49	-711.62	-7,234.65	1,804.95	1,400.25	404.70	4.460		
14,300.00	7,234.43	14,176.56	7,218.25	205.61	204.82	-89.49	-712.41	-7,334.64	1,804.07	1,393.74	410.34	4.397		
14,400.00	7,234.01	14,276.56	7,217.86	208.43	207.64	-89.49	-713.19	-7,434.64	1,803.19	1,387.22	415.98	4.335		
14,500.00	7,233.59	14,376.55	7,217.46	211.25	210.47	-89.49	-713.97	-7,534.63	1,802.32	1,380.70	421.62	4.275		
14,600.00	7,233.17	14,476.55	7,217.07	214.06	213.29	-89.49	-714.75	-7,634.62	1,801.44	1,374.18	427.26	4.216		
14,700.00	7,232.75	14,576.55	7,216.68	216.88	216.12	-89.49	-715.53	-7,734.61	1,800.56	1,367.66	432.91	4.159		
14,800.00	7,232.33	14,676.54	7,216.28	219.70	218.95	-89.49	-716.32	-7,834.61	1,799.69	1,361.13	438.56	4.104		
14,900.00	7,231.91	14,776.54	7,215.89	222.52	221.77	-89.49	-717.10	-7,934.60	1,798.81	1,354.61	444.21	4.049		
15,000.00	7,231.49	14,876.54	7,215.50	225.35	224.60	-89.49	-717.88	-8,034.59	1,797.93	1,348.08	449.86	3.997		
15,100.00	7,231.07	14,976.53	7,215.10	228.17	227.43	-89.49	-718.66	-8,134.58	1,797.06	1,341.55	455.51	3.945		
15,116.21	7,231.00	14,992.74	7,215.04	228.63	227.89	-89.49	-718.79	-8,150.79	1,796.92	1,340.49	456.43	3.937 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	0.00	3.28	-179.51	-260.11	-2.23	260.12					
100.00	100.00	102.00	100.00	0.18	3.29	-179.51	-260.11	-2.23	260.12	256.65	3.46	75.163		
200.00	200.00	202.00	200.00	0.61	3.34	-179.51	-260.11	-2.23	260.12	256.16	3.95	65.803		
300.00	300.00	298.00	300.00	1.05	3.44	-179.51	-260.11	-2.23	260.12	255.62	4.50	57.864 CC, ES		
400.00	400.00	389.91	391.90	1.49	3.58	-179.46	-261.50	-2.47	261.63	256.55	5.09	51.425		
500.00	500.00	481.48	483.36	1.93	3.75	-179.31	-265.77	-3.21	266.31	260.58	5.73	46.474		
600.00	599.98	572.51	574.10	2.37	3.95	-171.34	-272.87	-4.44	275.84	269.43	6.41	43.008		
700.00	699.84	662.40	663.44	2.81	4.19	-171.13	-282.66	-6.14	291.90	284.77	7.13	40.949		
800.00	799.45	755.38	755.53	3.26	4.45	-170.92	-295.29	-8.33	313.99	306.15	7.84	40.057		
900.00	898.70	851.99	851.17	3.70	4.76	-170.81	-308.75	-10.67	339.79	331.24	8.55	39.724		
1,000.00	997.47	947.65	945.86	4.15	5.08	-170.77	-322.09	-12.99	368.91	359.62	9.29	39.721		
1,100.00	1,095.78	1,042.51	1,039.76	4.60	5.43	-170.86	-335.31	-15.28	400.57	390.53	10.04	39.912		
1,200.00	1,194.05	1,137.30	1,133.61	5.05	5.78	-170.96	-348.53	-17.58	432.40	421.61	10.79	40.078		
1,300.00	1,292.33	1,232.10	1,227.45	5.50	6.15	-171.05	-361.74	-19.87	464.23	452.67	11.56	40.163		
1,400.00	1,390.61	1,326.90	1,321.29	5.96	6.53	-171.13	-374.95	-22.16	496.06	483.71	12.34	40.192		
1,500.00	1,488.89	1,421.69	1,415.14	6.43	6.92	-171.20	-388.17	-24.46	527.89	514.75	13.14	40.183		
1,600.00	1,587.16	1,516.49	1,508.98	6.89	7.32	-171.26	-401.38	-26.75	559.72	545.78	13.94	40.147		
1,700.00	1,685.44	1,611.29	1,602.82	7.36	7.72	-171.32	-414.60	-29.05	591.56	576.80	14.75	40.094		
1,800.00	1,783.72	1,706.08	1,696.66	7.83	8.12	-171.37	-427.81	-31.34	623.39	607.81	15.57	40.028		
1,900.00	1,882.00	1,800.88	1,790.51	8.30	8.54	-171.41	-441.03	-33.63	655.22	638.82	16.40	39.954		
2,000.00	1,980.27	1,904.32	1,884.35	8.77	8.99	-171.45	-454.24	-35.93	687.06	669.79	17.27	39.792		
2,100.00	2,078.55	2,009.53	1,978.19	9.25	9.45	-171.49	-467.45	-38.22	718.89	700.75	18.15	39.619		
2,200.00	2,176.83	2,085.27	2,072.04	9.72	9.79	-171.52	-480.67	-40.52	750.73	731.82	18.90	39.714		
2,300.00	2,275.11	2,180.06	2,165.88	10.19	10.21	-171.55	-493.88	-42.81	782.56	762.82	19.75	39.633		
2,400.00	2,373.38	2,274.86	2,259.72	10.66	10.64	-171.58	-507.10	-45.11	814.40	793.81	20.59	39.552		
2,500.00	2,471.66	2,369.66	2,353.57	11.14	11.07	-171.61	-520.31	-47.40	846.23	824.79	21.44	39.474		
2,600.00	2,569.94	2,464.45	2,447.41	11.61	11.49	-171.63	-533.53	-49.69	878.07	855.78	22.29	39.397		
2,700.00	2,668.22	2,559.25	2,541.25	12.09	11.93	-171.65	-546.74	-51.99	909.90	886.76	23.14	39.322		
2,800.00	2,766.49	2,654.05	2,635.09	12.56	12.36	-171.67	-559.95	-54.28	941.74	917.75	23.99	39.250		
2,900.00	2,864.77	2,748.84	2,728.94	13.04	12.79	-171.69	-573.17	-56.58	973.58	948.73	24.85	39.180		
3,000.00	2,963.05	2,843.64	2,822.78	13.51	13.23	-171.71	-586.38	-58.87	1,005.41	979.71	25.71	39.113		
3,100.00	3,061.33	2,938.44	2,916.62	13.99	13.66	-171.73	-599.60	-61.16	1,037.25	1,010.68	26.56	39.047		
3,200.00	3,159.60	3,033.23	3,010.47	14.46	14.10	-171.75	-612.81	-63.46	1,069.08	1,041.66	27.42	38.985		
3,300.00	3,257.88	3,128.03	3,104.31	14.94	14.53	-171.76	-626.03	-65.75	1,100.92	1,072.64	28.28	38.924		
3,400.00	3,356.16	3,222.83	3,198.15	15.41	14.97	-171.78	-639.24	-68.05	1,132.76	1,103.61	29.15	38.866		
3,500.00	3,454.43	3,317.62	3,291.99	15.89	15.41	-171.79	-652.46	-70.34	1,164.59	1,134.59	30.01	38.809		
3,600.00	3,552.71	3,412.42	3,385.84	16.36	15.85	-171.80	-665.67	-72.64	1,196.43	1,165.56	30.87	38.755		
3,700.00	3,650.99	3,507.22	3,479.68	16.84	16.29	-171.82	-678.88	-74.93	1,228.27	1,196.53	31.74	38.703		
3,800.00	3,749.27	3,602.01	3,573.52	17.32	16.73	-171.83	-692.10	-77.22	1,260.10	1,227.50	32.60	38.653		
3,900.00	3,847.54	3,703.19	3,667.37	17.79	17.20	-171.84	-705.31	-79.52	1,291.94	1,258.44	33.49	38.571		
4,000.00	3,945.82	3,808.40	3,761.21	18.27	17.69	-171.85	-718.53	-81.81	1,323.78	1,289.37	34.41	38.473		
4,100.00	4,044.10	3,886.40	3,855.05	18.75	18.06	-171.86	-731.74	-84.11	1,355.61	1,320.41	35.20	38.512		
4,200.00	4,142.38	3,981.20	3,948.89	19.22	18.50	-171.87	-744.96	-86.40	1,387.45	1,351.38	36.07	38.469		
4,300.00	4,240.65	4,075.99	4,042.74	19.70	18.94	-171.88	-758.17	-88.69	1,419.29	1,382.35	36.94	38.427		
4,400.00	4,338.93	4,170.79	4,136.58	20.18	19.38	-171.89	-771.38	-90.99	1,451.12	1,413.32	37.80	38.386		
4,500.00	4,437.21	4,265.59	4,230.42	20.65	19.83	-171.90	-784.60	-93.28	1,482.96	1,444.29	38.67	38.347		
4,600.00	4,535.49	4,360.38	4,324.27	21.13	20.27	-171.90	-797.81	-95.58	1,514.80	1,475.26	39.54	38.309		
4,700.00	4,633.76	4,455.18	4,418.11	21.61	20.71	-171.91	-811.03	-97.87	1,546.63	1,506.22	40.41	38.272		
4,800.00	4,732.04	4,549.98	4,511.95	22.08	21.16	-171.92	-824.24	-100.17	1,578.47	1,537.19	41.28	38.237		
4,900.00	4,830.32	4,644.77	4,605.79	22.56	21.60	-171.93	-837.46	-102.46	1,610.31	1,568.16	42.15	38.202		
5,000.00	4,928.60	4,739.57	4,699.64	23.04	22.05	-171.93	-850.67	-104.75	1,642.14	1,599.12	43.02	38.169		
5,100.00	5,026.87	4,834.37	4,793.48	23.51	22.49	-171.94	-863.88	-107.05	1,673.98	1,630.09	43.89	38.137		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,929.16	4,887.32	23.99	22.94	-171.95	-877.10	-109.34	1,705.82	1,661.05	44.77	38.105		
5,300.00	5,223.43	5,023.96	4,981.17	24.47	23.38	-171.95	-890.31	-111.64	1,737.66	1,692.02	45.64	38.075		
5,400.00	5,321.71	5,118.76	5,075.01	24.94	23.83	-171.96	-903.53	-113.93	1,769.49	1,722.98	46.51	38.046		
5,500.00	5,419.98	5,213.55	5,168.85	25.42	24.27	-171.96	-916.74	-116.22	1,801.33	1,753.95	47.38	38.017		
5,600.00	5,518.26	5,308.35	5,262.70	25.90	24.72	-171.97	-929.96	-118.52	1,833.17	1,784.91	48.25	37.989		
5,700.00	5,616.54	5,403.15	5,356.54	26.38	25.17	-171.97	-943.17	-120.81	1,865.00	1,815.88	49.13	37.962		
5,800.00	5,714.82	5,502.06	5,450.38	26.85	25.63	-171.98	-956.38	-123.11	1,896.84	1,846.82	50.02	37.922		
5,900.00	5,813.09	5,592.74	5,544.22	27.33	26.06	-171.98	-969.60	-125.40	1,928.68	1,877.80	50.87	37.910		
6,000.00	5,911.37	5,687.53	5,638.07	27.81	26.50	-171.99	-982.81	-127.69	1,960.52	1,908.77	51.75	37.886		
6,100.00	6,009.65	5,782.33	5,731.91	28.28	26.95	-171.99	-996.03	-129.99	1,992.35	1,939.73	52.62	37.861		
6,200.00	6,107.93	5,877.13	5,825.75	28.76	27.40	-172.00	-1,009.24	-132.28	2,024.19	1,970.69	53.50	37.838		
6,300.00	6,206.20	5,971.92	5,919.60	29.24	27.84	-172.00	-1,022.46	-134.58	2,056.03	2,001.66	54.37	37.815		
6,400.00	6,304.48	6,066.72	6,013.44	29.72	28.29	-172.01	-1,035.67	-136.87	2,087.86	2,032.62	55.25	37.793		
6,500.00	6,402.76	6,161.52	6,107.28	30.19	28.74	-172.01	-1,048.88	-139.17	2,119.70	2,063.58	56.12	37.771		
6,600.00	6,501.04	6,256.31	6,201.12	30.67	29.19	-172.01	-1,062.10	-141.46	2,151.54	2,094.54	57.00	37.749		
6,700.00	6,599.31	6,351.11	6,294.97	31.15	29.63	-172.02	-1,075.31	-143.75	2,183.38	2,125.50	57.87	37.729		
6,800.00	6,697.50	6,445.87	6,388.78	31.63	30.08	-149.66	-1,088.52	-146.05	2,215.16	2,156.41	58.75	37.707		
6,900.00	6,794.18	6,539.62	6,481.55	32.10	30.52	-121.27	-1,101.59	-148.99	2,246.33	2,186.71	59.62	37.677		
7,000.00	6,886.96	6,634.75	6,574.67	32.55	30.96	-107.48	-1,114.80	-162.71	2,276.27	2,215.76	60.51	37.618		
7,100.00	6,973.57	6,733.48	6,668.02	32.99	31.40	-99.54	-1,128.18	-191.59	2,304.29	2,242.86	61.43	37.511		
7,200.00	7,051.87	6,836.51	6,759.49	33.41	31.82	-94.37	-1,141.43	-236.88	2,329.71	2,267.31	62.40	37.333		
7,300.00	7,119.93	6,944.41	6,846.19	33.85	32.23	-90.79	-1,154.17	-299.60	2,351.89	2,288.40	63.48	37.049		
7,400.00	7,176.09	7,057.52	6,924.44	34.39	32.62	-88.30	-1,165.87	-380.23	2,370.23	2,305.48	64.75	36.607		
7,500.00	7,218.95	7,175.80	6,989.80	35.09	33.07	-86.64	-1,175.91	-478.09	2,384.21	2,317.89	66.31	35.953		
7,600.00	7,247.46	7,298.65	7,037.50	35.98	33.75	-85.67	-1,183.59	-590.83	2,393.40	2,325.12	68.27	35.057		
7,700.00	7,260.92	7,424.91	7,063.27	37.04	34.86	-85.31	-1,188.28	-714.13	2,397.48	2,326.82	70.67	33.926		
7,800.00	7,261.75	7,540.53	7,066.82	38.23	36.19	-85.34	-1,189.78	-829.61	2,397.16	2,323.87	73.29	32.708		
7,900.00	7,261.33	7,640.53	7,066.43	39.59	37.53	-85.34	-1,190.60	-929.60	2,396.31	2,320.26	76.05	31.511		
8,000.00	7,260.91	7,740.52	7,066.04	41.10	39.05	-85.34	-1,191.41	-1,029.59	2,395.46	2,316.34	79.12	30.277		
8,100.00	7,260.49	7,840.52	7,065.64	42.75	40.71	-85.33	-1,192.22	-1,129.59	2,394.62	2,312.15	82.47	29.037		
8,200.00	7,260.07	7,940.52	7,065.25	44.53	42.51	-85.33	-1,193.03	-1,229.58	2,393.77	2,307.70	86.07	27.813		
8,300.00	7,259.65	8,040.51	7,064.86	46.41	44.41	-85.33	-1,193.84	-1,329.57	2,392.92	2,303.04	89.88	26.623		
8,400.00	7,259.23	8,140.51	7,064.47	48.39	46.42	-85.33	-1,194.65	-1,429.56	2,392.08	2,298.19	93.89	25.479		
8,500.00	7,258.81	8,240.50	7,064.07	50.45	48.52	-85.33	-1,195.47	-1,529.56	2,391.23	2,293.17	98.06	24.386		
8,600.00	7,258.39	8,340.50	7,063.68	52.59	50.68	-85.33	-1,196.28	-1,629.55	2,390.38	2,288.01	102.38	23.349		
8,700.00	7,257.97	8,440.50	7,063.29	54.79	52.92	-85.33	-1,197.09	-1,729.54	2,389.54	2,282.71	106.83	22.368		
8,800.00	7,257.55	8,540.49	7,062.89	57.05	55.21	-85.33	-1,197.90	-1,829.53	2,388.69	2,277.30	111.39	21.445		
8,900.00	7,257.13	8,640.49	7,062.50	59.36	57.56	-85.33	-1,198.71	-1,929.53	2,387.85	2,271.79	116.05	20.576		
9,000.00	7,256.71	8,740.49	7,062.11	61.72	59.95	-85.33	-1,199.52	-2,029.52	2,387.00	2,266.20	120.80	19.759		
9,100.00	7,256.29	8,840.48	7,061.71	64.12	62.37	-85.32	-1,200.34	-2,129.51	2,386.15	2,260.52	125.63	18.993		
9,200.00	7,255.87	8,940.48	7,061.32	66.56	64.84	-85.32	-1,201.15	-2,229.50	2,385.31	2,254.77	130.53	18.274		
9,300.00	7,255.45	9,040.48	7,060.93	69.02	67.33	-85.32	-1,201.96	-2,329.49	2,384.46	2,248.97	135.49	17.598		
9,400.00	7,255.03	9,140.47	7,060.53	71.52	69.85	-85.32	-1,202.77	-2,429.48	2,383.61	2,243.10	140.51	16.964		
9,500.00	7,254.61	9,240.47	7,060.14	74.04	72.40	-85.32	-1,203.58	-2,529.48	2,382.77	2,237.19	145.58	16.368		
9,600.00	7,254.19	9,340.47	7,059.75	76.58	74.97	-85.32	-1,204.39	-2,629.47	2,381.92	2,231.23	150.69	15.807		
9,700.00	7,253.77	9,440.46	7,059.35	79.15	77.56	-85.32	-1,205.21	-2,729.46	2,381.07	2,225.23	155.84	15.279		
9,800.00	7,253.35	9,540.46	7,058.96	81.74	80.17	-85.32	-1,206.02	-2,829.46	2,380.23	2,219.20	161.03	14.781		
9,900.00	7,252.92	9,640.45	7,058.57	84.34	82.80	-85.32	-1,206.83	-2,929.45	2,379.38	2,213.13	166.25	14.312		
10,000.00	7,252.50	9,740.45	7,058.18	86.96	85.44	-85.32	-1,207.64	-3,029.44	2,378.54	2,207.03	171.50	13.869		
10,100.00	7,252.08	9,840.45	7,057.78	89.59	88.09	-85.31	-1,208.45	-3,129.43	2,377.69	2,200.91	176.78	13.450		
10,200.00	7,251.66	9,940.44	7,057.39	92.24	90.76	-85.31	-1,209.26	-3,229.43	2,376.84	2,194.75	182.09	13.053		
10,300.00	7,251.24	10,040.44	7,057.00	94.90	93.44	-85.31	-1,210.08	-3,329.42	2,376.00	2,188.58	187.42	12.678		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,140.44	7,056.60	97.57	96.12	-85.31	-1,210.89	-3,429.41	2,375.15	2,182.39	192.76	12.322		
10,500.00	7,250.40	10,240.43	7,056.21	100.25	98.82	-85.31	-1,211.70	-3,529.40	2,374.30	2,176.17	198.13	11.983		
10,600.00	7,249.98	10,340.43	7,055.82	102.93	101.53	-85.31	-1,212.51	-3,629.40	2,373.46	2,169.94	203.52	11.662		
10,700.00	7,249.56	10,440.43	7,055.42	105.63	104.24	-85.31	-1,213.32	-3,729.39	2,372.61	2,163.69	208.92	11.357		
10,800.00	7,249.14	10,540.42	7,055.03	108.34	106.96	-85.31	-1,214.13	-3,829.38	2,371.76	2,157.43	214.34	11.066		
10,900.00	7,248.72	10,640.42	7,054.64	111.05	109.69	-85.31	-1,214.95	-3,929.37	2,370.92	2,151.15	219.77	10.788		
11,000.00	7,248.30	10,740.41	7,054.24	113.77	112.43	-85.31	-1,215.76	-4,029.36	2,370.07	2,144.86	225.21	10.524		
11,100.00	7,247.88	10,840.41	7,053.85	116.50	115.17	-85.30	-1,216.57	-4,129.36	2,369.23	2,138.56	230.67	10.271		
11,200.00	7,247.46	10,940.41	7,053.46	119.23	117.92	-85.30	-1,217.38	-4,229.35	2,368.38	2,132.25	236.13	10.030		
11,300.00	7,247.04	11,040.40	7,053.06	121.97	120.67	-85.30	-1,218.19	-4,329.34	2,367.53	2,125.92	241.61	9.799		
11,400.00	7,246.62	11,140.40	7,052.67	124.72	123.42	-85.30	-1,219.00	-4,429.33	2,366.69	2,119.59	247.10	9.578		
11,500.00	7,246.20	11,240.40	7,052.28	127.46	126.19	-85.30	-1,219.82	-4,529.33	2,365.84	2,113.24	252.60	9.366		
11,600.00	7,245.78	11,340.39	7,051.88	130.22	128.95	-85.30	-1,220.63	-4,629.32	2,364.99	2,106.89	258.10	9.163		
11,700.00	7,245.36	11,440.39	7,051.49	132.98	131.72	-85.30	-1,221.44	-4,729.31	2,364.15	2,100.53	263.61	8.968		
11,800.00	7,244.94	11,540.39	7,051.10	135.74	134.49	-85.30	-1,222.25	-4,829.30	2,363.30	2,094.17	269.14	8.781		
11,900.00	7,244.52	11,640.38	7,050.71	138.50	137.27	-85.30	-1,223.06	-4,929.30	2,362.46	2,087.79	274.66	8.601		
12,000.00	7,244.10	11,740.38	7,050.31	141.27	140.05	-85.30	-1,223.87	-5,029.29	2,361.61	2,081.41	280.20	8.428		
12,100.00	7,243.68	11,840.38	7,049.92	144.04	142.83	-85.29	-1,224.69	-5,129.28	2,360.76	2,075.02	285.74	8.262		
12,200.00	7,243.26	11,940.37	7,049.53	146.82	145.62	-85.29	-1,225.50	-5,229.27	2,359.92	2,068.63	291.29	8.102		
12,300.00	7,242.84	12,040.37	7,049.13	149.60	148.41	-85.29	-1,226.31	-5,329.27	2,359.07	2,062.23	296.84	7.947		
12,400.00	7,242.42	12,140.36	7,048.74	152.38	151.20	-85.29	-1,227.12	-5,429.26	2,358.22	2,055.83	302.40	7.798		
12,500.00	7,242.00	12,240.36	7,048.35	155.16	153.99	-85.29	-1,227.93	-5,529.25	2,357.38	2,049.42	307.96	7.655		
12,600.00	7,241.58	12,340.36	7,047.95	157.95	156.79	-85.29	-1,228.74	-5,629.24	2,356.53	2,043.01	313.53	7.516		
12,700.00	7,241.16	12,440.35	7,047.56	160.74	159.59	-85.29	-1,229.55	-5,729.23	2,355.68	2,036.59	319.10	7.382		
12,800.00	7,240.74	12,540.35	7,047.17	163.53	162.39	-85.29	-1,230.37	-5,829.23	2,354.84	2,030.17	324.67	7.253		
12,900.00	7,240.32	12,640.35	7,046.77	166.32	165.19	-85.29	-1,231.18	-5,929.22	2,353.99	2,023.74	330.25	7.128		
13,000.00	7,239.89	12,740.34	7,046.38	169.12	167.99	-85.28	-1,231.99	-6,029.21	2,353.15	2,017.31	335.84	7.007		
13,100.00	7,239.47	12,840.34	7,045.99	171.92	170.80	-85.28	-1,232.80	-6,129.20	2,352.30	2,010.88	341.42	6.890		
13,200.00	7,239.05	12,940.34	7,045.59	174.72	173.61	-85.28	-1,233.61	-6,229.20	2,351.45	2,004.44	347.01	6.776		
13,300.00	7,238.63	13,040.33	7,045.20	177.52	176.42	-85.28	-1,234.43	-6,329.19	2,350.61	1,998.00	352.61	6.666		
13,400.00	7,238.21	13,140.33	7,044.81	180.32	179.23	-85.28	-1,235.24	-6,429.18	2,349.76	1,991.55	358.21	6.560		
13,500.00	7,237.79	13,240.33	7,044.41	183.13	182.04	-85.28	-1,236.05	-6,529.17	2,348.91	1,985.11	363.81	6.456		
13,600.00	7,237.37	13,340.32	7,044.02	185.93	184.85	-85.28	-1,236.86	-6,629.17	2,348.07	1,978.66	369.41	6.356		
13,700.00	7,236.95	13,440.32	7,043.63	188.74	187.67	-85.28	-1,237.67	-6,729.16	2,347.22	1,972.21	375.02	6.259		
13,800.00	7,236.53	13,540.31	7,043.24	191.55	190.49	-85.28	-1,238.48	-6,829.15	2,346.37	1,965.75	380.62	6.165		
13,900.00	7,236.11	13,640.31	7,042.84	194.36	193.30	-85.28	-1,239.30	-6,929.14	2,345.53	1,959.29	386.24	6.073		
14,000.00	7,235.69	13,740.31	7,042.45	197.17	196.12	-85.27	-1,240.11	-7,029.13	2,344.68	1,952.83	391.85	5.984		
14,100.00	7,235.27	13,840.30	7,042.06	199.98	198.94	-85.27	-1,240.92	-7,129.13	2,343.84	1,946.37	397.46	5.897		
14,200.00	7,234.85	13,940.30	7,041.66	202.80	201.76	-85.27	-1,241.73	-7,229.12	2,342.99	1,939.91	403.08	5.813		
14,300.00	7,234.43	14,040.30	7,041.27	205.61	204.58	-85.27	-1,242.54	-7,329.11	2,342.14	1,933.44	408.70	5.731		
14,400.00	7,234.01	14,140.29	7,040.88	208.43	207.41	-85.27	-1,243.36	-7,429.10	2,341.30	1,926.97	414.32	5.651		
14,500.00	7,233.59	14,240.29	7,040.48	211.25	210.23	-85.27	-1,244.17	-7,529.10	2,340.45	1,920.50	419.95	5.573		
14,600.00	7,233.17	14,340.29	7,040.09	214.06	213.06	-85.27	-1,244.98	-7,629.09	2,339.60	1,914.03	425.57	5.498		
14,700.00	7,232.75	14,440.28	7,039.70	216.88	215.88	-85.27	-1,245.79	-7,729.08	2,338.76	1,907.56	431.20	5.424		
14,800.00	7,232.33	14,540.28	7,039.30	219.70	218.71	-85.27	-1,246.60	-7,829.07	2,337.91	1,901.08	436.83	5.352		
14,900.00	7,231.91	14,640.27	7,038.91	222.52	221.54	-85.26	-1,247.41	-7,929.07	2,337.07	1,894.60	442.46	5.282		
15,000.00	7,231.49	14,740.27	7,038.52	225.35	224.36	-85.26	-1,248.23	-8,029.06	2,336.22	1,888.13	448.09	5.214		
15,100.00	7,231.07	14,840.27	7,038.12	228.17	227.19	-85.26	-1,249.04	-8,129.05	2,335.37	1,881.65	453.73	5.147		
15,116.21	7,231.00	14,856.48	7,038.06	228.63	227.65	-85.26	-1,249.17	-8,145.26	2,335.24	1,880.60	454.64	5.136 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	0.00	3.28	-179.56	-179.95	-1.39	179.96					
100.00	100.00	101.00	100.00	0.18	3.28	-179.56	-179.95	-1.39	179.96	176.50	3.46	52.005		
200.00	200.00	201.00	200.00	0.61	3.34	-179.56	-179.95	-1.39	179.96	176.01	3.95	45.535		
300.00	300.00	301.00	300.00	1.05	3.45	-179.56	-179.95	-1.39	179.96	175.46	4.50	39.997		
400.00	400.00	401.00	400.00	1.49	3.61	-179.56	-179.95	-1.39	179.96	174.86	5.10	35.307		
500.00	500.00	501.00	500.00	1.93	3.81	-179.56	-179.95	-1.39	179.96	174.22	5.74	31.358 CC, ES		
600.00	599.98	597.87	598.87	2.37	4.04	-171.88	-180.01	-1.40	181.75	175.34	6.41	28.357		
700.00	699.84	691.68	692.65	2.81	4.27	-171.93	-182.07	-1.89	189.13	182.03	7.10	26.645		
800.00	799.45	784.50	785.33	3.26	4.53	-171.89	-187.06	-3.05	203.10	195.29	7.82	25.978		
900.00	898.70	875.76	876.23	3.70	4.80	-171.77	-194.81	-4.86	223.57	215.02	8.55	26.139		
1,000.00	997.47	970.58	970.48	4.15	5.10	-171.66	-204.96	-7.23	249.55	240.26	9.29	26.859		
1,100.00	1,095.78	1,066.39	1,065.70	4.60	5.42	-171.67	-215.30	-9.65	278.19	268.15	10.04	27.708		
1,200.00	1,194.05	1,162.15	1,160.87	5.05	5.76	-171.71	-225.64	-12.07	307.01	296.22	10.80	28.439		
1,300.00	1,292.33	1,257.91	1,256.04	5.50	6.12	-171.75	-235.98	-14.48	335.83	324.26	11.57	29.032		
1,400.00	1,390.61	1,353.66	1,351.20	5.96	6.48	-171.78	-246.32	-16.90	364.65	352.29	12.35	29.519		
1,500.00	1,488.89	1,449.42	1,446.37	6.43	6.86	-171.80	-256.65	-19.31	393.47	380.32	13.15	29.921		
1,600.00	1,587.16	1,545.18	1,541.54	6.89	7.24	-171.82	-266.99	-21.73	422.28	408.33	13.96	30.257		
1,700.00	1,685.44	1,640.94	1,636.70	7.36	7.63	-171.84	-277.33	-24.14	451.10	436.33	14.77	30.539		
1,800.00	1,783.72	1,736.69	1,731.87	7.83	8.02	-171.86	-287.67	-26.56	479.92	464.33	15.59	30.778		
1,900.00	1,882.00	1,832.45	1,827.04	8.30	8.42	-171.87	-298.00	-28.98	508.74	492.32	16.42	30.983		
2,000.00	1,980.27	1,928.21	1,922.21	8.77	8.82	-171.88	-308.34	-31.39	537.56	520.30	17.25	31.158		
2,100.00	2,078.55	2,023.97	2,017.37	9.25	9.23	-171.90	-318.68	-33.81	566.37	548.28	18.09	31.310		
2,200.00	2,176.83	2,119.72	2,112.54	9.72	9.64	-171.91	-329.02	-36.22	595.19	576.26	18.93	31.442		
2,300.00	2,275.11	2,215.48	2,207.71	10.19	10.05	-171.92	-339.35	-38.64	624.01	604.24	19.77	31.557		
2,400.00	2,373.38	2,311.24	2,302.87	10.66	10.47	-171.92	-349.69	-41.05	652.83	632.21	20.62	31.658		
2,500.00	2,471.66	2,407.00	2,398.04	11.14	10.89	-171.93	-360.03	-43.47	681.65	660.18	21.47	31.748		
2,600.00	2,569.94	2,502.75	2,493.21	11.61	11.31	-171.94	-370.37	-45.89	710.46	688.14	22.32	31.827		
2,700.00	2,668.22	2,601.49	2,588.38	12.09	11.74	-171.95	-380.71	-48.30	739.28	716.09	23.19	31.880		
2,800.00	2,766.49	2,694.27	2,683.54	12.56	12.15	-171.95	-391.04	-50.72	768.10	744.07	24.03	31.961		
2,900.00	2,864.77	2,809.97	2,778.71	13.04	12.66	-171.96	-401.38	-53.13	796.92	771.94	24.98	31.907		
3,000.00	2,963.05	2,885.75	2,873.88	13.51	13.00	-171.96	-411.72	-55.55	825.74	799.99	25.75	32.069		
3,100.00	3,061.33	2,981.54	2,969.05	13.99	13.43	-171.97	-422.06	-57.96	854.56	827.95	26.61	32.115		
3,200.00	3,159.60	3,077.30	3,064.21	14.46	13.85	-171.97	-432.39	-60.38	883.37	855.90	27.47	32.157		
3,300.00	3,257.88	3,173.06	3,159.38	14.94	14.28	-171.98	-442.73	-62.80	912.19	883.86	28.33	32.194		
3,400.00	3,356.16	3,268.81	3,254.55	15.41	14.71	-171.98	-453.07	-65.21	941.01	911.81	29.20	32.229		
3,500.00	3,454.43	3,364.57	3,349.71	15.89	15.14	-171.99	-463.41	-67.63	969.83	939.77	30.06	32.261		
3,600.00	3,552.71	3,460.33	3,444.88	16.36	15.57	-171.99	-473.75	-70.04	998.65	967.72	30.93	32.289		
3,700.00	3,650.99	3,556.09	3,540.05	16.84	16.00	-171.99	-484.08	-72.46	1,027.47	995.67	31.79	32.316		
3,800.00	3,749.27	3,651.84	3,635.22	17.32	16.43	-172.00	-494.42	-74.87	1,056.28	1,023.62	32.66	32.340		
3,900.00	3,847.54	3,747.60	3,730.38	17.79	16.87	-172.00	-504.76	-77.29	1,085.10	1,051.57	33.53	32.363		
4,000.00	3,945.82	3,843.36	3,825.55	18.27	17.30	-172.00	-515.10	-79.70	1,113.92	1,079.52	34.40	32.383		
4,100.00	4,044.10	3,939.12	3,920.72	18.75	17.73	-172.00	-525.43	-82.12	1,142.74	1,107.47	35.27	32.402		
4,200.00	4,142.38	4,034.87	4,015.88	19.22	18.17	-172.01	-535.77	-84.54	1,171.56	1,135.42	36.14	32.420		
4,300.00	4,240.65	4,130.63	4,111.05	19.70	18.60	-172.01	-546.11	-86.95	1,200.38	1,163.37	37.01	32.436		
4,400.00	4,338.93	4,226.39	4,206.22	20.18	19.04	-172.01	-556.45	-89.37	1,229.19	1,191.32	37.88	32.452		
4,500.00	4,437.21	4,322.15	4,301.39	20.65	19.47	-172.01	-566.78	-91.78	1,258.01	1,219.26	38.75	32.466		
4,600.00	4,535.49	4,417.90	4,396.55	21.13	19.91	-172.02	-577.12	-94.20	1,286.83	1,247.21	39.62	32.479		
4,700.00	4,633.76	4,513.66	4,491.72	21.61	20.34	-172.02	-587.46	-96.61	1,315.65	1,275.16	40.49	32.491		
4,800.00	4,732.04	4,609.42	4,586.89	22.08	20.78	-172.02	-597.80	-99.03	1,344.47	1,303.10	41.36	32.503		
4,900.00	4,830.32	4,705.18	4,682.06	22.56	21.22	-172.02	-608.14	-101.45	1,373.29	1,331.05	42.24	32.513		
5,000.00	4,928.60	4,800.93	4,777.22	23.04	21.65	-172.02	-618.47	-103.86	1,402.10	1,358.99	43.11	32.523		
5,100.00	5,026.87	4,903.31	4,872.39	23.51	22.12	-172.03	-628.81	-106.28	1,430.92	1,386.91	44.01	32.511		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,007.55	4,967.56	23.99	22.60	-172.03	-639.15	-108.69	1,459.74	1,414.82	44.93	32.493		
5,300.00	5,223.43	5,088.21	5,062.72	24.47	22.96	-172.03	-649.49	-111.11	1,488.56	1,442.83	45.73	32.550		
5,400.00	5,321.71	5,183.97	5,157.89	24.94	23.40	-172.03	-659.82	-113.52	1,517.38	1,470.77	46.61	32.557		
5,500.00	5,419.98	5,279.72	5,253.06	25.42	23.84	-172.03	-670.16	-115.94	1,546.20	1,498.71	47.48	32.565		
5,600.00	5,518.26	5,375.48	5,348.23	25.90	24.28	-172.03	-680.50	-118.36	1,575.01	1,526.66	48.36	32.571		
5,700.00	5,616.54	5,471.24	5,443.39	26.38	24.71	-172.04	-690.84	-120.77	1,603.83	1,554.60	49.23	32.578		
5,800.00	5,714.82	5,567.00	5,538.56	26.85	25.15	-172.04	-701.17	-123.19	1,632.65	1,582.54	50.11	32.584		
5,900.00	5,813.09	5,662.75	5,633.73	27.33	25.59	-172.04	-711.51	-125.60	1,661.47	1,610.49	50.98	32.589		
6,000.00	5,911.37	5,758.51	5,728.89	27.81	26.03	-172.04	-721.85	-128.02	1,690.29	1,638.43	51.86	32.595		
6,100.00	6,009.65	5,854.27	5,824.06	28.28	26.47	-172.04	-732.19	-130.43	1,719.11	1,666.37	52.73	32.600		
6,200.00	6,107.93	5,950.03	5,919.23	28.76	26.91	-172.04	-742.53	-132.85	1,747.92	1,694.31	53.61	32.604		
6,300.00	6,206.20	6,045.78	6,014.40	29.24	27.35	-172.04	-752.86	-135.27	1,776.74	1,722.26	54.49	32.609		
6,400.00	6,304.48	6,141.54	6,109.56	29.72	27.79	-172.04	-763.20	-137.68	1,805.56	1,750.20	55.36	32.613		
6,500.00	6,402.76	6,237.30	6,204.73	30.19	28.22	-172.05	-773.54	-140.10	1,834.38	1,778.14	56.24	32.617		
6,600.00	6,501.04	6,333.06	6,299.90	30.67	28.66	-172.05	-783.88	-142.51	1,863.20	1,806.08	57.12	32.620		
6,700.00	6,599.31	6,428.81	6,395.07	31.15	29.10	-172.05	-794.21	-144.93	1,892.02	1,834.02	57.99	32.624		
6,800.00	6,697.50	6,524.54	6,490.20	31.63	29.54	-149.84	-804.55	-147.34	1,920.78	1,861.91	58.87	32.626		
6,900.00	6,794.18	6,619.34	6,584.19	32.10	29.98	-121.72	-814.79	-153.49	1,948.98	1,889.24	59.75	32.620		
7,000.00	6,886.96	6,715.79	6,677.87	32.55	30.41	-108.11	-825.11	-173.55	1,976.01	1,915.37	60.64	32.588		
7,100.00	6,973.57	6,814.81	6,769.76	32.99	30.83	-100.33	-835.36	-208.70	2,001.21	1,939.67	61.54	32.517		
7,200.00	7,051.87	6,916.81	6,857.56	33.41	31.23	-95.28	-845.30	-259.42	2,023.98	1,961.48	62.50	32.383		
7,300.00	7,119.93	7,022.06	6,938.52	33.85	31.62	-91.79	-854.63	-325.84	2,043.74	1,980.17	63.57	32.151		
7,400.00	7,176.09	7,130.65	7,009.47	34.39	32.04	-89.36	-862.99	-407.46	2,059.98	1,995.15	64.83	31.775		
7,500.00	7,218.95	7,242.44	7,067.00	35.09	32.59	-87.73	-870.01	-502.87	2,072.27	2,005.87	66.39	31.213		
7,600.00	7,247.46	7,356.94	7,107.82	35.98	33.44	-86.77	-875.32	-609.55	2,080.25	2,011.92	68.33	30.444		
7,700.00	7,260.92	7,473.42	7,129.19	37.04	34.61	-86.41	-878.58	-723.84	2,083.68	2,013.02	70.66	29.490		
7,800.00	7,261.75	7,582.71	7,131.79	38.23	35.91	-86.43	-879.76	-833.04	2,083.23	2,010.02	73.21	28.455		
7,900.00	7,261.33	7,682.71	7,131.36	39.59	37.30	-86.42	-880.54	-933.04	2,082.36	2,006.36	75.99	27.402		
8,000.00	7,260.91	7,782.71	7,130.93	41.10	38.85	-86.42	-881.32	-1,033.03	2,081.48	2,002.39	79.08	26.320		
8,100.00	7,260.49	7,882.70	7,130.49	42.75	40.54	-86.42	-882.09	-1,133.02	2,080.60	1,998.14	82.45	25.233		
8,200.00	7,260.07	7,982.70	7,130.06	44.53	42.35	-86.42	-882.87	-1,233.01	2,079.72	1,993.65	86.07	24.163		
8,300.00	7,259.65	8,082.70	7,129.63	46.41	44.28	-86.42	-883.65	-1,333.00	2,078.84	1,988.94	89.90	23.123		
8,400.00	7,259.23	8,182.69	7,129.19	48.39	46.31	-86.41	-884.43	-1,433.00	2,077.96	1,984.04	93.93	22.123		
8,500.00	7,258.81	8,282.69	7,128.76	50.45	48.42	-86.41	-885.20	-1,532.99	2,077.08	1,978.97	98.11	21.170		
8,600.00	7,258.39	8,382.68	7,128.32	52.59	50.60	-86.41	-885.98	-1,632.98	2,076.20	1,973.75	102.45	20.265		
8,700.00	7,257.97	8,482.68	7,127.89	54.79	52.85	-86.41	-886.76	-1,732.97	2,075.33	1,968.41	106.91	19.411		
8,800.00	7,257.55	8,582.68	7,127.46	57.05	55.16	-86.41	-887.53	-1,832.96	2,074.45	1,962.96	111.49	18.606		
8,900.00	7,257.13	8,682.67	7,127.02	59.36	57.51	-86.40	-888.31	-1,932.96	2,073.57	1,957.40	116.17	17.850		
9,000.00	7,256.71	8,782.67	7,126.59	61.72	59.91	-86.40	-889.09	-2,032.95	2,072.69	1,951.76	120.93	17.139		
9,100.00	7,256.29	8,882.66	7,126.15	64.12	62.35	-86.40	-889.87	-2,132.94	2,071.81	1,946.04	125.77	16.472		
9,200.00	7,255.87	8,982.66	7,125.72	66.56	64.82	-86.40	-890.64	-2,232.93	2,070.93	1,940.25	130.69	15.847		
9,300.00	7,255.45	9,082.66	7,125.29	69.02	67.32	-86.40	-891.42	-2,332.93	2,070.05	1,934.39	135.66	15.259		
9,400.00	7,255.03	9,182.65	7,124.85	71.52	69.85	-86.40	-892.20	-2,432.92	2,069.17	1,928.49	140.69	14.707		
9,500.00	7,254.61	9,282.65	7,124.42	74.04	72.41	-86.39	-892.98	-2,532.91	2,068.30	1,922.53	145.77	14.189		
9,600.00	7,254.19	9,382.64	7,123.98	76.58	74.98	-86.39	-893.75	-2,632.90	2,067.42	1,916.53	150.89	13.701		
9,700.00	7,253.77	9,482.64	7,123.55	79.15	77.58	-86.39	-894.53	-2,732.89	2,066.54	1,910.49	156.05	13.243		
9,800.00	7,253.35	9,582.64	7,123.12	81.74	80.19	-86.39	-895.31	-2,832.89	2,065.66	1,904.41	161.25	12.810		
9,900.00	7,252.92	9,682.63	7,122.68	84.34	82.82	-86.39	-896.08	-2,932.88	2,064.78	1,898.30	166.48	12.402		
10,000.00	7,252.50	9,782.63	7,122.25	86.96	85.47	-86.38	-896.86	-3,032.87	2,063.90	1,892.16	171.75	12.017		
10,100.00	7,252.08	9,882.63	7,121.81	89.59	88.13	-86.38	-897.64	-3,132.86	2,063.02	1,885.99	177.04	11.653		
10,200.00	7,251.66	9,982.62	7,121.38	92.24	90.80	-86.38	-898.42	-3,232.85	2,062.14	1,879.79	182.35	11.309		
10,300.00	7,251.24	10,082.62	7,120.95	94.90	93.48	-86.38	-899.19	-3,332.85	2,061.27	1,873.58	187.69	10.982		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,182.61	7,120.51	97.57	96.17	-86.38	-899.97	-3,432.84	2,060.39	1,867.34	193.05	10.673		
10,500.00	7,250.40	10,282.61	7,120.08	100.25	98.87	-86.37	-900.75	-3,532.83	2,059.51	1,861.09	198.42	10.379		
10,600.00	7,249.98	10,382.61	7,119.65	102.93	101.58	-86.37	-901.53	-3,632.82	2,058.63	1,854.81	203.82	10.100		
10,700.00	7,249.56	10,482.60	7,119.21	105.63	104.30	-86.37	-902.30	-3,732.82	2,057.75	1,848.52	209.23	9.835		
10,800.00	7,249.14	10,582.60	7,118.78	108.34	107.02	-86.37	-903.08	-3,832.81	2,056.87	1,842.22	214.65	9.582		
10,900.00	7,248.72	10,682.59	7,118.34	111.05	109.76	-86.37	-903.86	-3,932.80	2,055.99	1,835.90	220.09	9.341		
11,000.00	7,248.30	10,782.59	7,117.91	113.77	112.49	-86.36	-904.64	-4,032.79	2,055.12	1,829.57	225.55	9.112		
11,100.00	7,247.88	10,882.59	7,117.48	116.50	115.24	-86.36	-905.41	-4,132.78	2,054.24	1,823.23	231.01	8.892		
11,200.00	7,247.46	10,982.58	7,117.04	119.23	117.99	-86.36	-906.19	-4,232.78	2,053.36	1,816.87	236.49	8.683		
11,300.00	7,247.04	11,082.58	7,116.61	121.97	120.74	-86.36	-906.97	-4,332.77	2,052.48	1,810.51	241.97	8.482		
11,400.00	7,246.62	11,182.57	7,116.17	124.72	123.50	-86.36	-907.74	-4,432.76	2,051.60	1,804.13	247.47	8.290		
11,500.00	7,246.20	11,282.57	7,115.74	127.46	126.26	-86.35	-908.52	-4,532.75	2,050.72	1,797.75	252.97	8.106		
11,600.00	7,245.78	11,382.57	7,115.31	130.22	129.03	-86.35	-909.30	-4,632.74	2,049.84	1,791.36	258.49	7.930		
11,700.00	7,245.36	11,482.56	7,114.87	132.98	131.80	-86.35	-910.08	-4,732.74	2,048.96	1,784.96	264.01	7.761		
11,800.00	7,244.94	11,582.56	7,114.44	135.74	134.58	-86.35	-910.85	-4,832.73	2,048.09	1,778.55	269.54	7.599		
11,900.00	7,244.52	11,682.56	7,114.00	138.50	137.36	-86.35	-911.63	-4,932.72	2,047.21	1,772.13	275.07	7.442		
12,000.00	7,244.10	11,782.55	7,113.57	141.27	140.14	-86.34	-912.41	-5,032.71	2,046.33	1,765.71	280.62	7.292		
12,100.00	7,243.68	11,882.55	7,113.14	144.04	142.92	-86.34	-913.19	-5,132.71	2,045.45	1,759.29	286.16	7.148		
12,200.00	7,243.26	11,982.54	7,112.70	146.82	145.71	-86.34	-913.96	-5,232.70	2,044.57	1,752.85	291.72	7.009		
12,300.00	7,242.84	12,082.54	7,112.27	149.60	148.50	-86.34	-914.74	-5,332.69	2,043.69	1,746.41	297.28	6.875		
12,400.00	7,242.42	12,182.54	7,111.84	152.38	151.29	-86.34	-915.52	-5,432.68	2,042.81	1,739.97	302.84	6.745		
12,500.00	7,242.00	12,282.53	7,111.40	155.16	154.09	-86.33	-916.30	-5,532.67	2,041.94	1,733.52	308.41	6.621		
12,600.00	7,241.58	12,382.53	7,110.97	157.95	156.89	-86.33	-917.07	-5,632.67	2,041.06	1,727.07	313.99	6.500		
12,700.00	7,241.16	12,482.52	7,110.53	160.74	159.68	-86.33	-917.85	-5,732.66	2,040.18	1,720.61	319.57	6.384		
12,800.00	7,240.74	12,582.52	7,110.10	163.53	162.49	-86.33	-918.63	-5,832.65	2,039.30	1,714.15	325.15	6.272		
12,900.00	7,240.32	12,682.52	7,109.67	166.32	165.29	-86.33	-919.40	-5,932.64	2,038.42	1,707.68	330.74	6.163		
13,000.00	7,239.89	12,782.51	7,109.23	169.12	168.10	-86.33	-920.18	-6,032.64	2,037.54	1,701.21	336.33	6.058		
13,100.00	7,239.47	12,882.51	7,108.80	171.92	170.90	-86.32	-920.96	-6,132.63	2,036.66	1,694.74	341.93	5.956		
13,200.00	7,239.05	12,982.51	7,108.36	174.72	173.71	-86.32	-921.74	-6,232.62	2,035.78	1,688.26	347.53	5.858		
13,300.00	7,238.63	13,082.50	7,107.93	177.52	176.52	-86.32	-922.51	-6,332.61	2,034.91	1,681.78	353.13	5.763		
13,400.00	7,238.21	13,182.50	7,107.50	180.32	179.33	-86.32	-923.29	-6,432.60	2,034.03	1,675.30	358.73	5.670		
13,500.00	7,237.79	13,282.49	7,107.06	183.13	182.15	-86.32	-924.07	-6,532.60	2,033.15	1,668.81	364.34	5.580		
13,600.00	7,237.37	13,382.49	7,106.63	185.93	184.96	-86.31	-924.85	-6,632.59	2,032.27	1,662.32	369.95	5.493		
13,700.00	7,236.95	13,482.49	7,106.19	188.74	187.78	-86.31	-925.62	-6,732.58	2,031.39	1,655.83	375.56	5.409		
13,800.00	7,236.53	13,582.48	7,105.76	191.55	190.60	-86.31	-926.40	-6,832.57	2,030.51	1,649.33	381.18	5.327		
13,900.00	7,236.11	13,682.48	7,105.33	194.36	193.41	-86.31	-927.18	-6,932.56	2,029.63	1,642.84	386.80	5.247		
14,000.00	7,235.69	13,782.47	7,104.89	197.17	196.23	-86.31	-927.96	-7,032.56	2,028.76	1,636.34	392.42	5.170		
14,100.00	7,235.27	13,882.47	7,104.46	199.98	199.05	-86.30	-928.73	-7,132.55	2,027.88	1,629.84	398.04	5.095		
14,200.00	7,234.85	13,982.47	7,104.02	202.80	201.88	-86.30	-929.51	-7,232.54	2,027.00	1,623.33	403.67	5.021		
14,300.00	7,234.43	14,082.46	7,103.59	205.61	204.70	-86.30	-930.29	-7,332.53	2,026.12	1,616.83	409.29	4.950		
14,400.00	7,234.01	14,182.46	7,103.16	208.43	207.52	-86.30	-931.06	-7,432.53	2,025.24	1,610.32	414.92	4.881		
14,500.00	7,233.59	14,282.45	7,102.72	211.25	210.35	-86.30	-931.84	-7,532.52	2,024.36	1,603.81	420.55	4.814		
14,600.00	7,233.17	14,382.45	7,102.29	214.06	213.17	-86.29	-932.62	-7,632.51	2,023.48	1,597.30	426.19	4.748		
14,700.00	7,232.75	14,482.45	7,101.86	216.88	216.00	-86.29	-933.40	-7,732.50	2,022.61	1,590.78	431.82	4.684		
14,800.00	7,232.33	14,582.44	7,101.42	219.70	218.83	-86.29	-934.17	-7,832.49	2,021.73	1,584.27	437.46	4.622		
14,900.00	7,231.91	14,682.44	7,100.99	222.52	221.65	-86.29	-934.95	-7,932.49	2,020.85	1,577.75	443.10	4.561		
15,000.00	7,231.49	14,782.44	7,100.55	225.35	224.48	-86.29	-935.73	-8,032.48	2,019.97	1,571.23	448.73	4.501		
15,100.00	7,231.07	14,882.43	7,100.12	228.17	227.31	-86.28	-936.51	-8,132.47	2,019.09	1,564.72	454.38	4.444		
15,116.21	7,231.00	14,898.64	7,100.05	228.63	227.77	-86.28	-936.63	-8,148.68	2,018.95	1,563.66	455.29	4.434 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	0.00	3.28	-179.54	-379.96	-3.06	379.97					
100.00	100.00	102.00	100.00	0.18	3.29	-179.54	-379.96	-3.06	379.97	376.51	3.46	109.796		
200.00	200.00	198.00	200.00	0.61	3.34	-179.54	-379.96	-3.06	379.97	376.02	3.95	96.202 CC, ES		
300.00	300.00	286.52	288.51	1.05	3.42	-179.53	-381.26	-3.16	381.45	376.95	4.50	84.774		
400.00	400.00	374.65	376.54	1.49	3.55	-179.48	-385.26	-3.47	385.99	380.89	5.11	75.603		
500.00	500.00	462.44	464.07	1.93	3.71	-179.42	-391.94	-3.98	393.60	387.85	5.75	68.448		
600.00	599.98	549.54	550.68	2.37	3.91	-171.58	-401.19	-4.69	405.95	399.52	6.43	63.137		
700.00	699.84	635.35	635.68	2.81	4.13	-171.51	-412.88	-5.59	424.69	417.56	7.13	59.529		
800.00	799.45	719.38	718.54	3.26	4.37	-171.46	-426.77	-6.65	449.69	441.84	7.85	57.319		
900.00	898.70	801.18	798.77	3.70	4.64	-171.42	-442.62	-7.87	480.76	472.21	8.55	56.213		
1,000.00	997.47	880.33	875.95	4.15	4.93	-171.38	-460.13	-9.21	517.72	508.48	9.25	55.978		
1,100.00	1,095.78	956.78	950.01	4.60	5.22	-171.44	-479.05	-10.66	559.63	549.69	9.93	56.345		
1,200.00	1,194.05	1,031.27	1,021.66	5.05	5.53	-171.50	-499.37	-12.22	604.06	593.48	10.59	57.062		
1,300.00	1,292.33	1,106.06	1,093.03	5.50	5.85	-171.55	-521.61	-13.93	650.76	639.52	11.24	57.917		
1,400.00	1,390.61	1,205.96	1,176.77	5.96	6.31	-171.60	-548.54	-16.00	698.29	686.30	11.99	58.231		
1,500.00	1,488.89	1,282.02	1,260.50	6.43	6.68	-171.63	-575.48	-18.06	745.82	733.14	12.67	58.857		
1,600.00	1,587.16	1,370.00	1,344.23	6.89	7.11	-171.67	-602.42	-20.13	793.34	779.93	13.42	59.134		
1,700.00	1,685.44	1,457.99	1,427.96	7.36	7.55	-171.70	-629.35	-22.20	840.87	826.70	14.17	59.323		
1,800.00	1,783.72	1,545.97	1,511.70	7.83	8.00	-171.72	-656.29	-24.26	888.40	873.46	14.94	59.445		
1,900.00	1,882.00	1,633.95	1,595.43	8.30	8.45	-171.75	-683.22	-26.33	935.93	920.21	15.73	59.517		
2,000.00	1,980.27	1,721.93	1,679.16	8.77	8.91	-171.77	-710.16	-28.40	983.46	966.94	16.51	59.550		
2,100.00	2,078.55	1,809.91	1,762.89	9.25	9.38	-171.79	-737.09	-30.46	1,030.99	1,013.68	17.31	59.554		
2,200.00	2,176.83	1,902.10	1,846.62	9.72	9.87	-171.81	-764.03	-32.53	1,078.52	1,060.38	18.13	59.472		
2,300.00	2,275.11	1,985.88	1,930.36	10.19	10.32	-171.82	-790.96	-34.60	1,126.05	1,107.12	18.92	59.502		
2,400.00	2,373.38	2,073.86	2,014.09	10.66	10.80	-171.84	-817.90	-36.66	1,173.58	1,153.84	19.74	59.455		
2,500.00	2,471.66	2,161.84	2,097.82	11.14	11.28	-171.85	-844.84	-38.73	1,221.11	1,200.55	20.56	59.400		
2,600.00	2,569.94	2,249.83	2,181.55	11.61	11.76	-171.87	-871.77	-40.80	1,268.64	1,247.26	21.38	59.337		
2,700.00	2,668.22	2,337.81	2,265.29	12.09	12.25	-171.88	-898.71	-42.86	1,316.16	1,293.96	22.21	59.271		
2,800.00	2,766.49	2,425.79	2,349.02	12.56	12.73	-171.89	-925.64	-44.93	1,363.69	1,340.66	23.04	59.201		
2,900.00	2,864.77	2,513.77	2,432.75	13.04	13.22	-171.90	-952.58	-47.00	1,411.22	1,387.36	23.87	59.128		
3,000.00	2,963.05	2,601.76	2,516.48	13.51	13.71	-171.91	-979.51	-49.06	1,458.75	1,434.05	24.70	59.055		
3,100.00	3,061.33	2,689.74	2,600.21	13.99	14.20	-171.92	-1,006.45	-51.13	1,506.28	1,480.75	25.54	58.981		
3,200.00	3,159.60	2,777.72	2,683.95	14.46	14.70	-171.93	-1,033.38	-53.20	1,553.81	1,527.44	26.38	58.908		
3,300.00	3,257.88	2,865.70	2,767.68	14.94	15.19	-171.93	-1,060.32	-55.26	1,601.34	1,574.12	27.22	58.835		
3,400.00	3,356.16	2,953.69	2,851.41	15.41	15.68	-171.94	-1,087.26	-57.33	1,648.87	1,620.81	28.06	58.762		
3,500.00	3,454.43	3,041.67	2,935.14	15.89	16.18	-171.95	-1,114.19	-59.40	1,696.40	1,667.50	28.90	58.691		
3,600.00	3,552.71	3,129.65	3,018.88	16.36	16.68	-171.96	-1,141.13	-61.46	1,743.93	1,714.18	29.75	58.621		
3,700.00	3,650.99	3,217.63	3,102.61	16.84	17.17	-171.96	-1,168.06	-63.53	1,791.46	1,760.87	30.60	58.553		
3,800.00	3,749.27	3,305.61	3,186.34	17.32	17.67	-171.97	-1,195.00	-65.60	1,838.99	1,807.55	31.44	58.485		
3,900.00	3,847.54	3,393.60	3,270.07	17.79	18.17	-171.97	-1,221.93	-67.66	1,886.52	1,854.23	32.29	58.419		
4,000.00	3,945.82	3,481.58	3,353.81	18.27	18.67	-171.98	-1,248.87	-69.73	1,934.05	1,900.91	33.14	58.355		
4,100.00	4,044.10	3,569.56	3,437.54	18.75	19.17	-171.98	-1,275.81	-71.80	1,981.58	1,947.59	33.99	58.292		
4,200.00	4,142.38	3,657.54	3,521.27	19.22	19.67	-171.99	-1,302.74	-73.86	2,029.11	1,994.26	34.85	58.231		
4,300.00	4,240.65	3,745.53	3,605.00	19.70	20.17	-171.99	-1,329.68	-75.93	2,076.64	2,040.94	35.70	58.172		
4,400.00	4,338.93	3,833.51	3,688.73	20.18	20.67	-172.00	-1,356.61	-78.00	2,124.17	2,087.62	36.55	58.113		
4,500.00	4,437.21	3,921.49	3,772.47	20.65	21.17	-172.00	-1,383.55	-80.06	2,171.70	2,134.29	37.41	58.057		
4,600.00	4,535.49	4,009.47	3,856.20	21.13	21.67	-172.01	-1,410.48	-82.13	2,219.23	2,180.97	38.26	58.001		
4,700.00	4,633.76	4,102.54	3,939.93	21.61	22.21	-172.01	-1,437.42	-84.20	2,266.76	2,227.62	39.14	57.909		
4,800.00	4,732.04	4,185.44	4,023.66	22.08	22.68	-172.01	-1,464.35	-86.27	2,314.29	2,274.32	39.97	57.895		
4,900.00	4,830.32	4,273.42	4,107.40	22.56	23.18	-172.02	-1,491.29	-88.33	2,361.82	2,320.99	40.83	57.844		
5,000.00	4,928.60	4,361.40	4,191.13	23.04	23.68	-172.02	-1,518.23	-90.40	2,409.35	2,367.66	41.69	57.794		
5,100.00	5,026.87	4,449.38	4,274.86	23.51	24.19	-172.02	-1,545.16	-92.47	2,456.88	2,414.33	42.55	57.745		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,537.37	4,358.59	23.99	24.69	-172.03	-1,572.10	-94.53	2,504.41	2,461.00	43.41	57.697		
5,300.00	5,223.43	4,625.35	4,442.32	24.47	25.20	-172.03	-1,599.03	-96.60	2,551.94	2,507.67	44.27	57.651		
5,400.00	5,321.71	4,713.33	4,526.06	24.94	25.70	-172.03	-1,625.97	-98.67	2,599.47	2,554.34	45.13	57.606		
5,500.00	5,419.98	4,801.31	4,609.79	25.42	26.20	-172.04	-1,652.90	-100.73	2,647.00	2,601.01	45.99	57.562		
5,600.00	5,518.26	4,889.30	4,693.52	25.90	26.71	-172.04	-1,679.84	-102.80	2,694.53	2,647.68	46.85	57.519		
5,700.00	5,616.54	4,977.28	4,777.25	26.38	27.21	-172.04	-1,706.77	-104.87	2,742.06	2,694.35	47.71	57.477		
5,800.00	5,714.82	5,065.26	4,860.99	26.85	27.72	-172.05	-1,733.71	-106.93	2,789.59	2,741.02	48.57	57.435		
5,900.00	5,813.09	5,153.24	4,944.72	27.33	28.22	-172.05	-1,760.65	-109.00	2,837.12	2,787.69	49.43	57.395		
6,000.00	5,911.37	5,241.23	5,028.45	27.81	28.73	-172.05	-1,787.58	-111.07	2,884.65	2,834.35	50.29	57.356		
6,100.00	6,009.65	5,329.21	5,112.18	28.28	29.23	-172.05	-1,814.52	-113.13	2,932.18	2,881.02	51.16	57.317		
6,200.00	6,107.93	5,417.19	5,195.92	28.76	29.74	-172.05	-1,841.45	-115.20	2,979.71	2,927.69	52.02	57.280		
6,300.00	6,206.20	5,505.17	5,279.65	29.24	30.24	-172.06	-1,868.39	-117.27	3,027.24	2,974.35	52.88	57.243		
6,400.00	6,304.48	5,593.16	5,363.38	29.72	30.75	-172.06	-1,895.32	-119.33	3,074.77	3,021.02	53.75	57.207		
6,500.00	6,402.76	5,681.14	5,447.11	30.19	31.26	-172.06	-1,922.26	-121.40	3,122.30	3,067.69	54.61	57.171		
6,600.00	6,501.04	5,769.12	5,530.84	30.67	31.76	-172.06	-1,949.20	-123.47	3,169.83	3,114.35	55.48	57.136		
6,700.00	6,599.31	5,857.10	5,614.58	31.15	32.27	-172.07	-1,976.13	-125.53	3,217.36	3,161.02	56.34	57.102		
6,800.00	6,697.50	5,945.06	5,698.29	31.63	32.77	-148.80	-2,003.06	-127.60	3,264.83	3,207.62	57.21	57.068		
6,900.00	6,794.18	6,032.04	5,781.06	32.10	33.27	-118.54	-2,029.69	-129.64	3,311.51	3,253.43	58.07	57.024		
7,000.00	6,886.96	6,115.97	5,860.94	32.55	33.76	-103.13	-2,055.38	-131.61	3,356.43	3,297.52	58.91	56.972		
7,100.00	6,973.57	6,205.21	5,935.95	32.99	34.27	-93.86	-2,079.51	-133.47	3,398.89	3,339.11	59.78	56.857		
7,200.00	7,051.87	6,266.54	6,004.24	33.41	34.62	-87.57	-2,101.48	-135.15	3,438.36	3,377.84	60.52	56.817		
7,300.00	7,119.93	6,329.47	6,064.13	33.85	34.99	-82.98	-2,120.75	-136.63	3,474.47	3,413.17	61.31	56.675		
7,400.00	7,176.09	6,382.03	6,114.15	34.39	35.29	-79.50	-2,136.84	-137.86	3,506.98	3,444.85	62.12	56.452		
7,500.00	7,218.95	6,422.92	6,153.06	35.09	35.52	-76.78	-2,149.35	-138.83	3,535.66	3,472.67	63.00	56.124		
7,600.00	7,247.46	6,451.14	6,179.91	35.98	35.69	-74.64	-2,157.99	-139.49	3,560.34	3,496.41	63.94	55.685		
7,700.00	7,260.92	6,465.98	6,194.04	37.04	35.77	-72.98	-2,162.54	-139.84	3,580.80	3,515.87	64.93	55.145		
7,800.00	7,261.75	6,469.56	6,197.44	38.23	35.79	-72.45	-2,163.63	-139.92	3,598.09	3,532.11	65.98	54.531		
7,900.00	7,261.33	6,472.01	6,199.78	39.59	35.81	-72.49	-2,164.38	-139.98	3,617.48	3,550.31	67.17	53.857		
8,000.00	7,260.91	6,474.47	6,202.12	41.10	35.82	-72.53	-2,165.14	-140.04	3,639.51	3,571.04	68.47	53.152		
8,100.00	7,260.49	8,100.27	7,075.89	42.75	44.48	-87.11	-2,453.65	-1,124.78	3,652.78	3,567.28	85.49	42.725		
8,200.00	7,260.07	8,200.27	7,075.57	44.53	45.92	-87.11	-2,454.32	-1,224.77	3,651.78	3,562.81	88.97	41.044		
8,300.00	7,259.65	8,300.28	7,075.24	46.41	47.54	-87.11	-2,454.99	-1,324.76	3,650.79	3,558.12	92.67	39.396		
8,400.00	7,259.23	8,400.28	7,074.92	48.39	49.31	-87.11	-2,455.65	-1,424.75	3,649.79	3,553.23	96.56	37.797		
8,500.00	7,258.81	8,500.29	7,074.59	50.45	51.20	-87.11	-2,456.32	-1,524.75	3,648.80	3,548.17	100.63	36.259		
8,600.00	7,258.39	8,600.29	7,074.27	52.59	53.20	-87.11	-2,456.99	-1,624.74	3,647.80	3,542.95	104.85	34.791		
8,700.00	7,257.97	8,700.30	7,073.94	54.79	55.28	-87.11	-2,457.66	-1,724.73	3,646.81	3,537.60	109.20	33.394		
8,800.00	7,257.55	8,800.30	7,073.62	57.05	57.43	-87.11	-2,458.32	-1,824.72	3,645.81	3,532.14	113.68	32.071		
8,900.00	7,257.13	8,900.31	7,073.29	59.36	59.65	-87.11	-2,458.99	-1,924.71	3,644.82	3,526.56	118.26	30.821		
9,000.00	7,256.71	8,999.69	7,072.97	61.72	61.91	-87.11	-2,459.66	-2,024.71	3,643.82	3,520.91	122.92	29.644		
9,100.00	7,256.29	9,100.32	7,072.64	64.12	64.25	-87.11	-2,460.33	-2,124.70	3,642.83	3,515.14	127.69	28.528		
9,200.00	7,255.87	9,200.32	7,072.32	66.56	66.61	-87.11	-2,460.99	-2,224.69	3,641.83	3,509.31	132.53	27.480		
9,300.00	7,255.45	9,299.67	7,071.99	69.02	69.00	-87.11	-2,461.66	-2,324.68	3,640.84	3,503.43	137.41	26.496		
9,400.00	7,255.03	9,400.33	7,071.67	71.52	71.46	-87.11	-2,462.33	-2,424.68	3,639.85	3,497.46	142.39	25.563		
9,500.00	7,254.61	9,500.34	7,071.34	74.04	73.93	-87.12	-2,463.00	-2,524.67	3,638.85	3,491.45	147.40	24.687		
9,600.00	7,254.19	9,600.34	7,071.02	76.58	76.43	-87.12	-2,463.66	-2,624.66	3,637.86	3,485.39	152.46	23.861		
9,700.00	7,253.77	9,699.65	7,070.69	79.15	78.94	-87.12	-2,464.33	-2,724.65	3,636.86	3,479.31	157.55	23.084		
9,800.00	7,253.35	9,800.35	7,070.37	81.74	81.50	-87.12	-2,465.00	-2,824.64	3,635.87	3,473.15	162.72	22.345		
9,900.00	7,252.92	9,900.36	7,070.04	84.34	84.07	-87.12	-2,465.67	-2,924.64	3,634.87	3,466.97	167.90	21.649		
10,000.00	7,252.50	10,000.36	7,069.72	86.96	86.65	-87.12	-2,466.33	-3,024.63	3,633.88	3,460.76	173.12	20.991		
10,100.00	7,252.08	10,100.37	7,069.39	89.59	89.26	-87.12	-2,467.00	-3,124.62	3,632.88	3,454.52	178.36	20.368		
10,200.00	7,251.66	10,200.37	7,069.07	92.24	91.88	-87.12	-2,467.67	-3,224.61	3,631.89	3,448.25	183.64	19.778		
10,300.00	7,251.24	10,300.38	7,068.74	94.90	94.51	-87.12	-2,468.34	-3,324.61	3,630.89	3,441.96	188.93	19.218		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,399.62	7,068.42	97.57	97.13	-87.12	-2,469.00	-3,424.60	3,629.90	3,435.66	194.24	18.688		
10,500.00	7,250.40	10,499.61	7,068.09	100.25	99.79	-87.12	-2,469.67	-3,524.59	3,628.90	3,429.33	199.58	18.183		
10,600.00	7,249.98	10,600.39	7,067.77	102.93	102.48	-87.12	-2,470.34	-3,624.58	3,627.91	3,422.95	204.96	17.700		
10,700.00	7,249.56	10,700.40	7,067.44	105.63	105.16	-87.12	-2,471.01	-3,724.58	3,626.91	3,416.57	210.34	17.243		
10,800.00	7,249.14	10,800.40	7,067.12	108.34	107.84	-87.12	-2,471.67	-3,824.57	3,625.92	3,410.18	215.74	16.807		
10,900.00	7,248.72	10,900.41	7,066.79	111.05	110.54	-87.13	-2,472.34	-3,924.56	3,624.92	3,403.77	221.15	16.391		
11,000.00	7,248.30	11,000.41	7,066.47	113.77	113.24	-87.13	-2,473.01	-4,024.55	3,623.93	3,397.35	226.58	15.994		
11,100.00	7,247.88	11,100.42	7,066.14	116.50	115.96	-87.13	-2,473.67	-4,124.54	3,622.93	3,390.91	232.02	15.615		
11,200.00	7,247.46	11,200.42	7,065.82	119.23	118.68	-87.13	-2,474.34	-4,224.54	3,621.94	3,384.47	237.47	15.252		
11,300.00	7,247.04	11,300.43	7,065.49	121.97	121.40	-87.13	-2,475.01	-4,324.53	3,620.95	3,378.01	242.94	14.905		
11,400.00	7,246.62	11,400.43	7,065.17	124.72	124.13	-87.13	-2,475.68	-4,424.52	3,619.95	3,371.54	248.42	14.572		
11,500.00	7,246.20	11,499.56	7,064.84	127.46	126.84	-87.13	-2,476.34	-4,524.51	3,618.96	3,365.08	253.88	14.255		
11,600.00	7,245.78	11,600.44	7,064.52	130.22	129.61	-87.13	-2,477.01	-4,624.51	3,617.96	3,358.56	259.40	13.948		
11,700.00	7,245.36	11,700.45	7,064.19	132.98	132.36	-87.13	-2,477.68	-4,724.50	3,616.97	3,352.06	264.90	13.654		
11,800.00	7,244.94	11,800.45	7,063.87	135.74	135.11	-87.13	-2,478.35	-4,824.49	3,615.97	3,345.56	270.41	13.372		
11,900.00	7,244.52	11,900.46	7,063.55	138.50	137.87	-87.13	-2,479.01	-4,924.48	3,614.98	3,339.04	275.94	13.101		
12,000.00	7,244.10	12,000.46	7,063.22	141.27	140.63	-87.13	-2,479.68	-5,024.48	3,613.98	3,332.52	281.46	12.840		
12,100.00	7,243.68	12,100.47	7,062.90	144.04	143.39	-87.13	-2,480.35	-5,124.47	3,612.99	3,325.99	287.00	12.589		
12,200.00	7,243.26	12,200.47	7,062.57	146.82	146.16	-87.13	-2,481.02	-5,224.46	3,611.99	3,319.45	292.54	12.347		
12,300.00	7,242.84	12,300.48	7,062.25	149.60	148.93	-87.14	-2,481.68	-5,324.45	3,611.00	3,312.91	298.09	12.114		
12,400.00	7,242.42	12,400.48	7,061.92	152.38	151.70	-87.14	-2,482.35	-5,424.44	3,610.00	3,306.36	303.64	11.889		
12,500.00	7,242.00	12,500.49	7,061.60	155.16	154.48	-87.14	-2,483.02	-5,524.44	3,609.01	3,299.81	309.20	11.672		
12,600.00	7,241.58	12,600.49	7,061.27	157.95	157.26	-87.14	-2,483.69	-5,624.43	3,608.01	3,293.25	314.77	11.462		
12,700.00	7,241.16	12,700.50	7,060.95	160.74	160.05	-87.14	-2,484.35	-5,724.42	3,607.02	3,286.68	320.34	11.260		
12,800.00	7,240.74	12,800.50	7,060.62	163.53	162.83	-87.14	-2,485.02	-5,824.41	3,606.02	3,280.11	325.91	11.064		
12,900.00	7,240.32	12,900.51	7,060.30	166.32	165.62	-87.14	-2,485.69	-5,924.41	3,605.03	3,273.54	331.49	10.875		
13,000.00	7,239.89	13,000.51	7,059.97	169.12	168.41	-87.14	-2,486.36	-6,024.40	3,604.03	3,266.96	337.07	10.692		
13,100.00	7,239.47	13,100.52	7,059.65	171.92	171.20	-87.14	-2,487.02	-6,124.39	3,603.04	3,260.38	342.66	10.515		
13,200.00	7,239.05	13,200.52	7,059.32	174.72	174.00	-87.14	-2,487.69	-6,224.38	3,602.04	3,253.79	348.25	10.343		
13,300.00	7,238.63	13,300.53	7,059.00	177.52	176.80	-87.14	-2,488.36	-6,324.37	3,601.05	3,247.20	353.85	10.177		
13,400.00	7,238.21	13,400.53	7,058.67	180.32	179.60	-87.14	-2,489.03	-6,424.37	3,600.06	3,240.61	359.45	10.016		
13,500.00	7,237.79	13,500.54	7,058.35	183.13	182.40	-87.14	-2,489.69	-6,524.36	3,599.06	3,234.01	365.05	9.859		
13,600.00	7,237.37	13,600.54	7,058.02	185.93	185.20	-87.15	-2,490.36	-6,624.35	3,598.07	3,227.41	370.65	9.707		
13,700.00	7,236.95	13,700.55	7,057.70	188.74	188.00	-87.15	-2,491.03	-6,724.34	3,597.07	3,220.81	376.26	9.560		
13,800.00	7,236.53	13,800.55	7,057.37	191.55	190.81	-87.15	-2,491.70	-6,824.34	3,596.08	3,214.20	381.87	9.417		
13,900.00	7,236.11	13,900.56	7,057.05	194.36	193.62	-87.15	-2,492.36	-6,924.33	3,595.08	3,207.60	387.49	9.278		
14,000.00	7,235.69	14,000.56	7,056.72	197.17	196.43	-87.15	-2,493.03	-7,024.32	3,594.09	3,200.98	393.10	9.143		
14,100.00	7,235.27	14,100.57	7,056.40	199.98	199.24	-87.15	-2,493.70	-7,124.31	3,593.09	3,194.37	398.72	9.012		
14,200.00	7,234.85	14,200.57	7,056.07	202.80	202.05	-87.15	-2,494.37	-7,224.31	3,592.10	3,187.75	404.34	8.884		
14,300.00	7,234.43	14,300.58	7,055.75	205.61	204.86	-87.15	-2,495.03	-7,324.30	3,591.10	3,181.14	409.97	8.759		
14,400.00	7,234.01	14,400.58	7,055.42	208.43	207.68	-87.15	-2,495.70	-7,424.29	3,590.11	3,174.51	415.59	8.639		
14,500.00	7,233.59	14,500.59	7,055.10	211.25	210.49	-87.15	-2,496.37	-7,524.28	3,589.11	3,167.89	421.22	8.521		
14,600.00	7,233.17	14,600.59	7,054.77	214.06	213.31	-87.15	-2,497.04	-7,624.27	3,588.12	3,161.27	426.85	8.406		
14,700.00	7,232.75	14,700.60	7,054.45	216.88	216.13	-87.15	-2,497.70	-7,724.27	3,587.12	3,154.64	432.49	8.294		
14,800.00	7,232.33	14,800.60	7,054.12	219.70	218.95	-87.15	-2,498.37	-7,824.26	3,586.13	3,148.01	438.12	8.185		
14,900.00	7,231.91	14,900.61	7,053.80	222.52	221.77	-87.15	-2,499.04	-7,924.25	3,585.13	3,141.38	443.76	8.079		
15,000.00	7,231.49	15,000.61	7,053.47	225.35	224.59	-87.16	-2,499.71	-8,024.24	3,584.14	3,134.75	449.39	7.975		
15,100.00	7,231.07	15,100.62	7,053.15	228.17	227.41	-87.16	-2,500.37	-8,124.24	3,583.14	3,128.11	455.03	7.874		
15,116.21	7,231.00	15,115.60	7,053.10	228.63	227.83	-87.16	-2,500.48	-8,140.45	3,582.98	3,127.07	455.91	7.859 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	0.00	3.28	-179.52	-400.01	-3.34	400.03					
100.00	100.00	103.00	100.00	0.18	3.29	-179.52	-400.01	-3.34	400.03	396.56	3.46	115.583		
200.00	200.00	197.00	200.00	0.61	3.33	-179.52	-400.01	-3.34	400.03	396.08	3.95	101.300 CC, ES		
300.00	300.00	285.11	288.10	1.05	3.42	-179.51	-401.27	-3.42	401.46	396.97	4.50	89.271		
400.00	400.00	372.69	375.59	1.49	3.55	-179.48	-405.20	-3.70	405.95	400.85	5.10	79.582		
500.00	500.00	459.95	462.60	1.93	3.71	-179.42	-411.77	-4.15	413.49	407.74	5.74	71.992		
600.00	599.98	546.54	548.69	2.37	3.90	-171.60	-420.89	-4.78	425.75	419.33	6.42	66.314		
700.00	699.84	631.85	633.21	2.81	4.12	-171.54	-432.42	-5.58	444.38	437.26	7.12	62.395		
800.00	799.45	715.40	715.63	3.26	4.36	-171.50	-446.14	-6.53	469.26	461.43	7.83	59.926		
900.00	898.70	796.75	795.44	3.70	4.63	-171.47	-461.79	-7.61	500.21	491.67	8.54	58.599		
1,000.00	997.47	875.49	872.25	4.15	4.91	-171.45	-479.09	-8.81	537.03	527.80	9.23	58.184		
1,100.00	1,095.78	951.57	945.97	4.60	5.20	-171.51	-497.80	-10.10	578.78	568.87	9.91	58.394		
1,200.00	1,194.05	1,025.71	1,017.32	5.05	5.51	-171.59	-517.90	-11.49	623.06	612.50	10.56	58.979		
1,300.00	1,292.33	1,097.95	1,086.32	5.50	5.82	-171.64	-539.26	-12.97	669.62	658.41	11.21	59.759		
1,400.00	1,390.61	1,168.93	1,153.57	5.96	6.14	-171.68	-561.92	-14.54	718.36	706.52	11.84	60.685		
1,500.00	1,488.89	1,255.70	1,235.45	6.43	6.56	-171.72	-590.55	-16.52	768.08	755.53	12.55	61.211		
1,600.00	1,587.16	1,342.46	1,317.33	6.89	6.99	-171.75	-619.17	-18.50	817.80	804.52	13.28	61.592		
1,700.00	1,685.44	1,429.22	1,399.21	7.36	7.43	-171.78	-647.80	-20.48	867.52	853.50	14.02	61.865		
1,800.00	1,783.72	1,515.98	1,481.09	7.83	7.89	-171.81	-676.43	-22.46	917.24	902.46	14.78	62.055		
1,900.00	1,882.00	1,602.75	1,562.97	8.30	8.34	-171.83	-705.05	-24.44	966.96	951.41	15.55	62.181		
2,000.00	1,980.27	1,689.51	1,644.85	8.77	8.81	-171.85	-733.68	-26.42	1,016.68	1,000.35	16.33	62.259		
2,100.00	2,078.55	1,776.27	1,726.73	9.25	9.28	-171.87	-762.30	-28.40	1,066.40	1,049.29	17.12	62.298		
2,200.00	2,176.83	1,863.03	1,808.61	9.72	9.76	-171.88	-790.93	-30.38	1,116.12	1,098.21	17.91	62.309		
2,300.00	2,275.11	1,949.79	1,890.49	10.19	10.24	-171.90	-819.55	-32.36	1,165.85	1,147.13	18.71	62.298		
2,400.00	2,373.38	2,036.56	1,972.37	10.66	10.72	-171.91	-848.18	-34.34	1,215.57	1,196.05	19.52	62.270		
2,500.00	2,471.66	2,123.32	2,054.25	11.14	11.21	-171.93	-876.81	-36.32	1,265.29	1,244.96	20.33	62.229		
2,600.00	2,569.94	2,210.08	2,136.13	11.61	11.70	-171.94	-905.43	-38.30	1,315.01	1,293.86	21.15	62.179		
2,700.00	2,668.22	2,303.16	2,218.01	12.09	12.23	-171.95	-934.06	-40.28	1,364.73	1,342.73	22.00	62.034		
2,800.00	2,766.49	2,383.61	2,299.89	12.56	12.69	-171.96	-962.68	-42.26	1,414.45	1,391.66	22.79	62.058		
2,900.00	2,864.77	2,470.37	2,381.77	13.04	13.18	-171.97	-991.31	-44.24	1,464.18	1,440.56	23.62	61.992		
3,000.00	2,963.05	2,557.13	2,463.65	13.51	13.68	-171.98	-1,019.93	-46.22	1,513.90	1,489.45	24.45	61.923		
3,100.00	3,061.33	2,643.89	2,545.53	13.99	14.18	-171.99	-1,048.56	-48.20	1,563.62	1,538.34	25.28	61.853		
3,200.00	3,159.60	2,730.66	2,627.41	14.46	14.68	-172.00	-1,077.19	-50.18	1,613.34	1,587.23	26.11	61.781		
3,300.00	3,257.88	2,817.42	2,709.29	14.94	15.19	-172.00	-1,105.81	-52.16	1,663.06	1,636.11	26.95	61.710		
3,400.00	3,356.16	2,904.18	2,791.17	15.41	15.69	-172.01	-1,134.44	-54.14	1,712.79	1,685.00	27.79	61.638		
3,500.00	3,454.43	3,009.06	2,873.05	15.89	16.30	-172.02	-1,163.06	-56.12	1,762.51	1,733.79	28.72	61.371		
3,600.00	3,552.71	3,077.70	2,954.93	16.36	16.70	-172.02	-1,191.69	-58.10	1,812.23	1,782.76	29.47	61.497		
3,700.00	3,650.99	3,164.47	3,036.81	16.84	17.20	-172.03	-1,220.31	-60.08	1,861.95	1,831.64	30.31	61.428		
3,800.00	3,749.27	3,251.23	3,118.69	17.32	17.71	-172.03	-1,248.94	-62.06	1,911.67	1,880.52	31.16	61.359		
3,900.00	3,847.54	3,337.99	3,200.57	17.79	18.22	-172.04	-1,277.57	-64.04	1,961.39	1,929.39	32.00	61.292		
4,000.00	3,945.82	3,424.75	3,282.45	18.27	18.73	-172.04	-1,306.19	-66.02	2,011.12	1,978.27	32.85	61.227		
4,100.00	4,044.10	3,511.52	3,364.33	18.75	19.23	-172.05	-1,334.82	-68.00	2,060.84	2,027.14	33.69	61.162		
4,200.00	4,142.38	3,601.72	3,446.21	19.22	19.76	-172.05	-1,363.44	-69.98	2,110.56	2,076.00	34.56	61.068		
4,300.00	4,240.65	3,685.04	3,528.09	19.70	20.25	-172.06	-1,392.07	-71.96	2,160.28	2,124.89	35.39	61.038		
4,400.00	4,338.93	3,771.80	3,609.97	20.18	20.76	-172.06	-1,420.69	-73.94	2,210.00	2,173.76	36.24	60.978		
4,500.00	4,437.21	3,858.57	3,691.85	20.65	21.27	-172.07	-1,449.32	-75.92	2,259.73	2,222.63	37.09	60.919		
4,600.00	4,535.49	3,945.33	3,773.73	21.13	21.78	-172.07	-1,477.94	-77.90	2,309.45	2,271.50	37.95	60.861		
4,700.00	4,633.76	4,032.09	3,855.61	21.61	22.30	-172.07	-1,506.57	-79.88	2,359.17	2,320.37	38.80	60.805		
4,800.00	4,732.04	4,118.85	3,937.49	22.08	22.81	-172.08	-1,535.20	-81.86	2,408.89	2,369.24	39.65	60.751		
4,900.00	4,830.32	4,205.61	4,019.37	22.56	23.32	-172.08	-1,563.82	-83.84	2,458.62	2,418.11	40.51	60.697		
5,000.00	4,928.60	4,307.62	4,101.25	23.04	23.92	-172.08	-1,592.45	-85.82	2,508.34	2,466.90	41.44	60.530		
5,100.00	5,026.87	4,379.14	4,183.13	23.51	24.34	-172.09	-1,621.07	-87.80	2,558.06	2,515.84	42.22	60.594		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,465.90	4,265.01	23.99	24.86	-172.09	-1,649.70	-89.78	2,607.78	2,564.71	43.07	60.544		
5,300.00	5,223.43	4,552.66	4,346.89	24.47	25.37	-172.09	-1,678.32	-91.76	2,657.50	2,613.57	43.93	60.495		
5,400.00	5,321.71	4,639.43	4,428.77	24.94	25.88	-172.10	-1,706.95	-93.74	2,707.23	2,662.44	44.79	60.448		
5,500.00	5,419.98	4,726.19	4,510.65	25.42	26.40	-172.10	-1,735.58	-95.72	2,756.95	2,711.30	45.64	60.401		
5,600.00	5,518.26	4,812.95	4,592.53	25.90	26.91	-172.10	-1,764.20	-97.70	2,806.67	2,760.17	46.50	60.356		
5,700.00	5,616.54	4,900.29	4,674.41	26.38	27.43	-172.10	-1,792.83	-99.68	2,856.39	2,809.03	47.36	60.308		
5,800.00	5,714.82	4,986.48	4,756.29	26.85	27.94	-172.11	-1,821.45	-101.66	2,906.11	2,857.89	48.22	60.268		
5,900.00	5,813.09	5,073.24	4,838.17	27.33	28.45	-172.11	-1,850.08	-103.64	2,955.84	2,906.76	49.08	60.225		
6,000.00	5,911.37	5,160.00	4,920.05	27.81	28.97	-172.11	-1,878.70	-105.62	3,005.56	2,955.62	49.94	60.184		
6,100.00	6,009.65	5,246.76	5,001.93	28.28	29.48	-172.11	-1,907.33	-107.60	3,055.28	3,004.48	50.80	60.143		
6,200.00	6,107.93	5,333.53	5,083.81	28.76	30.00	-172.12	-1,935.96	-109.58	3,105.00	3,053.34	51.66	60.103		
6,300.00	6,206.20	5,420.29	5,165.69	29.24	30.51	-172.12	-1,964.58	-111.56	3,154.72	3,102.20	52.52	60.064		
6,400.00	6,304.48	5,507.05	5,247.57	29.72	31.03	-172.12	-1,993.21	-113.54	3,204.45	3,151.06	53.39	60.025		
6,500.00	6,402.76	5,593.81	5,329.45	30.19	31.62	-172.12	-2,021.83	-115.52	3,254.17	3,199.86	54.31	59.916		
6,600.00	6,501.04	5,680.57	5,411.33	30.67	32.06	-172.12	-2,050.46	-117.50	3,303.89	3,248.78	55.11	59.951		
6,700.00	6,599.31	5,767.34	5,493.21	31.15	32.57	-172.13	-2,079.08	-119.48	3,353.61	3,297.64	55.97	59.914		
6,800.00	6,697.50	5,854.07	5,575.07	31.63	33.09	-148.71	-2,107.70	-121.46	3,403.28	3,346.44	56.84	59.877		
6,900.00	6,794.18	5,939.85	5,656.02	32.10	33.60	-118.16	-2,136.00	-123.42	3,452.13	3,394.44	57.70	59.831		
7,000.00	6,886.96	6,022.62	5,734.13	32.55	34.09	-102.47	-2,163.31	-125.31	3,499.17	3,440.63	58.54	59.778		
7,100.00	6,973.57	6,100.35	5,807.48	32.99	34.55	-92.97	-2,188.95	-127.08	3,543.59	3,484.25	59.34	59.712		
7,200.00	7,051.87	6,171.11	5,874.27	33.41	34.97	-86.46	-2,212.30	-128.70	3,584.82	3,524.69	60.13	59.618		
7,300.00	7,119.93	6,233.18	5,932.84	33.85	35.34	-81.71	-2,232.78	-130.12	3,622.41	3,561.50	60.91	59.468		
7,400.00	7,176.09	6,285.02	5,981.76	34.39	35.65	-78.11	-2,249.88	-131.30	3,656.06	3,594.33	61.73	59.231		
7,500.00	7,218.95	6,325.35	6,019.82	35.09	35.89	-75.32	-2,263.19	-132.22	3,685.49	3,622.90	62.59	58.880		
7,600.00	7,247.46	6,353.18	6,046.09	35.98	36.06	-73.15	-2,272.37	-132.85	3,710.49	3,646.96	63.53	58.406		
7,700.00	7,260.92	6,367.83	6,059.92	37.04	36.14	-71.51	-2,277.21	-133.19	3,730.81	3,666.29	64.52	57.822		
7,800.00	7,261.75	6,371.37	6,063.25	38.23	36.16	-71.00	-2,278.37	-133.27	3,747.57	3,682.00	65.57	57.153		
7,900.00	7,261.33	6,373.80	6,065.55	39.59	36.18	-71.04	-2,279.17	-133.32	3,766.30	3,699.54	66.76	56.416		
8,000.00	7,260.91	6,376.23	6,067.84	41.10	36.19	-71.08	-2,279.98	-133.38	3,787.58	3,719.51	68.07	55.643		
8,100.00	7,260.49	6,378.66	6,070.14	42.75	36.21	-71.12	-2,280.78	-133.44	3,811.36	3,741.88	69.48	54.854		
8,200.00	7,260.07	6,381.10	6,072.43	44.53	36.22	-71.15	-2,281.58	-133.49	3,837.60	3,766.62	70.97	54.071		
8,300.00	7,259.65	6,384.29	6,074.72	46.41	36.23	-71.18	-2,282.37	-133.54	3,863.84	3,791.86	72.51	53.291		
8,400.00	7,259.23	6,387.48	6,077.01	48.39	36.24	-71.21	-2,283.16	-133.59	3,890.08	3,817.10	74.11	52.516		
8,500.00	7,258.81	6,390.67	6,079.30	50.45	36.25	-71.24	-2,283.95	-133.64	3,916.32	3,842.34	75.77	51.747		
8,600.00	7,258.39	6,393.86	6,081.59	52.59	36.26	-71.27	-2,284.74	-133.69	3,942.56	3,867.58	77.48	50.984		
8,700.00	7,257.97	6,397.05	6,083.88	54.79	36.27	-71.30	-2,285.53	-133.74	3,968.80	3,892.82	79.24	50.227		
8,800.00	7,257.55	6,400.24	6,086.17	57.05	36.28	-71.33	-2,286.32	-133.79	3,995.04	3,918.06	81.04	49.476		
8,900.00	7,257.13	6,403.43	6,088.46	59.36	36.29	-71.36	-2,287.11	-133.84	4,021.28	3,943.30	82.89	48.730		
9,000.00	7,256.71	6,406.62	6,090.75	61.72	36.30	-71.39	-2,287.90	-133.89	4,047.52	3,968.54	84.70	47.989		
9,100.00	7,256.29	6,409.81	6,093.04	64.12	36.31	-71.42	-2,288.69	-133.94	4,073.76	3,993.78	86.56	47.253		
9,200.00	7,255.87	6,413.00	6,095.33	66.56	36.32	-71.45	-2,289.48	-133.99	4,100.00	4,019.02	88.46	46.522		
9,300.00	7,255.45	6,416.19	6,097.62	69.02	36.33	-71.48	-2,290.27	-134.04	4,126.24	4,044.26	90.39	45.796		
9,400.00	7,255.03	6,419.38	6,099.91	71.52	36.34	-71.51	-2,291.06	-134.09	4,152.48	4,069.50	92.36	45.075		
9,500.00	7,254.61	6,422.57	6,102.20	74.04	36.35	-71.54	-2,291.85	-134.14	4,178.72	4,094.74	94.37	44.359		
9,600.00	7,254.19	6,425.76	6,104.49	76.58	36.36	-71.57	-2,292.64	-134.19	4,204.96	4,119.98	96.41	43.647		
9,700.00	7,253.77	6,428.95	6,106.78	79.15	36.37	-71.60	-2,293.43	-134.24	4,231.20	4,145.22	98.48	42.939		
9,800.00	7,253.35	6,432.14	6,109.07	81.74	36.38	-71.63	-2,294.22	-134.29	4,257.44	4,170.46	100.58	42.235		
9,900.00	7,252.92	6,435.33	6,111.36	84.34	36.39	-71.66	-2,295.01	-134.34	4,283.68	4,195.70	102.71	41.535		
10,000.00	7,252.50	6,438.52	6,113.65	86.96	36.40	-71.69	-2,295.80	-134.39	4,309.92	4,220.94	104.87	40.839		
10,100.00	7,252.08	6,441.71	6,115.94	89.59	36.41	-71.72	-2,296.59	-134.44	4,336.16	4,246.18	107.04	40.147		
10,200.00	7,251.66	6,444.90	6,118.23	92.24	36.42	-71.75	-2,297.38	-134.49	4,362.40	4,271.42	109.24	39.459		
10,300.00	7,251.24	6,448.09	6,120.52	94.90	36.43	-71.78	-2,298.17	-134.54	4,388.64	4,296.66	111.47	38.775		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,528.17	7,131.98	97.57	97.55	-88.23	-2,678.51	-3,425.21	3,836.65	3,641.95	194.71	19.705		
10,500.00	7,250.40	10,628.17	7,131.41	100.25	100.20	-88.22	-2,679.13	-3,525.20	3,835.61	3,635.57	200.05	19.174		
10,600.00	7,249.98	10,728.16	7,130.84	102.93	102.86	-88.22	-2,679.74	-3,625.19	3,834.57	3,629.17	205.40	18.668		
10,700.00	7,249.56	10,828.16	7,130.28	105.63	105.52	-88.22	-2,680.35	-3,725.18	3,833.53	3,622.75	210.78	18.187		
10,800.00	7,249.14	10,928.15	7,129.71	108.34	108.20	-88.22	-2,680.96	-3,825.17	3,832.49	3,616.32	216.17	17.729		
10,900.00	7,248.72	11,028.14	7,129.14	111.05	110.89	-88.21	-2,681.58	-3,925.16	3,831.45	3,609.87	221.58	17.291		
11,000.00	7,248.30	11,128.14	7,128.57	113.77	113.58	-88.21	-2,682.19	-4,025.15	3,830.41	3,603.40	227.01	16.873		
11,100.00	7,247.88	11,228.13	7,128.00	116.50	116.29	-88.21	-2,682.80	-4,125.14	3,829.37	3,596.92	232.45	16.474		
11,200.00	7,247.46	11,328.13	7,127.43	119.23	119.00	-88.21	-2,683.42	-4,225.13	3,828.33	3,590.43	237.90	16.092		
11,300.00	7,247.04	11,428.12	7,126.87	121.97	121.72	-88.20	-2,684.03	-4,325.13	3,827.29	3,583.93	243.36	15.727		
11,400.00	7,246.62	11,528.12	7,126.30	124.72	124.44	-88.20	-2,684.64	-4,425.12	3,826.25	3,577.42	248.83	15.377		
11,500.00	7,246.20	11,628.11	7,125.73	127.46	127.17	-88.20	-2,685.25	-4,525.11	3,825.21	3,570.89	254.32	15.041		
11,600.00	7,245.78	11,728.11	7,125.16	130.22	129.91	-88.19	-2,685.87	-4,625.10	3,824.17	3,564.36	259.81	14.719		
11,700.00	7,245.36	11,828.10	7,124.59	132.98	132.65	-88.19	-2,686.48	-4,725.09	3,823.13	3,557.81	265.31	14.410		
11,800.00	7,244.94	11,928.09	7,124.02	135.74	135.39	-88.19	-2,687.09	-4,825.08	3,822.09	3,551.26	270.82	14.113		
11,900.00	7,244.52	12,028.09	7,123.45	138.50	138.14	-88.19	-2,687.71	-4,925.07	3,821.05	3,544.70	276.34	13.827		
12,000.00	7,244.10	12,128.08	7,122.89	141.27	140.90	-88.18	-2,688.32	-5,025.06	3,820.01	3,538.13	281.87	13.552		
12,100.00	7,243.68	12,228.08	7,122.32	144.04	143.66	-88.18	-2,688.93	-5,125.05	3,818.96	3,531.56	287.41	13.288		
12,200.00	7,243.26	12,328.07	7,121.75	146.82	146.42	-88.18	-2,689.55	-5,225.04	3,817.92	3,524.98	292.95	13.033		
12,300.00	7,242.84	12,428.07	7,121.18	149.60	149.19	-88.18	-2,690.16	-5,325.03	3,816.88	3,518.39	298.49	12.787		
12,400.00	7,242.42	12,528.06	7,120.61	152.38	151.96	-88.17	-2,690.77	-5,425.03	3,815.84	3,511.80	304.05	12.550		
12,500.00	7,242.00	12,628.06	7,120.04	155.16	154.73	-88.17	-2,691.38	-5,525.02	3,814.80	3,505.20	309.61	12.321		
12,600.00	7,241.58	12,728.05	7,119.48	157.95	157.51	-88.17	-2,692.00	-5,625.01	3,813.76	3,498.59	315.17	12.101		
12,700.00	7,241.16	12,828.04	7,118.91	160.74	160.28	-88.16	-2,692.61	-5,725.00	3,812.72	3,491.98	320.74	11.887		
12,800.00	7,240.74	12,928.04	7,118.34	163.53	163.07	-88.16	-2,693.22	-5,824.99	3,811.68	3,485.37	326.32	11.681		
12,900.00	7,240.32	13,028.03	7,117.77	166.32	165.85	-88.16	-2,693.84	-5,924.98	3,810.64	3,478.75	331.89	11.481		
13,000.00	7,239.89	13,128.03	7,117.20	169.12	168.64	-88.16	-2,694.45	-6,024.97	3,809.60	3,472.12	337.48	11.288		
13,100.00	7,239.47	13,228.02	7,116.63	171.92	171.43	-88.15	-2,695.06	-6,124.96	3,808.56	3,465.50	343.07	11.102		
13,200.00	7,239.05	13,328.02	7,116.07	174.72	174.22	-88.15	-2,695.67	-6,224.95	3,807.52	3,458.86	348.66	10.921		
13,300.00	7,238.63	13,428.01	7,115.50	177.52	177.01	-88.15	-2,696.29	-6,324.94	3,806.48	3,452.23	354.25	10.745		
13,400.00	7,238.21	13,528.01	7,114.93	180.32	179.81	-88.15	-2,696.90	-6,424.94	3,805.44	3,445.59	359.85	10.575		
13,500.00	7,237.79	13,628.00	7,114.36	183.13	182.61	-88.14	-2,697.51	-6,524.93	3,804.40	3,438.95	365.45	10.410		
13,600.00	7,237.37	13,727.99	7,113.79	185.93	185.41	-88.14	-2,698.13	-6,624.92	3,803.36	3,432.30	371.06	10.250		
13,700.00	7,236.95	13,827.99	7,113.22	188.74	188.21	-88.14	-2,698.74	-6,724.91	3,802.32	3,425.65	376.67	10.095		
13,800.00	7,236.53	13,927.98	7,112.65	191.55	191.01	-88.13	-2,699.35	-6,824.90	3,801.28	3,419.00	382.28	9.944		
13,900.00	7,236.11	14,027.98	7,112.09	194.36	193.81	-88.13	-2,699.97	-6,924.89	3,800.24	3,412.34	387.89	9.797		
14,000.00	7,235.69	14,127.97	7,111.52	197.17	196.62	-88.13	-2,700.58	-7,024.88	3,799.20	3,405.69	393.51	9.655		
14,100.00	7,235.27	14,227.97	7,110.95	199.98	199.43	-88.13	-2,701.19	-7,124.87	3,798.16	3,399.03	399.13	9.516		
14,200.00	7,234.85	14,327.96	7,110.38	202.80	202.24	-88.12	-2,701.80	-7,224.86	3,797.12	3,392.36	404.75	9.381		
14,300.00	7,234.43	14,427.96	7,109.81	205.61	205.05	-88.12	-2,702.42	-7,324.85	3,796.08	3,385.70	410.38	9.250		
14,400.00	7,234.01	14,527.95	7,109.24	208.43	207.86	-88.12	-2,703.03	-7,424.84	3,795.04	3,379.03	416.01	9.123		
14,500.00	7,233.59	14,627.94	7,108.68	211.25	210.67	-88.12	-2,703.64	-7,524.84	3,794.00	3,372.36	421.63	8.998		
14,600.00	7,233.17	14,727.94	7,108.11	214.06	213.49	-88.11	-2,704.26	-7,624.83	3,792.96	3,365.69	427.27	8.877		
14,700.00	7,232.75	14,827.93	7,107.54	216.88	216.30	-88.11	-2,704.87	-7,724.82	3,791.92	3,359.02	432.90	8.759		
14,800.00	7,232.33	14,927.93	7,106.97	219.70	219.12	-88.11	-2,705.48	-7,824.81	3,790.88	3,352.34	438.53	8.644		
14,900.00	7,231.91	15,027.92	7,106.40	222.52	221.94	-88.10	-2,706.09	-7,924.80	3,789.84	3,345.66	444.17	8.532		
15,000.00	7,231.49	15,127.92	7,105.83	225.35	224.76	-88.10	-2,706.71	-8,024.79	3,788.79	3,338.98	449.81	8.423		
15,100.00	7,231.07	15,227.91	7,105.27	228.17	227.58	-88.10	-2,707.32	-8,124.78	3,787.75	3,332.30	455.45	8.316		
15,116.21	7,231.00	15,244.12	7,105.17	228.63	228.03	-88.10	-2,707.42	-8,140.99	3,787.59	3,331.22	456.37	8.299 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	0.00	3.28	-179.52	-460.11	-3.89	460.13					
100.00	100.00	103.00	100.00	0.18	3.29	-179.52	-460.11	-3.89	460.13	456.67	3.46	132.949		
200.00	200.00	197.00	200.00	0.61	3.33	-179.52	-460.11	-3.89	460.13	456.18	3.95	116.520	CC, ES	
300.00	300.00	283.57	286.55	1.05	3.42	-179.51	-461.33	-3.96	461.54	457.04	4.49	102.689		
400.00	400.00	369.56	372.47	1.49	3.54	-179.49	-465.12	-4.17	465.95	460.86	5.09	91.471		
500.00	500.00	455.26	457.92	1.93	3.70	-179.45	-471.46	-4.52	473.35	467.62	5.73	82.602		
600.00	599.98	540.31	542.51	2.37	3.89	-171.65	-480.27	-5.00	485.43	479.03	6.40	75.842		
700.00	699.84	624.14	625.59	2.81	4.10	-171.61	-491.40	-5.61	503.84	496.74	7.10	71.007		
800.00	799.45	706.28	706.65	3.26	4.33	-171.59	-504.66	-6.33	528.44	520.65	7.80	67.775		
900.00	898.70	786.29	785.21	3.70	4.59	-171.57	-519.80	-7.16	559.08	550.58	8.50	65.794		
1,000.00	997.47	863.79	860.87	4.15	4.87	-171.56	-536.55	-8.08	595.56	586.38	9.18	64.842		
1,100.00	1,095.78	938.72	933.56	4.60	5.15	-171.64	-554.69	-9.07	636.95	627.08	9.86	64.587		
1,200.00	1,194.05	1,011.79	1,003.97	5.05	5.45	-171.73	-574.19	-10.14	680.83	670.32	10.51	64.781		
1,300.00	1,292.33	1,083.03	1,072.12	5.50	5.75	-171.80	-594.93	-11.28	726.97	715.82	11.15	65.212		
1,400.00	1,390.61	1,152.43	1,137.98	5.96	6.07	-171.86	-616.75	-12.47	775.26	763.49	11.77	65.844		
1,500.00	1,488.89	1,219.98	1,201.56	6.43	6.39	-171.90	-639.51	-13.72	825.63	813.25	12.39	66.654		
1,600.00	1,587.16	1,285.67	1,262.87	6.89	6.72	-171.93	-663.07	-15.01	878.00	865.01	12.99	67.615		
1,700.00	1,685.44	1,349.52	1,321.92	7.36	7.06	-171.95	-687.32	-16.33	932.27	918.70	13.57	68.705		
1,800.00	1,783.72	1,413.55	1,380.59	7.83	7.40	-171.97	-712.94	-17.74	988.37	974.22	14.15	69.849		
1,900.00	1,882.00	1,504.16	1,455.69	8.30	7.91	-171.98	-746.51	-19.57	1,045.19	1,030.28	14.91	70.106		
2,000.00	1,980.27	1,578.12	1,530.80	8.77	8.34	-171.99	-780.07	-21.41	1,102.02	1,086.41	15.60	70.621		
2,100.00	2,078.55	1,660.41	1,605.90	9.25	8.82	-172.00	-813.64	-23.25	1,158.84	1,142.49	16.35	70.872		
2,200.00	2,176.83	1,742.70	1,681.01	9.72	9.31	-172.01	-847.21	-25.09	1,215.66	1,198.56	17.11	71.058		
2,300.00	2,275.11	1,824.98	1,756.11	10.19	9.80	-172.02	-880.78	-26.93	1,272.49	1,254.62	17.87	71.193		
2,400.00	2,373.38	1,907.27	1,831.22	10.66	10.30	-172.03	-914.35	-28.76	1,329.31	1,310.67	18.65	71.286		
2,500.00	2,471.66	1,989.55	1,906.32	11.14	10.81	-172.03	-947.92	-30.60	1,386.14	1,366.71	19.43	71.345		
2,600.00	2,569.94	2,071.84	1,981.42	11.61	11.32	-172.04	-981.49	-32.44	1,442.96	1,422.75	20.22	71.378		
2,700.00	2,668.22	2,154.13	2,056.53	12.09	11.83	-172.05	-1,015.06	-34.28	1,499.79	1,478.78	21.01	71.390		
2,800.00	2,766.49	2,236.41	2,131.63	12.56	12.34	-172.05	-1,048.62	-36.12	1,556.61	1,534.81	21.81	71.385		
2,900.00	2,864.77	2,318.70	2,206.74	13.04	12.86	-172.06	-1,082.19	-37.95	1,613.44	1,590.83	22.61	71.367		
3,000.00	2,963.05	2,400.98	2,281.84	13.51	13.38	-172.06	-1,115.76	-39.79	1,670.26	1,646.85	23.41	71.339		
3,100.00	3,061.33	2,483.27	2,356.95	13.99	13.91	-172.07	-1,149.33	-41.63	1,727.09	1,702.86	24.22	71.301		
3,200.00	3,159.60	2,565.55	2,432.05	14.46	14.43	-172.07	-1,182.90	-43.47	1,783.91	1,758.88	25.03	71.257		
3,300.00	3,257.88	2,647.84	2,507.16	14.94	14.96	-172.07	-1,216.47	-45.31	1,840.73	1,814.88	25.85	71.208		
3,400.00	3,356.16	2,730.13	2,582.26	15.41	15.49	-172.08	-1,250.04	-47.14	1,897.56	1,870.89	26.67	71.155		
3,500.00	3,454.43	2,812.41	2,657.37	15.89	16.01	-172.08	-1,283.61	-48.98	1,954.38	1,926.90	27.49	71.099		
3,600.00	3,552.71	2,905.30	2,732.47	16.36	16.61	-172.08	-1,317.18	-50.82	2,011.21	1,982.84	28.37	70.898		
3,700.00	3,650.99	2,976.98	2,807.58	16.84	17.08	-172.09	-1,350.74	-52.66	2,068.03	2,038.90	29.13	70.981		
3,800.00	3,749.27	3,059.27	2,882.68	17.32	17.61	-172.09	-1,384.31	-54.50	2,124.86	2,094.90	29.96	70.920		
3,900.00	3,847.54	3,141.55	2,957.79	17.79	18.14	-172.09	-1,417.88	-56.33	2,181.68	2,150.89	30.79	70.858		
4,000.00	3,945.82	3,223.84	3,032.89	18.27	18.68	-172.10	-1,451.45	-58.17	2,238.51	2,206.89	31.62	70.796		
4,100.00	4,044.10	3,306.13	3,107.99	18.75	19.21	-172.10	-1,485.02	-60.01	2,295.33	2,262.88	32.45	70.734		
4,200.00	4,142.38	3,388.41	3,183.10	19.22	19.75	-172.10	-1,518.59	-61.85	2,352.16	2,318.87	33.28	70.672		
4,300.00	4,240.65	3,470.70	3,258.20	19.70	20.29	-172.10	-1,552.16	-63.69	2,408.98	2,374.86	34.12	70.611		
4,400.00	4,338.93	3,552.98	3,333.31	20.18	20.82	-172.11	-1,585.73	-65.52	2,465.81	2,430.85	34.95	70.549		
4,500.00	4,437.21	3,635.27	3,408.41	20.65	21.36	-172.11	-1,619.29	-67.36	2,522.63	2,486.84	35.79	70.489		
4,600.00	4,535.49	3,717.56	3,483.52	21.13	21.90	-172.11	-1,652.86	-69.20	2,579.45	2,542.83	36.62	70.429		
4,700.00	4,633.76	3,800.16	3,558.62	21.61	22.44	-172.11	-1,686.43	-71.04	2,636.28	2,598.81	37.46	70.367		
4,800.00	4,732.04	3,882.13	3,633.73	22.08	22.98	-172.11	-1,720.00	-72.88	2,693.10	2,654.80	38.30	70.312		
4,900.00	4,830.32	3,964.41	3,708.83	22.56	23.52	-172.12	-1,753.57	-74.71	2,749.93	2,710.79	39.14	70.254		
5,000.00	4,928.60	4,046.70	3,783.94	23.04	24.06	-172.12	-1,787.14	-76.55	2,806.75	2,766.77	39.98	70.198		
5,100.00	5,026.87	4,128.98	3,859.04	23.51	24.60	-172.12	-1,820.71	-78.39	2,863.58	2,822.75	40.83	70.142		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	4,211.27	3,934.15	23.99	25.14	-172.12	-1,854.28	-80.23	2,920.40	2,878.73	41.67	70.087		
5,300.00	5,223.43	4,306.44	4,009.25	24.47	25.77	-172.12	-1,887.84	-82.06	2,977.23	2,934.64	42.58	69.916		
5,400.00	5,321.71	4,375.84	4,084.36	24.94	26.23	-172.12	-1,921.41	-83.90	3,034.05	2,990.70	43.36	69.980		
5,500.00	5,419.98	4,458.13	4,159.46	25.42	26.77	-172.12	-1,954.98	-85.74	3,090.88	3,046.68	44.20	69.928		
5,600.00	5,518.26	4,540.41	4,234.56	25.90	27.31	-172.13	-1,988.55	-87.58	3,147.70	3,102.65	45.05	69.876		
5,700.00	5,616.54	4,622.70	4,309.67	26.38	27.85	-172.13	-2,022.12	-89.42	3,204.53	3,158.63	45.89	69.826		
5,800.00	5,714.82	4,704.99	4,384.77	26.85	28.39	-172.13	-2,055.69	-91.25	3,261.35	3,214.61	46.74	69.776		
5,900.00	5,813.09	4,787.27	4,459.88	27.33	28.94	-172.13	-2,089.26	-93.09	3,318.18	3,270.59	47.59	69.727		
6,000.00	5,911.37	4,869.56	4,534.98	27.81	29.48	-172.13	-2,122.83	-94.93	3,375.00	3,326.56	48.44	69.679		
6,100.00	6,009.65	4,951.84	4,610.09	28.28	30.02	-172.13	-2,156.40	-96.77	3,431.82	3,382.54	49.29	69.632		
6,200.00	6,107.93	5,034.13	4,685.19	28.76	30.57	-172.13	-2,189.96	-98.61	3,488.65	3,438.51	50.13	69.585		
6,300.00	6,206.20	5,116.41	4,760.30	29.24	31.11	-172.13	-2,223.53	-100.44	3,545.47	3,494.49	50.98	69.540		
6,400.00	6,304.48	5,201.30	4,835.40	29.72	31.67	-172.14	-2,257.10	-102.28	3,602.30	3,550.45	51.85	69.475		
6,500.00	6,402.76	5,280.99	4,910.51	30.19	32.20	-172.14	-2,290.67	-104.12	3,659.12	3,606.44	52.69	69.450		
6,600.00	6,501.04	5,363.27	4,985.61	30.67	32.74	-172.14	-2,324.24	-105.96	3,715.95	3,662.41	53.54	69.406		
6,700.00	6,599.31	5,445.56	5,060.72	31.15	33.29	-172.14	-2,357.81	-107.80	3,772.77	3,718.38	54.39	69.363		
6,800.00	6,697.50	5,527.82	5,135.80	31.63	33.83	-148.22	-2,391.37	-109.63	3,829.54	3,774.30	55.25	69.319		
6,900.00	6,794.18	5,609.21	5,210.09	32.10	34.37	-116.64	-2,424.57	-111.45	3,885.42	3,829.32	56.09	69.266		
7,000.00	6,886.96	5,687.78	5,281.80	32.55	34.89	-100.02	-2,456.62	-113.21	3,939.20	3,882.28	56.92	69.207		
7,100.00	6,973.57	5,761.59	5,349.17	32.99	35.38	-89.71	-2,486.73	-114.86	3,989.90	3,932.19	57.71	69.135		
7,200.00	7,051.87	5,828.83	5,410.54	33.41	35.82	-82.57	-2,514.17	-116.36	4,036.72	3,978.24	58.48	69.029		
7,300.00	7,119.93	5,887.85	5,464.41	33.85	36.22	-77.32	-2,538.24	-117.68	4,079.01	4,019.77	59.24	68.854		
7,400.00	7,176.09	5,937.19	5,509.45	34.39	36.54	-73.38	-2,558.37	-118.78	4,116.27	4,056.24	60.03	68.569		
7,500.00	7,218.95	5,975.64	5,544.54	35.09	36.80	-70.40	-2,574.06	-119.64	4,148.10	4,087.23	60.88	68.140		
7,600.00	7,247.46	6,002.24	5,568.82	35.98	36.97	-68.18	-2,584.91	-120.23	4,174.15	4,112.36	61.79	67.552		
7,700.00	7,260.92	6,016.35	5,581.70	37.04	37.07	-66.61	-2,590.67	-120.55	4,194.13	4,131.36	62.77	66.817		
7,800.00	7,261.75	6,019.92	5,584.96	38.23	37.09	-66.17	-2,592.12	-120.63	4,209.34	4,145.53	63.81	65.966		
7,900.00	7,261.33	6,022.45	5,587.26	39.59	37.11	-66.21	-2,593.15	-120.68	4,226.15	4,161.15	65.00	65.021		
8,000.00	7,260.91	6,024.98	5,589.57	41.10	37.12	-66.24	-2,594.18	-120.74	4,245.25	4,178.94	66.31	64.019		
8,100.00	7,260.49	6,027.50	5,591.88	42.75	37.14	-66.28	-2,595.21	-120.79	4,266.61	4,198.87	67.74	62.989		
8,200.00	7,260.07	6,030.03	5,594.18	44.53	37.16	-66.31	-2,596.25	-120.85	4,290.19	4,220.94	69.25	61.954		
8,300.00	7,259.65	6,032.56	5,596.49	46.41	37.17	-66.35	-2,597.28	-120.91	4,315.96	4,245.13	70.83	60.933		
8,400.00	7,259.23	6,035.08	5,598.79	48.39	37.19	-66.38	-2,598.31	-120.96	4,343.87	4,271.41	72.47	59.942		
8,500.00	7,258.81	6,037.61	5,601.10	50.45	37.21	-66.42	-2,599.34	-121.02	4,373.90	4,299.75	74.15	58.990		
8,600.00	7,258.39	6,040.14	5,603.40	52.59	37.22	-66.45	-2,600.37	-121.08	4,405.98	4,330.13	75.85	58.087		
8,700.00	7,257.97	6,042.66	5,605.71	54.79	37.24	-66.49	-2,601.40	-121.13	4,440.09	4,362.52	77.57	57.238		
8,800.00	7,257.55	6,045.19	5,608.02	57.05	37.26	-66.52	-2,602.43	-121.19	4,476.17	4,396.87	79.30	56.445		
8,900.00	7,257.13	9,237.89	7,140.84	59.36	61.95	-88.52	-3,302.17	-1,922.62	4,484.87	4,364.75	120.11	37.339		
9,000.00	7,256.71	9,337.88	7,140.30	61.72	64.09	-88.51	-3,302.76	-2,022.61	4,483.80	4,359.08	124.72	35.952		
9,100.00	7,256.29	9,437.87	7,139.76	64.12	66.29	-88.51	-3,303.35	-2,122.60	4,482.73	4,353.32	129.41	34.640		
9,200.00	7,255.87	9,537.87	7,139.21	66.56	68.55	-88.51	-3,303.94	-2,222.59	4,481.67	4,347.48	134.18	33.400		
9,300.00	7,255.45	9,637.86	7,138.67	69.02	70.86	-88.51	-3,304.53	-2,322.58	4,480.60	4,341.57	139.02	32.229		
9,400.00	7,255.03	9,737.86	7,138.13	71.52	73.21	-88.51	-3,305.11	-2,422.58	4,479.53	4,335.60	143.93	31.123		
9,500.00	7,254.61	9,837.85	7,137.59	74.04	75.60	-88.51	-3,305.70	-2,522.57	4,478.46	4,329.57	148.89	30.078		
9,600.00	7,254.19	9,937.85	7,137.05	76.58	78.02	-88.50	-3,306.29	-2,622.56	4,477.40	4,323.49	153.91	29.091		
9,700.00	7,253.77	10,037.84	7,136.51	79.15	80.48	-88.50	-3,306.88	-2,722.55	4,476.33	4,317.36	158.97	28.158		
9,800.00	7,253.35	10,137.83	7,135.97	81.74	82.96	-88.50	-3,307.47	-2,822.54	4,475.26	4,311.19	164.07	27.276		
9,900.00	7,252.92	10,237.83	7,135.43	84.34	85.47	-88.50	-3,308.05	-2,922.53	4,474.19	4,304.98	169.22	26.440		
10,000.00	7,252.50	10,337.82	7,134.89	86.96	88.00	-88.50	-3,308.64	-3,022.52	4,473.13	4,298.73	174.40	25.649		
10,100.00	7,252.08	10,437.82	7,134.35	89.59	90.55	-88.49	-3,309.23	-3,122.51	4,472.06	4,292.45	179.61	24.899		
10,200.00	7,251.66	10,537.81	7,133.80	92.24	93.12	-88.49	-3,309.82	-3,222.50	4,470.99	4,286.15	184.85	24.187		
10,300.00	7,251.24	10,637.80	7,133.26	94.90	95.71	-88.49	-3,310.40	-3,322.49	4,469.93	4,279.81	190.12	23.512		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,737.80	7,132.72	97.57	98.31	-88.49	-3,310.99	-3,422.49	4,468.86	4,273.45	195.41	22.869		
10,500.00	7,250.40	10,837.79	7,132.18	100.25	100.93	-88.49	-3,311.58	-3,522.48	4,467.79	4,267.07	200.72	22.258		
10,600.00	7,249.98	10,937.79	7,131.64	102.93	103.56	-88.48	-3,312.17	-3,622.47	4,466.72	4,260.66	206.06	21.677		
10,700.00	7,249.56	11,037.78	7,131.10	105.63	106.20	-88.48	-3,312.76	-3,722.46	4,465.66	4,254.24	211.42	21.123		
10,800.00	7,249.14	11,137.78	7,130.56	108.34	108.86	-88.48	-3,313.34	-3,822.45	4,464.59	4,247.80	216.79	20.594		
10,900.00	7,248.72	11,237.77	7,130.02	111.05	111.52	-88.48	-3,313.93	-3,922.44	4,463.52	4,241.34	222.18	20.090		
11,000.00	7,248.30	11,337.76	7,129.48	113.77	114.19	-88.48	-3,314.52	-4,022.43	4,462.46	4,234.87	227.59	19.608		
11,100.00	7,247.88	11,437.76	7,128.93	116.50	116.88	-88.47	-3,315.11	-4,122.42	4,461.39	4,228.38	233.01	19.147		
11,200.00	7,247.46	11,537.75	7,128.39	119.23	119.57	-88.47	-3,315.70	-4,222.41	4,460.32	4,221.88	238.44	18.706		
11,300.00	7,247.04	11,637.75	7,127.85	121.97	122.27	-88.47	-3,316.28	-4,322.40	4,459.25	4,215.36	243.89	18.284		
11,400.00	7,246.62	11,737.74	7,127.31	124.72	124.97	-88.47	-3,316.87	-4,422.40	4,458.19	4,208.84	249.35	17.879		
11,500.00	7,246.20	11,837.73	7,126.77	127.46	127.69	-88.47	-3,317.46	-4,522.39	4,457.12	4,202.30	254.82	17.491		
11,600.00	7,245.78	11,937.73	7,126.23	130.22	130.41	-88.47	-3,318.05	-4,622.38	4,456.05	4,195.75	260.30	17.119		
11,700.00	7,245.36	12,037.72	7,125.69	132.98	133.13	-88.46	-3,318.63	-4,722.37	4,454.99	4,189.19	265.79	16.761		
11,800.00	7,244.94	12,137.72	7,125.15	135.74	135.86	-88.46	-3,319.22	-4,822.36	4,453.92	4,182.63	271.29	16.418		
11,900.00	7,244.52	12,237.71	7,124.61	138.50	138.60	-88.46	-3,319.81	-4,922.35	4,452.85	4,176.05	276.80	16.087		
12,000.00	7,244.10	12,337.71	7,124.07	141.27	141.34	-88.46	-3,320.40	-5,022.34	4,451.78	4,169.47	282.31	15.769		
12,100.00	7,243.68	12,437.70	7,123.52	144.04	144.08	-88.46	-3,320.99	-5,122.33	4,450.72	4,162.88	287.84	15.463		
12,200.00	7,243.26	12,537.69	7,122.98	146.82	146.83	-88.45	-3,321.57	-5,222.32	4,449.65	4,156.28	293.37	15.167		
12,300.00	7,242.84	12,637.69	7,122.44	149.60	149.59	-88.45	-3,322.16	-5,322.31	4,448.58	4,149.68	298.91	14.883		
12,400.00	7,242.42	12,737.68	7,121.90	152.38	152.35	-88.45	-3,322.75	-5,422.31	4,447.52	4,143.07	304.45	14.608		
12,500.00	7,242.00	12,837.68	7,121.36	155.16	155.11	-88.45	-3,323.34	-5,522.30	4,446.45	4,136.45	310.00	14.343		
12,600.00	7,241.58	12,937.67	7,120.82	157.95	157.87	-88.45	-3,323.93	-5,622.29	4,445.38	4,129.83	315.56	14.087		
12,700.00	7,241.16	13,037.67	7,120.28	160.74	160.64	-88.44	-3,324.51	-5,722.28	4,444.31	4,123.20	321.12	13.840		
12,800.00	7,240.74	13,137.66	7,119.74	163.53	163.41	-88.44	-3,325.10	-5,822.27	4,443.25	4,116.56	326.68	13.601		
12,900.00	7,240.32	13,237.65	7,119.20	166.32	166.19	-88.44	-3,325.69	-5,922.26	4,442.18	4,109.93	332.26	13.370		
13,000.00	7,239.89	13,337.65	7,118.65	169.12	168.96	-88.44	-3,326.28	-6,022.25	4,441.11	4,103.28	337.83	13.146		
13,100.00	7,239.47	13,437.64	7,118.11	171.92	171.74	-88.44	-3,326.87	-6,122.24	4,440.05	4,096.63	343.41	12.929		
13,200.00	7,239.05	13,537.64	7,117.57	174.72	174.53	-88.43	-3,327.45	-6,222.23	4,438.98	4,089.98	349.00	12.719		
13,300.00	7,238.63	13,637.63	7,117.03	177.52	177.31	-88.43	-3,328.04	-6,322.22	4,437.91	4,083.33	354.58	12.516		
13,400.00	7,238.21	13,737.62	7,116.49	180.32	180.10	-88.43	-3,328.63	-6,422.22	4,436.85	4,076.67	360.18	12.318		
13,500.00	7,237.79	13,837.62	7,115.95	183.13	182.89	-88.43	-3,329.22	-6,522.21	4,435.78	4,070.00	365.77	12.127		
13,600.00	7,237.37	13,937.61	7,115.41	185.93	185.68	-88.43	-3,329.80	-6,622.20	4,434.71	4,063.34	371.37	11.941		
13,700.00	7,236.95	14,037.61	7,114.87	188.74	188.47	-88.42	-3,330.39	-6,722.19	4,433.64	4,056.67	376.98	11.761		
13,800.00	7,236.53	14,137.60	7,114.33	191.55	191.27	-88.42	-3,330.98	-6,822.18	4,432.58	4,049.99	382.58	11.586		
13,900.00	7,236.11	14,237.60	7,113.79	194.36	194.07	-88.42	-3,331.57	-6,922.17	4,431.51	4,043.32	388.19	11.416		
14,000.00	7,235.69	14,337.59	7,113.24	197.17	196.87	-88.42	-3,332.16	-7,022.16	4,430.44	4,036.64	393.80	11.250		
14,100.00	7,235.27	14,437.58	7,112.70	199.98	199.67	-88.42	-3,332.74	-7,122.15	4,429.38	4,029.96	399.42	11.090		
14,200.00	7,234.85	14,537.58	7,112.16	202.80	202.47	-88.41	-3,333.33	-7,222.14	4,428.31	4,023.27	405.04	10.933		
14,300.00	7,234.43	14,637.57	7,111.62	205.61	205.27	-88.41	-3,333.92	-7,322.13	4,427.24	4,016.59	410.66	10.781		
14,400.00	7,234.01	14,737.57	7,111.08	208.43	208.08	-88.41	-3,334.51	-7,422.13	4,426.18	4,009.90	416.28	10.633		
14,500.00	7,233.59	14,837.56	7,110.54	211.25	210.89	-88.41	-3,335.10	-7,522.12	4,425.11	4,003.20	421.90	10.488		
14,600.00	7,233.17	14,937.55	7,110.00	214.06	213.70	-88.41	-3,335.68	-7,622.11	4,424.04	3,996.51	427.53	10.348		
14,700.00	7,232.75	15,037.55	7,109.46	216.88	216.51	-88.41	-3,336.27	-7,722.10	4,422.97	3,989.81	433.16	10.211		
14,800.00	7,232.33	15,137.54	7,108.92	219.70	219.32	-88.40	-3,336.86	-7,822.09	4,421.91	3,983.11	438.79	10.077		
14,900.00	7,231.91	15,237.54	7,108.37	222.52	222.13	-88.40	-3,337.45	-7,922.08	4,420.84	3,976.41	444.43	9.947		
15,000.00	7,231.49	15,337.53	7,107.83	225.35	224.94	-88.40	-3,338.04	-8,022.07	4,419.77	3,969.71	450.06	9.820		
15,100.00	7,231.07	15,437.53	7,107.29	228.17	227.76	-88.40	-3,338.62	-8,122.06	4,418.71	3,963.01	455.70	9.697		
15,116.21	7,231.00	15,453.74	7,107.20	228.63	228.21	-88.40	-3,338.72	-8,138.27	4,418.53	3,961.92	456.61	9.677 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	0.00	3.28	-179.60	-40.07	-0.28	40.07					
100.00	100.00	101.00	100.00	0.18	3.28	-179.60	-40.07	-0.28	40.07	36.61	3.46	11.580		
200.00	200.00	201.00	200.00	0.61	3.34	-179.60	-40.07	-0.28	40.07	36.12	3.95	10.139		
300.00	300.00	301.00	300.00	1.05	3.45	-179.60	-40.07	-0.28	40.07	35.57	4.50	8.906		
400.00	400.00	401.00	400.00	1.49	3.61	-179.60	-40.07	-0.28	40.07	34.97	5.10	7.862		
500.00	500.00	501.00	500.00	1.93	3.81	-179.60	-40.07	-0.28	40.07	34.33	5.74	6.982 CC, ES		
600.00	599.98	598.98	599.98	2.37	4.04	-172.19	-40.07	-0.28	41.80	35.39	6.41	6.517		
700.00	699.84	700.40	701.38	2.81	4.32	-172.57	-38.36	-0.69	45.30	38.16	7.14	6.347		
800.00	799.45	801.97	802.80	3.26	4.62	-172.48	-33.15	-1.94	48.81	40.91	7.90	6.179		
900.00	898.70	903.65	904.08	3.70	4.95	-172.00	-24.43	-4.02	52.34	43.65	8.69	6.024		
1,000.00	997.47	1,004.08	1,003.85	4.15	5.29	-171.44	-13.24	-6.70	56.73	47.26	9.48	5.987		
1,100.00	1,095.78	1,103.84	1,102.94	4.60	5.64	-171.32	-1.98	-9.40	63.65	53.37	10.27	6.195		
1,200.00	1,194.05	1,203.59	1,202.01	5.05	6.01	-171.25	9.29	-12.10	70.74	59.65	11.09	6.380		
1,300.00	1,292.33	1,303.34	1,301.08	5.50	6.38	-171.19	20.55	-14.80	77.84	65.92	11.91	6.533		
1,400.00	1,390.61	1,403.09	1,400.16	5.96	6.77	-171.14	31.82	-17.50	84.93	72.18	12.75	6.660		
1,500.00	1,488.89	1,502.83	1,499.23	6.43	7.16	-171.10	43.08	-20.20	92.03	78.43	13.60	6.767		
1,600.00	1,587.16	1,602.58	1,598.30	6.89	7.56	-171.06	54.35	-22.89	99.12	84.67	14.46	6.857		
1,700.00	1,685.44	1,702.33	1,697.38	7.36	7.97	-171.03	65.61	-25.59	106.22	90.90	15.32	6.934		
1,800.00	1,783.72	1,802.08	1,796.45	7.83	8.38	-171.01	76.88	-28.29	113.31	97.13	16.19	7.001		
1,900.00	1,882.00	1,901.83	1,895.52	8.30	8.79	-170.98	88.14	-30.99	120.41	103.35	17.06	7.058		
2,000.00	1,980.27	2,001.57	1,994.59	8.77	9.21	-170.96	99.41	-33.69	127.50	109.57	17.94	7.109		
2,100.00	2,078.55	2,101.32	2,093.67	9.25	9.63	-170.94	110.67	-36.39	134.60	115.78	18.82	7.153		
2,200.00	2,176.83	2,201.07	2,192.74	9.72	10.05	-170.93	121.94	-39.08	141.69	121.99	19.70	7.192		
2,300.00	2,275.11	2,300.82	2,291.81	10.19	10.48	-170.91	133.20	-41.78	148.79	128.20	20.59	7.227		
2,400.00	2,373.38	2,400.57	2,390.89	10.66	10.91	-170.90	144.47	-44.48	155.88	134.41	21.48	7.258		
2,500.00	2,471.66	2,500.31	2,489.96	11.14	11.34	-170.88	155.73	-47.18	162.98	140.61	22.37	7.286		
2,600.00	2,569.94	2,600.06	2,589.03	11.61	11.77	-170.87	166.99	-49.88	170.07	146.81	23.26	7.312		
2,700.00	2,668.22	2,700.19	2,688.11	12.09	12.20	-170.86	178.26	-52.58	177.17	153.01	24.16	7.334		
2,800.00	2,766.49	2,800.44	2,787.18	12.56	12.64	-170.85	189.52	-55.27	184.26	159.21	25.06	7.354		
2,900.00	2,864.77	2,900.69	2,886.25	13.04	13.08	-170.84	200.79	-57.97	191.36	165.40	25.96	7.372		
3,000.00	2,963.05	3,000.95	2,985.33	13.51	13.52	-170.83	212.05	-60.67	198.45	171.60	26.86	7.389		
3,100.00	3,061.33	3,101.20	3,084.40	13.99	13.96	-170.83	223.32	-63.37	205.55	177.79	27.76	7.405		
3,200.00	3,159.60	3,201.45	3,183.47	14.46	14.40	-170.82	234.58	-66.07	212.65	183.98	28.66	7.419		
3,300.00	3,257.88	3,301.70	3,282.55	14.94	14.84	-170.81	245.85	-68.77	219.74	190.17	29.57	7.432		
3,400.00	3,356.16	3,398.05	3,381.62	15.41	15.26	-170.81	257.11	-71.46	226.84	196.38	30.46	7.448		
3,500.00	3,454.43	3,502.21	3,480.69	15.89	15.72	-170.80	268.38	-74.16	233.93	202.55	31.38	7.455		
3,600.00	3,552.71	3,602.46	3,579.76	16.36	16.17	-170.79	279.64	-76.86	241.03	208.74	32.29	7.465		
3,700.00	3,650.99	3,702.71	3,678.84	16.84	16.61	-170.79	290.91	-79.56	248.12	214.93	33.19	7.475		
3,800.00	3,749.27	3,802.96	3,777.91	17.32	17.05	-170.78	302.17	-82.26	255.22	221.12	34.10	7.484		
3,900.00	3,847.54	3,903.21	3,876.98	17.79	17.50	-170.78	313.44	-84.95	262.31	227.30	35.01	7.493		
4,000.00	3,945.82	4,003.47	3,976.06	18.27	17.95	-170.77	324.70	-87.65	269.41	233.49	35.92	7.500		
4,100.00	4,044.10	4,103.72	4,075.13	18.75	18.39	-170.77	335.97	-90.35	276.50	239.67	36.83	7.508		
4,200.00	4,142.38	4,203.97	4,174.20	19.22	18.84	-170.77	347.23	-93.05	283.60	245.86	37.74	7.515		
4,300.00	4,240.65	4,304.22	4,273.28	19.70	19.28	-170.76	358.50	-95.75	290.69	252.04	38.65	7.521		
4,400.00	4,338.93	4,395.53	4,372.35	20.18	19.69	-170.76	369.76	-98.45	297.79	258.27	39.52	7.535		
4,500.00	4,437.21	4,504.73	4,471.42	20.65	20.18	-170.75	381.02	-101.14	304.88	264.41	40.47	7.533		
4,600.00	4,535.49	4,595.02	4,570.50	21.13	20.58	-170.75	392.29	-103.84	311.98	270.64	41.34	7.547		
4,700.00	4,633.76	4,694.77	4,669.57	21.61	21.03	-170.75	403.55	-106.54	319.07	276.83	42.25	7.552		
4,800.00	4,732.04	4,805.48	4,768.64	22.08	21.52	-170.74	414.82	-109.24	326.17	282.96	43.21	7.549		
4,900.00	4,830.32	4,905.74	4,867.72	22.56	21.97	-170.74	426.08	-111.94	333.26	289.15	44.12	7.554		
5,000.00	4,928.60	5,005.99	4,966.79	23.04	22.42	-170.74	437.35	-114.64	340.36	295.33	45.03	7.558		
5,100.00	5,026.87	5,106.24	5,065.86	23.51	22.87	-170.74	448.61	-117.33	347.46	301.51	45.95	7.562		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,125.15	5,206.49	5,164.93	23.99	23.32	-170.73	459.88	-120.03	354.55	307.69	46.86	7.566	
5,300.00	5,223.43	5,293.26	5,264.01	24.47	23.71	-170.73	471.14	-122.73	361.65	313.93	47.71	7.580	
5,400.00	5,321.71	5,393.00	5,363.08	24.94	24.15	-170.73	482.41	-125.43	368.74	320.12	48.62	7.584	
5,500.00	5,419.98	5,507.25	5,462.15	25.42	24.67	-170.73	493.67	-128.13	375.84	326.24	49.60	7.577	
5,600.00	5,518.26	5,607.50	5,561.23	25.90	25.11	-170.72	504.94	-130.83	382.93	332.42	50.51	7.581	
5,700.00	5,616.54	5,707.75	5,660.30	26.38	25.56	-170.72	516.20	-133.52	390.03	338.60	51.43	7.584	
5,800.00	5,714.82	5,808.00	5,759.37	26.85	26.01	-170.72	527.47	-136.22	397.12	344.78	52.34	7.587	
5,900.00	5,813.09	5,908.26	5,858.45	27.33	26.46	-170.72	538.73	-138.92	404.22	350.96	53.26	7.590	
6,000.00	5,911.37	6,008.51	5,957.52	27.81	26.92	-170.72	550.00	-141.62	411.31	357.14	54.17	7.593	
6,100.00	6,009.65	6,108.76	6,056.59	28.28	27.37	-170.71	561.26	-144.32	418.41	363.32	55.09	7.595	
6,200.00	6,107.93	6,209.01	6,155.67	28.76	27.82	-170.71	572.52	-147.02	425.50	369.50	56.00	7.598	
6,300.00	6,206.20	6,290.74	6,254.74	29.24	28.18	-170.71	583.79	-149.71	432.60	375.76	56.83	7.612	
6,400.00	6,304.48	6,390.07	6,353.39	29.72	28.63	-170.68	595.00	-152.64	439.70	381.96	57.74	7.615	
6,500.00	6,402.76	6,486.24	6,448.06	30.19	29.06	-169.41	605.70	-165.09	447.28	388.63	58.64	7.627	
6,600.00	6,501.04	6,577.40	6,535.13	30.67	29.47	-166.58	615.44	-190.01	456.46	396.97	59.49	7.673	
6,700.00	6,599.31	6,660.61	6,610.78	31.15	29.83	-162.77	623.82	-223.46	469.20	409.03	60.16	7.799	
6,800.00	6,697.50	6,735.21	6,674.43	31.63	30.16	-136.87	630.80	-261.67	487.23	426.76	60.47	8.057	
6,900.00	6,794.18	6,806.24	6,730.51	32.10	30.48	-105.71	636.89	-304.76	508.24	447.85	60.38	8.417	
7,000.00	6,886.96	6,875.17	6,780.06	32.55	30.84	-89.50	642.19	-352.34	530.21	470.28	59.93	8.847	
7,100.00	6,973.57	6,942.49	6,823.25	32.99	31.23	-79.61	646.75	-403.74	551.77	492.57	59.21	9.319	
7,200.00	7,051.87	7,008.56	6,860.16	33.41	31.67	-72.87	650.57	-458.37	571.79	513.43	58.35	9.799	
7,300.00	7,119.93	7,073.67	6,890.85	33.85	32.17	-68.07	653.66	-515.68	589.37	531.84	57.53	10.244	
7,400.00	7,176.09	7,138.07	6,915.33	34.39	32.73	-64.64	656.03	-575.16	603.83	546.93	56.90	10.612	
7,500.00	7,218.95	7,200.00	6,933.13	35.09	33.34	-62.31	657.64	-634.44	614.67	558.11	56.56	10.868	
7,600.00	7,247.46	7,265.47	6,945.63	35.98	34.06	-60.86	658.61	-698.66	621.53	564.69	56.84	10.935	
7,700.00	7,260.92	7,328.80	6,951.43	37.04	34.81	-60.24	658.83	-761.70	624.20	566.59	57.61	10.834	
7,800.00	7,261.75	7,411.96	6,951.84	38.23	35.87	-60.20	658.29	-844.85	623.55	564.18	59.37	10.503	
7,900.00	7,261.33	7,511.96	6,951.54	39.59	37.31	-60.17	657.55	-944.85	622.69	560.86	61.83	10.071	
8,000.00	7,260.91	7,611.95	6,951.24	41.10	38.90	-60.13	656.82	-1,044.84	621.83	557.24	64.59	9.628	
8,100.00	7,260.49	7,711.95	6,950.94	42.75	40.63	-60.10	656.08	-1,144.83	620.97	553.36	67.61	9.185	
8,200.00	7,260.07	7,811.95	6,950.65	44.53	42.48	-60.07	655.34	-1,244.82	620.11	549.26	70.85	8.752	
8,300.00	7,259.65	7,911.94	6,950.35	46.41	44.44	-60.04	654.60	-1,344.82	619.25	544.96	74.29	8.336	
8,400.00	7,259.23	8,011.94	6,950.05	48.39	46.49	-60.00	653.87	-1,444.81	618.39	540.49	77.90	7.938	
8,500.00	7,258.81	8,111.93	6,949.75	50.45	48.63	-59.97	653.13	-1,544.80	617.53	535.88	81.66	7.563	
8,600.00	7,258.39	8,211.93	6,949.45	52.59	50.83	-59.94	652.39	-1,644.79	616.68	531.14	85.54	7.209	
8,700.00	7,257.97	8,311.92	6,949.15	54.79	53.10	-59.90	651.65	-1,744.79	615.82	526.29	89.53	6.878	
8,800.00	7,257.55	8,411.92	6,948.86	57.05	55.42	-59.87	650.91	-1,844.78	614.96	521.35	93.61	6.569	
8,900.00	7,257.13	8,511.92	6,948.56	59.36	57.79	-59.84	650.18	-1,944.77	614.10	516.32	97.78	6.280	
9,000.00	7,256.71	8,611.91	6,948.26	61.72	60.20	-59.80	649.44	-2,044.76	613.25	511.22	102.03	6.011	
9,100.00	7,256.29	8,711.91	6,947.96	64.12	62.65	-59.77	648.70	-2,144.76	612.39	506.06	106.33	5.759	
9,200.00	7,255.87	8,811.90	6,947.66	66.56	65.13	-59.74	647.96	-2,244.75	611.53	500.84	110.69	5.525	
9,300.00	7,255.45	8,911.90	6,947.36	69.02	67.65	-59.70	647.23	-2,344.74	610.67	495.58	115.10	5.306	
9,400.00	7,255.03	9,011.89	6,947.07	71.52	70.19	-59.67	646.49	-2,444.73	609.82	490.27	119.55	5.101	
9,500.00	7,254.61	9,111.89	6,946.77	74.04	72.75	-59.64	645.75	-2,544.73	608.96	484.93	124.04	4.910	
9,600.00	7,254.19	9,211.89	6,946.47	76.58	75.33	-59.60	645.01	-2,644.72	608.11	479.55	128.56	4.730	
9,700.00	7,253.77	9,311.88	6,946.17	79.15	77.94	-59.57	644.27	-2,744.71	607.25	474.14	133.11	4.562	
9,800.00	7,253.35	9,411.88	6,945.87	81.74	80.56	-59.53	643.54	-2,844.70	606.39	468.71	137.69	4.404	
9,900.00	7,252.92	9,511.87	6,945.57	84.34	83.19	-59.50	642.80	-2,944.70	605.54	463.25	142.29	4.256	
10,000.00	7,252.50	9,611.87	6,945.28	86.96	85.84	-59.46	642.06	-3,044.69	604.68	457.77	146.91	4.116	
10,100.00	7,252.08	9,711.86	6,944.98	89.59	88.51	-59.43	641.32	-3,144.68	603.83	452.28	151.55	3.984	
10,200.00	7,251.66	9,811.86	6,944.68	92.24	91.18	-59.40	640.59	-3,244.67	602.97	446.77	156.21	3.860	
10,300.00	7,251.24	9,911.85	6,944.38	94.90	93.87	-59.36	639.85	-3,344.67	602.12	441.24	160.88	3.743	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,011.85	6,944.08	97.57	96.56	-59.33	639.11	-3,444.66	601.26	435.70	165.57	3.632		
10,500.00	7,250.40	10,111.85	6,943.78	100.25	99.27	-59.29	638.37	-3,544.65	600.41	430.15	170.26	3.526		
10,600.00	7,249.98	10,211.84	6,943.48	102.93	101.98	-59.26	637.64	-3,644.64	599.56	424.58	174.97	3.427		
10,700.00	7,249.56	10,311.84	6,943.19	105.63	104.70	-59.22	636.90	-3,744.64	598.70	419.01	179.69	3.332		
10,800.00	7,249.14	10,411.83	6,942.89	108.34	107.43	-59.19	636.16	-3,844.63	597.85	413.43	184.42	3.242		
10,900.00	7,248.72	10,511.83	6,942.59	111.05	110.17	-59.15	635.42	-3,944.62	597.00	407.85	189.15	3.156		
11,000.00	7,248.30	10,611.82	6,942.29	113.77	112.91	-59.12	634.68	-4,044.61	596.14	402.25	193.89	3.075		
11,100.00	7,247.88	10,711.82	6,941.99	116.50	115.65	-59.08	633.95	-4,144.61	595.29	396.65	198.64	2.997		
11,200.00	7,247.46	10,811.82	6,941.69	119.23	118.41	-59.04	633.21	-4,244.60	594.44	391.05	203.39	2.923		
11,300.00	7,247.04	10,911.81	6,941.40	121.97	121.16	-59.01	632.47	-4,344.59	593.59	385.44	208.15	2.852		
11,400.00	7,246.62	11,011.81	6,941.10	124.72	123.92	-58.97	631.73	-4,444.58	592.73	379.82	212.91	2.784		
11,500.00	7,246.20	11,111.80	6,940.80	127.46	126.69	-58.94	631.00	-4,544.58	591.88	374.21	217.67	2.719		
11,600.00	7,245.78	11,211.80	6,940.50	130.22	129.46	-58.90	630.26	-4,644.57	591.03	368.59	222.44	2.657		
11,700.00	7,245.36	11,311.79	6,940.20	132.98	132.23	-58.87	629.52	-4,744.56	590.18	362.97	227.21	2.597		
11,800.00	7,244.94	11,411.79	6,939.90	135.74	135.01	-58.83	628.78	-4,844.55	589.33	357.34	231.98	2.540		
11,900.00	7,244.52	11,511.79	6,939.61	138.50	137.79	-58.79	628.04	-4,944.55	588.48	351.72	236.76	2.486		
12,000.00	7,244.10	11,611.78	6,939.31	141.27	140.57	-58.76	627.31	-5,044.54	587.62	346.09	241.54	2.433		
12,100.00	7,243.68	11,711.78	6,939.01	144.04	143.36	-58.72	626.57	-5,144.53	586.77	340.46	246.31	2.382		
12,200.00	7,243.26	11,811.77	6,938.71	146.82	146.15	-58.68	625.83	-5,244.52	585.92	334.83	251.09	2.334		
12,300.00	7,242.84	11,911.77	6,938.41	149.60	148.94	-58.65	625.09	-5,344.52	585.07	329.20	255.87	2.287		
12,400.00	7,242.42	12,011.76	6,938.11	152.38	151.74	-58.61	624.36	-5,444.51	584.22	323.57	260.65	2.241		
12,500.00	7,242.00	12,111.76	6,937.82	155.16	154.53	-58.57	623.62	-5,544.50	583.37	317.95	265.43	2.198		
12,600.00	7,241.58	12,211.76	6,937.52	157.95	157.33	-58.54	622.88	-5,644.49	582.53	312.32	270.21	2.156		
12,700.00	7,241.16	12,311.75	6,937.22	160.74	160.13	-58.50	622.14	-5,744.49	581.68	306.69	274.99	2.115		
12,800.00	7,240.74	12,411.75	6,936.92	163.53	162.93	-58.46	621.41	-5,844.48	580.83	301.06	279.77	2.076		
12,900.00	7,240.32	12,511.74	6,936.62	166.32	165.74	-58.42	620.67	-5,944.47	579.98	295.43	284.55	2.038		
13,000.00	7,239.89	12,611.74	6,936.32	169.12	168.55	-58.39	619.93	-6,044.46	579.13	289.81	289.32	2.002		
13,100.00	7,239.47	12,711.73	6,936.03	171.92	171.35	-58.35	619.19	-6,144.46	578.28	284.18	294.10	1.966		
13,200.00	7,239.05	12,811.73	6,935.73	174.72	174.16	-58.31	618.45	-6,244.45	577.43	278.56	298.87	1.932		
13,300.00	7,238.63	12,911.73	6,935.43	177.52	176.98	-58.27	617.72	-6,344.44	576.59	272.94	303.65	1.899		
13,400.00	7,238.21	13,011.72	6,935.13	180.32	179.79	-58.24	616.98	-6,444.43	575.74	267.32	308.42	1.867		
13,500.00	7,237.79	13,111.72	6,934.83	183.13	182.60	-58.20	616.24	-6,544.43	574.89	261.70	313.19	1.836		
13,600.00	7,237.37	13,211.71	6,934.53	185.93	185.42	-58.16	615.50	-6,644.42	574.05	256.09	317.96	1.805		
13,700.00	7,236.95	13,311.71	6,934.24	188.74	188.24	-58.12	614.77	-6,744.41	573.20	250.47	322.72	1.776		
13,800.00	7,236.53	13,411.70	6,933.94	191.55	191.05	-58.08	614.03	-6,844.40	572.35	244.86	327.49	1.748		
13,900.00	7,236.11	13,511.70	6,933.64	194.36	193.87	-58.05	613.29	-6,944.40	571.51	239.25	332.25	1.720		
14,000.00	7,235.69	13,611.70	6,933.34	197.17	196.69	-58.01	612.55	-7,044.39	570.66	233.65	337.01	1.693		
14,100.00	7,235.27	13,711.69	6,933.04	199.98	199.52	-57.97	611.82	-7,144.38	569.82	228.04	341.77	1.667		
14,200.00	7,234.85	13,811.69	6,932.74	202.80	202.34	-57.93	611.08	-7,244.37	568.97	222.44	346.53	1.642		
14,300.00	7,234.43	13,911.68	6,932.45	205.61	205.16	-57.89	610.34	-7,344.37	568.13	216.84	351.28	1.617		
14,400.00	7,234.01	14,011.68	6,932.15	208.43	207.99	-57.85	609.60	-7,444.36	567.28	211.25	356.03	1.593		
14,500.00	7,233.59	14,111.67	6,931.85	211.25	210.81	-57.81	608.86	-7,544.35	566.44	205.66	360.78	1.570		
14,600.00	7,233.17	14,211.67	6,931.55	214.06	213.64	-57.77	608.13	-7,644.34	565.59	200.07	365.52	1.547		
14,700.00	7,232.75	14,311.67	6,931.25	216.88	216.47	-57.73	607.39	-7,744.34	564.75	194.48	370.27	1.525		
14,800.00	7,232.33	14,411.66	6,930.95	219.70	219.29	-57.69	606.65	-7,844.33	563.90	188.90	375.01	1.504		
14,900.00	7,231.91	14,511.66	6,930.66	222.52	222.12	-57.65	605.91	-7,944.32	563.06	183.32	379.74	1.483 Level 3		
15,000.00	7,231.49	14,611.65	6,930.36	225.35	224.95	-57.62	605.18	-8,044.31	562.22	177.74	384.48	1.462 Level 3		
15,100.00	7,231.07	14,711.65	6,930.06	228.17	227.78	-57.58	604.44	-8,144.31	561.38	172.17	389.21	1.442 Level 3		
15,116.21	7,231.00	14,727.86	6,930.01	228.63	228.24	-57.57	604.32	-8,160.52	561.24	171.26	389.97	1.439 Level 3, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	0.00	3.28	-179.20	-20.02	-0.28	20.03					
100.00	100.00	101.00	100.00	0.18	3.28	-179.20	-20.02	-0.28	20.03	16.57	3.46	5.787		
200.00	200.00	201.00	200.00	0.61	3.34	-179.20	-20.02	-0.28	20.03	16.07	3.95	5.067		
300.00	300.00	301.00	300.00	1.05	3.45	-179.20	-20.02	-0.28	20.03	15.53	4.50	4.451		
400.00	400.00	401.00	400.00	1.49	3.61	-179.20	-20.02	-0.28	20.03	14.93	5.10	3.929		
500.00	500.00	501.00	500.00	1.93	3.81	-179.20	-20.02	-0.28	20.03	14.29	5.74	3.490 CC		
600.00	599.98	598.98	599.98	2.37	4.04	-172.14	-20.02	-0.28	21.75	15.34	6.41	3.392		
700.00	699.84	699.73	700.71	2.81	4.32	-173.13	-18.31	-0.55	25.24	18.11	7.14	3.537		
800.00	799.45	800.61	801.44	3.26	4.62	-173.71	-13.09	-1.39	28.72	20.83	7.90	3.637		
900.00	898.70	901.61	902.06	3.70	4.95	-174.00	-4.36	-2.80	32.18	23.50	8.68	3.706		
1,000.00	997.47	1,002.74	1,002.41	4.15	5.29	-174.09	7.88	-4.77	35.61	26.12	9.49	3.753		
1,100.00	1,095.78	1,103.49	1,101.95	4.60	5.65	-173.96	23.30	-7.26	38.47	28.17	10.30	3.735		
1,200.00	1,194.05	1,203.47	1,200.60	5.05	6.02	-173.75	39.27	-9.83	40.84	29.73	11.11	3.676		
1,300.00	1,292.33	1,303.44	1,299.26	5.50	6.39	-173.57	55.23	-12.40	43.22	31.28	11.94	3.620		
1,400.00	1,390.61	1,403.41	1,397.91	5.96	6.78	-173.40	71.20	-14.97	45.59	32.81	12.78	3.568		
1,500.00	1,488.89	1,503.38	1,496.57	6.43	7.19	-173.25	87.17	-17.54	47.96	34.33	13.63	3.519		
1,600.00	1,587.16	1,603.35	1,595.22	6.89	7.59	-173.12	103.14	-20.12	50.34	35.85	14.49	3.474		
1,700.00	1,685.44	1,703.32	1,693.88	7.36	8.01	-173.00	119.10	-22.69	52.71	37.35	15.36	3.432		
1,800.00	1,783.72	1,803.30	1,792.53	7.83	8.43	-172.88	135.07	-25.26	55.08	38.85	16.23	3.394		
1,900.00	1,882.00	1,903.27	1,891.19	8.30	8.86	-172.78	151.04	-27.83	57.46	40.35	17.11	3.358		
2,000.00	1,980.27	2,003.24	1,989.84	8.77	9.29	-172.69	167.01	-30.40	59.83	41.84	18.00	3.325		
2,100.00	2,078.55	2,103.21	2,088.50	9.25	9.72	-172.60	182.97	-32.97	62.21	43.32	18.88	3.294		
2,200.00	2,176.83	2,203.18	2,187.15	9.72	10.16	-172.52	198.94	-35.55	64.58	44.81	19.78	3.266		
2,300.00	2,275.11	2,303.16	2,285.81	10.19	10.60	-172.44	214.91	-38.12	66.96	46.29	20.67	3.239		
2,400.00	2,373.38	2,403.13	2,384.46	10.66	11.04	-172.38	230.87	-40.69	69.33	47.76	21.57	3.214		
2,500.00	2,471.66	2,503.10	2,483.12	11.14	11.48	-172.31	246.84	-43.26	71.71	49.24	22.47	3.191		
2,600.00	2,569.94	2,603.07	2,581.77	11.61	11.93	-172.25	262.81	-45.83	74.08	50.71	23.37	3.169		
2,700.00	2,668.22	2,703.04	2,680.43	12.09	12.38	-172.19	278.78	-48.41	76.46	52.18	24.28	3.149		
2,800.00	2,766.49	2,803.01	2,779.08	12.56	12.83	-172.14	294.74	-50.98	78.83	53.65	25.19	3.130		
2,900.00	2,864.77	2,902.99	2,877.74	13.04	13.28	-172.09	310.71	-53.55	81.21	55.12	26.09	3.112		
3,000.00	2,963.05	3,002.96	2,976.39	13.51	13.73	-172.04	326.68	-56.12	83.59	56.58	27.00	3.095		
3,100.00	3,061.33	3,102.93	3,075.05	13.99	14.18	-171.99	342.64	-58.69	85.96	58.05	27.92	3.079		
3,200.00	3,159.60	3,202.90	3,173.70	14.46	14.63	-171.95	358.61	-61.26	88.34	59.51	28.83	3.064		
3,300.00	3,257.88	3,302.87	3,272.36	14.94	15.09	-171.91	374.58	-63.84	90.71	60.97	29.74	3.050		
3,400.00	3,356.16	3,402.84	3,371.01	15.41	15.54	-171.87	390.55	-66.41	93.09	62.43	30.65	3.037		
3,500.00	3,454.43	3,502.82	3,469.66	15.89	16.00	-171.84	406.51	-68.98	95.46	63.90	31.57	3.024		
3,600.00	3,552.71	3,602.79	3,568.32	16.36	16.46	-171.80	422.48	-71.55	97.84	65.36	32.48	3.012		
3,700.00	3,650.99	3,702.76	3,666.97	16.84	16.91	-171.77	438.45	-74.12	100.22	66.81	33.40	3.000		
3,800.00	3,749.27	3,802.73	3,765.63	17.32	17.37	-171.74	454.42	-76.70	102.59	68.27	34.32	2.989		
3,900.00	3,847.54	3,902.70	3,864.28	17.79	17.83	-171.71	470.38	-79.27	104.97	69.73	35.24	2.979		
4,000.00	3,945.82	4,002.68	3,962.94	18.27	18.29	-171.68	486.35	-81.84	107.34	71.19	36.15	2.969		
4,100.00	4,044.10	4,102.65	4,061.59	18.75	18.75	-171.65	502.32	-84.41	109.72	72.65	37.07	2.960		
4,200.00	4,142.38	4,202.62	4,160.25	19.22	19.21	-171.62	518.28	-86.98	112.10	74.10	37.99	2.950		
4,300.00	4,240.65	4,302.59	4,258.90	19.70	19.67	-171.60	534.25	-89.55	114.47	75.56	38.91	2.942		
4,400.00	4,338.93	4,402.56	4,357.56	20.18	20.13	-171.57	550.22	-92.13	116.85	77.01	39.83	2.933		
4,500.00	4,437.21	4,502.53	4,456.21	20.65	20.59	-171.55	566.19	-94.70	119.22	78.47	40.75	2.925		
4,600.00	4,535.49	4,602.51	4,554.87	21.13	21.05	-171.53	582.15	-97.27	121.60	79.92	41.67	2.918		
4,700.00	4,633.76	4,702.48	4,653.52	21.61	21.51	-171.51	598.12	-99.84	123.98	81.38	42.60	2.910		
4,800.00	4,732.04	4,802.45	4,752.18	22.08	21.97	-171.49	614.09	-102.41	126.35	82.83	43.52	2.903		
4,900.00	4,830.32	4,902.42	4,850.83	22.56	22.44	-171.47	630.06	-104.99	128.73	84.29	44.44	2.897		
5,000.00	4,928.60	5,002.39	4,949.49	23.04	22.90	-171.45	646.02	-107.56	131.10	85.74	45.36	2.890		
5,100.00	5,026.87	5,102.36	5,048.14	23.51	23.36	-171.43	661.99	-110.13	133.48	87.20	46.29	2.884		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,202.34	5,146.80	23.99	23.82	-171.41	677.96	-112.70	135.86	88.65	47.21	2.878		
5,300.00	5,223.43	5,302.31	5,245.45	24.47	24.29	-171.39	693.92	-115.27	138.23	90.10	48.13	2.872		
5,400.00	5,321.71	5,402.28	5,344.11	24.94	24.75	-171.38	709.89	-117.85	140.61	91.55	49.05	2.866		
5,500.00	5,419.98	5,502.25	5,442.76	25.42	25.21	-171.36	725.86	-120.42	142.99	93.01	49.98	2.861		
5,600.00	5,518.26	5,602.22	5,541.42	25.90	25.68	-171.34	741.83	-122.99	145.36	94.46	50.90	2.856		
5,700.00	5,616.54	5,702.19	5,640.07	26.38	26.14	-171.33	757.79	-125.56	147.74	95.91	51.83	2.851		
5,800.00	5,714.82	5,802.17	5,738.73	26.85	26.60	-171.32	773.76	-128.13	150.11	97.36	52.75	2.846		
5,900.00	5,813.09	5,902.14	5,837.38	27.33	27.07	-171.30	789.73	-130.70	152.49	98.82	53.67	2.841		
6,000.00	5,911.37	6,002.11	5,936.04	27.81	27.53	-171.29	805.69	-133.28	154.87	100.27	54.60	2.836		
6,100.00	6,009.65	6,102.08	6,034.69	28.28	27.99	-171.27	821.66	-135.85	157.24	101.72	55.52	2.832		
6,200.00	6,107.93	6,202.05	6,133.35	28.76	28.46	-171.26	837.63	-138.42	159.62	103.17	56.45	2.828		
6,300.00	6,206.20	6,302.03	6,232.00	29.24	28.92	-171.25	853.60	-140.99	162.00	104.62	57.37	2.824		
6,400.00	6,304.48	6,402.00	6,330.66	29.72	29.39	-171.24	869.56	-143.56	164.37	106.07	58.30	2.819		
6,500.00	6,402.76	6,501.97	6,429.31	30.19	29.85	-171.22	885.53	-146.14	166.75	107.52	59.22	2.816		
6,600.00	6,501.04	6,601.94	6,527.97	30.67	30.32	-171.21	901.50	-148.71	169.12	108.98	60.15	2.812		
6,700.00	6,599.31	6,699.66	6,623.84	31.15	30.77	-168.63	916.75	-158.93	172.11	111.01	61.10	2.817		
6,800.00	6,697.50	6,793.36	6,713.37	31.63	31.19	-141.07	930.52	-182.56	177.82	115.83	61.99	2.868		
6,900.00	6,794.18	6,883.87	6,795.78	32.10	31.59	-108.63	942.74	-217.76	186.27	123.74	62.54	2.979		
7,000.00	6,886.96	6,971.98	6,870.54	32.55	31.96	-91.51	953.37	-263.02	196.33	133.80	62.53	3.140		
7,100.00	6,973.57	7,058.09	6,937.02	32.99	32.32	-81.01	962.36	-316.90	207.07	145.12	61.95	3.343		
7,200.00	7,051.87	7,142.55	6,994.72	33.41	32.71	-73.92	969.68	-378.06	217.67	156.74	60.94	3.572		
7,300.00	7,119.93	7,225.68	7,043.26	33.85	33.17	-68.96	975.30	-445.24	227.48	167.75	59.73	3.808		
7,400.00	7,176.09	7,307.77	7,082.35	34.39	33.74	-65.49	979.21	-517.26	235.99	177.36	58.63	4.025		
7,500.00	7,218.95	7,389.10	7,111.76	35.09	34.42	-63.20	981.43	-592.99	242.83	184.91	57.92	4.193		
7,600.00	7,247.46	7,469.93	7,131.34	35.98	35.22	-61.87	981.96	-671.35	247.73	189.87	57.86	4.281		
7,700.00	7,260.92	7,550.00	7,140.92	37.04	36.09	-61.40	980.83	-750.79	250.55	191.95	58.61	4.275		
7,800.00	7,261.75	7,640.86	7,141.78	38.23	37.21	-61.56	977.89	-841.58	252.00	191.46	60.54	4.163		
7,900.00	7,261.33	7,740.85	7,141.35	39.59	38.58	-61.75	974.43	-941.50	253.59	190.46	63.13	4.017		
8,000.00	7,260.91	7,840.83	7,140.92	41.10	40.11	-61.94	970.97	-1,041.43	255.19	189.15	66.04	3.864		
8,100.00	7,260.49	7,940.81	7,140.48	42.75	41.77	-62.13	967.51	-1,141.35	256.79	187.57	69.22	3.710		
8,200.00	7,260.07	8,040.80	7,140.05	44.53	43.55	-62.31	964.05	-1,241.27	258.39	185.76	72.63	3.557		
8,300.00	7,259.65	8,140.78	7,139.62	46.41	45.45	-62.50	960.59	-1,341.20	259.99	183.73	76.26	3.409		
8,400.00	7,259.23	8,240.76	7,139.18	48.39	47.44	-62.68	957.13	-1,441.12	261.60	181.52	80.07	3.267		
8,500.00	7,258.81	8,340.75	7,138.75	50.45	49.51	-62.85	953.67	-1,541.04	263.21	179.16	84.05	3.132		
8,600.00	7,258.39	8,440.73	7,138.31	52.59	51.66	-63.03	950.21	-1,640.96	264.82	176.66	88.16	3.004		
8,700.00	7,257.97	8,540.72	7,137.88	54.79	53.87	-63.20	946.75	-1,740.89	266.43	174.03	92.40	2.883		
8,800.00	7,257.55	8,640.70	7,137.45	57.05	56.14	-63.37	943.29	-1,840.81	268.05	171.30	96.75	2.771		
8,900.00	7,257.13	8,740.68	7,137.01	59.36	58.46	-63.54	939.83	-1,940.73	269.67	168.47	101.20	2.665		
9,000.00	7,256.71	8,840.67	7,136.58	61.72	60.83	-63.71	936.37	-2,040.66	271.29	165.56	105.73	2.566		
9,100.00	7,256.29	8,940.65	7,136.15	64.12	63.23	-63.87	932.91	-2,140.58	272.91	162.57	110.34	2.473		
9,200.00	7,255.87	9,040.63	7,135.71	66.56	65.67	-64.04	929.45	-2,240.50	274.54	159.52	115.02	2.387		
9,300.00	7,255.45	9,140.62	7,135.28	69.02	68.14	-64.20	925.99	-2,340.43	276.16	156.40	119.76	2.306		
9,400.00	7,255.03	9,240.60	7,134.84	71.52	70.65	-64.36	922.53	-2,440.35	277.79	153.24	124.56	2.230		
9,500.00	7,254.61	9,340.59	7,134.41	74.04	73.17	-64.51	919.07	-2,540.27	279.42	150.02	129.40	2.159		
9,600.00	7,254.19	9,440.57	7,133.98	76.58	75.72	-64.67	915.61	-2,640.19	281.06	146.76	134.30	2.093		
9,700.00	7,253.77	9,540.55	7,133.54	79.15	78.29	-64.82	912.15	-2,740.12	282.69	143.46	139.23	2.030		
9,800.00	7,253.35	9,640.54	7,133.11	81.74	80.88	-64.98	908.69	-2,840.04	284.33	140.12	144.21	1.972		
9,900.00	7,252.92	9,740.52	7,132.68	84.34	83.48	-65.13	905.23	-2,939.96	285.97	136.75	149.22	1.916		
10,000.00	7,252.50	9,840.50	7,132.24	86.96	86.10	-65.27	901.77	-3,039.89	287.61	133.35	154.26	1.864		
10,100.00	7,252.08	9,940.49	7,131.81	89.59	88.74	-65.42	898.31	-3,139.81	289.26	129.92	159.34	1.815		
10,200.00	7,251.66	10,040.47	7,131.38	92.24	91.39	-65.57	894.85	-3,239.73	290.90	126.46	164.44	1.769		
10,300.00	7,251.24	10,140.46	7,130.94	94.90	94.05	-65.71	891.39	-3,339.65	292.55	122.98	169.57	1.725		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,240.44	7,130.51	97.57	96.72	-65.85	887.93	-3,439.58	294.20	119.48	174.72	1.684		
10,500.00	7,250.40	10,340.42	7,130.07	100.25	99.40	-65.99	884.47	-3,539.50	295.85	115.96	179.89	1.645		
10,600.00	7,249.98	10,440.41	7,129.64	102.93	102.09	-66.13	881.01	-3,639.42	297.50	112.41	185.09	1.607		
10,700.00	7,249.56	10,540.39	7,129.21	105.63	104.78	-66.27	877.55	-3,739.35	299.16	108.85	190.31	1.572		
10,800.00	7,249.14	10,640.37	7,128.77	108.34	107.49	-66.40	874.09	-3,839.27	300.81	105.27	195.54	1.538		
10,900.00	7,248.72	10,740.36	7,128.34	111.05	110.20	-66.54	870.63	-3,939.19	302.47	101.67	200.80	1.506		
11,000.00	7,248.30	10,840.34	7,127.91	113.77	112.92	-66.67	867.17	-4,039.12	304.13	98.06	206.07	1.476	Level 3	
11,100.00	7,247.88	10,940.33	7,127.47	116.50	115.65	-66.80	863.71	-4,139.04	305.79	94.44	211.35	1.447	Level 3	
11,200.00	7,247.46	11,040.31	7,127.04	119.23	118.38	-66.93	860.25	-4,238.96	307.45	90.80	216.65	1.419	Level 3	
11,300.00	7,247.04	11,140.29	7,126.60	121.97	121.11	-67.06	856.79	-4,338.88	309.12	87.15	221.97	1.393	Level 3	
11,400.00	7,246.62	11,240.28	7,126.17	124.72	123.85	-67.19	853.33	-4,438.81	310.78	83.49	227.30	1.367	Level 3	
11,500.00	7,246.20	11,340.26	7,125.74	127.46	126.60	-67.31	849.87	-4,538.73	312.45	79.81	232.64	1.343	Level 3	
11,600.00	7,245.78	11,440.24	7,125.30	130.22	129.35	-67.44	846.41	-4,638.65	314.12	76.13	238.00	1.320	Level 3	
11,700.00	7,245.36	11,540.23	7,124.87	132.98	132.11	-67.56	842.95	-4,738.58	315.79	72.43	243.36	1.298	Level 3	
11,800.00	7,244.94	11,640.21	7,124.44	135.74	134.86	-67.68	839.49	-4,838.50	317.46	68.72	248.74	1.276	Level 3	
11,900.00	7,244.52	11,740.20	7,124.00	138.50	137.63	-67.81	836.03	-4,938.42	319.14	65.01	254.13	1.256	Level 3	
12,000.00	7,244.10	11,840.18	7,123.57	141.27	140.39	-67.92	832.57	-5,038.34	320.81	61.29	259.52	1.236	Level 2	
12,100.00	7,243.68	11,940.16	7,123.13	144.04	143.16	-68.04	829.12	-5,138.27	322.49	57.55	264.93	1.217	Level 2	
12,200.00	7,243.26	12,040.15	7,122.70	146.82	145.93	-68.16	825.66	-5,238.19	324.16	53.81	270.35	1.199	Level 2	
12,300.00	7,242.84	12,140.13	7,122.27	149.60	148.71	-68.28	822.20	-5,338.11	325.84	50.07	275.78	1.182	Level 2	
12,400.00	7,242.42	12,240.11	7,121.83	152.38	151.49	-68.39	818.74	-5,438.04	327.52	46.31	281.21	1.165	Level 2	
12,500.00	7,242.00	12,340.10	7,121.40	155.16	154.27	-68.50	815.28	-5,537.96	329.20	42.55	286.65	1.148	Level 2	
12,600.00	7,241.58	12,440.08	7,120.97	157.95	157.05	-68.62	811.82	-5,637.88	330.89	38.78	292.11	1.133	Level 2	
12,700.00	7,241.16	12,540.07	7,120.53	160.74	159.83	-68.73	808.36	-5,737.81	332.57	35.00	297.57	1.118	Level 2	
12,800.00	7,240.74	12,640.05	7,120.10	163.53	162.62	-68.84	804.90	-5,837.73	334.25	31.22	303.03	1.103	Level 2	
12,900.00	7,240.32	12,740.03	7,119.67	166.32	165.41	-68.94	801.44	-5,937.65	335.94	27.44	308.51	1.089	Level 2	
13,000.00	7,239.89	12,840.02	7,119.23	169.12	168.20	-69.05	797.98	-6,037.57	337.63	23.64	313.99	1.075	Level 2	
13,100.00	7,239.47	12,940.00	7,118.80	171.92	171.00	-69.16	794.52	-6,137.50	339.32	19.84	319.47	1.062	Level 2	
13,200.00	7,239.05	13,039.99	7,118.36	174.72	173.79	-69.26	791.06	-6,237.42	341.01	16.04	324.97	1.049	Level 2	
13,300.00	7,238.63	13,139.97	7,117.93	177.52	176.59	-69.37	787.60	-6,337.34	342.70	12.23	330.47	1.037	Level 2	
13,400.00	7,238.21	13,239.95	7,117.50	180.32	179.38	-69.47	784.14	-6,437.27	344.39	8.42	335.97	1.025	Level 2	
13,500.00	7,237.79	13,339.94	7,117.06	183.13	182.18	-69.58	780.68	-6,537.19	346.08	4.60	341.48	1.013	Level 2	
13,600.00	7,237.37	13,439.92	7,116.63	185.93	184.99	-69.68	777.22	-6,637.11	347.78	0.78	347.00	1.002	Level 2	
13,700.00	7,236.95	13,539.90	7,116.20	188.74	187.79	-69.78	773.76	-6,737.03	349.47	-3.05	352.52	0.991	Level 1	
13,800.00	7,236.53	13,639.89	7,115.76	191.55	190.59	-69.88	770.30	-6,836.96	351.17	-6.88	358.05	0.981	Level 1	
13,900.00	7,236.11	13,739.87	7,115.33	194.36	193.40	-69.98	766.84	-6,936.88	352.87	-10.72	363.58	0.971	Level 1	
14,000.00	7,235.69	13,839.86	7,114.89	197.17	196.20	-70.07	763.38	-7,036.80	354.56	-14.56	369.12	0.961	Level 1	
14,100.00	7,235.27	13,939.84	7,114.46	199.98	199.01	-70.17	759.92	-7,136.73	356.26	-18.40	374.66	0.951	Level 1	
14,200.00	7,234.85	14,039.82	7,114.03	202.80	201.82	-70.27	756.46	-7,236.65	357.96	-22.25	380.21	0.941	Level 1	
14,300.00	7,234.43	14,139.81	7,113.59	205.61	204.63	-70.36	753.00	-7,336.57	359.67	-26.10	385.76	0.932	Level 1	
14,400.00	7,234.01	14,239.79	7,113.16	208.43	207.44	-70.45	749.54	-7,436.50	361.37	-29.95	391.32	0.923	Level 1	
14,500.00	7,233.59	14,339.77	7,112.73	211.25	210.25	-70.55	746.08	-7,536.42	363.07	-33.81	396.88	0.915	Level 1	
14,600.00	7,233.17	14,439.76	7,112.29	214.06	213.07	-70.64	742.62	-7,636.34	364.78	-37.67	402.44	0.906	Level 1	
14,700.00	7,232.75	14,539.74	7,111.86	216.88	215.88	-70.73	739.16	-7,736.26	366.48	-41.53	408.01	0.898	Level 1	
14,800.00	7,232.33	14,639.73	7,111.42	219.70	218.70	-70.82	735.70	-7,836.19	368.19	-45.40	413.58	0.890	Level 1	
14,900.00	7,231.91	14,739.71	7,110.99	222.52	221.51	-70.91	732.24	-7,936.11	369.90	-49.27	419.16	0.882	Level 1	
15,000.00	7,231.49	14,839.69	7,110.56	225.35	224.33	-71.00	728.78	-8,036.03	371.60	-53.14	424.74	0.875	Level 1	
15,100.00	7,231.07	14,939.68	7,110.12	228.17	227.14	-71.09	725.32	-8,135.96	373.31	-57.01	430.32	0.868	Level 1	
15,116.21	7,231.00	14,955.89	7,110.05	228.63	227.60	-71.10	724.76	-8,152.15	373.59	-57.64	431.23	0.866	Level 1, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	0.00	3.28	-179.55	-140.25	-1.11	140.25					
100.00	100.00	101.00	100.00	0.18	3.28	-179.55	-140.25	-1.11	140.25	136.79	3.46	40.529		
200.00	200.00	201.00	200.00	0.61	3.34	-179.55	-140.25	-1.11	140.25	136.30	3.95	35.487		
300.00	300.00	301.00	300.00	1.05	3.45	-179.55	-140.25	-1.11	140.25	135.75	4.50	31.172		
400.00	400.00	399.00	400.00	1.49	3.60	-179.55	-140.25	-1.11	140.25	135.16	5.09	27.536 CC, ES		
500.00	500.00	495.28	496.26	1.93	3.79	-179.15	-141.49	-2.09	141.56	135.83	5.73	24.716		
600.00	599.98	594.35	595.26	2.37	4.01	-170.56	-144.56	-4.51	146.43	140.04	6.39	22.915		
700.00	699.84	706.02	694.81	2.81	4.30	-169.97	-147.70	-6.98	154.82	147.70	7.12	21.742		
800.00	799.45	806.73	794.02	3.26	4.59	-169.64	-150.84	-9.45	166.64	158.78	7.85	21.218		
900.00	898.70	907.90	892.77	3.70	4.90	-169.54	-153.95	-11.90	181.86	173.24	8.61	21.117		
1,000.00	997.47	1,009.65	990.94	4.15	5.24	-169.62	-157.05	-14.34	200.46	191.07	9.39	21.343		
1,100.00	1,095.78	1,088.07	1,088.58	4.60	5.51	-169.84	-160.13	-16.76	221.67	211.56	10.11	21.932		
1,200.00	1,194.05	1,185.75	1,186.18	5.05	5.86	-170.05	-163.21	-19.19	243.05	232.16	10.89	22.315		
1,300.00	1,292.33	1,283.44	1,283.79	5.50	6.22	-170.23	-166.29	-21.61	264.44	252.75	11.69	22.620		
1,400.00	1,390.61	1,381.12	1,381.39	5.96	6.58	-170.38	-169.37	-24.03	285.84	273.34	12.50	22.866		
1,500.00	1,488.89	1,478.80	1,478.99	6.43	6.96	-170.51	-172.46	-26.46	307.23	293.91	13.32	23.066		
1,600.00	1,587.16	1,576.48	1,576.60	6.89	7.34	-170.63	-175.54	-28.88	328.62	314.48	14.15	23.229		
1,700.00	1,685.44	1,674.17	1,674.20	7.36	7.73	-170.73	-178.62	-31.31	350.02	335.04	14.98	23.365		
1,800.00	1,783.72	1,771.85	1,771.81	7.83	8.12	-170.81	-181.70	-33.73	371.42	355.60	15.82	23.477		
1,900.00	1,882.00	1,869.53	1,869.41	8.30	8.52	-170.89	-184.78	-36.16	392.81	376.15	16.66	23.572		
2,000.00	1,980.27	1,967.21	1,967.01	8.77	8.92	-170.96	-187.86	-38.58	414.21	396.70	17.51	23.652		
2,100.00	2,078.55	2,064.90	2,064.62	9.25	9.32	-171.03	-190.94	-41.00	435.61	417.25	18.37	23.719		
2,200.00	2,176.83	2,162.58	2,162.22	9.72	9.72	-171.08	-194.02	-43.43	457.01	437.79	19.22	23.777		
2,300.00	2,275.11	2,260.26	2,259.83	10.19	10.13	-171.14	-197.10	-45.85	478.41	458.33	20.08	23.827		
2,400.00	2,373.38	2,357.95	2,357.43	10.66	10.54	-171.18	-200.18	-48.28	499.81	478.87	20.94	23.870		
2,500.00	2,471.66	2,455.63	2,455.03	11.14	10.95	-171.23	-203.26	-50.70	521.21	499.41	21.80	23.907		
2,600.00	2,569.94	2,553.31	2,552.64	11.61	11.36	-171.27	-206.34	-53.13	542.61	519.94	22.67	23.939		
2,700.00	2,668.22	2,650.99	2,650.24	12.09	11.78	-171.31	-209.42	-55.55	564.01	540.48	23.53	23.967		
2,800.00	2,766.49	2,748.68	2,747.85	12.56	12.19	-171.34	-212.50	-57.97	585.41	561.01	24.40	23.992		
2,900.00	2,864.77	2,846.36	2,845.45	13.04	12.61	-171.37	-215.59	-60.40	606.81	581.54	25.27	24.014		
3,000.00	2,963.05	2,944.04	2,943.05	13.51	13.03	-171.40	-218.67	-62.82	628.22	602.08	26.14	24.033		
3,100.00	3,061.33	3,041.72	3,040.66	13.99	13.44	-171.43	-221.75	-65.25	649.62	622.60	27.01	24.050		
3,200.00	3,159.60	3,139.41	3,138.26	14.46	13.86	-171.46	-224.83	-67.67	671.02	643.13	27.88	24.064		
3,300.00	3,257.88	3,237.09	3,235.86	14.94	14.28	-171.48	-227.91	-70.10	692.42	663.66	28.76	24.078		
3,400.00	3,356.16	3,334.77	3,333.47	15.41	14.71	-171.51	-230.99	-72.52	713.82	684.19	29.63	24.089		
3,500.00	3,454.43	3,432.45	3,431.07	15.89	15.13	-171.53	-234.07	-74.94	735.22	704.72	30.51	24.100		
3,600.00	3,552.71	3,530.14	3,528.68	16.36	15.55	-171.55	-237.15	-77.37	756.63	725.24	31.38	24.109		
3,700.00	3,650.99	3,627.82	3,626.28	16.84	15.97	-171.57	-240.23	-79.79	778.03	745.77	32.26	24.117		
3,800.00	3,749.27	3,725.50	3,723.88	17.32	16.40	-171.59	-243.31	-82.22	799.43	766.29	33.14	24.125		
3,900.00	3,847.54	3,823.18	3,821.49	17.79	16.82	-171.60	-246.39	-84.64	820.83	786.82	34.02	24.131		
4,000.00	3,945.82	3,920.87	3,919.09	18.27	17.24	-171.62	-249.47	-87.07	842.23	807.34	34.89	24.137		
4,100.00	4,044.10	4,018.55	4,016.70	18.75	17.67	-171.64	-252.55	-89.49	863.64	827.86	35.77	24.142		
4,200.00	4,142.38	4,116.23	4,114.30	19.22	18.09	-171.65	-255.63	-91.91	885.04	848.39	36.65	24.147		
4,300.00	4,240.65	4,213.91	4,211.90	19.70	18.52	-171.67	-258.71	-94.34	906.44	868.91	37.53	24.151		
4,400.00	4,338.93	4,311.60	4,309.51	20.18	18.94	-171.68	-261.80	-96.76	927.84	889.43	38.41	24.155		
4,500.00	4,437.21	4,409.28	4,407.11	20.65	19.37	-171.69	-264.88	-99.19	949.25	909.95	39.29	24.158		
4,600.00	4,535.49	4,506.96	4,504.71	21.13	19.80	-171.70	-267.96	-101.61	970.65	930.48	40.17	24.161		
4,700.00	4,633.76	4,604.64	4,602.32	21.61	20.22	-171.72	-271.04	-104.04	992.05	951.00	41.05	24.164		
4,800.00	4,732.04	4,702.33	4,699.92	22.08	20.65	-171.73	-274.12	-106.46	1,013.46	971.52	41.94	24.167		
4,900.00	4,830.32	4,800.01	4,797.53	22.56	21.08	-171.74	-277.20	-108.88	1,034.86	992.04	42.82	24.169		
5,000.00	4,928.60	4,902.31	4,895.13	23.04	21.53	-171.75	-280.28	-111.31	1,056.26	1,012.54	43.72	24.159		
5,100.00	5,026.87	5,004.63	4,992.73	23.51	21.97	-171.76	-283.36	-113.73	1,077.66	1,033.04	44.62	24.150		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,093.06	5,090.34	23.99	22.36	-171.77	-286.44	-116.16	1,099.07	1,053.60	45.47	24.174		
5,300.00	5,223.43	5,209.26	5,187.94	24.47	22.87	-171.78	-289.52	-118.58	1,120.47	1,074.04	46.43	24.133		
5,400.00	5,321.71	5,288.42	5,285.55	24.94	23.22	-171.79	-292.60	-121.01	1,141.87	1,094.64	47.23	24.176		
5,500.00	5,419.98	5,386.10	5,383.15	25.42	23.64	-171.80	-295.68	-123.43	1,163.28	1,115.16	48.11	24.177		
5,600.00	5,518.26	5,483.79	5,480.75	25.90	24.07	-171.80	-298.76	-125.85	1,184.68	1,135.68	49.00	24.178		
5,700.00	5,616.54	5,581.47	5,578.36	26.38	24.50	-171.81	-301.84	-128.28	1,206.08	1,156.20	49.88	24.179		
5,800.00	5,714.82	5,679.15	5,675.96	26.85	24.93	-171.82	-304.93	-130.70	1,227.48	1,176.72	50.77	24.179		
5,900.00	5,813.09	5,776.84	5,773.57	27.33	25.36	-171.83	-308.01	-133.13	1,248.89	1,197.24	51.65	24.180		
6,000.00	5,911.37	5,874.52	5,871.17	27.81	25.79	-171.83	-311.09	-135.55	1,270.29	1,217.76	52.53	24.180		
6,100.00	6,009.65	5,972.20	5,968.77	28.28	26.22	-171.84	-314.17	-137.98	1,291.69	1,238.27	53.42	24.180		
6,200.00	6,107.93	6,069.88	6,066.38	28.76	26.65	-171.85	-317.25	-140.40	1,313.10	1,258.79	54.30	24.180		
6,300.00	6,206.20	6,167.57	6,163.98	29.24	27.08	-171.85	-320.33	-142.82	1,334.50	1,279.31	55.19	24.181		
6,400.00	6,304.48	6,265.25	6,261.58	29.72	27.51	-171.86	-323.41	-145.25	1,355.90	1,299.83	56.07	24.181		
6,500.00	6,402.76	6,362.93	6,359.19	30.19	27.94	-171.87	-326.49	-147.67	1,377.31	1,320.35	56.96	24.181		
6,600.00	6,501.04	6,460.30	6,456.47	30.67	28.36	-171.87	-329.56	-150.26	1,398.71	1,340.87	57.84	24.182		
6,700.00	6,599.31	6,554.88	6,550.21	31.15	28.78	-171.49	-332.58	-161.81	1,420.24	1,361.54	58.70	24.196		
6,800.00	6,697.50	6,645.33	6,637.32	31.63	29.18	-148.74	-335.46	-185.72	1,442.12	1,382.61	59.50	24.235		
6,900.00	6,794.18	6,732.94	6,717.63	32.10	29.55	-120.15	-338.19	-220.42	1,463.85	1,403.57	60.27	24.287		
7,000.00	6,886.96	6,818.61	6,790.85	32.55	29.91	-106.10	-340.77	-264.71	1,484.75	1,423.74	61.01	24.335		
7,100.00	6,973.57	6,902.80	6,856.37	32.99	30.27	-97.92	-343.15	-317.42	1,504.23	1,442.47	61.76	24.358		
7,200.00	7,051.87	6,985.84	6,913.64	33.41	30.68	-92.52	-345.31	-377.44	1,521.74	1,459.19	62.55	24.328		
7,300.00	7,119.93	7,068.05	6,962.17	33.85	31.17	-88.73	-347.24	-443.69	1,536.81	1,473.34	63.47	24.214		
7,400.00	7,176.09	7,150.00	7,001.66	34.39	31.75	-86.04	-348.92	-515.42	1,549.03	1,484.45	64.58	23.987		
7,500.00	7,218.95	7,230.81	7,031.26	35.09	32.45	-84.20	-350.31	-590.55	1,558.08	1,492.13	65.94	23.627		
7,600.00	7,247.46	7,311.74	7,051.15	35.98	33.26	-83.10	-351.42	-668.92	1,563.72	1,496.12	67.60	23.133		
7,700.00	7,260.92	7,392.54	7,060.93	37.04	34.18	-82.66	-352.22	-749.08	1,565.81	1,496.28	69.53	22.520		
7,800.00	7,261.75	7,483.09	7,061.78	38.23	35.33	-82.66	-352.80	-839.61	1,565.01	1,493.14	71.86	21.777		
7,900.00	7,261.33	7,583.09	7,061.34	39.59	36.77	-82.66	-353.40	-939.60	1,563.96	1,489.29	74.66	20.947		
8,000.00	7,260.91	7,683.08	7,060.91	41.10	38.37	-82.65	-353.99	-1,039.59	1,562.91	1,485.14	77.77	20.096		
8,100.00	7,260.49	7,783.08	7,060.47	42.75	40.11	-82.64	-354.59	-1,139.58	1,561.86	1,480.70	81.16	19.245		
8,200.00	7,260.07	7,883.07	7,060.04	44.53	41.97	-82.64	-355.19	-1,239.57	1,560.81	1,476.02	84.79	18.408		
8,300.00	7,259.65	7,983.07	7,059.61	46.41	43.93	-82.63	-355.79	-1,339.57	1,559.76	1,471.13	88.63	17.598		
8,400.00	7,259.23	8,083.06	7,059.17	48.39	45.99	-82.63	-356.39	-1,439.56	1,558.71	1,466.05	92.66	16.821		
8,500.00	7,258.81	8,183.06	7,058.74	50.45	48.14	-82.62	-356.99	-1,539.55	1,557.66	1,460.80	96.86	16.082		
8,600.00	7,258.39	8,283.05	7,058.30	52.59	50.35	-82.62	-357.59	-1,639.54	1,556.61	1,455.41	101.20	15.382		
8,700.00	7,257.97	8,383.04	7,057.87	54.79	52.63	-82.61	-358.19	-1,739.53	1,555.56	1,449.90	105.66	14.722		
8,800.00	7,257.55	8,483.04	7,057.44	57.05	54.96	-82.61	-358.78	-1,839.52	1,554.51	1,444.28	110.24	14.101		
8,900.00	7,257.13	8,583.03	7,057.00	59.36	57.34	-82.60	-359.38	-1,939.51	1,553.46	1,438.55	114.91	13.519		
9,000.00	7,256.71	8,683.03	7,056.57	61.72	59.76	-82.59	-359.98	-2,039.51	1,552.41	1,432.75	119.67	12.973		
9,100.00	7,256.29	8,783.02	7,056.13	64.12	62.22	-82.59	-360.58	-2,139.50	1,551.37	1,426.86	124.50	12.460		
9,200.00	7,255.87	8,883.02	7,055.70	66.56	64.71	-82.58	-361.18	-2,239.49	1,550.32	1,420.91	129.41	11.980		
9,300.00	7,255.45	8,983.01	7,055.27	69.02	67.23	-82.58	-361.78	-2,339.48	1,549.27	1,414.90	134.37	11.530		
9,400.00	7,255.03	9,083.01	7,054.83	71.52	69.77	-82.57	-362.38	-2,439.47	1,548.22	1,408.83	139.39	11.107		
9,500.00	7,254.61	9,183.00	7,054.40	74.04	72.34	-82.57	-362.97	-2,539.47	1,547.17	1,402.72	144.45	10.711		
9,600.00	7,254.19	9,282.99	7,053.96	76.58	74.93	-82.56	-363.57	-2,639.46	1,546.12	1,396.56	149.56	10.338		
9,700.00	7,253.77	9,382.99	7,053.53	79.15	77.54	-82.56	-364.17	-2,739.45	1,545.07	1,390.37	154.70	9.987		
9,800.00	7,253.35	9,482.98	7,053.10	81.74	80.17	-82.55	-364.77	-2,839.44	1,544.02	1,384.14	159.88	9.657		
9,900.00	7,252.92	9,582.98	7,052.66	84.34	82.81	-82.54	-365.37	-2,939.43	1,542.97	1,377.87	165.10	9.346		
10,000.00	7,252.50	9,682.97	7,052.23	86.96	85.47	-82.54	-365.97	-3,039.42	1,541.92	1,371.58	170.34	9.052		
10,100.00	7,252.08	9,782.97	7,051.79	89.59	88.14	-82.53	-366.57	-3,139.42	1,540.87	1,365.27	175.61	8.775		
10,200.00	7,251.66	9,882.96	7,051.36	92.24	90.82	-82.53	-367.17	-3,239.41	1,539.82	1,358.92	180.90	8.512		
10,300.00	7,251.24	9,982.95	7,050.93	94.90	93.51	-82.52	-367.76	-3,339.40	1,538.77	1,352.56	186.21	8.264		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,082.95	7,050.49	97.57	96.21	-82.52	-368.36	-3,439.39	1,537.73	1,346.18	191.55	8.028		
10,500.00	7,250.40	10,182.94	7,050.06	100.25	98.92	-82.51	-368.96	-3,539.38	1,536.68	1,339.78	196.90	7.804		
10,600.00	7,249.98	10,282.94	7,049.62	102.93	101.64	-82.51	-369.56	-3,639.37	1,535.63	1,333.36	202.27	7.592		
10,700.00	7,249.56	10,382.93	7,049.19	105.63	104.36	-82.50	-370.16	-3,739.37	1,534.58	1,326.92	207.65	7.390		
10,800.00	7,249.14	10,482.93	7,048.76	108.34	107.09	-82.49	-370.76	-3,839.36	1,533.53	1,320.48	213.05	7.198		
10,900.00	7,248.72	10,582.92	7,048.32	111.05	109.83	-82.49	-371.36	-3,939.35	1,532.48	1,314.01	218.47	7.015		
11,000.00	7,248.30	10,682.92	7,047.89	113.77	112.58	-82.48	-371.96	-4,039.34	1,531.43	1,307.54	223.89	6.840		
11,100.00	7,247.88	10,782.91	7,047.45	116.50	115.33	-82.48	-372.55	-4,139.33	1,530.38	1,301.05	229.33	6.673		
11,200.00	7,247.46	10,882.90	7,047.02	119.23	118.08	-82.47	-373.15	-4,239.32	1,529.33	1,294.56	234.78	6.514		
11,300.00	7,247.04	10,982.90	7,046.59	121.97	120.84	-82.47	-373.75	-4,339.32	1,528.28	1,288.05	240.23	6.362		
11,400.00	7,246.62	11,082.89	7,046.15	124.72	123.61	-82.46	-374.35	-4,439.31	1,527.24	1,281.54	245.70	6.216		
11,500.00	7,246.20	11,182.89	7,045.72	127.46	126.37	-82.45	-374.95	-4,539.30	1,526.19	1,275.01	251.18	6.076		
11,600.00	7,245.78	11,282.88	7,045.28	130.22	129.15	-82.45	-375.55	-4,639.29	1,525.14	1,268.48	256.66	5.942		
11,700.00	7,245.36	11,382.88	7,044.85	132.98	131.92	-82.44	-376.15	-4,739.28	1,524.09	1,261.94	262.15	5.814		
11,800.00	7,244.94	11,482.87	7,044.42	135.74	134.70	-82.44	-376.75	-4,839.27	1,523.04	1,255.39	267.65	5.690		
11,900.00	7,244.52	11,582.86	7,043.98	138.50	137.49	-82.43	-377.34	-4,939.27	1,521.99	1,248.84	273.15	5.572		
12,000.00	7,244.10	11,682.86	7,043.55	141.27	140.27	-82.43	-377.94	-5,039.26	1,520.94	1,242.28	278.66	5.458		
12,100.00	7,243.68	11,782.85	7,043.11	144.04	143.06	-82.42	-378.54	-5,139.25	1,519.89	1,235.71	284.18	5.348		
12,200.00	7,243.26	11,882.85	7,042.68	146.82	145.85	-82.41	-379.14	-5,239.24	1,518.84	1,229.14	289.70	5.243		
12,300.00	7,242.84	11,982.84	7,042.25	149.60	148.65	-82.41	-379.74	-5,339.23	1,517.80	1,222.57	295.23	5.141		
12,400.00	7,242.42	12,082.84	7,041.81	152.38	151.44	-82.40	-380.34	-5,439.22	1,516.75	1,215.99	300.76	5.043		
12,500.00	7,242.00	12,182.83	7,041.38	155.16	154.24	-82.40	-380.94	-5,539.22	1,515.70	1,209.40	306.30	4.948		
12,600.00	7,241.58	12,282.83	7,040.94	157.95	157.04	-82.39	-381.54	-5,639.21	1,514.65	1,202.81	311.84	4.857		
12,700.00	7,241.16	12,382.82	7,040.51	160.74	159.85	-82.38	-382.13	-5,739.20	1,513.60	1,196.22	317.39	4.769		
12,800.00	7,240.74	12,482.81	7,040.08	163.53	162.65	-82.38	-382.73	-5,839.19	1,512.55	1,189.62	322.93	4.684		
12,900.00	7,240.32	12,582.81	7,039.64	166.32	165.46	-82.37	-383.33	-5,939.18	1,511.50	1,183.01	328.49	4.601		
13,000.00	7,239.89	12,682.80	7,039.21	169.12	168.27	-82.37	-383.93	-6,039.17	1,510.45	1,176.41	334.04	4.522		
13,100.00	7,239.47	12,782.80	7,038.77	171.92	171.08	-82.36	-384.53	-6,139.17	1,509.41	1,169.80	339.60	4.445		
13,200.00	7,239.05	12,882.79	7,038.34	174.72	173.89	-82.36	-385.13	-6,239.16	1,508.36	1,163.19	345.17	4.370		
13,300.00	7,238.63	12,982.79	7,037.91	177.52	176.70	-82.35	-385.73	-6,339.15	1,507.31	1,156.57	350.73	4.298		
13,400.00	7,238.21	13,082.78	7,037.47	180.32	179.52	-82.34	-386.33	-6,439.14	1,506.26	1,149.96	356.30	4.227		
13,500.00	7,237.79	13,182.77	7,037.04	183.13	182.33	-82.34	-386.92	-6,539.13	1,505.21	1,143.34	361.88	4.159		
13,600.00	7,237.37	13,282.77	7,036.61	185.93	185.15	-82.33	-387.52	-6,639.12	1,504.16	1,136.71	367.45	4.094		
13,700.00	7,236.95	13,382.76	7,036.17	188.74	187.97	-82.33	-388.12	-6,739.12	1,503.11	1,130.09	373.03	4.030		
13,800.00	7,236.53	13,482.76	7,035.74	191.55	190.79	-82.32	-388.72	-6,839.11	1,502.06	1,123.46	378.61	3.967		
13,900.00	7,236.11	13,582.75	7,035.30	194.36	193.61	-82.31	-389.32	-6,939.10	1,501.02	1,116.83	384.19	3.907		
14,000.00	7,235.69	13,682.75	7,034.87	197.17	196.43	-82.31	-389.92	-7,039.09	1,499.97	1,110.20	389.77	3.848		
14,100.00	7,235.27	13,782.74	7,034.44	199.98	199.26	-82.30	-390.52	-7,139.08	1,498.92	1,103.56	395.36	3.791		
14,200.00	7,234.85	13,882.74	7,034.00	202.80	202.08	-82.30	-391.11	-7,239.07	1,497.87	1,096.93	400.94	3.736		
14,300.00	7,234.43	13,982.73	7,033.57	205.61	204.90	-82.29	-391.71	-7,339.07	1,496.82	1,090.29	406.53	3.682		
14,400.00	7,234.01	14,082.72	7,033.13	208.43	207.73	-82.28	-392.31	-7,439.06	1,495.77	1,083.65	412.12	3.629		
14,500.00	7,233.59	14,182.72	7,032.70	211.25	210.56	-82.28	-392.91	-7,539.05	1,494.73	1,077.01	417.72	3.578		
14,600.00	7,233.17	14,282.71	7,032.27	214.06	213.38	-82.27	-393.51	-7,639.04	1,493.68	1,070.36	423.31	3.529		
14,700.00	7,232.75	14,382.71	7,031.83	216.88	216.21	-82.27	-394.11	-7,739.03	1,492.63	1,063.72	428.91	3.480		
14,800.00	7,232.33	14,482.70	7,031.40	219.70	219.04	-82.26	-394.71	-7,839.02	1,491.58	1,057.07	434.51	3.433		
14,900.00	7,231.91	14,582.70	7,030.96	222.52	221.87	-82.25	-395.31	-7,939.02	1,490.53	1,050.43	440.11	3.387		
15,000.00	7,231.49	14,682.69	7,030.53	225.35	224.70	-82.25	-395.90	-8,039.01	1,489.48	1,043.78	445.71	3.342		
15,100.00	7,231.07	14,782.68	7,030.10	228.17	227.54	-82.24	-396.50	-8,139.00	1,488.43	1,037.13	451.31	3.298		
15,116.21	7,231.00	14,798.90	7,030.03	228.63	227.99	-82.24	-396.60	-8,155.21	1,488.26	1,036.05	452.22	3.291 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	0.00	3.28	-179.47	-120.21	-1.11	120.22					
100.00	100.00	101.00	100.00	0.18	3.28	-179.47	-120.21	-1.11	120.22	116.76	3.46	34.741		
200.00	200.00	201.00	200.00	0.61	3.34	-179.47	-120.21	-1.11	120.22	116.27	3.95	30.419		
300.00	300.00	301.00	300.00	1.05	3.45	-179.47	-120.21	-1.11	120.22	115.72	4.50	26.719		
400.00	400.00	401.00	400.00	1.49	3.61	-179.47	-120.21	-1.11	120.22	115.12	5.10	23.586		
500.00	500.00	499.00	500.00	1.93	3.80	-179.47	-120.21	-1.11	120.22	114.48	5.73	20.965 CC, ES		
600.00	599.98	601.07	599.92	2.37	4.04	-171.09	-120.21	-2.69	121.97	115.55	6.41	19.022		
700.00	699.84	701.22	699.73	2.81	4.30	-170.32	-120.21	-5.19	127.20	120.08	7.12	17.871		
800.00	799.45	801.61	799.31	3.26	4.60	-169.85	-120.21	-7.67	135.88	128.02	7.85	17.303		
900.00	898.70	902.35	898.54	3.70	4.91	-169.68	-120.21	-10.15	147.98	139.36	8.61	17.179		
1,000.00	997.47	1,003.56	997.30	4.15	5.24	-169.73	-120.21	-12.62	163.48	154.08	9.40	17.398		
1,100.00	1,095.78	1,105.22	1,095.61	4.60	5.60	-169.95	-120.21	-15.08	181.60	171.40	10.20	17.810		
1,200.00	1,194.05	1,206.91	1,193.89	5.05	5.96	-170.16	-120.21	-17.54	199.90	188.89	11.00	18.166		
1,300.00	1,292.33	1,308.60	1,292.16	5.50	6.34	-170.33	-120.21	-19.99	218.20	206.37	11.82	18.452		
1,400.00	1,390.61	1,389.71	1,390.44	5.96	6.64	-170.48	-120.21	-22.45	236.50	223.92	12.58	18.802		
1,500.00	1,488.89	1,488.01	1,488.72	6.43	7.02	-170.61	-120.21	-24.91	254.81	241.40	13.41	19.008		
1,600.00	1,587.16	1,586.32	1,587.00	6.89	7.40	-170.72	-120.21	-27.36	273.11	258.87	14.24	19.180		
1,700.00	1,685.44	1,684.63	1,685.28	7.36	7.79	-170.81	-120.21	-29.82	291.42	276.34	15.08	19.324		
1,800.00	1,783.72	1,782.94	1,783.56	7.83	8.18	-170.89	-120.21	-32.28	309.72	293.80	15.93	19.447		
1,900.00	1,882.00	1,881.25	1,881.83	8.30	8.58	-170.97	-120.21	-34.73	328.03	311.26	16.78	19.552		
2,000.00	1,980.27	1,979.56	1,980.11	8.77	8.98	-171.04	-120.21	-37.19	346.34	328.71	17.63	19.643		
2,100.00	2,078.55	2,077.87	2,078.39	9.25	9.38	-171.10	-120.21	-39.64	364.65	346.16	18.49	19.722		
2,200.00	2,176.83	2,176.18	2,176.67	9.72	9.79	-171.15	-120.21	-42.10	382.96	363.61	19.35	19.790		
2,300.00	2,275.11	2,274.49	2,274.95	10.19	10.20	-171.20	-120.21	-44.56	401.27	381.05	20.21	19.850		
2,400.00	2,373.38	2,372.80	2,373.23	10.66	10.61	-171.24	-120.21	-47.01	419.58	398.50	21.08	19.903		
2,500.00	2,471.66	2,471.10	2,471.50	11.14	11.02	-171.29	-120.21	-49.47	437.89	415.94	21.95	19.950		
2,600.00	2,569.94	2,569.41	2,569.78	11.61	11.43	-171.32	-120.21	-51.93	456.20	433.38	22.82	19.992		
2,700.00	2,668.22	2,667.72	2,668.06	12.09	11.85	-171.36	-120.21	-54.38	474.51	450.82	23.69	20.029		
2,800.00	2,766.49	2,766.03	2,766.34	12.56	12.26	-171.39	-120.21	-56.84	492.82	468.25	24.56	20.062		
2,900.00	2,864.77	2,864.34	2,864.62	13.04	12.68	-171.42	-120.21	-59.30	511.13	485.69	25.44	20.093		
3,000.00	2,963.05	2,962.65	2,962.90	13.51	13.10	-171.45	-120.21	-61.75	529.44	503.12	26.31	20.120		
3,100.00	3,061.33	3,060.96	3,061.17	13.99	13.52	-171.47	-120.21	-64.21	547.75	520.56	27.19	20.144		
3,200.00	3,159.60	3,159.27	3,159.45	14.46	13.94	-171.50	-120.21	-66.67	566.06	537.99	28.07	20.167		
3,300.00	3,257.88	3,257.58	3,257.73	14.94	14.36	-171.52	-120.21	-69.12	584.37	555.42	28.95	20.187		
3,400.00	3,356.16	3,355.89	3,356.01	15.41	14.78	-171.54	-120.21	-71.58	602.68	572.85	29.83	20.206		
3,500.00	3,454.43	3,454.19	3,454.29	15.89	15.20	-171.56	-120.21	-74.03	620.99	590.28	30.71	20.223		
3,600.00	3,552.71	3,552.50	3,552.57	16.36	15.62	-171.58	-120.21	-76.49	639.30	607.71	31.59	20.238		
3,700.00	3,650.99	3,650.81	3,650.84	16.84	16.04	-171.60	-120.21	-78.95	657.61	625.14	32.47	20.253		
3,800.00	3,749.27	3,749.12	3,749.12	17.32	16.47	-171.62	-120.21	-81.40	675.93	642.57	33.35	20.266		
3,900.00	3,847.54	3,847.43	3,847.40	17.79	16.89	-171.63	-120.21	-83.86	694.24	660.00	34.24	20.278		
4,000.00	3,945.82	3,945.74	3,945.68	18.27	17.32	-171.65	-120.21	-86.32	712.55	677.43	35.12	20.290		
4,100.00	4,044.10	4,044.05	4,043.96	18.75	17.74	-171.66	-120.21	-88.77	730.86	694.86	36.00	20.300		
4,200.00	4,142.38	4,142.36	4,142.24	19.22	18.17	-171.68	-120.21	-91.23	749.17	712.28	36.89	20.310		
4,300.00	4,240.65	4,240.67	4,240.51	19.70	18.59	-171.69	-120.21	-93.69	767.48	729.71	37.77	20.319		
4,400.00	4,338.93	4,338.98	4,338.79	20.18	19.02	-171.70	-120.21	-96.14	785.79	747.14	38.66	20.327		
4,500.00	4,437.21	4,437.28	4,437.07	20.65	19.44	-171.72	-120.21	-98.60	804.11	764.56	39.54	20.335		
4,600.00	4,535.49	4,535.59	4,535.35	21.13	19.87	-171.73	-120.21	-101.06	822.42	781.99	40.43	20.343		
4,700.00	4,633.76	4,633.90	4,633.63	21.61	20.30	-171.74	-120.21	-103.51	840.73	799.41	41.31	20.350		
4,800.00	4,732.04	4,732.21	4,731.91	22.08	20.72	-171.75	-120.21	-105.97	859.04	816.84	42.20	20.356		
4,900.00	4,830.32	4,830.52	4,830.18	22.56	21.15	-171.76	-120.21	-108.43	877.35	834.26	43.09	20.362		
5,000.00	4,928.60	4,928.83	4,928.46	23.04	21.58	-171.77	-120.21	-110.88	895.66	851.69	43.97	20.368		
5,100.00	5,026.87	5,027.14	5,026.74	23.51	22.01	-171.78	-120.21	-113.34	913.98	869.11	44.86	20.373		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,125.45	5,125.02	23.99	22.44	-171.79	-120.21	-115.79	932.29	886.54	45.75	20.378		
5,300.00	5,223.43	5,223.76	5,223.30	24.47	22.86	-171.79	-120.21	-118.25	950.60	903.96	46.64	20.383		
5,400.00	5,321.71	5,322.07	5,321.58	24.94	23.29	-171.80	-120.21	-120.71	968.91	921.39	47.52	20.388		
5,500.00	5,419.98	5,420.37	5,419.85	25.42	23.72	-171.81	-120.21	-123.16	987.22	938.81	48.41	20.392		
5,600.00	5,518.26	5,518.68	5,518.13	25.90	24.15	-171.82	-120.21	-125.62	1,005.53	956.23	49.30	20.396		
5,700.00	5,616.54	5,616.99	5,616.41	26.38	24.58	-171.83	-120.21	-128.08	1,023.85	973.66	50.19	20.400		
5,800.00	5,714.82	5,715.30	5,714.69	26.85	25.01	-171.83	-120.21	-130.53	1,042.16	991.08	51.08	20.403		
5,900.00	5,813.09	5,813.61	5,812.97	27.33	25.43	-171.84	-120.21	-132.99	1,060.47	1,008.50	51.97	20.407		
6,000.00	5,911.37	5,911.92	5,911.25	27.81	25.86	-171.85	-120.21	-135.45	1,078.78	1,025.93	52.86	20.410		
6,100.00	6,009.65	6,010.23	6,009.52	28.28	26.29	-171.85	-120.21	-137.90	1,097.09	1,043.35	53.75	20.413		
6,200.00	6,107.93	6,108.54	6,107.80	28.76	26.72	-171.86	-120.21	-140.36	1,115.41	1,060.77	54.63	20.416		
6,300.00	6,206.20	6,206.85	6,206.08	29.24	27.15	-171.86	-120.21	-142.82	1,133.72	1,078.19	55.52	20.418		
6,400.00	6,304.48	6,305.16	6,304.36	29.72	27.58	-171.87	-120.21	-145.27	1,152.03	1,095.62	56.41	20.421		
6,500.00	6,402.76	6,403.46	6,402.64	30.19	28.01	-171.88	-120.21	-147.73	1,170.34	1,113.04	57.30	20.424		
6,600.00	6,501.04	6,501.77	6,500.91	30.67	28.44	-171.88	-120.21	-150.18	1,188.65	1,130.46	58.19	20.426		
6,700.00	6,599.31	6,599.84	6,598.58	31.15	28.86	-171.62	-120.32	-158.02	1,207.12	1,148.06	59.05	20.442		
6,800.00	6,697.50	6,698.33	6,697.65	31.63	29.26	-149.04	-120.68	-178.41	1,226.06	1,166.18	59.88	20.477		
6,900.00	6,794.18	6,774.37	6,764.74	32.10	29.66	-120.73	-121.25	-210.03	1,245.03	1,184.35	60.67	20.521		
7,000.00	6,886.96	6,860.72	6,840.27	32.55	30.05	-106.94	-122.03	-251.74	1,263.42	1,201.98	61.44	20.563		
7,100.00	6,973.57	6,945.76	6,908.47	32.99	30.46	-98.99	-122.99	-302.43	1,280.72	1,218.51	62.21	20.587		
7,200.00	7,051.87	7,029.82	6,968.65	33.41	30.90	-93.79	-124.11	-361.03	1,296.43	1,233.40	63.03	20.569		
7,300.00	7,119.93	7,113.18	7,020.19	33.85	31.41	-90.17	-125.36	-426.45	1,310.13	1,246.17	63.96	20.484		
7,400.00	7,176.09	7,196.09	7,062.55	34.39	32.00	-87.61	-126.73	-497.64	1,321.45	1,256.37	65.08	20.306		
7,500.00	7,218.95	7,278.74	7,095.21	35.09	32.70	-85.87	-128.20	-573.49	1,330.11	1,263.65	66.46	20.015		
7,600.00	7,247.46	7,361.33	7,117.76	35.98	33.51	-84.83	-129.74	-652.87	1,335.88	1,267.76	68.12	19.611		
7,700.00	7,260.92	7,444.01	7,129.86	37.04	34.43	-84.41	-131.33	-734.58	1,338.63	1,268.56	70.07	19.105		
7,800.00	7,261.75	7,532.74	7,131.88	38.23	35.54	-84.43	-133.07	-823.23	1,338.99	1,266.63	72.36	18.505		
7,900.00	7,261.33	7,632.74	7,131.51	39.59	36.93	-84.44	-135.02	-923.21	1,339.28	1,264.17	75.11	17.830		
8,000.00	7,260.91	7,732.74	7,131.14	41.10	38.48	-84.44	-136.98	-1,023.19	1,339.57	1,261.39	78.18	17.134		
8,100.00	7,260.49	7,832.74	7,130.78	42.75	40.18	-84.44	-138.93	-1,123.17	1,339.86	1,258.33	81.53	16.433		
8,200.00	7,260.07	7,932.74	7,130.41	44.53	42.00	-84.45	-140.89	-1,223.15	1,340.15	1,255.02	85.13	15.742		
8,300.00	7,259.65	8,032.74	7,130.05	46.41	43.93	-84.45	-142.85	-1,323.13	1,340.45	1,251.49	88.95	15.069		
8,400.00	7,259.23	8,132.73	7,129.68	48.39	45.95	-84.45	-144.80	-1,423.11	1,340.74	1,247.77	92.96	14.422		
8,500.00	7,258.81	8,232.73	7,129.31	50.45	48.07	-84.46	-146.76	-1,523.09	1,341.03	1,243.89	97.14	13.805		
8,600.00	7,258.39	8,332.73	7,128.95	52.59	50.25	-84.46	-148.71	-1,623.07	1,341.32	1,239.85	101.46	13.220		
8,700.00	7,257.97	8,432.73	7,128.58	54.79	52.50	-84.46	-150.67	-1,723.05	1,341.61	1,235.69	105.91	12.667		
8,800.00	7,257.55	8,532.73	7,128.21	57.05	54.81	-84.47	-152.62	-1,823.03	1,341.90	1,231.42	110.48	12.146		
8,900.00	7,257.13	8,632.73	7,127.85	59.36	57.16	-84.47	-154.58	-1,923.01	1,342.19	1,227.04	115.14	11.657		
9,000.00	7,256.71	8,732.73	7,127.48	61.72	59.56	-84.48	-156.53	-2,022.99	1,342.48	1,222.58	119.90	11.197		
9,100.00	7,256.29	8,832.73	7,127.12	64.12	62.00	-84.48	-158.49	-2,122.97	1,342.77	1,218.04	124.73	10.765		
9,200.00	7,255.87	8,932.73	7,126.75	66.56	64.47	-84.48	-160.44	-2,222.95	1,343.06	1,213.43	129.63	10.361		
9,300.00	7,255.45	9,032.73	7,126.38	69.02	66.97	-84.49	-162.40	-2,322.93	1,343.35	1,208.76	134.59	9.981		
9,400.00	7,255.03	9,132.73	7,126.02	71.52	69.50	-84.49	-164.36	-2,422.91	1,343.64	1,204.03	139.61	9.624		
9,500.00	7,254.61	9,232.73	7,125.65	74.04	72.06	-84.49	-166.31	-2,522.89	1,343.93	1,199.25	144.68	9.289		
9,600.00	7,254.19	9,332.73	7,125.29	76.58	74.63	-84.50	-168.27	-2,622.87	1,344.22	1,194.43	149.79	8.974		
9,700.00	7,253.77	9,432.73	7,124.92	79.15	77.23	-84.50	-170.22	-2,722.85	1,344.51	1,189.57	154.94	8.678		
9,800.00	7,253.35	9,532.73	7,124.55	81.74	79.84	-84.50	-172.18	-2,822.83	1,344.80	1,184.67	160.13	8.398		
9,900.00	7,252.92	9,632.73	7,124.19	84.34	82.47	-84.51	-174.13	-2,922.81	1,345.09	1,179.74	165.35	8.135		
10,000.00	7,252.50	9,732.73	7,123.82	86.96	85.11	-84.51	-176.09	-3,022.79	1,345.38	1,174.78	170.60	7.886		
10,100.00	7,252.08	9,832.73	7,123.45	89.59	87.77	-84.51	-178.04	-3,122.77	1,345.67	1,169.79	175.88	7.651		
10,200.00	7,251.66	9,932.73	7,123.09	92.24	90.44	-84.52	-180.00	-3,222.75	1,345.96	1,164.78	181.18	7.429		
10,300.00	7,251.24	10,032.73	7,122.72	94.90	93.12	-84.52	-181.96	-3,322.73	1,346.25	1,159.75	186.51	7.218		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	10,132.73	7,122.36	97.57	95.81	-84.52	-183.91	-3,422.71	1,346.54	1,154.69	191.85	7.019		
10,500.00	7,250.40	10,232.73	7,121.99	100.25	98.50	-84.53	-185.87	-3,522.69	1,346.83	1,149.62	197.22	6.829		
10,600.00	7,249.98	10,332.72	7,121.62	102.93	101.21	-84.53	-187.82	-3,622.67	1,347.12	1,144.53	202.60	6.649		
10,700.00	7,249.56	10,432.72	7,121.26	105.63	103.93	-84.54	-189.78	-3,722.65	1,347.41	1,139.42	208.00	6.478		
10,800.00	7,249.14	10,532.72	7,120.89	108.34	106.65	-84.54	-191.73	-3,822.63	1,347.71	1,134.29	213.41	6.315		
10,900.00	7,248.72	10,632.72	7,120.52	111.05	109.38	-84.54	-193.69	-3,922.61	1,348.00	1,129.16	218.84	6.160		
11,000.00	7,248.30	10,732.72	7,120.16	113.77	112.11	-84.55	-195.64	-4,022.58	1,348.29	1,124.01	224.28	6.012		
11,100.00	7,247.88	10,832.72	7,119.79	116.50	114.86	-84.55	-197.60	-4,122.56	1,348.58	1,118.85	229.73	5.870		
11,200.00	7,247.46	10,932.72	7,119.43	119.23	117.60	-84.55	-199.56	-4,222.54	1,348.87	1,113.67	235.19	5.735		
11,300.00	7,247.04	11,032.72	7,119.06	121.97	120.35	-84.56	-201.51	-4,322.52	1,349.16	1,108.49	240.67	5.606		
11,400.00	7,246.62	11,132.72	7,118.69	124.72	123.11	-84.56	-203.47	-4,422.50	1,349.45	1,103.30	246.15	5.482		
11,500.00	7,246.20	11,232.72	7,118.33	127.46	125.87	-84.56	-205.42	-4,522.48	1,349.74	1,098.09	251.64	5.364		
11,600.00	7,245.78	11,332.72	7,117.96	130.22	128.64	-84.57	-207.38	-4,622.46	1,350.03	1,092.88	257.15	5.250		
11,700.00	7,245.36	11,432.72	7,117.60	132.98	131.40	-84.57	-209.33	-4,722.44	1,350.32	1,087.67	262.65	5.141		
11,800.00	7,244.94	11,532.72	7,117.23	135.74	134.18	-84.57	-211.29	-4,822.42	1,350.61	1,082.44	268.17	5.036		
11,900.00	7,244.52	11,632.72	7,116.86	138.50	136.95	-84.58	-213.24	-4,922.40	1,350.90	1,077.21	273.69	4.936		
12,000.00	7,244.10	11,732.72	7,116.50	141.27	139.73	-84.58	-215.20	-5,022.38	1,351.19	1,071.97	279.23	4.839		
12,100.00	7,243.68	11,832.72	7,116.13	144.04	142.51	-84.58	-217.16	-5,122.36	1,351.48	1,066.72	284.76	4.746		
12,200.00	7,243.26	11,932.72	7,115.76	146.82	145.30	-84.59	-219.11	-5,222.34	1,351.77	1,061.47	290.30	4.656		
12,300.00	7,242.84	12,032.72	7,115.40	149.60	148.08	-84.59	-221.07	-5,322.32	1,352.06	1,056.21	295.85	4.570		
12,400.00	7,242.42	12,132.72	7,115.03	152.38	150.87	-84.59	-223.02	-5,422.30	1,352.35	1,050.95	301.40	4.487		
12,500.00	7,242.00	12,232.72	7,114.67	155.16	153.67	-84.60	-224.98	-5,522.28	1,352.64	1,045.68	306.96	4.407		
12,600.00	7,241.58	12,332.72	7,114.30	157.95	156.46	-84.60	-226.93	-5,622.26	1,352.93	1,040.41	312.53	4.329		
12,700.00	7,241.16	12,432.72	7,113.93	160.74	159.26	-84.60	-228.89	-5,722.24	1,353.23	1,035.13	318.09	4.254		
12,800.00	7,240.74	12,532.71	7,113.57	163.53	162.06	-84.61	-230.84	-5,822.22	1,353.52	1,029.85	323.66	4.182		
12,900.00	7,240.32	12,632.71	7,113.20	166.32	164.86	-84.61	-232.80	-5,922.20	1,353.81	1,024.57	329.24	4.112		
13,000.00	7,239.89	12,732.71	7,112.84	169.12	167.66	-84.62	-234.76	-6,022.18	1,354.10	1,019.28	334.82	4.044		
13,100.00	7,239.47	12,832.71	7,112.47	171.92	170.46	-84.62	-236.71	-6,122.16	1,354.39	1,013.99	340.40	3.979		
13,200.00	7,239.05	12,932.71	7,112.10	174.72	173.27	-84.62	-238.67	-6,222.14	1,354.68	1,008.69	345.99	3.915		
13,300.00	7,238.63	13,032.71	7,111.74	177.52	176.07	-84.63	-240.62	-6,322.12	1,354.97	1,003.39	351.58	3.854		
13,400.00	7,238.21	13,132.71	7,111.37	180.32	178.88	-84.63	-242.58	-6,422.10	1,355.26	998.09	357.17	3.794		
13,500.00	7,237.79	13,232.71	7,111.00	183.13	181.69	-84.63	-244.53	-6,522.08	1,355.55	992.78	362.77	3.737		
13,600.00	7,237.37	13,332.71	7,110.64	185.93	184.50	-84.64	-246.49	-6,622.06	1,355.84	987.48	368.37	3.681		
13,700.00	7,236.95	13,432.71	7,110.27	188.74	187.32	-84.64	-248.44	-6,722.04	1,356.13	982.16	373.97	3.626		
13,800.00	7,236.53	13,532.71	7,109.91	191.55	190.13	-84.64	-250.40	-6,822.02	1,356.42	976.85	379.57	3.574		
13,900.00	7,236.11	13,632.71	7,109.54	194.36	192.95	-84.65	-252.36	-6,922.00	1,356.71	971.53	385.18	3.522		
14,000.00	7,235.69	13,732.71	7,109.17	197.17	195.76	-84.65	-254.31	-7,021.98	1,357.00	966.22	390.79	3.472		
14,100.00	7,235.27	13,832.71	7,108.81	199.98	198.58	-84.65	-256.27	-7,121.96	1,357.29	960.90	396.40	3.424		
14,200.00	7,234.85	13,932.71	7,108.44	202.80	201.40	-84.66	-258.22	-7,221.94	1,357.58	955.57	402.01	3.377		
14,300.00	7,234.43	14,032.71	7,108.07	205.61	204.22	-84.66	-260.18	-7,321.92	1,357.87	950.25	407.63	3.331		
14,400.00	7,234.01	14,132.71	7,107.71	208.43	207.04	-84.66	-262.13	-7,421.90	1,358.17	944.92	413.24	3.287		
14,500.00	7,233.59	14,232.71	7,107.34	211.25	209.86	-84.67	-264.09	-7,521.88	1,358.46	939.59	418.86	3.243		
14,600.00	7,233.17	14,332.71	7,106.98	214.06	212.68	-84.67	-266.04	-7,621.86	1,358.75	934.26	424.49	3.201		
14,700.00	7,232.75	14,432.71	7,106.61	216.88	215.50	-84.67	-268.00	-7,721.84	1,359.04	928.93	430.11	3.160		
14,800.00	7,232.33	14,532.71	7,106.24	219.70	218.33	-84.68	-269.96	-7,821.82	1,359.33	923.59	435.73	3.120		
14,900.00	7,231.91	14,632.71	7,105.88	222.52	221.15	-84.68	-271.91	-7,921.80	1,359.62	918.26	441.36	3.081		
15,000.00	7,231.49	14,732.70	7,105.51	225.35	223.98	-84.68	-273.87	-8,021.78	1,359.91	912.92	446.99	3.042		
15,100.00	7,231.07	14,832.70	7,105.15	228.17	226.80	-84.69	-275.82	-8,121.75	1,360.20	907.58	452.62	3.005		
15,116.21	7,231.00	14,848.92	7,105.09	228.63	227.26	-84.69	-276.14	-8,137.96	1,360.25	906.72	453.53	2.999 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
7,700.00	7,260.92	7,201.08	7,260.92	37.04	249.67	-85.07	-4,395.88	-8,995.98	9,966.04	9,680.42	285.63	34.892		
7,800.00	7,261.75	7,200.25	7,261.75	38.23	249.64	-90.36	-4,395.88	-8,995.98	9,882.68	9,596.48	286.20	34.530		
7,900.00	7,261.33	7,200.67	7,261.33	39.59	249.65	-90.36	-4,395.88	-8,995.98	9,799.48	9,512.59	286.89	34.158		
8,000.00	7,260.91	7,201.09	7,260.91	41.10	249.67	-90.35	-4,395.88	-8,995.98	9,716.60	9,428.95	287.65	33.779		
8,100.00	7,260.49	7,201.51	7,260.49	42.75	249.68	-90.35	-4,395.88	-8,995.98	9,634.04	9,345.55	288.48	33.395		
8,200.00	7,260.07	7,201.93	7,260.07	44.53	249.70	-90.35	-4,395.88	-8,995.98	9,551.81	9,262.42	289.39	33.007		
8,300.00	7,259.65	7,202.35	7,259.65	46.41	249.71	-90.34	-4,395.88	-8,995.98	9,469.93	9,179.56	290.37	32.614		
8,400.00	7,259.23	7,202.77	7,259.23	48.39	249.73	-90.34	-4,395.88	-8,995.98	9,388.40	9,096.98	291.42	32.217		
8,500.00	7,258.81	7,203.19	7,258.81	50.45	249.74	-90.33	-4,395.88	-8,995.98	9,307.22	9,014.69	292.53	31.816		
8,600.00	7,258.39	7,203.61	7,258.39	52.59	249.75	-90.33	-4,395.88	-8,995.98	9,226.42	8,932.70	293.72	31.412		
8,700.00	7,257.97	7,204.03	7,257.97	54.79	249.77	-90.32	-4,395.88	-8,995.98	9,146.00	8,851.02	294.98	31.006		
8,800.00	7,257.55	7,204.45	7,257.55	57.05	249.78	-90.32	-4,395.88	-8,995.98	9,065.96	8,769.67	296.30	30.598		
8,900.00	7,257.13	7,204.87	7,257.13	59.36	249.80	-90.31	-4,395.88	-8,995.98	8,986.33	8,688.65	297.68	30.188		
9,000.00	7,256.71	7,205.29	7,256.71	61.72	249.81	-90.31	-4,395.88	-8,995.98	8,907.11	8,607.98	299.13	29.777		
9,100.00	7,256.29	7,205.71	7,256.29	64.12	249.83	-90.31	-4,395.88	-8,995.98	8,828.31	8,527.66	300.64	29.365		
9,200.00	7,255.87	7,206.13	7,255.87	66.56	249.84	-90.30	-4,395.88	-8,995.98	8,749.94	8,447.72	302.22	28.952		
9,300.00	7,255.45	7,206.55	7,255.45	69.02	249.86	-90.30	-4,395.88	-8,995.98	8,672.02	8,368.16	303.85	28.540		
9,400.00	7,255.03	7,206.97	7,255.03	71.52	249.87	-90.29	-4,395.88	-8,995.98	8,594.55	8,289.00	305.55	28.128		
9,500.00	7,254.61	7,207.39	7,254.61	74.04	249.89	-90.29	-4,395.88	-8,995.98	8,517.55	8,210.25	307.30	27.717		
9,600.00	7,254.19	7,207.81	7,254.19	76.58	249.90	-90.28	-4,395.88	-8,995.98	8,441.04	8,131.92	309.12	27.307		
9,700.00	7,253.77	7,208.23	7,253.77	79.15	249.92	-90.28	-4,395.88	-8,995.98	8,365.02	8,054.03	310.99	26.898		
9,800.00	7,253.35	7,208.66	7,253.35	81.74	249.93	-90.28	-4,395.88	-8,995.98	8,289.51	7,976.60	312.91	26.491		
9,900.00	7,252.92	7,209.08	7,252.92	84.34	249.95	-90.27	-4,395.88	-8,995.98	8,214.53	7,899.63	314.90	26.086		
10,000.00	7,252.50	7,209.50	7,252.50	86.96	249.96	-90.27	-4,395.88	-8,995.98	8,140.08	7,823.14	316.94	25.684		
10,100.00	7,252.08	7,209.92	7,252.08	89.59	249.97	-90.26	-4,395.88	-8,995.98	8,066.18	7,747.15	319.03	25.283		
10,200.00	7,251.66	7,189.66	7,251.66	92.24	249.27	-90.26	-4,395.88	-8,995.98	7,992.85	7,672.40	320.46	24.942		
10,300.00	7,251.24	7,189.24	7,251.24	94.90	249.25	-90.25	-4,395.88	-8,995.98	7,920.11	7,597.48	322.63	24.549		
10,400.00	7,250.82	7,188.82	7,250.82	97.57	249.24	-90.25	-4,395.88	-8,995.98	7,847.97	7,523.11	324.86	24.158		
10,500.00	7,250.40	7,188.40	7,250.40	100.25	249.22	-90.24	-4,395.88	-8,995.98	7,776.44	7,449.30	327.14	23.771		
10,600.00	7,249.98	7,187.98	7,249.98	102.93	249.21	-90.24	-4,395.88	-8,995.98	7,705.54	7,376.07	329.47	23.387		
10,700.00	7,249.56	7,187.56	7,249.56	105.63	249.19	-90.24	-4,395.88	-8,995.98	7,635.30	7,303.44	331.86	23.008		
10,800.00	7,249.14	7,187.14	7,249.14	108.34	249.18	-90.23	-4,395.88	-8,995.98	7,565.73	7,231.43	334.30	22.632		
10,900.00	7,248.72	7,186.72	7,248.72	111.05	249.17	-90.23	-4,395.88	-8,995.98	7,496.85	7,160.05	336.79	22.260		
11,000.00	7,248.30	7,186.30	7,248.30	113.77	249.15	-90.22	-4,395.88	-8,995.98	7,428.67	7,089.33	339.33	21.892		
11,100.00	7,247.88	7,185.88	7,247.88	116.50	249.14	-90.22	-4,395.88	-8,995.98	7,361.22	7,019.29	341.93	21.529		
11,200.00	7,247.46	7,185.46	7,247.46	119.23	249.12	-90.21	-4,395.88	-8,995.98	7,294.52	6,949.94	344.57	21.170		
11,300.00	7,247.04	7,185.04	7,247.04	121.97	249.11	-90.21	-4,395.88	-8,995.98	7,228.58	6,881.31	347.27	20.815		
11,400.00	7,246.62	7,184.62	7,246.62	124.72	249.09	-90.20	-4,395.88	-8,995.98	7,163.44	6,813.42	350.02	20.466		
11,500.00	7,246.20	7,184.20	7,246.20	127.46	249.08	-90.20	-4,395.88	-8,995.98	7,099.10	6,746.29	352.81	20.121		
11,600.00	7,245.78	7,183.78	7,245.78	130.22	249.06	-90.20	-4,395.88	-8,995.98	7,035.60	6,679.94	355.66	19.782		
11,700.00	7,245.36	7,183.36	7,245.36	132.98	249.05	-90.19	-4,395.88	-8,995.98	6,972.95	6,614.40	358.55	19.447		
11,800.00	7,244.94	7,182.94	7,244.94	135.74	249.03	-90.19	-4,395.88	-8,995.98	6,911.19	6,549.69	361.49	19.118		
11,900.00	7,244.52	7,182.52	7,244.52	138.50	249.02	-90.18	-4,395.88	-8,995.98	6,850.32	6,485.84	364.48	18.795		
12,000.00	7,244.10	7,182.10	7,244.10	141.27	249.00	-90.18	-4,395.88	-8,995.98	6,790.39	6,422.87	367.52	18.476		
12,100.00	7,243.68	7,181.68	7,243.68	144.04	248.99	-90.17	-4,395.88	-8,995.98	6,731.40	6,360.80	370.60	18.164		
12,200.00	7,243.26	7,181.26	7,243.26	146.82	248.97	-90.17	-4,395.88	-8,995.98	6,673.39	6,299.67	373.73	17.856		
12,300.00	7,242.84	7,180.84	7,242.84	149.60	248.96	-90.16	-4,395.88	-8,995.98	6,616.39	6,239.49	376.89	17.555		
12,400.00	7,242.42	7,180.42	7,242.42	152.38	248.94	-90.16	-4,395.88	-8,995.98	6,560.41	6,180.31	380.11	17.259		
12,500.00	7,242.00	7,180.00	7,242.00	155.16	248.93	-90.16	-4,395.88	-8,995.98	6,505.49	6,122.13	383.36	16.970		
12,600.00	7,241.58	7,179.58	7,241.58	157.95	248.92	-90.15	-4,395.88	-8,995.98	6,451.65	6,065.01	386.65	16.686		
12,700.00	7,241.16	7,179.16	7,241.16	160.74	248.90	-90.15	-4,395.88	-8,995.98	6,398.93	6,008.95	389.98	16.408		
12,800.00	7,240.74	7,178.74	7,240.74	163.53	248.89	-90.14	-4,395.88	-8,995.98	6,347.34	5,954.00	393.34	16.137		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
12,900.00	7,240.32	7,178.32	7,240.32	166.32	248.87	-90.14	-4,395.88	-8,995.98	6,296.91	5,900.17	396.74	15.872		
13,000.00	7,239.89	7,177.89	7,239.89	169.12	248.86	-90.13	-4,395.88	-8,995.98	6,247.68	5,847.51	400.17	15.613		
13,100.00	7,239.47	7,177.47	7,239.47	171.92	248.84	-90.13	-4,395.88	-8,995.98	6,199.67	5,796.04	403.63	15.360		
13,200.00	7,239.05	7,177.05	7,239.05	174.72	248.83	-90.13	-4,395.88	-8,995.98	6,152.91	5,745.79	407.12	15.113		
13,300.00	7,238.63	7,176.63	7,238.63	177.52	248.81	-90.12	-4,395.88	-8,995.98	6,107.43	5,696.80	410.63	14.873		
13,400.00	7,238.21	7,176.21	7,238.21	180.32	248.80	-90.12	-4,395.88	-8,995.98	6,063.26	5,649.10	414.17	14.640		
13,500.00	7,237.79	7,175.79	7,237.79	183.13	248.78	-90.11	-4,395.88	-8,995.98	6,020.43	5,602.71	417.72	14.412		
13,600.00	7,237.37	7,175.37	7,237.37	185.93	248.77	-90.11	-4,395.88	-8,995.98	5,978.96	5,557.67	421.29	14.192		
13,700.00	7,236.95	7,174.95	7,236.95	188.74	248.75	-90.10	-4,395.88	-8,995.98	5,938.89	5,514.01	424.88	13.978		
13,800.00	7,236.53	7,174.53	7,236.53	191.55	248.74	-90.10	-4,395.88	-8,995.98	5,900.24	5,471.77	428.47	13.770		
13,900.00	7,236.11	7,174.11	7,236.11	194.36	248.72	-90.09	-4,395.88	-8,995.98	5,863.04	5,430.96	432.08	13.569		
14,000.00	7,235.69	7,173.69	7,235.69	197.17	248.71	-90.09	-4,395.88	-8,995.98	5,827.32	5,391.64	435.68	13.375		
14,100.00	7,235.27	7,173.27	7,235.27	199.98	248.70	-90.09	-4,395.88	-8,995.98	5,793.11	5,353.82	439.28	13.188		
14,200.00	7,234.85	7,172.85	7,234.85	202.80	248.68	-90.08	-4,395.88	-8,995.98	5,760.42	5,317.54	442.88	13.007		
14,300.00	7,234.43	7,172.43	7,234.43	205.61	248.67	-90.08	-4,395.88	-8,995.98	5,729.30	5,282.83	446.47	12.832		
14,400.00	7,234.01	7,172.01	7,234.01	208.43	248.65	-90.07	-4,395.88	-8,995.98	5,699.76	5,249.71	450.05	12.665		
14,500.00	7,233.59	7,171.59	7,233.59	211.25	248.64	-90.07	-4,395.88	-8,995.98	5,671.84	5,218.23	453.61	12.504		
14,600.00	7,233.17	7,171.17	7,233.17	214.06	248.62	-90.06	-4,395.88	-8,995.98	5,645.54	5,188.39	457.15	12.349		
14,700.00	7,232.75	7,170.75	7,232.75	216.88	248.61	-90.06	-4,395.88	-8,995.98	5,620.90	5,160.24	460.66	12.202		
14,800.00	7,232.33	7,170.33	7,232.33	219.70	248.59	-90.05	-4,395.88	-8,995.98	5,597.94	5,133.80	464.14	12.061		
14,900.00	7,231.91	7,169.91	7,231.91	222.52	248.58	-90.05	-4,395.88	-8,995.98	5,576.68	5,109.09	467.59	11.926		
15,000.00	7,231.49	7,169.49	7,231.49	225.35	248.56	-90.05	-4,395.88	-8,995.98	5,557.14	5,086.14	471.00	11.799		
15,100.00	7,231.07	7,169.07	7,231.07	228.17	248.55	-90.04	-4,395.88	-8,995.98	5,539.33	5,064.97	474.36	11.677		
15,116.21	7,231.00	7,169.00	7,231.00	228.63	248.55	-90.04	-4,395.88	-8,995.98	5,536.61	5,061.70	474.90	11.658	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	667.12	702.03	0.00	4.31	-108.95	-3,068.58	-8,938.44	9,476.54					
100.00	100.00	724.00	758.32	0.18	4.49	-108.99	-3,074.08	-8,932.39	9,469.48	9,464.52	4.96	1,910.572		
200.00	200.00	724.00	758.32	0.61	4.49	-108.99	-3,074.08	-8,932.39	9,463.05	9,457.88	5.17	1,830.174		
300.00	300.00	724.00	758.32	1.05	4.49	-108.99	-3,074.08	-8,932.39	9,457.68	9,452.14	5.53	1,708.910		
400.00	400.00	724.00	758.32	1.49	4.49	-108.99	-3,074.08	-8,932.39	9,453.36	9,447.42	5.94	1,590.641		
500.00	500.00	775.30	809.00	1.93	4.66	-109.04	-3,080.35	-8,927.60	9,449.13	9,442.59	6.54	1,445.236		
600.00	599.98	818.00	851.05	2.37	4.81	-101.39	-3,087.08	-8,924.43	9,446.96	9,439.84	7.12	1,327.499		
700.00	699.84	818.00	851.05	2.81	4.81	-101.41	-3,087.08	-8,924.43	9,445.86	9,438.31	7.55	1,251.287		
712.65	712.45	818.00	851.05	2.87	4.81	-101.41	-3,087.08	-8,924.43	9,445.85	9,438.24	7.60	1,242.221		
800.00	799.45	818.00	851.05	3.26	4.81	-101.40	-3,087.08	-8,924.43	9,446.52	9,438.53	7.99	1,182.952		
900.00	898.70	818.00	851.05	3.70	4.81	-101.35	-3,087.08	-8,924.43	9,448.92	9,440.49	8.43	1,121.312		
1,000.00	997.47	818.00	851.05	4.15	4.81	-101.27	-3,087.08	-8,924.43	9,453.06	9,444.19	8.87	1,065.324		
1,100.00	1,095.78	859.25	891.57	4.60	4.96	-101.33	-3,094.46	-8,922.20	9,458.18	9,448.71	9.47	998.227		
1,200.00	1,194.05	873.03	905.10	5.05	5.01	-101.36	-3,097.02	-8,921.66	9,464.52	9,454.54	9.98	948.126		
1,300.00	1,292.33	912.00	943.33	5.50	5.15	-101.44	-3,104.52	-8,920.72	9,472.01	9,461.42	10.59	894.600		
1,400.00	1,390.61	912.00	943.33	5.96	5.15	-101.44	-3,104.52	-8,920.72	9,480.00	9,468.96	11.05	858.060		
1,500.00	1,488.89	912.00	943.33	6.43	5.15	-101.44	-3,104.52	-8,920.72	9,489.05	9,477.54	11.51	824.472		
1,600.00	1,587.16	912.00	943.33	6.89	5.15	-101.44	-3,104.52	-8,920.72	9,499.13	9,487.16	11.97	793.542		
1,700.00	1,685.44	912.00	943.33	7.36	5.15	-101.44	-3,104.52	-8,920.72	9,510.26	9,497.83	12.43	765.007		
1,800.00	1,783.72	954.54	985.04	7.83	5.31	-101.54	-3,112.85	-8,920.77	9,521.77	9,508.71	13.06	729.271		
1,900.00	1,882.00	1,006.00	1,035.51	8.30	5.50	-101.64	-3,122.77	-8,922.50	9,535.01	9,521.28	13.72	694.968		
2,000.00	1,980.27	1,006.00	1,035.51	8.77	5.50	-101.64	-3,122.77	-8,922.50	9,548.32	9,534.14	14.18	673.474		
2,100.00	2,078.55	1,006.00	1,035.51	9.25	5.50	-101.64	-3,122.77	-8,922.50	9,562.66	9,548.02	14.63	653.465		
2,200.00	2,176.83	1,006.00	1,035.51	9.72	5.50	-101.64	-3,122.77	-8,922.50	9,578.02	9,562.93	15.09	634.810		
2,300.00	2,275.11	1,006.00	1,035.51	10.19	5.50	-101.64	-3,122.77	-8,922.50	9,594.40	9,578.86	15.54	617.392		
2,400.00	2,373.38	1,046.42	1,075.15	10.66	5.65	-101.72	-3,130.27	-8,925.02	9,611.36	9,595.22	16.15	595.158		
2,500.00	2,471.66	1,101.00	1,128.68	11.14	5.85	-101.83	-3,139.73	-8,929.87	9,629.62	9,612.81	16.82	572.629		
2,600.00	2,569.94	1,101.00	1,128.68	11.61	5.85	-101.83	-3,139.73	-8,929.87	9,648.11	9,630.84	17.26	558.929		
2,700.00	2,668.22	1,101.00	1,128.68	12.09	5.85	-101.83	-3,139.73	-8,929.87	9,667.59	9,649.88	17.70	546.058		
2,800.00	2,766.49	1,101.00	1,128.68	12.56	5.85	-101.83	-3,139.73	-8,929.87	9,688.06	9,669.92	18.14	533.955		
2,900.00	2,864.77	1,101.00	1,128.68	13.04	5.85	-101.83	-3,139.73	-8,929.87	9,709.53	9,690.95	18.58	522.561		
3,000.00	2,963.05	1,149.62	1,176.23	13.51	6.04	-101.91	-3,148.24	-8,935.37	9,731.25	9,712.04	19.21	506.451		
3,100.00	3,061.33	1,197.00	1,222.30	13.99	6.23	-102.00	-3,157.35	-8,941.61	9,754.43	9,734.59	19.84	491.535		
3,200.00	3,159.60	1,197.00	1,222.30	14.46	6.23	-102.00	-3,157.35	-8,941.61	9,777.91	9,757.64	20.27	482.322		
3,300.00	3,257.88	1,197.00	1,222.30	14.94	6.23	-102.00	-3,157.35	-8,941.61	9,802.35	9,781.65	20.70	473.616		
3,400.00	3,356.16	1,197.00	1,222.30	15.41	6.23	-102.00	-3,157.35	-8,941.61	9,827.74	9,806.62	21.12	465.382		
3,500.00	3,454.43	1,197.00	1,222.30	15.89	6.23	-102.00	-3,157.35	-8,941.61	9,854.09	9,832.55	21.53	457.591		
3,600.00	3,552.71	1,247.58	1,271.18	16.36	6.44	-102.10	-3,167.90	-8,949.16	9,880.68	9,858.50	22.18	445.571		
3,700.00	3,650.99	1,292.00	1,313.86	16.84	6.64	-102.19	-3,177.81	-8,956.50	9,908.56	9,885.77	22.79	434.770		
3,800.00	3,749.27	1,292.00	1,313.86	17.32	6.64	-102.19	-3,177.81	-8,956.50	9,936.84	9,913.64	23.20	428.366		
3,900.00	3,847.54	1,292.00	1,313.86	17.79	6.64	-102.19	-3,177.81	-8,956.50	9,966.04	9,942.44	23.60	422.292		
4,000.00	3,945.82	1,292.00	1,313.86	18.27	6.64	-102.19	-3,177.81	-8,956.50	9,996.15	9,972.16	24.00	416.528		
8,700.00	7,257.97	3,925.00	3,693.33	54.79	30.62	-56.23	-4,224.87	-9,332.99	9,973.68	9,908.92	64.76	154.018		
8,800.00	7,257.55	3,925.00	3,693.33	57.05	30.62	-56.23	-4,224.87	-9,332.99	9,896.81	9,831.03	65.79	150.438		
8,900.00	7,257.13	3,925.00	3,693.33	59.36	30.62	-56.23	-4,224.87	-9,332.99	9,820.36	9,753.49	66.87	146.854		
9,000.00	7,256.71	3,925.00	3,693.33	61.72	30.62	-56.23	-4,224.87	-9,332.99	9,744.34	9,676.33	68.01	143.275		
9,100.00	7,256.29	3,925.00	3,693.33	64.12	30.62	-56.23	-4,224.87	-9,332.99	9,668.75	9,599.55	69.20	139.714		
9,200.00	7,255.87	7,439.06	7,028.89	66.56	53.73	-88.16	-5,032.68	-9,556.82	9,591.54	9,497.82	93.72	102.344		
9,300.00	7,255.45	7,441.01	7,030.83	69.02	53.73	-88.18	-5,032.70	-9,556.92	9,514.49	9,419.26	95.23	99.912		
9,400.00	7,255.03	7,442.97	7,032.79	71.52	53.74	-88.19	-5,032.72	-9,556.96	9,437.87	9,341.08	96.79	97.505		
9,500.00	7,254.61	7,444.93	7,034.75	74.04	53.74	-88.21	-5,032.74	-9,557.00	9,361.70	9,263.29	98.41	95.127		
9,600.00	7,254.19	7,446.90	7,036.72	76.58	53.75	-88.23	-5,032.76	-9,557.05	9,285.98	9,185.89	100.08	92.781		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
9,700.00	7,253.77	7,448.88	7,038.70	79.15	53.76	-88.25	-5,032.78	-9,557.09	9,210.72	9,108.91	101.81	90.471		
9,800.00	7,253.35	7,450.87	7,040.69	81.74	53.76	-88.27	-5,032.80	-9,557.14	9,135.93	9,032.35	103.58	88.198		
9,900.00	7,252.92	7,452.86	7,042.68	84.34	53.77	-88.29	-5,032.82	-9,557.18	9,061.63	8,956.22	105.41	85.965		
10,000.00	7,252.50	7,454.87	7,044.69	86.96	53.77	-88.31	-5,032.84	-9,557.23	8,987.83	8,880.54	107.29	83.773		
10,100.00	7,252.08	7,456.88	7,046.70	89.59	53.78	-88.32	-5,032.86	-9,557.28	8,914.54	8,805.32	109.21	81.625		
10,200.00	7,251.66	7,458.90	7,048.72	92.24	53.78	-88.34	-5,032.88	-9,557.32	8,841.77	8,730.58	111.19	79.521		
10,300.00	7,251.24	7,460.93	7,050.75	94.90	53.79	-88.36	-5,032.89	-9,557.37	8,769.53	8,656.32	113.21	77.463		
10,400.00	7,250.82	7,462.97	7,052.79	97.57	53.79	-88.38	-5,032.91	-9,557.41	8,697.85	8,582.57	115.28	75.450		
10,500.00	7,250.40	7,465.02	7,054.84	100.25	53.80	-88.40	-5,032.93	-9,557.46	8,626.73	8,509.33	117.40	73.483		
10,600.00	7,249.98	7,467.08	7,056.89	102.93	53.81	-88.42	-5,032.95	-9,557.51	8,556.19	8,436.62	119.56	71.562		
10,700.00	7,249.56	7,469.14	7,058.96	105.63	53.81	-88.44	-5,032.97	-9,557.56	8,486.24	8,364.46	121.77	69.688		
10,800.00	7,249.14	7,471.22	7,061.03	108.34	53.82	-88.46	-5,032.99	-9,557.60	8,416.89	8,292.86	124.03	67.860		
10,900.00	7,248.72	7,473.30	7,063.11	111.05	53.82	-88.48	-5,033.01	-9,557.65	8,348.17	8,221.83	126.34	66.078		
11,000.00	7,248.30	7,475.39	7,065.21	113.77	53.83	-88.50	-5,033.03	-9,557.70	8,280.08	8,151.39	128.69	64.342		
11,100.00	7,247.88	7,477.49	7,067.31	116.50	53.83	-88.52	-5,033.05	-9,557.75	8,212.65	8,081.56	131.08	62.652		
11,200.00	7,247.46	7,479.60	7,069.42	119.23	53.84	-88.54	-5,033.06	-9,557.80	8,145.88	8,012.36	133.52	61.007		
11,300.00	7,247.04	7,481.72	7,071.54	121.97	53.85	-88.56	-5,033.08	-9,557.85	8,079.80	7,943.79	136.01	59.406		
11,400.00	7,246.62	7,483.85	7,073.66	124.72	53.85	-88.58	-5,033.10	-9,557.90	8,014.42	7,875.88	138.54	57.848		
11,500.00	7,246.20	7,485.99	7,075.80	127.46	53.86	-88.60	-5,033.12	-9,557.95	7,949.77	7,808.65	141.12	56.334		
11,600.00	7,245.78	7,488.14	7,077.95	130.22	53.86	-88.62	-5,033.14	-9,558.00	7,885.85	7,742.11	143.74	54.863		
11,700.00	7,245.36	7,490.30	7,080.10	132.98	53.87	-88.64	-5,033.16	-9,558.05	7,822.68	7,676.28	146.40	53.433		
11,800.00	7,244.94	7,492.46	7,082.27	135.74	53.87	-88.66	-5,033.18	-9,558.10	7,760.29	7,611.18	149.11	52.044		
11,900.00	7,244.52	7,494.64	7,084.45	138.50	53.88	-88.68	-5,033.19	-9,558.15	7,698.69	7,546.83	151.86	50.696		
12,000.00	7,244.10	7,496.83	7,086.63	141.27	53.89	-88.70	-5,033.21	-9,558.20	7,637.91	7,483.25	154.66	49.387		
12,100.00	7,243.68	7,499.02	7,088.83	144.04	53.89	-88.72	-5,033.23	-9,558.25	7,577.95	7,420.46	157.49	48.116		
12,200.00	7,243.26	7,501.23	7,091.03	146.82	53.90	-88.74	-5,033.25	-9,558.31	7,518.85	7,358.48	160.37	46.884		
12,300.00	7,242.84	7,503.44	7,093.25	149.60	53.90	-88.76	-5,033.27	-9,558.36	7,460.62	7,297.33	163.29	45.689		
12,400.00	7,242.42	7,505.67	7,095.47	152.38	53.91	-88.78	-5,033.28	-9,558.41	7,403.28	7,237.02	166.25	44.530		
12,500.00	7,242.00	7,507.90	7,097.71	155.16	53.92	-88.80	-5,033.30	-9,558.46	7,346.85	7,177.60	169.26	43.407		
12,600.00	7,241.58	7,510.15	7,099.95	157.95	53.92	-88.83	-5,033.32	-9,558.52	7,291.36	7,119.06	172.30	42.318		
12,700.00	7,241.16	7,512.40	7,102.20	160.74	53.93	-88.85	-5,033.34	-9,558.57	7,236.82	7,061.45	175.38	41.264		
12,800.00	7,240.74	7,514.67	7,104.47	163.53	53.94	-88.87	-5,033.35	-9,558.63	7,183.27	7,004.77	178.50	40.243		
12,900.00	7,240.32	7,516.94	7,106.74	166.32	53.94	-88.89	-5,033.37	-9,558.68	7,130.71	6,949.05	181.65	39.254		
13,000.00	7,239.90	7,519.23	7,109.03	169.12	53.95	-88.91	-5,033.39	-9,558.74	7,079.17	6,894.32	184.85	38.297		
13,100.00	7,239.47	7,521.53	7,111.33	171.92	53.95	-88.93	-5,033.41	-9,558.79	7,028.68	6,840.60	188.08	37.372		
13,200.00	7,239.05	7,523.83	7,113.63	174.72	53.96	-88.95	-5,033.42	-9,558.85	6,979.25	6,787.91	191.34	36.476		
13,300.00	7,238.63	7,526.15	7,115.95	177.52	53.97	-88.98	-5,033.44	-9,558.90	6,930.91	6,736.28	194.63	35.610		
13,400.00	7,238.21	7,528.48	7,118.27	180.32	53.97	-89.00	-5,033.46	-9,558.96	6,883.69	6,685.73	197.96	34.773		
13,500.00	7,237.79	7,530.82	7,120.61	183.13	53.98	-89.02	-5,033.47	-9,559.02	6,837.60	6,636.29	201.32	33.965		
13,600.00	7,237.37	7,533.17	7,122.96	185.93	53.99	-89.04	-5,033.49	-9,559.07	6,792.67	6,587.97	204.70	33.183		
13,700.00	7,236.95	7,535.53	7,125.32	188.74	53.99	-89.06	-5,033.51	-9,559.13	6,748.93	6,540.81	208.11	32.429		
13,800.00	7,236.53	7,537.90	7,127.69	191.55	54.00	-89.09	-5,033.52	-9,559.19	6,706.39	6,494.84	211.55	31.701		
13,900.00	7,236.11	7,540.28	7,130.07	194.36	54.01	-89.11	-5,033.54	-9,559.25	6,665.07	6,450.06	215.01	30.999		
14,000.00	7,235.69	7,542.67	7,132.46	197.17	54.01	-89.13	-5,033.56	-9,559.31	6,625.01	6,406.52	218.49	30.322		
14,100.00	7,235.27	7,545.08	7,134.87	199.98	54.02	-89.15	-5,033.57	-9,559.36	6,586.22	6,364.23	221.99	29.669		
14,200.00	7,234.85	7,547.49	7,137.28	202.80	54.03	-89.18	-5,033.59	-9,559.42	6,548.73	6,323.22	225.51	29.040		
14,300.00	7,234.43	7,549.92	7,139.71	205.61	54.03	-89.20	-5,033.61	-9,559.48	6,512.56	6,283.52	229.04	28.434		
14,400.00	7,234.01	7,552.36	7,142.15	208.43	54.04	-89.22	-5,033.62	-9,559.54	6,477.73	6,245.14	232.59	27.851		
14,500.00	7,233.59	7,554.81	7,144.59	211.25	54.05	-89.25	-5,033.64	-9,559.60	6,444.26	6,208.12	236.14	27.290		
14,600.00	7,233.17	7,557.27	7,147.05	214.06	54.05	-89.27	-5,033.65	-9,559.67	6,412.17	6,172.47	239.70	26.751		
14,700.00	7,232.75	7,559.74	7,149.53	216.88	54.06	-89.29	-5,033.67	-9,559.73	6,381.49	6,138.23	243.26	26.233		
14,800.00	7,232.33	7,562.22	7,152.01	219.70	54.07	-89.32	-5,033.68	-9,559.79	6,352.24	6,105.41	246.83	25.736		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 82-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
14,900.00	7,231.91	7,564.72	7,154.50	222.52	54.07	-89.34	-5,033.70	-9,559.85	6,324.43	6,074.04	250.39	25.258	
15,000.00	7,231.49	7,567.23	7,157.01	225.35	54.08	-89.36	-5,033.71	-9,559.91	6,298.09	6,044.14	253.95	24.801	
15,100.00	7,231.07	7,569.75	7,159.53	228.17	54.09	-89.39	-5,033.73	-9,559.98	6,273.22	6,015.73	257.50	24.362	
15,116.21	7,231.00	7,570.16	7,159.94	228.63	54.09	-89.39	-5,033.73	-9,559.99	6,269.33	6,011.26	258.07	24.293	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	65.00	0.00	3.28	-131.32	-4,323.08	-4,917.76	6,548.10					
100.00	100.00	47.91	112.91	0.18	3.28	-131.32	-4,322.92	-4,917.83	6,547.74	6,544.28	3.46	1,893.613		
200.00	200.00	183.58	248.56	0.61	3.33	-131.30	-4,321.02	-4,918.65	6,547.27	6,543.32	3.95	1,657.774		
300.00	300.00	278.24	343.20	1.05	3.43	-131.28	-4,319.20	-4,919.32	6,546.53	6,542.04	4.48	1,460.106		
400.00	400.00	375.82	440.77	1.49	3.57	-131.27	-4,317.64	-4,919.87	6,545.90	6,540.84	5.07	1,292.093		
500.00	500.00	479.17	544.11	1.93	3.77	-131.26	-4,316.20	-4,920.26	6,545.26	6,539.56	5.70	1,148.067		
539.09	539.08	523.45	588.38	2.10	3.87	-123.51	-4,315.62	-4,920.35	6,545.13	6,539.16	5.97	1,096.532		
600.00	599.98	598.17	663.10	2.37	4.05	-123.51	-4,314.59	-4,920.40	6,545.43	6,539.01	6.41	1,020.558		
700.00	699.84	685.91	750.83	2.81	4.27	-123.51	-4,313.48	-4,920.35	6,547.44	6,540.36	7.08	924.575		
800.00	799.45	787.54	852.46	3.26	4.56	-123.50	-4,312.41	-4,920.24	6,551.49	6,543.68	7.81	838.673		
900.00	898.70	876.03	940.94	3.70	4.83	-123.47	-4,311.49	-4,920.18	6,557.51	6,548.98	8.52	769.216		
1,000.00	997.47	968.74	1,033.64	4.15	5.13	-123.43	-4,310.61	-4,920.24	6,565.62	6,556.35	9.27	708.263		
1,100.00	1,095.78	1,075.09	1,139.99	4.60	5.49	-123.52	-4,309.57	-4,920.32	6,575.24	6,565.16	10.08	652.384		
1,200.00	1,194.05	1,167.58	1,232.48	5.05	5.81	-123.64	-4,308.62	-4,920.35	6,584.92	6,574.06	10.85	606.660		
1,300.00	1,292.33	1,252.15	1,317.04	5.50	6.11	-123.74	-4,307.81	-4,920.53	6,594.80	6,583.19	11.61	567.882		
1,400.00	1,390.61	1,337.00	1,401.89	5.96	6.42	-123.85	-4,307.24	-4,920.74	6,604.94	6,592.56	12.38	533.494		
1,500.00	1,488.89	1,431.24	1,496.13	6.43	6.78	-123.97	-4,306.85	-4,920.96	6,615.27	6,602.08	13.19	501.520		
1,600.00	1,587.16	1,535.94	1,600.82	6.89	7.17	-124.11	-4,306.37	-4,921.13	6,625.54	6,611.50	14.05	471.636		
1,700.00	1,685.44	1,632.51	1,697.40	7.36	7.54	-124.24	-4,306.10	-4,921.15	6,635.88	6,621.00	14.88	445.916		
1,800.00	1,783.72	1,733.56	1,798.45	7.83	7.94	-124.37	-4,305.73	-4,921.17	6,646.19	6,630.45	15.74	422.300		
1,900.00	1,882.00	1,819.94	1,884.82	8.30	8.27	-124.48	-4,305.51	-4,921.19	6,656.60	6,640.06	16.54	402.442		
2,000.00	1,980.27	1,893.83	1,958.72	8.77	8.56	-124.58	-4,305.48	-4,921.36	6,667.34	6,650.04	17.29	385.510		
2,100.00	2,078.55	1,979.76	2,044.64	9.25	8.90	-124.69	-4,305.58	-4,921.76	6,678.39	6,660.29	18.10	368.994		
2,200.00	2,176.83	2,071.43	2,136.31	9.72	9.27	-124.80	-4,305.77	-4,922.29	6,689.61	6,670.69	18.93	353.408		
2,300.00	2,275.11	2,168.76	2,233.64	10.19	9.66	-124.93	-4,306.05	-4,922.86	6,700.93	6,681.14	19.78	338.692		
2,400.00	2,373.38	2,261.06	2,325.94	10.66	10.03	-125.05	-4,306.21	-4,923.53	6,712.30	6,691.68	20.62	325.485		
2,500.00	2,471.66	2,357.28	2,422.15	11.14	10.42	-125.17	-4,306.40	-4,924.34	6,723.80	6,702.32	21.48	313.045		
2,600.00	2,569.94	2,452.84	2,517.71	11.61	10.80	-125.29	-4,306.55	-4,925.16	6,735.33	6,712.99	22.33	301.570		
2,700.00	2,668.22	2,544.77	2,609.64	12.09	11.18	-125.40	-4,306.75	-4,926.03	6,746.97	6,723.79	23.18	291.118		
2,800.00	2,766.49	2,633.03	2,697.89	12.56	11.54	-125.51	-4,306.81	-4,927.08	6,758.74	6,734.74	24.00	281.571		
2,900.00	2,864.77	2,715.70	2,780.55	13.04	11.88	-125.61	-4,306.96	-4,928.25	6,770.76	6,745.95	24.81	272.923		
3,000.00	2,963.05	2,804.13	2,868.97	13.51	12.25	-125.72	-4,307.25	-4,929.59	6,782.98	6,757.34	25.64	264.562		
3,100.00	3,061.33	2,892.30	2,957.13	13.99	12.61	-125.83	-4,307.72	-4,930.92	6,795.37	6,768.90	26.47	256.736		
3,200.00	3,159.60	2,983.13	3,047.94	14.46	12.99	-125.94	-4,308.35	-4,932.32	6,807.92	6,780.61	27.31	249.279		
3,300.00	3,257.88	3,090.93	3,155.73	14.94	13.43	-126.07	-4,309.06	-4,934.03	6,820.50	6,792.28	28.23	241.624		
3,400.00	3,356.16	3,254.34	3,319.14	15.41	14.11	-126.27	-4,309.63	-4,935.35	6,832.23	6,802.84	29.39	232.466		
3,500.00	3,454.43	3,357.52	3,422.31	15.89	14.54	-126.40	-4,309.79	-4,936.03	6,843.89	6,813.60	30.29	225.943		
3,600.00	3,552.71	3,457.92	3,522.71	16.36	14.96	-126.52	-4,309.82	-4,936.55	6,855.39	6,824.21	31.18	219.872		
3,700.00	3,650.99	3,540.05	3,604.84	16.84	15.30	-126.62	-4,310.01	-4,936.98	6,867.06	6,835.07	31.99	214.678		
3,800.00	3,749.27	3,617.42	3,682.20	17.32	15.63	-126.71	-4,310.18	-4,937.71	6,879.05	6,846.27	32.78	209.885		
3,900.00	3,847.54	3,695.82	3,760.59	17.79	15.95	-126.81	-4,310.35	-4,938.78	6,891.36	6,857.79	33.57	205.299		
4,000.00	3,945.82	3,781.41	3,846.17	18.27	16.31	-126.90	-4,310.59	-4,940.19	6,903.92	6,869.53	34.39	200.744		
4,100.00	4,044.10	3,867.09	3,931.84	18.75	16.67	-127.00	-4,311.00	-4,941.64	6,916.70	6,881.48	35.22	196.406		
4,200.00	4,142.38	3,939.72	4,004.46	19.22	16.98	-127.09	-4,311.58	-4,942.87	6,929.73	6,893.75	35.98	192.591		
4,300.00	4,240.65	4,000.01	4,064.73	19.70	17.23	-127.16	-4,312.27	-4,944.07	6,943.25	6,906.56	36.69	189.242		
4,400.00	4,338.93	4,072.52	4,137.22	20.18	17.54	-127.25	-4,313.42	-4,945.67	6,957.24	6,919.79	37.45	185.760		
4,500.00	4,437.21	4,139.63	4,204.30	20.65	17.82	-127.33	-4,314.79	-4,947.26	6,971.68	6,933.49	38.19	182.553		
4,600.00	4,535.49	4,215.44	4,280.06	21.13	18.14	-127.42	-4,316.62	-4,949.27	6,986.59	6,947.62	38.97	179.296		
4,700.00	4,633.76	4,363.89	4,428.42	21.61	18.77	-127.59	-4,319.71	-4,953.00	7,001.20	6,961.11	40.08	174.666		
4,800.00	4,732.04	4,482.80	4,547.28	22.08	19.27	-127.73	-4,321.43	-4,955.97	7,015.38	6,974.32	41.06	170.846		
4,900.00	4,830.32	4,642.26	4,706.70	22.56	19.94	-127.91	-4,323.06	-4,959.37	7,029.07	6,986.84	42.23	166.446		
5,000.00	4,928.60	4,779.90	4,844.33	23.04	20.53	-128.07	-4,323.93	-4,961.33	7,042.00	6,998.71	43.30	162.648		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	4,880.65	4,945.07	23.51	20.95	-128.19	-4,324.58	-4,962.33	7,054.69	7,010.50	44.19	159.636		
5,200.00	5,125.15	4,991.21	5,055.62	23.99	21.42	-128.31	-4,325.11	-4,963.52	7,067.35	7,022.21	45.13	156.585		
5,300.00	5,223.43	5,113.14	5,177.54	24.47	21.93	-128.45	-4,325.27	-4,964.81	7,079.77	7,033.64	46.13	153.480		
5,400.00	5,321.71	5,219.11	5,283.50	24.94	22.38	-128.57	-4,324.94	-4,966.11	7,092.01	7,044.96	47.05	150.736		
5,500.00	5,419.98	5,319.49	5,383.87	25.42	22.81	-128.67	-4,324.39	-4,967.38	7,104.14	7,056.19	47.94	148.174		
5,600.00	5,518.26	5,390.64	5,455.02	25.90	23.11	-128.75	-4,324.17	-4,968.34	7,116.52	7,067.81	48.71	146.115		
5,700.00	5,616.54	5,521.67	5,586.03	26.38	23.67	-128.89	-4,323.73	-4,969.94	7,128.79	7,079.05	49.74	143.315		
5,800.00	5,714.82	5,585.68	5,650.04	26.85	23.94	-128.96	-4,323.66	-4,970.64	7,141.19	7,090.72	50.47	141.495		
5,900.00	5,813.09	5,664.46	5,728.82	27.33	24.27	-129.05	-4,323.90	-4,971.63	7,154.01	7,102.75	51.26	139.550		
6,000.00	5,911.37	5,753.04	5,817.38	27.81	24.65	-129.14	-4,324.17	-4,972.99	7,167.05	7,114.95	52.11	137.549		
6,100.00	6,009.65	5,840.62	5,904.95	28.28	25.02	-129.24	-4,324.58	-4,974.31	7,180.23	7,127.28	52.94	135.626		
6,200.00	6,107.93	5,928.19	5,992.50	28.76	25.40	-129.33	-4,324.80	-4,976.10	7,193.61	7,139.83	53.78	133.767		
6,300.00	6,206.20	6,030.87	6,095.16	29.24	25.83	-129.44	-4,324.86	-4,978.45	7,207.04	7,152.36	54.68	131.793		
6,400.00	6,304.48	6,131.25	6,195.51	29.72	26.26	-129.54	-4,325.07	-4,980.45	7,220.41	7,164.83	55.58	129.907		
6,500.00	6,402.76	6,214.76	6,279.00	30.19	26.61	-129.62	-4,324.98	-4,982.53	7,233.90	7,177.51	56.40	128.266		
6,600.00	6,501.04	6,283.12	6,347.33	30.67	26.91	-129.69	-4,325.09	-4,984.36	7,247.74	7,190.60	57.14	126.840		
6,700.00	6,599.31	6,399.52	6,463.69	31.15	27.40	-129.81	-4,325.49	-4,987.51	7,261.75	7,203.64	58.12	124.955		
6,800.00	6,697.50	6,492.06	6,556.19	31.63	27.80	-129.89	-4,325.52	-4,990.13	7,274.37	7,215.39	58.98	123.345		
6,900.00	6,794.18	6,571.41	6,635.51	32.10	28.13	-129.96	-4,325.76	-4,992.30	7,277.79	7,218.01	59.78	121.744		
7,000.00	6,886.96	6,650.51	6,714.59	32.55	28.47	-129.86	-4,326.30	-4,994.43	7,270.72	7,210.14	60.58	120.011		
7,100.00	6,973.57	6,726.28	6,790.31	32.99	28.79	-129.72	-4,326.50	-4,997.01	7,253.38	7,192.00	61.38	118.175		
7,200.00	7,051.87	6,793.99	6,857.96	33.41	29.08	-129.62	-4,326.41	-4,999.83	7,226.34	7,164.19	62.16	116.260		
7,300.00	7,119.93	6,839.72	6,903.64	33.85	29.28	-129.54	-4,326.28	-5,001.98	7,190.49	7,127.61	62.87	114.362		
7,400.00	7,176.09	6,876.99	6,940.87	34.39	29.44	-129.44	-4,326.27	-5,003.83	7,146.88	7,083.25	63.63	112.327		
7,500.00	7,218.95	6,900.01	6,963.86	35.09	29.53	-129.33	-4,326.31	-5,005.02	7,096.64	7,032.24	64.40	110.189		
7,600.00	7,247.46	6,922.76	6,986.58	35.98	29.63	-129.22	-4,326.38	-5,006.23	7,041.06	6,975.77	65.29	107.839		
7,700.00	7,260.92	6,932.60	6,996.40	37.04	29.67	-129.11	-4,326.42	-5,006.78	6,981.52	6,915.30	66.22	105.429		
7,800.00	7,261.75	6,935.97	6,999.76	38.23	29.69	-129.00	-4,326.44	-5,006.96	6,919.91	6,852.70	67.21	102.959		
7,900.00	7,261.33	6,938.71	7,002.50	39.59	29.70	-128.89	-4,326.45	-5,007.12	6,858.96	6,790.64	68.32	100.388		
8,000.00	7,260.91	6,941.49	7,005.27	41.10	29.71	-128.78	-4,326.47	-5,007.28	6,798.93	6,729.36	69.57	97.732		
8,100.00	7,260.49	6,944.30	7,008.08	42.75	29.72	-128.67	-4,326.48	-5,007.44	6,739.84	6,668.91	70.93	95.017		
8,200.00	7,260.07	6,947.14	7,010.91	44.53	29.74	-128.55	-4,326.50	-5,007.60	6,681.73	6,609.31	72.42	92.267		
8,300.00	7,259.65	6,950.02	7,013.79	46.41	29.75	-128.44	-4,326.52	-5,007.76	6,624.61	6,550.60	74.02	89.503		
8,400.00	7,259.23	6,952.93	7,016.69	48.39	29.76	-128.33	-4,326.54	-5,007.93	6,568.52	6,492.80	75.72	86.747		
8,500.00	7,258.81	6,955.88	7,019.63	50.45	29.77	-128.22	-4,326.55	-5,008.10	6,513.48	6,435.95	77.53	84.015		
8,600.00	7,258.39	6,958.86	7,022.61	52.59	29.79	-128.11	-4,326.58	-5,008.28	6,459.51	6,380.08	79.43	81.322		
8,700.00	7,257.97	6,961.88	7,025.62	54.79	29.80	-128.00	-4,326.60	-5,008.46	6,406.65	6,325.23	81.43	78.680		
8,800.00	7,257.55	6,964.93	7,028.67	57.05	29.81	-127.89	-4,326.62	-5,008.64	6,354.92	6,271.41	83.51	76.100		
8,900.00	7,257.13	6,968.02	7,031.76	59.36	29.82	-127.77	-4,326.64	-5,008.82	6,304.35	6,218.68	85.67	73.589		
9,000.00	7,256.71	6,971.15	7,034.88	61.72	29.84	-127.66	-4,326.67	-5,009.01	6,254.97	6,167.06	87.91	71.152		
9,100.00	7,256.29	6,974.32	7,038.05	64.12	29.85	-127.55	-4,326.69	-5,009.20	6,206.80	6,116.58	90.22	68.795		
9,200.00	7,255.87	6,977.53	7,041.25	66.56	29.87	-127.44	-4,326.72	-5,009.39	6,159.87	6,067.27	92.60	66.521		
9,300.00	7,255.45	6,980.78	7,044.49	69.02	29.88	-127.33	-4,326.75	-5,009.59	6,114.22	6,019.18	95.04	64.331		
9,400.00	7,255.03	6,984.07	7,047.78	71.52	29.89	-127.22	-4,326.78	-5,009.79	6,069.87	5,972.32	97.55	62.225		
9,500.00	7,254.61	7,000.01	7,063.69	74.04	29.96	-127.11	-4,326.93	-5,010.78	6,026.87	5,926.70	100.17	60.164		
9,600.00	7,254.19	7,000.01	7,063.69	76.58	29.96	-127.00	-4,326.93	-5,010.78	5,985.20	5,882.43	102.77	58.241		
9,700.00	7,253.77	7,000.01	7,063.69	79.15	29.96	-126.89	-4,326.93	-5,010.78	5,944.92	5,839.51	105.41	56.399		
9,800.00	7,253.35	7,000.01	7,063.69	81.74	29.96	-126.78	-4,326.93	-5,010.78	5,906.05	5,797.96	108.09	54.638		
9,900.00	7,252.92	7,000.01	7,063.69	84.34	29.96	-126.67	-4,326.93	-5,010.78	5,868.63	5,757.81	110.82	52.957		
10,000.00	7,252.50	7,006.02	7,069.68	86.96	29.99	-126.56	-4,327.00	-5,011.16	5,832.69	5,719.07	113.62	51.337		
10,100.00	7,252.08	7,010.54	7,074.20	89.59	30.01	-126.45	-4,327.04	-5,011.45	5,798.24	5,681.80	116.44	49.797		
10,200.00	7,251.66	7,015.07	7,078.72	92.24	30.03	-126.34	-4,327.09	-5,011.73	5,765.31	5,646.03	119.29	48.331		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,019.60	7,083.24	94.90	30.04	-88.31	-4,327.15	-5,012.02	5,733.94	5,611.77	122.17	46.936		
10,400.00	7,250.82	7,024.14	7,087.76	97.57	30.06	-88.36	-4,327.20	-5,012.31	5,704.14	5,579.07	125.07	45.609		
10,500.00	7,250.40	7,028.68	7,092.29	100.25	30.08	-88.41	-4,327.25	-5,012.59	5,675.94	5,547.96	127.98	44.349		
10,600.00	7,249.98	7,033.22	7,096.83	102.93	30.10	-88.46	-4,327.31	-5,012.88	5,649.37	5,518.45	130.92	43.152		
10,700.00	7,249.56	7,037.77	7,101.37	105.63	30.12	-88.50	-4,327.36	-5,013.17	5,624.44	5,490.58	133.86	42.017		
10,800.00	7,249.14	7,042.32	7,105.91	108.34	30.14	-88.55	-4,327.42	-5,013.46	5,601.19	5,464.37	136.82	40.940		
10,900.00	7,248.72	7,046.88	7,110.45	111.05	30.16	-88.60	-4,327.48	-5,013.74	5,579.63	5,439.85	139.77	39.920		
11,000.00	7,248.30	7,051.43	7,115.00	113.77	30.18	-88.65	-4,327.54	-5,014.03	5,559.77	5,417.04	142.73	38.954		
11,100.00	7,247.88	7,056.00	7,119.56	116.50	30.20	-88.70	-4,327.60	-5,014.32	5,541.65	5,395.97	145.68	38.040		
11,200.00	7,247.46	7,060.56	7,124.11	119.23	30.22	-88.74	-4,327.66	-5,014.61	5,525.27	5,376.65	148.62	37.177		
11,300.00	7,247.04	7,065.13	7,128.67	121.97	30.24	-88.79	-4,327.72	-5,014.90	5,510.65	5,359.10	151.55	36.361		
11,400.00	7,246.62	7,069.71	7,133.24	124.72	30.26	-88.84	-4,327.79	-5,015.19	5,497.81	5,343.34	154.47	35.591		
11,500.00	7,246.20	7,074.29	7,137.81	127.46	30.28	-88.89	-4,327.85	-5,015.48	5,486.75	5,329.38	157.37	34.866		
11,600.00	7,245.78	7,078.87	7,142.38	130.22	30.30	-88.93	-4,327.92	-5,015.77	5,477.50	5,317.25	160.24	34.183		
11,700.00	7,245.36	7,083.46	7,146.96	132.98	30.32	-88.98	-4,327.98	-5,016.06	5,470.05	5,306.96	163.09	33.540		
11,800.00	7,244.94	7,088.05	7,151.54	135.74	30.34	-89.03	-4,328.05	-5,016.35	5,464.41	5,298.51	165.91	32.937		
11,900.00	7,244.52	7,092.64	7,156.12	138.50	30.36	-89.08	-4,328.12	-5,016.64	5,460.60	5,291.91	168.69	32.371		
12,000.00	7,244.10	7,100.01	7,163.48	141.27	30.39	-89.16	-4,328.24	-5,017.11	5,458.61	5,287.16	171.45	31.838		
12,058.83	7,243.85	7,100.01	7,163.48	142.90	30.39	-89.16	-4,328.24	-5,017.11	5,458.30	5,285.26	173.03	31.545 CC		
12,100.00	7,243.68	7,102.38	7,165.84	144.04	30.40	-89.18	-4,328.28	-5,017.26	5,458.45	5,284.31	174.15	31.344		
12,200.00	7,243.26	7,108.34	7,171.79	146.82	30.42	-89.24	-4,328.37	-5,017.64	5,460.12	5,283.30	176.82	30.880 ES		
12,300.00	7,242.84	7,114.30	7,177.74	149.60	30.45	-89.31	-4,328.46	-5,018.02	5,463.60	5,284.16	179.45	30.447		
12,400.00	7,242.42	7,120.26	7,183.69	152.38	30.48	-89.37	-4,328.56	-5,018.40	5,468.91	5,286.89	182.02	30.045		
12,500.00	7,242.00	7,126.23	7,189.63	155.16	30.50	-89.43	-4,328.65	-5,018.78	5,476.03	5,291.48	184.55	29.672		
12,600.00	7,241.58	7,132.19	7,195.58	157.95	30.53	-89.49	-4,328.75	-5,019.16	5,484.97	5,297.94	187.03	29.327		
12,700.00	7,241.16	7,138.15	7,201.53	160.74	30.55	-89.56	-4,328.84	-5,019.54	5,495.69	5,306.25	189.44	29.010		
12,800.00	7,240.74	7,144.11	7,207.48	163.53	30.58	-89.62	-4,328.93	-5,019.91	5,508.21	5,316.41	191.81	28.718		
12,900.00	7,240.32	7,150.07	7,213.42	166.32	30.60	-89.68	-4,329.03	-5,020.29	5,522.51	5,328.40	194.11	28.451		
13,000.00	7,239.89	7,156.03	7,219.37	169.12	30.63	-89.74	-4,329.12	-5,020.67	5,538.56	5,342.21	196.35	28.208		
13,100.00	7,239.47	7,161.99	7,225.32	171.92	30.65	-89.81	-4,329.22	-5,021.05	5,556.37	5,357.84	198.53	27.988		
13,200.00	7,239.05	7,167.94	7,231.26	174.72	30.68	-89.87	-4,329.31	-5,021.43	5,575.90	5,375.25	200.65	27.790		
13,300.00	7,238.63	7,173.90	7,237.21	177.52	30.71	-89.93	-4,329.40	-5,021.81	5,597.15	5,394.45	202.70	27.613		
13,400.00	7,238.21	7,179.86	7,243.15	180.32	30.73	-89.99	-4,329.50	-5,022.19	5,620.09	5,415.40	204.69	27.457		
13,500.00	7,237.79	7,185.82	7,249.10	183.13	30.76	-90.06	-4,329.59	-5,022.56	5,644.70	5,438.08	206.61	27.320		
13,600.00	7,237.37	7,191.78	7,255.04	185.93	30.78	-90.12	-4,329.69	-5,022.94	5,670.96	5,462.49	208.47	27.202		
13,700.00	7,236.95	7,197.73	7,260.99	188.74	30.81	-90.18	-4,329.78	-5,023.32	5,698.85	5,488.58	210.27	27.103		
13,800.00	7,236.53	7,203.69	7,266.93	191.55	30.83	-90.24	-4,329.87	-5,023.70	5,728.35	5,516.35	212.00	27.021		
13,900.00	7,236.11	7,209.65	7,272.88	194.36	30.86	-90.30	-4,329.97	-5,024.08	5,759.42	5,545.76	213.66	26.956		
14,000.00	7,235.69	7,215.60	7,278.82	197.17	30.89	-90.37	-4,330.06	-5,024.46	5,792.05	5,576.78	215.26	26.907		
14,100.00	7,235.27	7,221.56	7,284.76	199.98	30.91	-90.43	-4,330.16	-5,024.83	5,826.20	5,609.40	216.80	26.874		
14,200.00	7,234.85	7,227.51	7,290.70	202.80	30.94	-90.49	-4,330.25	-5,025.21	5,861.86	5,643.58	218.27	26.856		
14,300.00	7,234.43	7,233.47	7,296.65	205.61	30.96	-90.55	-4,330.34	-5,025.59	5,898.99	5,679.30	219.68	26.852 SF		
14,400.00	7,234.01	7,239.42	7,302.59	208.43	30.99	-90.62	-4,330.44	-5,025.97	5,937.56	5,716.53	221.03	26.863		
14,500.00	7,233.59	7,245.38	7,308.53	211.25	31.01	-90.68	-4,330.53	-5,026.35	5,977.56	5,755.23	222.32	26.887		
14,600.00	7,233.17	7,251.33	7,314.47	214.06	31.04	-90.74	-4,330.62	-5,026.73	6,018.94	5,795.39	223.55	26.924		
14,700.00	7,232.75	7,257.29	7,320.41	216.88	31.07	-90.80	-4,330.72	-5,027.10	6,061.69	5,836.96	224.73	26.974		
14,800.00	7,232.33	7,263.24	7,326.35	219.70	31.09	-90.87	-4,330.81	-5,027.48	6,105.77	5,879.92	225.84	27.035		
14,900.00	7,231.91	7,269.19	7,332.29	222.52	31.12	-90.93	-4,330.91	-5,027.86	6,151.15	5,924.24	226.90	27.109		
15,000.00	7,231.49	7,275.14	7,338.23	225.35	31.14	-90.99	-4,331.00	-5,028.24	6,197.81	5,969.89	227.91	27.194		
15,100.00	7,231.07	7,281.10	7,344.17	228.17	31.17	-91.05	-4,331.09	-5,028.62	6,245.71	6,016.84	228.87	27.290		
15,116.21	7,231.00	7,282.06	7,345.14	228.63	31.17	-91.06	-4,331.11	-5,028.68	6,253.59	6,024.58	229.02	27.306		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	74.00	0.00	3.28	-148.86	-5,453.37	-3,294.70	6,371.79					
100.00	100.00	89.07	138.07	0.18	3.28	-148.86	-5,453.22	-3,294.58	6,371.28	6,367.82	3.46	1,839.558		
200.00	200.00	193.06	242.05	0.61	3.33	-148.86	-5,452.45	-3,294.38	6,370.55	6,366.61	3.95	1,614.805		
300.00	300.00	262.74	311.73	1.05	3.39	-148.86	-5,451.95	-3,294.60	6,370.11	6,365.66	4.45	1,432.873		
400.00	400.00	1,486.53	1,522.06	1.49	7.58	-147.94	-5,310.32	-3,325.74	6,365.46	6,356.24	9.23	689.771		
500.00	500.00	1,544.63	1,578.63	1.93	7.89	-147.86	-5,297.24	-3,327.89	6,348.16	6,338.33	9.83	646.063		
600.00	599.98	1,629.82	1,661.61	2.37	8.35	-140.21	-5,278.28	-3,331.38	6,332.63	6,322.03	10.60	597.521		
700.00	699.84	1,700.00	1,729.95	2.81	8.74	-140.29	-5,262.67	-3,334.69	6,320.09	6,308.77	11.32	558.222		
800.00	799.45	1,821.11	1,847.93	3.26	9.42	-140.30	-5,235.92	-3,340.58	6,310.51	6,298.18	12.33	511.646		
900.00	898.70	1,920.49	1,944.63	3.70	9.99	-140.32	-5,213.52	-3,345.43	6,303.20	6,289.95	13.26	475.477		
1,000.00	997.47	2,020.19	2,041.64	4.15	10.57	-140.32	-5,191.06	-3,350.30	6,298.59	6,284.39	14.20	443.591		
1,100.00	1,095.78	2,120.06	2,138.82	4.60	11.16	-140.29	-5,168.55	-3,355.18	6,296.05	6,280.89	15.16	415.365		
1,200.00	1,194.05	2,219.93	2,236.00	5.05	11.76	-140.25	-5,146.05	-3,360.06	6,293.66	6,277.53	16.13	390.212		
1,300.00	1,292.33	2,319.81	2,333.19	5.50	12.35	-140.21	-5,123.54	-3,364.94	6,291.27	6,274.16	17.11	367.734		
1,400.00	1,390.61	2,419.69	2,430.37	5.96	12.96	-140.17	-5,101.03	-3,369.82	6,288.88	6,270.79	18.09	347.555		
1,500.00	1,488.89	2,519.57	2,527.56	6.43	13.56	-140.13	-5,078.53	-3,374.71	6,286.50	6,267.41	19.09	329.362		
1,600.00	1,587.16	2,619.44	2,624.75	6.89	14.17	-140.09	-5,056.02	-3,379.59	6,284.12	6,264.03	20.08	312.889		
1,700.00	1,685.44	2,719.32	2,721.93	7.36	14.78	-140.05	-5,033.52	-3,384.47	6,281.74	6,260.65	21.09	297.915		
1,800.00	1,783.72	2,819.20	2,819.12	7.83	15.40	-140.02	-5,011.01	-3,389.35	6,279.36	6,257.27	22.09	284.252		
1,900.00	1,882.00	2,919.08	2,916.31	8.30	16.01	-139.98	-4,988.50	-3,394.23	6,276.99	6,253.89	23.10	271.740		
2,000.00	1,980.27	3,018.95	3,013.49	8.77	16.63	-139.94	-4,966.00	-3,399.11	6,274.62	6,250.51	24.11	260.243		
2,100.00	2,078.55	3,118.83	3,110.68	9.25	17.25	-139.90	-4,943.49	-3,403.99	6,272.26	6,247.13	25.12	249.648		
2,200.00	2,176.83	3,218.71	3,207.86	9.72	17.87	-139.86	-4,920.98	-3,408.87	6,269.89	6,243.75	26.14	239.853		
2,300.00	2,275.11	3,318.59	3,305.05	10.19	18.49	-139.82	-4,898.48	-3,413.75	6,267.53	6,240.37	27.16	230.774		
2,400.00	2,373.38	3,418.46	3,402.24	10.66	19.11	-139.78	-4,875.97	-3,418.63	6,265.18	6,237.00	28.18	222.337		
2,500.00	2,471.66	3,518.34	3,499.42	11.14	19.73	-139.74	-4,853.47	-3,423.51	6,262.82	6,233.62	29.20	214.477		
2,600.00	2,569.94	3,618.22	3,596.61	11.61	20.36	-139.70	-4,830.96	-3,428.39	6,260.47	6,230.25	30.22	207.138		
2,700.00	2,668.22	3,718.10	3,693.79	12.09	20.98	-139.66	-4,808.45	-3,433.27	6,258.12	6,226.88	31.25	200.271		
2,800.00	2,766.49	10,724.78	7,246.19	12.56	120.98	-174.45	-3,972.10	42.65	6,241.19	6,139.04	102.15	61.098		
2,900.00	2,864.77	10,720.62	7,246.26	13.04	120.85	-174.40	-3,972.11	38.49	6,183.97	6,080.56	103.42	59.795		
3,000.00	2,963.05	10,716.47	7,246.33	13.51	120.72	-174.35	-3,972.13	34.33	6,127.85	6,023.15	104.70	58.526		
3,100.00	3,061.33	10,712.31	7,246.41	13.99	120.59	-174.31	-3,972.14	30.17	6,072.86	5,966.85	106.00	57.291		
3,200.00	3,159.60	10,708.15	7,246.48	14.46	120.46	-174.26	-3,972.15	26.01	6,019.01	5,911.70	107.31	56.090		
3,300.00	3,257.88	10,703.99	7,246.55	14.94	120.33	-174.21	-3,972.17	21.86	5,966.36	5,857.73	108.63	54.924		
3,400.00	3,356.16	10,700.17	7,246.63	15.41	120.20	-174.17	-3,972.18	17.70	5,914.93	5,804.96	109.97	53.789		
3,500.00	3,454.43	10,704.33	7,246.70	15.89	120.34	-174.12	-3,972.19	13.54	5,864.74	5,753.23	111.51	52.595		
3,600.00	3,552.71	10,691.51	7,246.77	16.36	119.93	-174.07	-3,972.21	9.38	5,815.84	5,703.21	112.63	51.636		
3,700.00	3,650.99	10,687.36	7,246.85	16.84	119.80	-174.02	-3,972.22	5.22	5,768.26	5,654.28	113.98	50.609		
3,800.00	3,749.27	10,683.20	7,246.92	17.32	119.67	-173.98	-3,972.24	1.07	5,722.02	5,606.70	115.32	49.618		
3,900.00	3,847.54	10,679.04	7,246.99	17.79	119.54	-173.93	-3,972.25	-3.09	5,677.17	5,560.50	116.67	48.661		
4,000.00	3,945.82	10,674.88	7,247.07	18.27	119.40	-173.88	-3,972.26	-7.25	5,633.73	5,515.72	118.01	47.739		
4,100.00	4,044.10	10,670.72	7,247.14	18.75	119.27	-173.84	-3,972.28	-11.41	5,591.74	5,472.39	119.35	46.852		
4,200.00	4,142.38	10,666.56	7,247.21	19.22	119.14	-173.79	-3,972.29	-15.57	5,551.24	5,430.55	120.68	45.999		
4,300.00	4,240.65	10,662.40	7,247.29	19.70	119.01	-173.74	-3,972.31	-19.72	5,512.24	5,390.23	122.01	45.180		
4,400.00	4,338.93	10,658.25	7,247.36	20.18	118.88	-173.70	-3,972.32	-23.88	5,474.79	5,351.47	123.32	44.395		
4,500.00	4,437.21	10,654.09	7,247.43	20.65	118.75	-173.65	-3,972.33	-28.04	5,438.92	5,314.30	124.62	43.644		
4,600.00	4,535.49	10,654.11	7,247.51	21.13	118.75	-173.60	-3,972.35	-32.20	5,404.66	5,278.64	126.02	42.887		
4,700.00	4,633.76	10,645.77	7,247.58	21.61	118.48	-173.56	-3,972.36	-36.35	5,372.03	5,244.86	127.17	42.242		
4,800.00	4,732.04	10,641.61	7,247.65	22.08	118.35	-173.51	-3,972.38	-40.51	5,341.08	5,212.66	128.42	41.591		
4,900.00	4,830.32	10,637.45	7,247.72	22.56	118.22	-173.46	-3,972.39	-44.67	5,311.83	5,182.19	129.64	40.972		
5,000.00	4,928.60	10,633.29	7,247.80	23.04	118.09	-173.42	-3,972.40	-48.83	5,284.30	5,153.46	130.85	40.386		
5,100.00	5,026.87	10,629.14	7,247.87	23.51	117.96	-173.37	-3,972.42	-52.99	5,258.53	5,126.51	132.02	39.832		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	10,624.98	7,247.94	23.99	117.82	-173.32	-3,972.43	-57.14	5,234.54	5,101.38	133.16	39.309		
5,300.00	5,223.43	10,620.82	7,248.02	24.47	117.69	-173.28	-3,972.44	-61.30	5,212.36	5,078.08	134.28	38.818		
5,400.00	5,321.71	10,616.66	7,248.09	24.94	117.56	-173.23	-3,972.46	-65.46	5,192.00	5,056.65	135.35	38.358		
5,500.00	5,419.98	10,612.50	7,248.16	25.42	117.43	-173.18	-3,972.47	-69.62	5,173.49	5,037.10	136.40	37.930		
5,600.00	5,518.26	10,608.34	7,248.24	25.90	117.30	-173.14	-3,972.49	-73.78	5,156.86	5,019.45	137.40	37.531		
5,700.00	5,616.54	10,604.18	7,248.31	26.38	117.17	-173.09	-3,972.50	-77.93	5,142.11	5,003.74	138.37	37.163		
5,800.00	5,714.82	10,600.03	7,248.38	26.85	117.04	-173.04	-3,972.51	-82.09	5,129.26	4,989.97	139.29	36.825		
5,900.00	5,813.09	10,604.13	7,248.46	27.33	117.17	-173.00	-3,972.53	-86.25	5,118.33	4,977.92	140.42	36.451		
6,000.00	5,911.37	10,591.71	7,248.53	27.81	116.77	-172.95	-3,972.54	-90.41	5,109.34	4,968.34	141.00	36.237		
6,100.00	6,009.65	10,587.55	7,248.60	28.28	116.64	-172.90	-3,972.56	-94.57	5,102.28	4,960.50	141.78	35.986		
6,200.00	6,107.93	10,583.39	7,248.68	28.76	116.51	-172.86	-3,972.57	-98.72	5,097.18	4,954.66	142.52	35.765		
6,300.00	6,206.20	10,579.23	7,248.75	29.24	116.38	-172.81	-3,972.58	-102.88	5,094.03	4,950.82	143.21	35.571		
6,400.00	6,304.48	10,575.07	7,248.82	29.72	116.25	-172.76	-3,972.60	-107.04	5,092.83	4,948.99	143.84	35.405		
6,410.85	6,315.14	10,574.62	7,248.83	29.77	116.23	-172.76	-3,972.60	-107.49	5,092.82	4,948.91	143.91	35.389 CC, ES		
6,500.00	6,402.76	10,570.92	7,248.90	30.19	116.12	-172.72	-3,972.61	-111.20	5,093.60	4,949.17	144.43	35.267		
6,600.00	6,501.04	10,566.76	7,248.97	30.67	115.99	-172.67	-3,972.63	-115.35	5,096.33	4,951.37	144.96	35.156		
6,700.00	6,599.31	10,562.60	7,249.04	31.15	115.85	-172.62	-3,972.64	-119.51	5,101.01	4,955.57	145.44	35.072		
6,800.00	6,697.50	10,556.60	7,249.15	31.63	115.66	-151.29	-3,972.66	-125.51	5,107.62	4,961.80	145.81	35.029		
6,900.00	6,794.18	10,537.12	7,249.49	32.10	115.05	-124.50	-3,972.72	-144.98	5,115.87	4,970.16	145.71	35.111		
7,000.00	6,886.96	10,502.56	7,250.10	32.55	113.96	-111.78	-3,972.84	-179.54	5,125.36	4,980.29	145.07	35.330		
7,100.00	6,973.57	10,453.76	7,250.96	32.99	112.43	-104.50	-3,973.00	-228.33	5,135.56	4,991.60	143.95	35.676		
7,200.00	7,051.87	10,391.93	7,252.04	33.41	110.48	-99.63	-3,973.21	-290.16	5,145.82	5,003.41	142.41	36.133		
7,300.00	7,119.93	10,316.24	7,252.62	33.85	108.11	-96.07	-3,973.46	-365.84	5,155.44	5,014.97	140.48	36.700		
7,400.00	7,176.09	10,234.16	7,252.62	34.39	105.55	-93.44	-3,973.74	-447.92	5,163.76	5,025.32	138.44	37.298		
7,500.00	7,218.95	10,144.19	7,252.62	35.09	102.75	-91.57	-3,974.04	-537.89	5,170.19	5,033.87	136.32	37.927		
7,600.00	7,247.46	10,048.54	7,252.62	35.98	99.78	-90.39	-3,974.36	-633.54	5,174.21	5,040.01	134.20	38.556		
7,700.00	7,260.92	9,949.56	7,252.62	37.04	96.73	-89.90	-3,974.69	-732.52	5,175.50	5,043.33	132.17	39.158		
7,800.00	7,261.75	9,854.45	7,252.62	38.23	93.81	-89.90	-3,975.02	-832.49	5,174.41	5,043.98	130.43	39.672		
7,900.00	7,261.33	9,749.60	7,252.62	39.59	90.62	-89.91	-3,975.35	-932.48	5,173.08	5,044.50	128.58	40.233		
8,000.00	7,260.91	9,654.43	7,252.62	41.10	87.74	-89.91	-3,975.69	-1,032.47	5,171.76	5,044.56	127.19	40.661		
8,100.00	7,260.49	9,549.62	7,252.62	42.75	84.59	-89.92	-3,976.02	-1,132.46	5,170.43	5,044.76	125.67	41.142		
8,200.00	7,260.07	9,454.41	7,252.62	44.53	81.75	-89.92	-3,976.36	-1,232.45	5,169.10	5,044.52	124.59	41.490		
8,300.00	7,259.65	9,349.64	7,252.62	46.41	78.66	-89.93	-3,976.69	-1,332.44	5,167.78	5,044.43	123.34	41.897		
8,400.00	7,259.23	9,249.65	7,252.62	48.39	75.75	-89.93	-3,977.02	-1,432.43	5,166.45	5,044.08	122.37	42.220		
8,500.00	7,258.81	9,154.38	7,252.62	50.45	73.00	-89.93	-3,977.36	-1,532.42	5,165.13	5,043.48	121.65	42.460		
8,600.00	7,258.39	9,054.37	7,252.62	52.59	70.17	-89.94	-3,977.69	-1,632.41	5,163.80	5,042.91	120.89	42.713		
8,700.00	7,257.97	8,954.36	7,252.62	54.79	67.38	-89.94	-3,978.03	-1,732.40	5,162.48	5,042.23	120.25	42.933		
8,800.00	7,257.55	8,849.68	7,252.62	57.05	64.51	-89.95	-3,978.36	-1,832.39	5,161.15	5,041.58	119.57	43.164		
8,900.00	7,257.13	8,754.34	7,252.62	59.36	61.97	-89.95	-3,978.69	-1,932.38	5,159.83	5,040.57	119.26	43.266		
9,000.00	7,256.71	8,654.33	7,252.62	61.72	59.37	-89.96	-3,979.03	-2,032.37	5,158.50	5,039.58	118.92	43.378		
9,100.00	7,256.29	8,554.32	7,252.62	64.12	56.86	-89.96	-3,979.36	-2,132.36	5,157.18	5,038.49	118.69	43.450		
9,200.00	7,255.87	8,454.31	7,252.62	66.56	54.45	-89.97	-3,979.70	-2,232.35	5,155.85	5,037.28	118.58	43.481		
9,300.00	7,255.45	8,354.30	7,252.62	69.02	52.17	-89.97	-3,980.03	-2,332.34	5,154.53	5,035.94	118.59	43.466		
9,400.00	7,255.03	8,254.29	7,252.62	71.52	50.05	-89.98	-3,980.36	-2,432.33	5,153.20	5,034.47	118.73	43.402		
9,500.00	7,254.61	8,149.75	7,252.62	74.04	48.06	-89.98	-3,980.70	-2,532.32	5,151.88	5,032.95	118.93	43.320		
9,600.00	7,254.19	8,054.27	7,252.62	76.58	46.49	-89.99	-3,981.03	-2,632.31	5,150.55	5,031.07	119.48	43.108		
9,700.00	7,253.77	7,954.26	7,252.62	79.15	45.16	-89.99	-3,981.37	-2,732.30	5,149.23	5,029.11	120.12	42.867		
9,800.00	7,253.35	7,854.25	7,252.62	81.74	44.20	-90.00	-3,981.70	-2,832.28	5,147.90	5,026.93	120.97	42.555		
9,900.00	7,252.92	7,754.24	7,252.62	84.34	43.57	-90.00	-3,982.03	-2,932.27	5,146.58	5,024.53	122.05	42.168		
10,000.00	7,252.50	7,700.00	7,251.51	86.96	43.34	-89.99	-3,982.46	-2,982.04	5,145.76	5,021.83	123.93	41.523		
10,017.95	7,252.43	7,700.00	7,251.51	87.43	43.34	-89.99	-3,982.46	-2,982.04	5,145.73	5,021.33	124.39	41.366		
10,100.00	7,252.08	7,671.64	7,249.25	89.59	43.24	-89.97	-3,983.08	-3,010.30	5,146.16	5,019.99	126.17	40.788		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,636.81	7,244.79	92.24	43.13	-89.92	-3,984.22	-3,044.82	5,147.84	5,019.50	128.33	40.113		
10,300.00	7,251.24	7,600.00	7,238.09	94.90	43.03	-89.85	-3,985.90	-3,080.97	5,150.80	5,020.32	130.48	39.477		
10,400.00	7,250.82	7,569.04	7,230.88	97.57	42.96	-89.77	-3,987.67	-3,111.03	5,155.05	5,022.34	132.70	38.846		
10,500.00	7,250.40	7,536.44	7,221.77	100.25	42.88	-89.67	-3,989.88	-3,142.25	5,160.61	5,025.70	134.91	38.251		
10,600.00	7,249.98	7,504.88	7,211.47	102.93	42.82	-89.55	-3,992.37	-3,171.97	5,167.52	5,030.39	137.13	37.684		
10,700.00	7,249.56	7,474.44	7,200.19	105.63	42.75	-89.43	-3,995.08	-3,200.11	5,175.79	5,036.43	139.36	37.140		
10,800.00	7,249.14	7,452.02	7,191.05	108.34	42.71	-89.33	-3,997.26	-3,220.47	5,185.46	5,043.82	141.64	36.611		
10,900.00	7,248.72	7,417.22	7,175.50	111.05	42.64	-89.16	-4,000.97	-3,251.37	5,196.51	5,052.67	143.83	36.128		
11,000.00	7,248.30	7,400.00	7,167.20	113.77	42.61	-89.07	-4,002.94	-3,266.33	5,209.04	5,062.94	146.10	35.655		
11,100.00	7,247.88	7,352.01	7,142.03	116.50	42.51	-88.79	-4,008.91	-3,306.73	5,223.02	5,074.86	148.16	35.252		
11,200.00	7,247.46	7,352.01	7,142.03	119.23	42.51	-88.79	-4,008.91	-3,306.73	5,238.44	5,087.94	150.50	34.807		
11,300.00	7,247.04	7,317.32	7,122.02	121.97	42.43	-88.57	-4,013.64	-3,334.66	5,255.32	5,102.72	152.60	34.438		
11,400.00	7,246.62	7,300.00	7,111.48	124.72	42.39	-88.46	-4,016.13	-3,348.19	5,273.76	5,118.99	154.77	34.075		
11,500.00	7,246.20	7,275.64	7,096.06	127.46	42.33	-88.29	-4,019.77	-3,366.69	5,293.70	5,136.83	156.88	33.744		
11,600.00	7,245.78	7,252.01	7,080.46	130.22	42.27	-88.12	-4,023.44	-3,384.04	5,315.18	5,156.24	158.94	33.442		
11,700.00	7,245.36	7,252.01	7,080.46	132.98	42.27	-88.12	-4,023.44	-3,384.04	5,338.24	5,177.18	161.07	33.143		
11,800.00	7,244.94	7,208.36	7,050.03	135.74	42.16	-87.79	-4,030.59	-3,414.49	5,362.75	5,199.77	162.97	32.906		
11,900.00	7,244.52	7,203.80	7,046.73	138.50	42.14	-87.75	-4,031.37	-3,417.55	5,388.75	5,223.75	164.99	32.660		
12,000.00	7,244.10	7,200.00	7,043.96	141.27	42.13	-87.72	-4,032.02	-3,420.08	5,416.38	5,249.41	166.97	32.439		
12,100.00	7,243.68	7,173.42	7,024.24	144.04	42.05	-87.50	-4,036.65	-3,437.28	5,445.41	5,276.59	168.82	32.256		
12,200.00	7,243.26	7,152.01	7,007.86	146.82	41.99	-87.33	-4,040.49	-3,450.51	5,476.02	5,305.39	170.64	32.092		
12,300.00	7,242.84	7,152.01	7,007.86	149.60	41.99	-87.33	-4,040.49	-3,450.51	5,508.10	5,335.62	172.48	31.935		
12,400.00	7,242.42	7,152.01	7,007.86	152.38	41.99	-87.33	-4,040.49	-3,450.51	5,541.80	5,367.53	174.27	31.801		
12,500.00	7,242.00	7,121.71	6,983.94	155.16	41.89	-87.07	-4,046.09	-3,468.26	5,576.67	5,400.76	175.92	31.700		
12,600.00	7,241.58	7,100.00	6,966.32	157.95	41.82	-86.88	-4,050.21	-3,480.24	5,613.19	5,435.65	177.54	31.616		
12,700.00	7,241.16	7,100.00	6,966.32	160.74	41.82	-86.88	-4,050.21	-3,480.24	5,651.04	5,471.86	179.18	31.538		
12,800.00	7,240.74	7,100.00	6,966.32	163.53	41.82	-86.88	-4,050.21	-3,480.24	5,690.39	5,509.63	180.77	31.479		
12,900.00	7,240.32	7,079.74	6,949.52	166.32	41.75	-86.70	-4,054.14	-3,490.86	5,731.03	5,548.77	182.25	31.445		
13,000.00	7,239.89	7,052.01	6,926.01	169.12	41.65	-86.44	-4,059.63	-3,504.49	5,773.24	5,589.57	183.66	31.434		
13,100.00	7,239.47	7,052.01	6,926.01	171.92	41.65	-86.44	-4,059.63	-3,504.49	5,816.50	5,631.39	185.11	31.423 SF		
13,200.00	7,239.05	7,052.01	6,926.01	174.72	41.65	-86.44	-4,059.63	-3,504.49	5,861.15	5,674.65	186.50	31.428		
13,300.00	7,238.63	7,049.69	6,924.02	177.52	41.64	-86.42	-4,060.10	-3,505.59	5,907.14	5,719.31	187.83	31.449		
13,400.00	7,238.21	7,049.69	6,924.02	180.32	41.64	-86.42	-4,060.10	-3,505.59	5,954.45	5,765.33	189.12	31.485		
13,500.00	7,237.79	7,030.32	6,907.23	183.13	41.56	-86.24	-4,064.02	-3,514.42	6,002.86	5,812.54	190.32	31.540		
13,600.00	7,237.37	7,010.76	6,890.02	185.93	41.48	-86.06	-4,068.04	-3,522.80	6,052.64	5,861.16	191.48	31.610		
13,700.00	7,236.95	7,010.76	6,890.02	188.74	41.48	-86.06	-4,068.04	-3,522.80	6,103.45	5,910.82	192.63	31.684		
13,800.00	7,236.53	7,010.76	6,890.02	191.55	41.48	-86.06	-4,068.04	-3,522.80	6,155.47	5,961.73	193.74	31.771		
13,900.00	7,236.11	7,000.00	6,880.45	194.36	41.44	-85.95	-4,070.27	-3,527.18	6,208.65	6,013.86	194.79	31.874		
14,000.00	7,235.69	7,000.00	6,880.45	197.17	41.44	-85.95	-4,070.27	-3,527.18	6,262.91	6,067.10	195.81	31.984		
14,100.00	7,235.27	7,000.00	6,880.45	199.98	41.44	-85.95	-4,070.27	-3,527.18	6,318.30	6,121.50	196.79	32.106		
14,200.00	7,234.85	7,000.00	6,880.45	202.80	41.44	-85.95	-4,070.27	-3,527.18	6,374.77	6,177.04	197.73	32.239		
14,300.00	7,234.43	7,000.00	6,880.45	205.61	41.44	-85.95	-4,070.27	-3,527.18	6,432.30	6,233.66	198.63	32.383		
14,400.00	7,234.01	6,976.87	6,859.64	208.43	41.34	-85.73	-4,075.12	-3,536.03	6,490.55	6,291.08	199.46	32.540		
14,500.00	7,233.59	6,952.01	6,836.94	211.25	41.23	-85.49	-4,080.41	-3,544.66	6,550.20	6,349.96	200.24	32.711		
14,600.00	7,233.17	6,952.01	6,836.94	214.06	41.23	-85.49	-4,080.41	-3,544.66	6,610.47	6,409.43	201.04	32.881		
14,700.00	7,232.75	6,952.01	6,836.94	216.88	41.23	-85.49	-4,080.41	-3,544.66	6,671.70	6,469.90	201.80	33.061		
14,800.00	7,232.33	6,952.01	6,836.94	219.70	41.23	-85.49	-4,080.41	-3,544.66	6,733.86	6,531.33	202.53	33.249		
14,900.00	7,231.91	6,952.01	6,836.94	222.52	41.23	-85.49	-4,080.41	-3,544.66	6,796.91	6,593.70	203.22	33.446		
15,000.00	7,231.49	6,952.01	6,836.94	225.35	41.23	-85.49	-4,080.41	-3,544.66	6,860.85	6,656.97	203.88	33.652		
15,100.00	7,231.07	6,952.01	6,836.94	228.17	41.23	-85.49	-4,080.41	-3,544.66	6,925.64	6,721.13	204.51	33.865		
15,116.21	7,231.00	6,952.01	6,836.94	228.63	41.23	-85.49	-4,080.41	-3,544.66	6,936.22	6,731.61	204.61	33.900		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	74.00	0.00	3.28	-148.77	-5,433.33	-3,294.70	6,354.65					
100.00	100.00	1,275.66	1,305.82	0.18	7.18	-147.65	-5,257.88	-3,329.98	6,339.41	6,331.22	8.18	774.686		
200.00	200.00	1,407.07	1,432.50	0.61	7.97	-147.43	-5,223.63	-3,337.13	6,319.95	6,310.97	8.98	703.714		
300.00	300.00	1,498.02	1,520.34	1.05	8.53	-147.28	-5,200.44	-3,341.26	6,300.62	6,290.98	9.65	653.141		
400.00	400.00	1,587.92	1,607.22	1.49	9.08	-147.14	-5,177.64	-3,344.80	6,281.16	6,270.77	10.39	604.626		
500.00	500.00	1,646.71	1,664.17	1.93	9.44	-147.05	-5,163.18	-3,347.00	6,262.28	6,251.27	11.01	569.023		
600.00	599.98	1,817.25	1,829.11	2.37	10.51	-139.28	-5,120.41	-3,354.01	6,244.59	6,232.29	12.30	507.690		
700.00	699.84	1,914.91	1,923.25	2.81	11.14	-139.36	-5,094.85	-3,358.55	6,228.82	6,215.61	13.21	471.517		
800.00	799.45	2,013.25	2,018.05	3.26	11.78	-139.41	-5,069.11	-3,363.11	6,215.71	6,201.56	14.15	439.272		
900.00	898.70	2,112.17	2,113.41	3.70	12.43	-139.46	-5,043.22	-3,367.71	6,205.25	6,190.14	15.11	410.573		
1,000.00	997.47	2,211.53	2,209.20	4.15	13.09	-139.48	-5,017.21	-3,372.32	6,197.45	6,181.35	16.10	384.999		
1,100.00	1,095.78	2,311.17	2,305.25	4.60	13.75	-139.45	-4,991.13	-3,376.95	6,191.69	6,174.59	17.10	362.140		
1,200.00	1,194.05	2,410.82	2,401.32	5.05	14.42	-139.39	-4,965.05	-3,381.58	6,186.09	6,167.98	18.11	341.576		
1,300.00	1,292.33	2,510.47	2,497.38	5.50	15.09	-139.34	-4,938.97	-3,386.20	6,180.48	6,161.35	19.13	323.060		
1,400.00	1,390.61	2,610.12	2,593.45	5.96	15.76	-139.28	-4,912.89	-3,390.83	6,174.89	6,154.73	20.16	306.323		
1,500.00	1,488.89	2,709.77	2,689.51	6.43	16.43	-139.22	-4,886.80	-3,395.46	6,169.30	6,148.11	21.19	291.136		
1,600.00	1,587.16	2,809.42	2,785.58	6.89	17.10	-139.16	-4,860.72	-3,400.09	6,163.72	6,141.49	22.23	277.305		
1,700.00	1,685.44	2,909.07	2,881.64	7.36	17.78	-139.10	-4,834.64	-3,404.72	6,158.14	6,134.88	23.27	264.662		
1,800.00	1,783.72	3,008.72	2,977.71	7.83	18.45	-139.05	-4,808.56	-3,409.34	6,152.58	6,128.26	24.31	253.067		
1,900.00	1,882.00	3,108.37	3,073.77	8.30	19.13	-138.99	-4,782.48	-3,413.97	6,147.01	6,121.65	25.36	242.400		
2,000.00	1,980.27	3,208.02	3,169.84	8.77	19.81	-138.93	-4,756.39	-3,418.60	6,141.46	6,115.05	26.41	232.555		
2,100.00	2,078.55	3,307.67	3,265.90	9.25	20.49	-138.87	-4,730.31	-3,423.23	6,135.90	6,108.44	27.46	223.444		
2,200.00	2,176.83	3,407.32	3,361.97	9.72	21.17	-138.81	-4,704.23	-3,427.85	6,130.36	6,101.85	28.51	214.989		
2,300.00	2,275.11	3,506.97	3,458.03	10.19	21.85	-138.76	-4,678.15	-3,432.48	6,124.82	6,095.25	29.57	207.124		
2,400.00	2,373.38	3,606.62	3,554.10	10.66	22.53	-138.70	-4,652.07	-3,437.11	6,119.29	6,088.66	30.63	199.790		
2,500.00	2,471.66	3,706.27	3,650.16	11.14	23.21	-138.64	-4,625.98	-3,441.74	6,113.77	6,082.08	31.69	192.936		
2,600.00	2,569.94	10,488.90	7,078.96	11.61	118.01	-173.31	-3,709.27	-60.19	6,057.66	5,960.74	96.92	62.504		
2,700.00	2,668.22	10,486.46	7,078.96	12.09	117.94	-173.28	-3,709.26	-62.63	5,997.25	5,899.06	98.19	61.076		
2,800.00	2,766.49	10,484.03	7,078.96	12.56	117.86	-173.25	-3,709.26	-65.07	5,937.91	5,838.42	99.49	59.683		
2,900.00	2,864.77	10,481.59	7,078.95	13.04	117.78	-173.22	-3,709.25	-67.50	5,879.68	5,778.87	100.81	58.325		
3,000.00	2,963.05	10,479.15	7,078.95	13.51	117.71	-173.19	-3,709.25	-69.94	5,822.57	5,720.43	102.14	57.004		
3,100.00	3,061.33	10,476.71	7,078.95	13.99	117.63	-173.16	-3,709.24	-72.38	5,766.64	5,663.15	103.49	55.720		
3,200.00	3,159.60	10,474.27	7,078.95	14.46	117.55	-173.13	-3,709.23	-74.82	5,711.91	5,607.05	104.86	54.474		
3,300.00	3,257.88	10,471.83	7,078.94	14.94	117.48	-173.11	-3,709.23	-77.26	5,658.41	5,552.18	106.23	53.264		
3,400.00	3,356.16	10,469.39	7,078.94	15.41	117.40	-173.08	-3,709.22	-79.70	5,606.19	5,498.57	107.62	52.092		
3,500.00	3,454.43	10,466.95	7,078.94	15.89	117.32	-173.05	-3,709.22	-82.14	5,555.27	5,446.26	109.02	50.958		
3,600.00	3,552.71	10,464.52	7,078.94	16.36	117.25	-173.02	-3,709.21	-84.58	5,505.70	5,395.28	110.42	49.862		
3,700.00	3,650.99	10,462.08	7,078.93	16.84	117.17	-172.99	-3,709.20	-87.01	5,457.51	5,345.68	111.83	48.803		
3,800.00	3,749.27	10,459.64	7,078.93	17.32	117.09	-172.96	-3,709.20	-89.45	5,410.74	5,297.50	113.24	47.782		
3,900.00	3,847.54	10,457.20	7,078.93	17.79	117.01	-172.93	-3,709.19	-91.89	5,365.42	5,250.77	114.65	46.799		
4,000.00	3,945.82	10,454.76	7,078.93	18.27	116.94	-172.90	-3,709.18	-94.33	5,321.60	5,205.54	116.06	45.853		
4,100.00	4,044.10	10,452.32	7,078.92	18.75	116.86	-172.87	-3,709.18	-96.77	5,279.30	5,161.84	117.46	44.944		
4,200.00	4,142.38	10,449.88	7,078.92	19.22	116.78	-172.84	-3,709.17	-99.21	5,238.58	5,119.71	118.86	44.072		
4,300.00	4,240.65	10,447.45	7,078.92	19.70	116.71	-172.81	-3,709.17	-101.65	5,199.45	5,079.20	120.25	43.237		
4,400.00	4,338.93	10,445.01	7,078.92	20.18	116.63	-172.79	-3,709.16	-104.08	5,161.97	5,040.33	121.63	42.438		
4,500.00	4,437.21	10,442.57	7,078.91	20.65	116.55	-172.76	-3,709.15	-106.52	5,126.16	5,003.16	123.00	41.676		
4,600.00	4,535.49	10,440.13	7,078.91	21.13	116.48	-172.73	-3,709.15	-108.96	5,092.06	4,967.71	124.35	40.950		
4,700.00	4,633.76	10,437.69	7,078.91	21.61	116.40	-172.70	-3,709.14	-111.40	5,059.71	4,934.03	125.68	40.259		
4,800.00	4,732.04	10,435.25	7,078.91	22.08	116.32	-172.67	-3,709.14	-113.84	5,029.13	4,902.15	126.99	39.604		
4,900.00	4,830.32	10,432.81	7,078.90	22.56	116.25	-172.64	-3,709.13	-116.28	5,000.37	4,871.98	128.39	38.945		
5,000.00	4,928.60	10,430.37	7,078.90	23.04	116.17	-172.61	-3,709.12	-118.72	4,973.46	4,843.67	129.79	38.319		
5,100.00	5,026.87	10,427.94	7,078.90	23.51	116.09	-172.58	-3,709.12	-121.16	4,948.41	4,817.66	130.75	37.847		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	10,425.50	7,078.90	23.99	116.02	-172.55	-3,709.11	-123.59	4,925.27	4,793.33	131.94	37.330		
5,300.00	5,223.43	10,423.06	7,078.90	24.47	115.94	-172.52	-3,709.11	-126.03	4,904.06	4,770.96	133.10	36.846		
5,400.00	5,321.71	10,420.62	7,078.89	24.94	115.86	-172.49	-3,709.10	-128.47	4,884.80	4,750.59	134.21	36.396		
5,500.00	5,419.98	10,418.18	7,078.89	25.42	115.79	-172.47	-3,709.09	-130.91	4,867.52	4,732.23	135.29	35.979		
5,600.00	5,518.26	10,415.74	7,078.89	25.90	115.71	-172.44	-3,709.09	-133.35	4,852.24	4,715.91	136.32	35.594		
5,700.00	5,616.54	10,413.30	7,078.89	26.38	115.63	-172.41	-3,709.08	-135.79	4,838.97	4,701.66	137.31	35.241		
5,800.00	5,714.82	10,410.86	7,078.88	26.85	115.56	-172.38	-3,709.08	-138.23	4,827.74	4,689.49	138.25	34.921		
5,900.00	5,813.09	10,408.43	7,078.88	27.33	115.48	-172.35	-3,709.07	-140.67	4,818.56	4,679.42	139.14	34.631		
6,000.00	5,911.37	10,405.99	7,078.88	27.81	115.40	-172.32	-3,709.06	-143.10	4,811.44	4,671.46	139.98	34.373		
6,100.00	6,009.65	10,403.55	7,078.88	28.28	115.33	-172.29	-3,709.06	-145.54	4,806.38	4,665.62	140.76	34.145		
6,200.00	6,107.93	10,401.11	7,078.87	28.76	115.25	-172.26	-3,709.05	-147.98	4,803.41	4,661.91	141.49	33.948		
6,293.14	6,199.46	10,401.16	7,078.87	29.21	115.25	-172.24	-3,709.05	-150.25	4,802.50	4,660.31	142.20	33.774	CC, ES	
6,300.00	6,206.20	10,398.67	7,078.87	29.24	115.17	-172.23	-3,709.05	-150.42	4,802.51	4,660.34	142.17	33.781		
6,400.00	6,304.48	10,396.23	7,078.87	29.72	115.10	-172.20	-3,709.04	-152.86	4,803.69	4,660.91	142.79	33.643		
6,500.00	6,402.76	10,393.79	7,078.87	30.19	115.02	-172.17	-3,709.03	-155.30	4,806.95	4,663.61	143.35	33.534		
6,600.00	6,501.04	10,391.35	7,078.86	30.67	114.94	-172.15	-3,709.03	-157.74	4,812.29	4,668.44	143.85	33.454		
6,700.00	6,599.31	10,388.92	7,078.86	31.15	114.87	-172.12	-3,709.02	-160.17	4,819.70	4,675.40	144.29	33.402		
6,800.00	6,697.50	10,384.64	7,078.86	31.63	114.73	-150.67	-3,709.01	-164.45	4,829.12	4,684.50	144.62	33.391		
6,900.00	6,794.18	10,366.85	7,078.84	32.10	114.18	-123.64	-3,708.97	-182.24	4,840.14	4,695.67	144.47	33.503		
7,000.00	6,886.96	10,336.13	7,078.81	32.55	113.21	-110.67	-3,708.89	-215.18	4,852.28	4,708.42	143.86	33.730		
7,100.00	6,973.57	10,286.62	7,078.76	32.99	111.66	-103.15	-3,708.77	-262.47	4,864.93	4,722.32	142.61	34.113		
7,200.00	7,051.87	10,226.15	7,078.70	33.41	109.77	-98.06	-3,708.62	-322.94	4,877.38	4,736.36	141.03	34.585		
7,300.00	7,119.93	10,153.99	7,078.63	33.85	107.52	-94.33	-3,708.44	-395.10	4,888.87	4,749.75	139.12	35.141		
7,400.00	7,176.09	10,071.92	7,078.55	34.39	104.97	-91.55	-3,708.24	-477.17	4,898.65	4,761.64	137.02	35.752		
7,500.00	7,218.95	9,981.95	7,078.46	35.09	102.19	-89.56	-3,708.02	-567.14	4,906.05	4,771.22	134.84	36.384		
7,600.00	7,247.46	9,886.30	7,078.36	35.98	99.25	-88.34	-3,707.78	-662.79	4,910.53	4,777.84	132.69	37.009		
7,700.00	7,260.92	9,787.33	7,078.26	37.04	96.22	-87.85	-3,707.53	-761.76	4,911.72	4,781.08	130.64	37.598		
7,800.00	7,261.75	9,687.37	7,078.16	38.23	93.17	-87.86	-3,707.29	-861.72	4,910.08	4,781.33	128.75	38.136		
7,900.00	7,261.33	9,587.39	7,078.06	39.59	90.15	-87.86	-3,707.04	-961.70	4,908.17	4,781.11	127.05	38.630		
8,000.00	7,260.91	9,487.41	7,077.96	41.10	87.16	-87.87	-3,706.79	-1,061.68	4,906.25	4,780.72	125.53	39.084		
8,100.00	7,260.49	9,387.43	7,077.86	42.75	84.19	-87.87	-3,706.55	-1,161.66	4,904.33	4,780.17	124.16	39.499		
8,200.00	7,260.07	9,287.45	7,077.77	44.53	81.25	-87.87	-3,706.30	-1,261.64	4,902.42	4,779.48	122.94	39.876		
8,300.00	7,259.65	9,188.79	7,077.45	46.41	78.38	-87.87	-3,706.06	-1,360.30	4,900.51	4,778.61	121.90	40.202		
8,400.00	7,259.23	9,088.81	7,076.62	48.39	75.51	-87.87	-3,705.81	-1,460.27	4,898.62	4,777.69	120.93	40.509		
8,500.00	7,258.81	8,988.83	7,075.80	50.45	72.69	-87.86	-3,705.56	-1,560.25	4,896.73	4,776.66	120.07	40.781		
8,600.00	7,258.39	8,888.85	7,074.97	52.59	69.91	-87.86	-3,705.31	-1,660.23	4,894.84	4,775.51	119.33	41.019		
8,700.00	7,257.97	8,788.87	7,074.14	54.79	67.20	-87.85	-3,705.07	-1,760.21	4,892.95	4,774.26	118.70	41.223		
8,800.00	7,257.55	8,688.88	7,073.32	57.05	64.55	-87.85	-3,704.82	-1,860.18	4,891.06	4,772.90	118.16	41.392		
8,900.00	7,257.13	8,588.90	7,072.49	59.36	61.99	-87.84	-3,704.57	-1,960.16	4,889.17	4,771.44	117.74	41.525		
9,000.00	7,256.71	8,488.92	7,071.66	61.72	59.52	-87.83	-3,704.32	-2,060.14	4,887.29	4,769.86	117.42	41.622		
9,100.00	7,256.29	8,388.94	7,070.83	64.12	57.17	-87.83	-3,704.08	-2,160.11	4,885.40	4,768.18	117.22	41.678		
9,200.00	7,255.87	8,288.96	7,070.01	66.56	54.98	-87.82	-3,703.83	-2,260.09	4,883.51	4,766.38	117.13	41.693		
9,300.00	7,255.45	8,188.98	7,069.18	69.02	52.97	-87.82	-3,703.58	-2,360.07	4,881.62	4,764.45	117.17	41.662		
9,400.00	7,255.03	8,089.00	7,068.35	71.52	51.20	-87.81	-3,703.34	-2,460.05	4,879.73	4,762.37	117.36	41.581		
9,500.00	7,254.61	7,989.02	7,067.53	74.04	49.72	-87.81	-3,703.09	-2,560.02	4,877.84	4,760.15	117.69	41.445		
9,600.00	7,254.19	7,889.04	7,066.70	76.58	48.56	-87.80	-3,702.84	-2,660.00	4,875.95	4,757.75	118.21	41.250		
9,700.00	7,253.77	7,789.06	7,065.87	79.15	47.71	-87.79	-3,702.59	-2,759.98	4,874.06	4,755.15	118.91	40.989		
9,800.00	7,253.35	7,689.07	7,065.05	81.74	47.13	-87.79	-3,702.35	-2,859.96	4,872.17	4,752.34	119.83	40.658		
9,900.00	7,252.92	7,600.00	7,064.29	84.34	46.79	-87.78	-3,702.13	-2,949.03	4,870.30	4,749.17	121.14	40.205		
10,000.00	7,252.50	7,569.83	7,063.12	86.96	46.69	-87.77	-3,702.31	-2,979.17	4,869.36	4,746.00	123.36	39.473		
10,009.30	7,252.47	7,567.01	7,062.94	87.20	46.69	-87.77	-3,702.34	-2,981.98	4,869.34	4,745.78	123.57	39.407		
10,100.00	7,252.08	7,535.02	7,060.05	89.59	46.60	-87.74	-3,702.98	-3,013.84	4,869.85	4,744.34	125.51	38.800		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,500.00	7,055.13	92.24	46.52	-87.68	-3,704.15	-3,048.48	4,871.80	4,744.13	127.68	38.158		
10,300.00	7,251.24	7,472.62	7,050.01	94.90	46.45	-87.62	-3,705.41	-3,075.35	4,875.16	4,745.23	129.93	37.521		
10,400.00	7,250.82	7,450.00	7,044.94	97.57	46.40	-87.56	-3,706.68	-3,097.35	4,879.98	4,747.74	132.24	36.903		
10,500.00	7,250.40	7,422.82	7,037.86	100.25	46.34	-87.48	-3,708.48	-3,123.53	4,886.28	4,751.80	134.48	36.334		
10,600.00	7,249.98	7,400.00	7,031.08	102.93	46.29	-87.41	-3,710.21	-3,145.25	4,894.08	4,757.32	136.76	35.786		
10,700.00	7,249.56	7,368.36	7,020.45	105.63	46.23	-87.28	-3,712.96	-3,174.92	4,903.36	4,764.42	138.94	35.291		
10,800.00	7,249.14	7,342.38	7,010.67	108.34	46.18	-87.17	-3,715.50	-3,198.86	4,914.17	4,773.02	141.16	34.814		
10,900.00	7,248.72	7,317.29	7,000.33	111.05	46.12	-87.05	-3,718.20	-3,221.56	4,926.51	4,783.17	143.34	34.368		
11,000.00	7,248.30	7,300.00	6,992.71	113.77	46.08	-86.97	-3,720.19	-3,236.95	4,940.41	4,794.80	145.61	33.929		
11,100.00	7,247.88	7,269.88	6,978.49	116.50	46.02	-86.80	-3,723.92	-3,263.22	4,955.84	4,808.08	147.76	33.540		
11,200.00	7,247.46	7,250.00	6,968.45	119.23	45.97	-86.69	-3,726.57	-3,280.18	4,972.85	4,822.95	149.90	33.174		
11,300.00	7,247.04	7,226.24	6,955.79	121.97	45.92	-86.54	-3,729.91	-3,300.00	4,991.43	4,839.42	152.02	32.835		
11,400.00	7,246.62	7,200.00	6,940.98	124.72	45.85	-86.37	-3,733.82	-3,321.31	5,011.61	4,857.53	154.08	32.526		
11,500.00	7,246.20	7,183.10	6,931.01	127.46	45.81	-86.26	-3,736.47	-3,334.69	5,033.35	4,877.19	156.17	32.231		
11,600.00	7,245.78	7,167.66	6,921.60	130.22	45.77	-86.15	-3,738.96	-3,346.68	5,056.69	4,898.46	158.23	31.959		
11,700.00	7,245.36	7,150.00	6,910.49	132.98	45.72	-86.03	-3,741.91	-3,360.09	5,081.61	4,921.39	160.22	31.716		
11,800.00	7,244.94	7,135.01	6,900.79	135.74	45.68	-85.92	-3,744.49	-3,371.22	5,108.11	4,945.92	162.19	31.495		
11,900.00	7,244.52	7,121.76	6,892.01	138.50	45.64	-85.82	-3,746.83	-3,380.86	5,136.19	4,972.07	164.12	31.295		
12,000.00	7,244.10	7,100.00	6,877.16	141.27	45.57	-85.65	-3,750.78	-3,396.27	5,165.81	4,999.85	165.97	31.126		
12,100.00	7,243.68	7,100.00	6,877.16	144.04	45.57	-85.65	-3,750.78	-3,396.27	5,197.08	5,029.22	167.87	30.960		
12,200.00	7,243.26	7,072.59	6,857.76	146.82	45.49	-85.43	-3,755.96	-3,414.93	5,229.72	5,060.13	169.59	30.837		
12,300.00	7,242.84	7,050.00	6,841.20	149.60	45.42	-85.24	-3,760.38	-3,429.64	5,264.01	5,092.73	171.28	30.733		
12,400.00	7,242.42	7,050.00	6,841.20	152.38	45.42	-85.24	-3,760.38	-3,429.64	5,299.73	5,126.70	173.03	30.629		
12,500.00	7,242.00	7,035.01	6,829.94	155.16	45.36	-85.11	-3,763.39	-3,439.06	5,336.96	5,162.30	174.66	30.556		
12,600.00	7,241.58	7,035.01	6,829.94	157.95	45.36	-85.11	-3,763.39	-3,439.06	5,375.73	5,199.44	176.30	30.492		
12,700.00	7,241.16	7,000.00	6,802.83	160.74	45.24	-84.81	-3,770.65	-3,459.98	5,415.87	5,238.12	177.75	30.469		
12,800.00	7,240.74	7,000.00	6,802.83	163.53	45.24	-84.81	-3,770.65	-3,459.98	5,457.36	5,278.08	179.28	30.440		
12,900.00	7,240.32	7,000.00	6,802.83	166.32	45.24	-84.81	-3,770.65	-3,459.98	5,500.36	5,319.59	180.77	30.428 SF		
13,000.00	7,239.89	7,000.00	6,802.83	169.12	45.24	-84.81	-3,770.65	-3,459.98	5,544.83	5,362.63	182.19	30.434		
13,100.00	7,239.47	6,971.94	6,780.32	171.92	45.13	-84.56	-3,776.68	-3,475.61	5,590.31	5,406.82	183.48	30.467		
13,200.00	7,239.05	6,950.00	6,762.27	174.72	45.05	-84.35	-3,781.52	-3,487.11	5,637.38	5,452.65	184.74	30.515		
13,300.00	7,238.63	6,950.00	6,762.27	177.52	45.05	-84.35	-3,781.52	-3,487.11	5,685.57	5,499.55	186.02	30.564		
13,400.00	7,238.21	6,950.00	6,762.27	180.32	45.05	-84.35	-3,781.52	-3,487.11	5,735.10	5,547.85	187.25	30.627		
13,500.00	7,237.79	6,935.01	6,749.73	183.13	44.98	-84.21	-3,784.89	-3,494.59	5,785.87	5,597.48	188.39	30.712		
13,600.00	7,237.37	6,935.01	6,749.73	185.93	44.98	-84.21	-3,784.89	-3,494.59	5,837.85	5,648.32	189.53	30.801		
13,700.00	7,236.95	6,935.01	6,749.73	188.74	44.98	-84.21	-3,784.89	-3,494.59	5,891.06	5,700.44	190.62	30.904		
13,800.00	7,236.53	6,917.07	6,734.50	191.55	44.91	-84.04	-3,788.98	-3,503.14	5,945.30	5,753.67	191.62	31.026		
13,900.00	7,236.11	6,900.00	6,719.80	194.36	44.83	-83.88	-3,792.93	-3,510.86	6,000.78	5,808.20	192.58	31.160		
14,000.00	7,235.69	6,900.00	6,719.80	197.17	44.83	-83.88	-3,792.93	-3,510.86	6,057.25	5,863.70	193.54	31.296		
14,100.00	7,235.27	6,900.00	6,719.80	199.98	44.83	-83.88	-3,792.93	-3,510.86	6,114.83	5,920.36	194.46	31.444		
14,200.00	7,234.85	6,900.00	6,719.80	202.80	44.83	-83.88	-3,792.93	-3,510.86	6,173.49	5,978.14	195.34	31.603		
14,300.00	7,234.43	6,900.00	6,719.80	205.61	44.83	-83.88	-3,792.93	-3,510.86	6,233.20	6,037.02	196.18	31.772		
14,400.00	7,234.01	6,900.00	6,719.80	208.43	44.83	-83.88	-3,792.93	-3,510.86	6,293.94	6,096.95	196.98	31.952		
14,500.00	7,233.59	6,875.56	6,698.41	211.25	44.72	-83.64	-3,798.68	-3,521.20	6,355.29	6,157.58	197.71	32.145		
14,600.00	7,233.17	6,850.00	6,675.66	214.06	44.60	-83.39	-3,804.81	-3,531.09	6,418.07	6,219.69	198.38	32.352		
14,700.00	7,232.75	6,850.00	6,675.66	216.88	44.60	-83.39	-3,804.81	-3,531.09	6,481.39	6,282.30	199.09	32.556		
14,800.00	7,232.33	6,850.00	6,675.66	219.70	44.60	-83.39	-3,804.81	-3,531.09	6,545.62	6,345.86	199.75	32.769		
14,900.00	7,231.91	6,850.00	6,675.66	222.52	44.60	-83.39	-3,804.81	-3,531.09	6,610.73	6,410.35	200.39	32.990		
15,000.00	7,231.49	6,850.00	6,675.66	225.35	44.60	-83.39	-3,804.81	-3,531.09	6,676.72	6,475.72	200.99	33.219		
15,100.00	7,231.07	6,850.00	6,675.66	228.17	44.60	-83.39	-3,804.81	-3,531.09	6,743.53	6,541.97	201.56	33.456		
15,116.21	7,231.00	6,850.00	6,675.66	228.63	44.60	-83.39	-3,804.81	-3,531.09	6,754.44	6,552.79	201.65	33.495		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	67.00	0.00	3.28	-125.64	-4,550.80	-6,346.02	7,809.37				
100.00	100.00	33.00	100.00	0.18	3.33	-125.64	-4,550.80	-6,346.02	7,809.08	7,805.58	3.51	2,227.519	
200.00	200.00	133.00	200.00	0.61	4.38	-125.64	-4,550.80	-6,346.02	7,809.08	7,804.09	4.99	1,564.690	
300.00	300.00	233.00	300.00	1.05	7.18	-125.64	-4,550.80	-6,346.02	7,809.08	7,800.85	8.23	948.348	
400.00	400.00	333.00	400.00	1.49	10.41	-125.64	-4,550.80	-6,346.02	7,809.08	7,797.18	11.90	656.136	
500.00	500.00	433.00	500.00	1.93	13.77	-125.64	-4,550.80	-6,346.02	7,809.08	7,793.39	15.70	497.470	
600.00	599.98	532.98	599.98	2.37	17.18	-117.89	-4,550.80	-6,346.02	7,809.90	7,790.35	19.55	399.568	
700.00	699.84	632.84	699.84	2.81	20.61	-117.89	-4,550.80	-6,346.02	7,812.35	7,788.93	23.42	333.617	
800.00	799.45	732.45	799.45	3.26	24.05	-117.87	-4,550.80	-6,346.02	7,816.44	7,789.14	27.30	286.354	
900.00	898.70	831.70	898.70	3.70	27.49	-117.85	-4,550.80	-6,346.02	7,822.17	7,790.99	31.18	250.908	
1,000.00	997.47	930.47	997.47	4.15	30.91	-117.82	-4,550.80	-6,346.02	7,829.54	7,794.49	35.05	223.393	
1,100.00	1,095.78	1,028.78	1,095.78	4.60	34.33	-117.88	-4,550.80	-6,346.02	7,838.20	7,799.29	38.91	201.421	
1,200.00	1,194.05	1,127.05	1,194.05	5.05	37.74	-118.00	-4,550.80	-6,346.02	7,846.98	7,804.19	42.79	183.401	
1,300.00	1,292.33	1,225.33	1,292.33	5.50	41.16	-118.12	-4,550.80	-6,346.02	7,855.79	7,809.13	46.66	168.352	
1,400.00	1,390.61	1,323.61	1,390.61	5.96	44.58	-118.24	-4,550.80	-6,346.02	7,864.63	7,814.09	50.54	155.599	
1,500.00	1,488.89	1,421.89	1,488.89	6.43	48.00	-118.35	-4,550.80	-6,346.02	7,873.51	7,819.08	54.43	144.656	
1,600.00	1,587.16	1,520.16	1,587.16	6.89	51.43	-118.47	-4,550.80	-6,346.02	7,882.42	7,824.11	58.32	135.165	
1,700.00	1,685.44	1,618.44	1,685.44	7.36	54.85	-118.59	-4,550.80	-6,346.02	7,891.37	7,829.16	62.21	126.857	
1,800.00	1,783.72	1,716.72	1,783.72	7.83	58.28	-118.70	-4,550.80	-6,346.02	7,900.35	7,834.25	66.10	119.524	
1,900.00	1,882.00	1,815.00	1,882.00	8.30	61.70	-118.82	-4,550.80	-6,346.02	7,909.36	7,839.37	69.99	113.004	
2,000.00	1,980.27	1,913.27	1,980.27	8.77	65.13	-118.93	-4,550.80	-6,346.02	7,918.40	7,844.51	73.89	107.170	
2,100.00	2,078.55	2,011.55	2,078.55	9.25	68.56	-119.05	-4,550.80	-6,346.02	7,927.48	7,849.70	77.78	101.920	
2,200.00	2,176.83	2,109.83	2,176.83	9.72	71.98	-119.16	-4,550.80	-6,346.02	7,936.59	7,854.91	81.68	97.169	
2,300.00	2,275.11	2,208.11	2,275.11	10.19	75.41	-119.28	-4,550.80	-6,346.02	7,945.73	7,860.15	85.58	92.851	
2,400.00	2,373.38	2,306.38	2,373.38	10.66	78.84	-119.39	-4,550.80	-6,346.02	7,954.90	7,865.43	89.47	88.908	
2,500.00	2,471.66	2,404.66	2,471.66	11.14	82.27	-119.51	-4,550.80	-6,346.02	7,964.11	7,870.74	93.37	85.295	
2,600.00	2,569.94	2,502.94	2,569.94	11.61	85.70	-119.62	-4,550.80	-6,346.02	7,973.35	7,876.08	97.27	81.971	
2,700.00	2,668.22	2,601.22	2,668.22	12.09	89.12	-119.74	-4,550.80	-6,346.02	7,982.62	7,881.45	101.17	78.903	
2,800.00	2,766.49	2,700.51	2,766.49	12.56	92.59	-119.85	-4,550.80	-6,346.02	7,991.92	7,886.82	105.10	76.038	
2,900.00	2,864.77	2,802.23	2,864.77	13.04	96.14	-119.96	-4,550.80	-6,346.02	8,001.26	7,892.13	109.12	73.322	
3,000.00	2,963.05	2,903.95	2,963.05	13.51	99.69	-120.08	-4,550.80	-6,346.02	8,010.62	7,897.48	113.15	70.799	
3,100.00	3,061.33	3,005.67	3,061.33	13.99	103.23	-120.19	-4,550.80	-6,346.02	8,020.02	7,902.85	117.17	68.450	
3,200.00	3,159.60	3,107.40	3,159.60	14.46	106.78	-120.30	-4,550.80	-6,346.02	8,029.45	7,908.26	121.19	66.257	
3,300.00	3,257.88	3,209.12	3,257.88	14.94	110.33	-120.41	-4,550.80	-6,346.02	8,038.91	7,913.70	125.21	64.204	
3,400.00	3,356.16	3,289.16	3,356.16	15.41	113.13	-120.53	-4,550.80	-6,346.02	8,048.40	7,919.93	128.47	62.647	
3,500.00	3,454.43	3,387.43	3,454.43	15.89	116.56	-120.64	-4,550.80	-6,346.02	8,057.93	7,925.55	132.37	60.872	
3,600.00	3,552.71	3,485.71	3,552.71	16.36	119.99	-120.75	-4,550.80	-6,346.02	8,067.48	7,931.21	136.28	59.200	
3,700.00	3,650.99	3,583.99	3,650.99	16.84	123.42	-120.86	-4,550.80	-6,346.02	8,077.07	7,936.89	140.18	57.621	
3,800.00	3,749.27	3,682.27	3,749.27	17.32	126.85	-120.97	-4,550.80	-6,346.02	8,086.68	7,942.61	144.08	56.127	
3,900.00	3,847.54	3,780.54	3,847.54	17.79	130.27	-121.08	-4,550.80	-6,346.02	8,096.33	7,948.35	147.98	54.712	
4,000.00	3,945.82	3,878.82	3,945.82	18.27	133.70	-121.19	-4,550.80	-6,346.02	8,106.01	7,954.13	151.88	53.371	
4,100.00	4,044.10	3,977.10	4,044.10	18.75	137.13	-121.30	-4,550.80	-6,346.02	8,115.72	7,959.93	155.78	52.096	
4,200.00	4,142.38	4,075.38	4,142.38	19.22	140.56	-121.41	-4,550.80	-6,346.02	8,125.46	7,965.77	159.69	50.884	
4,300.00	4,240.65	4,173.65	4,240.65	19.70	143.99	-121.52	-4,550.80	-6,346.02	8,135.23	7,971.64	163.59	49.730	
4,400.00	4,338.93	4,271.93	4,338.93	20.18	147.42	-121.63	-4,550.80	-6,346.02	8,145.03	7,977.54	167.49	48.630	
4,500.00	4,437.21	4,370.21	4,437.21	20.65	150.85	-121.74	-4,550.80	-6,346.02	8,154.85	7,983.46	171.39	47.580	
4,600.00	4,535.49	4,468.49	4,535.49	21.13	154.28	-121.85	-4,550.80	-6,346.02	8,164.71	7,989.42	175.29	46.577	
4,700.00	4,633.76	4,566.76	4,633.76	21.61	157.71	-121.96	-4,550.80	-6,346.02	8,174.60	7,995.41	179.20	45.618	
4,800.00	4,732.04	4,665.04	4,732.04	22.08	161.14	-122.07	-4,550.80	-6,346.02	8,184.52	8,001.43	183.10	44.700	
4,900.00	4,830.32	4,763.32	4,830.32	22.56	164.57	-122.17	-4,550.80	-6,346.02	8,194.47	8,007.47	187.00	43.821	
5,000.00	4,928.60	4,861.60	4,928.60	23.04	168.01	-122.28	-4,550.80	-6,346.02	8,204.45	8,013.55	190.90	42.977	
5,100.00	5,026.87	4,959.87	5,026.87	23.51	171.44	-122.39	-4,550.80	-6,346.02	8,214.46	8,019.65	194.80	42.168	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,058.15	5,125.15	23.99	174.87	-122.50	-4,550.80	-6,346.02	8,224.50	8,025.79	198.71	41.390		
5,300.00	5,223.43	5,156.43	5,223.43	24.47	178.30	-122.60	-4,550.80	-6,346.02	8,234.56	8,031.95	202.61	40.643		
5,400.00	5,321.71	5,254.71	5,321.71	24.94	181.73	-122.71	-4,550.80	-6,346.02	8,244.66	8,038.15	206.51	39.924		
5,500.00	5,419.98	5,352.98	5,419.98	25.42	185.16	-122.82	-4,550.80	-6,346.02	8,254.78	8,044.37	210.41	39.231		
5,600.00	5,518.26	5,451.26	5,518.26	25.90	188.59	-122.92	-4,550.80	-6,346.02	8,264.94	8,050.62	214.32	38.564		
5,700.00	5,616.54	5,549.54	5,616.54	26.38	192.02	-123.03	-4,550.80	-6,346.02	8,275.12	8,056.90	218.22	37.921		
5,800.00	5,714.82	5,647.82	5,714.82	26.85	195.45	-123.14	-4,550.80	-6,346.02	8,285.33	8,063.21	222.12	37.301		
5,900.00	5,813.09	5,746.09	5,813.09	27.33	198.88	-123.24	-4,550.80	-6,346.02	8,295.57	8,069.55	226.02	36.703		
6,000.00	5,911.37	5,844.37	5,911.37	27.81	202.31	-123.35	-4,550.80	-6,346.02	8,305.84	8,075.91	229.92	36.124		
6,100.00	6,009.65	5,942.65	6,009.65	28.28	205.74	-123.45	-4,550.80	-6,346.02	8,316.13	8,082.31	233.83	35.566		
6,200.00	6,107.93	6,040.93	6,107.93	28.76	209.17	-123.56	-4,550.80	-6,346.02	8,326.46	8,088.73	237.73	35.025		
6,300.00	6,206.20	6,139.20	6,206.20	29.24	212.60	-123.66	-4,550.80	-6,346.02	8,336.81	8,095.18	241.63	34.502		
6,400.00	6,304.48	6,237.48	6,304.48	29.72	216.03	-123.77	-4,550.80	-6,346.02	8,347.19	8,101.66	245.53	33.996		
6,500.00	6,402.76	6,335.76	6,402.76	30.19	219.46	-123.87	-4,550.80	-6,346.02	8,357.60	8,108.17	249.43	33.506		
6,600.00	6,501.04	6,434.04	6,501.04	30.67	222.89	-123.97	-4,550.80	-6,346.02	8,368.04	8,114.70	253.34	33.031		
6,700.00	6,599.31	6,532.31	6,599.31	31.15	226.32	-124.08	-4,550.80	-6,346.02	8,378.50	8,121.27	257.24	32.571		
6,800.00	6,697.50	6,630.50	6,697.50	31.63	229.75	-103.01	-4,550.80	-6,346.02	8,387.61	8,126.47	261.14	32.119		
6,900.00	6,794.18	6,727.18	6,794.18	32.10	233.12	-77.42	-4,550.80	-6,346.02	8,386.45	8,121.46	264.99	31.648		
7,000.00	6,886.96	6,819.96	6,886.96	32.55	236.36	-66.91	-4,550.80	-6,346.02	8,373.60	8,104.89	268.70	31.163		
7,100.00	6,973.57	6,906.57	6,973.57	32.99	239.39	-62.83	-4,550.80	-6,346.02	8,349.47	8,077.26	272.20	30.674		
7,200.00	7,051.87	6,984.87	7,051.87	33.41	242.12	-62.10	-4,550.80	-6,346.02	8,314.78	8,039.36	275.42	30.189		
7,300.00	7,119.93	7,052.93	7,119.93	33.85	244.49	-63.64	-4,550.80	-6,346.02	8,270.54	7,992.23	278.31	29.717		
7,400.00	7,176.09	7,109.09	7,176.09	34.39	246.46	-67.03	-4,550.80	-6,346.02	8,217.96	7,937.11	280.84	29.262		
7,500.00	7,218.95	7,151.95	7,218.95	35.09	247.95	-72.11	-4,550.80	-6,346.02	8,158.43	7,875.46	282.97	28.831		
7,600.00	7,247.46	7,180.46	7,247.46	35.98	248.95	-78.76	-4,550.80	-6,346.02	8,093.52	7,808.83	284.69	28.430		
7,700.00	7,260.92	7,206.08	7,260.92	37.04	249.84	-86.74	-4,550.80	-6,346.02	8,024.85	7,738.48	286.37	28.023		
7,800.00	7,261.75	7,205.25	7,261.75	38.23	249.81	-90.24	-4,550.80	-6,346.02	7,954.43	7,667.23	287.20	27.697		
7,900.00	7,261.33	7,205.67	7,261.33	39.59	249.83	-90.23	-4,550.80	-6,346.02	7,884.47	7,596.29	288.17	27.360		
8,000.00	7,260.91	7,206.09	7,260.91	41.10	249.84	-90.23	-4,550.80	-6,346.02	7,815.16	7,525.89	289.26	27.018		
8,100.00	7,260.49	7,206.51	7,260.49	42.75	249.86	-90.23	-4,550.80	-6,346.02	7,746.52	7,456.06	290.46	26.670		
8,200.00	7,260.07	7,206.93	7,260.07	44.53	249.87	-90.22	-4,550.80	-6,346.02	7,678.56	7,386.81	291.76	26.319		
8,300.00	7,259.65	7,207.35	7,259.65	46.41	249.89	-90.22	-4,550.80	-6,346.02	7,611.32	7,318.16	293.15	25.964		
8,400.00	7,259.23	7,207.77	7,259.23	48.39	249.90	-90.21	-4,550.80	-6,346.02	7,544.80	7,250.15	294.65	25.606		
8,500.00	7,258.81	7,208.19	7,258.81	50.45	249.91	-90.21	-4,550.80	-6,346.02	7,479.03	7,182.79	296.24	25.246		
8,600.00	7,258.39	7,208.61	7,258.39	52.59	249.93	-90.20	-4,550.80	-6,346.02	7,414.02	7,116.10	297.92	24.886		
8,700.00	7,257.97	7,209.03	7,257.97	54.79	249.94	-90.20	-4,550.80	-6,346.02	7,349.80	7,050.11	299.69	24.525		
8,800.00	7,257.55	7,209.45	7,257.55	57.05	249.96	-90.20	-4,550.80	-6,346.02	7,286.38	6,984.84	301.54	24.164		
8,900.00	7,257.13	7,209.87	7,257.13	59.36	249.97	-90.19	-4,550.80	-6,346.02	7,223.79	6,920.33	303.47	23.804		
9,000.00	7,256.71	7,189.71	7,256.71	61.72	249.27	-90.19	-4,550.80	-6,346.02	7,162.05	6,857.30	304.75	23.501		
9,100.00	7,256.29	7,189.29	7,256.29	64.12	249.25	-90.18	-4,550.80	-6,346.02	7,101.19	6,794.38	306.81	23.146		
9,200.00	7,255.87	7,188.87	7,255.87	66.56	249.24	-90.18	-4,550.80	-6,346.02	7,041.21	6,732.28	308.93	22.792		
9,300.00	7,255.45	7,188.45	7,255.45	69.02	249.23	-90.17	-4,550.80	-6,346.02	6,982.16	6,671.04	311.12	22.442		
9,400.00	7,255.03	7,188.03	7,255.03	71.52	249.21	-90.17	-4,550.80	-6,346.02	6,924.04	6,610.66	313.38	22.095		
9,500.00	7,254.61	7,187.61	7,254.61	74.04	249.20	-90.17	-4,550.80	-6,346.02	6,866.89	6,551.19	315.69	21.752		
9,600.00	7,254.19	7,187.19	7,254.19	76.58	249.18	-90.16	-4,550.80	-6,346.02	6,810.73	6,492.65	318.08	21.412		
9,700.00	7,253.77	7,186.77	7,253.77	79.15	249.17	-90.16	-4,550.80	-6,346.02	6,755.58	6,435.06	320.51	21.077		
9,800.00	7,253.35	7,186.35	7,253.35	81.74	249.15	-90.15	-4,550.80	-6,346.02	6,701.47	6,378.45	323.01	20.747		
9,900.00	7,252.92	7,185.92	7,252.92	84.34	249.14	-90.15	-4,550.80	-6,346.02	6,648.42	6,322.86	325.56	20.421		
10,000.00	7,252.50	7,185.50	7,252.50	86.96	249.12	-90.14	-4,550.80	-6,346.02	6,596.46	6,268.30	328.16	20.101		
10,100.00	7,252.08	7,185.08	7,252.08	89.59	249.11	-90.14	-4,550.80	-6,346.02	6,545.62	6,214.80	330.81	19.786		
10,200.00	7,251.66	7,184.66	7,251.66	92.24	249.09	-90.14	-4,550.80	-6,346.02	6,495.92	6,162.40	333.51	19.477		
10,300.00	7,251.24	7,184.24	7,251.24	94.90	249.08	-90.13	-4,550.80	-6,346.02	6,447.39	6,111.13	336.26	19.174		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,183.82	7,250.82	97.57	249.06	-90.13	-4,550.80	-6,346.02	6,400.05	6,061.00	339.05	18.877		
10,500.00	7,250.40	7,183.40	7,250.40	100.25	249.05	-90.12	-4,550.80	-6,346.02	6,353.93	6,012.06	341.87	18.586		
10,600.00	7,249.98	7,182.98	7,249.98	102.93	249.03	-90.12	-4,550.80	-6,346.02	6,309.06	5,964.32	344.74	18.301		
10,700.00	7,249.56	7,182.56	7,249.56	105.63	249.02	-90.11	-4,550.80	-6,346.02	6,265.47	5,917.82	347.65	18.023		
10,800.00	7,249.14	7,182.14	7,249.14	108.34	249.01	-90.11	-4,550.80	-6,346.02	6,223.18	5,872.59	350.58	17.751		
10,900.00	7,248.72	7,181.72	7,248.72	111.05	248.99	-90.11	-4,550.80	-6,346.02	6,182.21	5,828.66	353.55	17.486		
11,000.00	7,248.30	7,181.30	7,248.30	113.77	248.98	-90.10	-4,550.80	-6,346.02	6,142.60	5,786.05	356.55	17.228		
11,100.00	7,247.88	7,180.88	7,247.88	116.50	248.96	-90.10	-4,550.80	-6,346.02	6,104.37	5,744.80	359.57	16.977		
11,200.00	7,247.46	7,180.46	7,247.46	119.23	248.95	-90.09	-4,550.80	-6,346.02	6,067.55	5,704.94	362.62	16.733		
11,300.00	7,247.04	7,180.04	7,247.04	121.97	248.93	-90.09	-4,550.80	-6,346.02	6,032.17	5,666.48	365.68	16.496		
11,400.00	7,246.62	7,179.62	7,246.62	124.72	248.92	-90.08	-4,550.80	-6,346.02	5,998.24	5,629.47	368.76	16.266		
11,500.00	7,246.20	7,179.20	7,246.20	127.46	248.90	-90.08	-4,550.80	-6,346.02	5,965.79	5,593.93	371.86	16.043		
11,600.00	7,245.78	7,178.78	7,245.78	130.22	248.89	-90.08	-4,550.80	-6,346.02	5,934.85	5,559.89	374.97	15.828		
11,700.00	7,245.36	7,178.36	7,245.36	132.98	248.87	-90.07	-4,550.80	-6,346.02	5,905.45	5,527.37	378.08	15.619		
11,800.00	7,244.94	7,177.94	7,244.94	135.74	248.86	-90.07	-4,550.80	-6,346.02	5,877.60	5,496.39	381.20	15.419		
11,900.00	7,244.52	7,177.52	7,244.52	138.50	248.84	-90.06	-4,550.80	-6,346.02	5,851.32	5,467.00	384.32	15.225		
12,000.00	7,244.10	7,177.10	7,244.10	141.27	248.83	-90.06	-4,550.80	-6,346.02	5,826.64	5,439.20	387.44	15.039		
12,100.00	7,243.68	7,176.68	7,243.68	144.04	248.81	-90.05	-4,550.80	-6,346.02	5,803.59	5,413.03	390.55	14.860		
12,200.00	7,243.26	7,176.26	7,243.26	146.82	248.80	-90.05	-4,550.80	-6,346.02	5,782.16	5,388.51	393.65	14.688		
12,300.00	7,242.84	7,175.84	7,242.84	149.60	248.79	-90.05	-4,550.80	-6,346.02	5,762.40	5,365.66	396.74	14.524		
12,400.00	7,242.42	7,175.42	7,242.42	152.38	248.77	-90.04	-4,550.80	-6,346.02	5,744.31	5,344.49	399.82	14.367		
12,500.00	7,242.00	7,175.00	7,242.00	155.16	248.76	-90.04	-4,550.80	-6,346.02	5,727.90	5,325.04	402.87	14.218		
12,600.00	7,241.58	7,174.58	7,241.58	157.95	248.74	-90.03	-4,550.80	-6,346.02	5,713.20	5,307.31	405.90	14.076		
12,700.00	7,241.16	7,174.16	7,241.16	160.74	248.73	-90.03	-4,550.80	-6,346.02	5,700.22	5,291.33	408.90	13.941		
12,800.00	7,240.74	7,173.74	7,240.74	163.53	248.71	-90.03	-4,550.80	-6,346.02	5,688.97	5,277.10	411.87	13.813		
12,900.00	7,240.32	7,173.32	7,240.32	166.32	248.70	-90.02	-4,550.80	-6,346.02	5,679.45	5,264.65	414.80	13.692		
13,000.00	7,239.89	7,172.89	7,239.89	169.12	248.68	-90.02	-4,550.80	-6,346.02	5,671.68	5,253.98	417.70	13.578		
13,100.00	7,239.47	7,172.47	7,239.47	171.92	248.67	-90.01	-4,550.80	-6,346.02	5,665.67	5,245.11	420.56	13.472		
13,200.00	7,239.05	7,172.05	7,239.05	174.72	248.65	-90.01	-4,550.80	-6,346.02	5,661.41	5,238.04	423.37	13.372		
13,300.00	7,238.63	7,171.63	7,238.63	177.52	248.64	-90.00	-4,550.80	-6,346.02	5,658.92	5,232.79	426.14	13.280		
13,390.92	7,238.25	7,171.25	7,238.25	180.07	248.63	-90.00	-4,550.80	-6,346.02	5,658.19	5,229.59	428.61	13.201 CC		
13,400.00	7,238.21	7,171.21	7,238.21	180.32	248.62	-90.00	-4,550.80	-6,346.02	5,658.20	5,229.35	428.85	13.194		
13,500.00	7,237.79	7,170.79	7,237.79	183.13	248.61	-90.00	-4,550.80	-6,346.02	5,659.25	5,227.73	431.51	13.115 ES		
13,600.00	7,237.37	7,170.37	7,237.37	185.93	248.59	-89.99	-4,550.80	-6,346.02	5,662.06	5,227.93	434.12	13.043		
13,700.00	7,236.95	7,169.95	7,236.95	188.74	248.58	-89.99	-4,550.80	-6,346.02	5,666.63	5,229.96	436.67	12.977		
13,800.00	7,236.53	7,169.53	7,236.53	191.55	248.57	-89.98	-4,550.80	-6,346.02	5,672.96	5,233.80	439.16	12.918		
13,900.00	7,236.11	7,169.11	7,236.11	194.36	248.55	-89.98	-4,550.80	-6,346.02	5,681.05	5,239.46	441.59	12.865		
14,000.00	7,235.69	7,168.69	7,235.69	197.17	248.54	-89.97	-4,550.80	-6,346.02	5,690.88	5,246.93	443.96	12.819		
14,100.00	7,235.27	7,168.27	7,235.27	199.98	248.52	-89.97	-4,550.80	-6,346.02	5,702.45	5,256.20	446.25	12.778		
14,200.00	7,234.85	7,167.85	7,234.85	202.80	248.51	-89.97	-4,550.80	-6,346.02	5,715.75	5,267.26	448.49	12.745		
14,300.00	7,234.43	7,167.43	7,234.43	205.61	248.49	-89.96	-4,550.80	-6,346.02	5,730.76	5,280.11	450.65	12.717		
14,400.00	7,234.01	7,167.01	7,234.01	208.43	248.48	-89.96	-4,550.80	-6,346.02	5,747.47	5,294.72	452.75	12.695		
14,500.00	7,233.59	7,166.59	7,233.59	211.25	248.46	-89.95	-4,550.80	-6,346.02	5,765.86	5,311.10	454.77	12.679		
14,600.00	7,233.17	7,166.17	7,233.17	214.06	248.45	-89.95	-4,550.80	-6,346.02	5,785.93	5,329.21	456.72	12.668		
14,700.00	7,232.75	7,165.75	7,232.75	216.88	248.43	-89.94	-4,550.80	-6,346.02	5,807.65	5,349.05	458.61	12.664 SF		
14,800.00	7,232.33	7,165.33	7,232.33	219.70	248.42	-89.94	-4,550.80	-6,346.02	5,831.01	5,370.59	460.42	12.665		
14,900.00	7,231.91	7,164.91	7,231.91	222.52	248.40	-89.94	-4,550.80	-6,346.02	5,855.98	5,393.82	462.16	12.671		
15,000.00	7,231.49	7,164.49	7,231.49	225.35	248.39	-89.93	-4,550.80	-6,346.02	5,882.54	5,418.71	463.83	12.683		
15,100.00	7,231.07	7,164.07	7,231.07	228.17	248.37	-89.93	-4,550.80	-6,346.02	5,910.67	5,445.25	465.43	12.699		
15,116.21	7,231.00	7,164.00	7,231.00	228.63	248.37	-89.93	-4,550.80	-6,346.02	5,915.38	5,449.70	465.68	12.703		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	20.00	0.00	3.28	-70.53	2,248.23	-6,358.46	6,744.25				
100.00	100.00	80.00	100.00	0.18	3.56	-70.53	2,248.23	-6,358.46	6,744.22	6,740.48	3.74	1,803.073	
200.00	200.00	180.00	200.00	0.61	5.60	-70.53	2,248.23	-6,358.46	6,744.22	6,738.01	6.21	1,085.362	
300.00	300.00	280.00	300.00	1.05	8.67	-70.53	2,248.23	-6,358.46	6,744.22	6,734.49	9.73	693.388	
400.00	400.00	380.00	400.00	1.49	11.98	-70.53	2,248.23	-6,358.46	6,744.22	6,730.75	13.47	500.686	
500.00	500.00	480.00	500.00	1.93	15.37	-70.53	2,248.23	-6,358.46	6,744.22	6,726.92	17.30	389.928	
600.00	599.98	579.98	599.98	2.37	18.79	-62.81	2,248.23	-6,358.46	6,743.42	6,722.26	21.16	318.706	
700.00	699.84	679.84	699.84	2.81	22.23	-62.89	2,248.23	-6,358.46	6,741.03	6,715.99	25.04	269.240	
800.00	799.45	779.45	799.45	3.26	25.68	-63.03	2,248.23	-6,358.46	6,737.06	6,708.14	28.92	232.953	
900.00	898.70	878.70	898.70	3.70	29.12	-63.22	2,248.23	-6,358.46	6,731.51	6,698.71	32.80	205.225	
1,000.00	997.47	977.47	997.47	4.15	32.54	-63.46	2,248.23	-6,358.46	6,724.42	6,687.75	36.67	183.360	
1,100.00	1,095.78	1,075.78	1,095.78	4.60	35.96	-63.65	2,248.23	-6,358.46	6,716.17	6,675.63	40.54	165.673	
1,200.00	1,194.05	1,174.05	1,194.05	5.05	39.38	-63.79	2,248.23	-6,358.46	6,707.87	6,663.46	44.41	151.048	
1,300.00	1,292.33	1,272.33	1,292.33	5.50	42.80	-63.93	2,248.23	-6,358.46	6,699.61	6,651.33	48.28	138.752	
1,400.00	1,390.61	1,370.61	1,390.61	5.96	46.22	-64.07	2,248.23	-6,358.46	6,691.40	6,639.23	52.17	128.273	
1,500.00	1,488.89	1,468.89	1,488.89	6.43	49.64	-64.21	2,248.23	-6,358.46	6,683.22	6,627.17	56.05	119.239	
1,600.00	1,587.16	1,567.16	1,587.16	6.89	53.07	-64.35	2,248.23	-6,358.46	6,675.09	6,615.15	59.94	111.371	
1,700.00	1,685.44	1,665.44	1,685.44	7.36	56.49	-64.49	2,248.23	-6,358.46	6,666.99	6,603.17	63.82	104.458	
1,800.00	1,783.72	1,763.72	1,783.72	7.83	59.92	-64.63	2,248.23	-6,358.46	6,658.94	6,591.23	67.72	98.337	
1,900.00	1,882.00	1,862.00	1,882.00	8.30	63.34	-64.77	2,248.23	-6,358.46	6,650.93	6,579.32	71.61	92.880	
2,000.00	1,980.27	1,960.27	1,980.27	8.77	66.77	-64.91	2,248.23	-6,358.46	6,642.96	6,567.46	75.50	87.985	
2,100.00	2,078.55	2,058.55	2,078.55	9.25	70.20	-65.06	2,248.23	-6,358.46	6,635.04	6,555.64	79.40	83.569	
2,200.00	2,176.83	2,156.83	2,176.83	9.72	73.62	-65.20	2,248.23	-6,358.46	6,627.15	6,543.86	83.29	79.565	
2,300.00	2,275.11	2,255.11	2,275.11	10.19	77.05	-65.34	2,248.23	-6,358.46	6,619.31	6,532.12	87.19	75.919	
2,400.00	2,373.38	2,353.38	2,373.38	10.66	80.48	-65.49	2,248.23	-6,358.46	6,611.51	6,520.42	91.09	72.585	
2,500.00	2,471.66	2,451.66	2,471.66	11.14	83.91	-65.63	2,248.23	-6,358.46	6,603.75	6,508.77	94.98	69.524	
2,600.00	2,569.94	2,549.94	2,569.94	11.61	87.33	-65.77	2,248.23	-6,358.46	6,596.04	6,497.15	98.88	66.705	
2,700.00	2,668.22	2,648.22	2,668.22	12.09	90.76	-65.92	2,248.23	-6,358.46	6,588.37	6,485.58	102.78	64.100	
2,800.00	2,766.49	2,746.49	2,766.49	12.56	94.19	-66.06	2,248.23	-6,358.46	6,580.74	6,474.05	106.68	61.685	
2,900.00	2,864.77	2,844.77	2,864.77	13.04	97.62	-66.21	2,248.23	-6,358.46	6,573.15	6,462.57	110.58	59.441	
3,000.00	2,963.05	2,943.05	2,963.05	13.51	101.05	-66.35	2,248.23	-6,358.46	6,565.61	6,451.13	114.48	57.350	
3,100.00	3,061.33	3,041.33	3,061.33	13.99	104.48	-66.50	2,248.23	-6,358.46	6,558.11	6,439.73	118.39	55.396	
3,200.00	3,159.60	3,139.60	3,159.60	14.46	107.91	-66.65	2,248.23	-6,358.46	6,550.66	6,428.37	122.29	53.568	
3,300.00	3,257.88	3,237.88	3,257.88	14.94	111.34	-66.79	2,248.23	-6,358.46	6,543.24	6,417.05	126.19	51.853	
3,400.00	3,356.16	3,336.16	3,356.16	15.41	114.77	-66.94	2,248.23	-6,358.46	6,535.88	6,405.78	130.09	50.241	
3,500.00	3,454.43	3,434.43	3,454.43	15.89	118.20	-67.09	2,248.23	-6,358.46	6,528.55	6,394.56	133.99	48.723	
3,600.00	3,552.71	3,532.71	3,552.71	16.36	121.63	-67.23	2,248.23	-6,358.46	6,521.27	6,383.38	137.90	47.291	
3,700.00	3,650.99	3,630.99	3,650.99	16.84	125.06	-67.38	2,248.23	-6,358.46	6,514.04	6,372.24	141.80	45.939	
3,800.00	3,749.27	3,729.27	3,749.27	17.32	128.49	-67.53	2,248.23	-6,358.46	6,506.85	6,361.14	145.70	44.659	
3,900.00	3,847.54	3,827.54	3,847.54	17.79	131.92	-67.68	2,248.23	-6,358.46	6,499.70	6,350.09	149.61	43.446	
4,000.00	3,945.82	3,925.82	3,945.82	18.27	135.34	-67.83	2,248.23	-6,358.46	6,492.60	6,339.09	153.51	42.295	
4,100.00	4,044.10	4,024.10	4,044.10	18.75	138.77	-67.98	2,248.23	-6,358.46	6,485.54	6,328.13	157.41	41.201	
4,200.00	4,142.38	4,122.38	4,142.38	19.22	142.20	-68.12	2,248.23	-6,358.46	6,478.53	6,317.21	161.32	40.160	
4,300.00	4,240.65	4,220.65	4,240.65	19.70	145.63	-68.27	2,248.23	-6,358.46	6,471.56	6,306.34	165.22	39.169	
4,400.00	4,338.93	4,318.93	4,338.93	20.18	149.06	-68.42	2,248.23	-6,358.46	6,464.64	6,295.52	169.13	38.224	
4,500.00	4,437.21	4,417.21	4,437.21	20.65	152.49	-68.57	2,248.23	-6,358.46	6,457.76	6,284.73	173.03	37.322	
4,600.00	4,535.49	4,515.49	4,535.49	21.13	155.92	-68.73	2,248.23	-6,358.46	6,450.93	6,274.00	176.93	36.459	
4,700.00	4,633.76	4,613.76	4,633.76	21.61	159.36	-68.88	2,248.23	-6,358.46	6,444.15	6,263.31	180.84	35.635	
4,800.00	4,732.04	4,712.04	4,732.04	22.08	162.79	-69.03	2,248.23	-6,358.46	6,437.41	6,252.67	184.74	34.845	
4,900.00	4,830.32	4,810.32	4,830.32	22.56	166.22	-69.18	2,248.23	-6,358.46	6,430.72	6,242.07	188.65	34.088	
5,000.00	4,928.60	4,908.60	4,928.60	23.04	169.65	-69.33	2,248.23	-6,358.46	6,424.07	6,231.52	192.55	33.362	
5,100.00	5,026.87	5,006.87	5,026.87	23.51	173.08	-69.48	2,248.23	-6,358.46	6,417.47	6,221.01	196.46	32.666	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,105.15	5,125.15	23.99	176.51	-69.63	2,248.23	-6,358.46	6,410.92	6,210.55	200.37	31.996		
5,300.00	5,223.43	5,203.43	5,223.43	24.47	179.94	-69.79	2,248.23	-6,358.46	6,404.41	6,200.14	204.27	31.353		
5,400.00	5,321.71	5,301.71	5,321.71	24.94	183.37	-69.94	2,248.23	-6,358.46	6,397.95	6,189.78	208.18	30.733		
5,500.00	5,419.98	5,400.02	5,419.98	25.42	186.80	-70.09	2,248.23	-6,358.46	6,391.54	6,179.46	212.08	30.137		
5,600.00	5,518.26	5,501.74	5,518.26	25.90	190.35	-70.25	2,248.23	-6,358.46	6,385.17	6,169.06	216.11	29.546		
5,700.00	5,616.54	5,603.46	5,616.54	26.38	193.90	-70.40	2,248.23	-6,358.46	6,378.85	6,158.72	220.14	28.977		
5,800.00	5,714.82	5,705.18	5,714.82	26.85	197.45	-70.56	2,248.23	-6,358.46	6,372.58	6,148.42	224.16	28.428		
5,900.00	5,813.09	5,806.91	5,813.09	27.33	201.00	-70.71	2,248.23	-6,358.46	6,366.36	6,138.17	228.19	27.899		
6,000.00	5,911.37	5,908.63	5,911.37	27.81	204.55	-70.86	2,248.23	-6,358.46	6,360.18	6,127.97	232.22	27.389		
6,100.00	6,009.65	5,989.65	6,009.65	28.28	207.38	-71.02	2,248.23	-6,358.46	6,354.05	6,118.53	235.52	26.979		
6,200.00	6,107.93	6,087.93	6,107.93	28.76	210.81	-71.17	2,248.23	-6,358.46	6,347.97	6,108.54	239.43	26.513		
6,300.00	6,206.20	6,186.20	6,206.20	29.24	214.24	-71.33	2,248.23	-6,358.46	6,341.94	6,098.61	243.33	26.063		
6,400.00	6,304.48	6,284.48	6,304.48	29.72	217.67	-71.49	2,248.23	-6,358.46	6,335.95	6,088.71	247.24	25.627		
6,500.00	6,402.76	6,382.76	6,402.76	30.19	221.10	-71.64	2,248.23	-6,358.46	6,330.02	6,078.87	251.15	25.204		
6,600.00	6,501.04	6,481.04	6,501.04	30.67	224.53	-71.80	2,248.23	-6,358.46	6,324.13	6,069.08	255.05	24.795		
6,700.00	6,599.31	6,579.31	6,599.31	31.15	227.96	-71.96	2,248.23	-6,358.46	6,318.29	6,059.33	258.96	24.399		
6,800.00	6,697.50	6,677.50	6,697.50	31.63	231.39	-51.07	2,248.23	-6,358.46	6,310.70	6,047.83	262.87	24.007		
6,900.00	6,794.18	6,774.18	6,794.18	32.10	234.76	-25.00	2,248.23	-6,358.46	6,289.95	6,023.25	266.70	23.584		
7,000.00	6,886.96	6,866.96	6,886.96	32.55	238.00	-12.90	2,248.23	-6,358.46	6,254.49	5,984.12	270.38	23.133		
7,100.00	6,973.57	6,953.57	6,973.57	32.99	241.03	-5.97	2,248.23	-6,358.46	6,205.18	5,931.39	273.79	22.664		
7,200.00	7,051.87	7,031.87	7,051.87	33.41	243.76	-0.88	2,248.23	-6,358.46	6,143.20	5,866.35	276.85	22.189		
7,300.00	7,119.93	7,100.07	7,119.93	33.85	246.14	3.96	2,248.23	-6,358.46	6,070.10	5,790.59	279.50	21.718		
7,400.00	7,176.09	7,156.09	7,176.09	34.39	248.10	9.88	2,248.23	-6,358.46	5,987.65	5,706.00	281.65	21.259		
7,500.00	7,218.95	7,201.05	7,218.95	35.09	249.67	19.10	2,248.23	-6,358.46	5,897.92	5,614.58	283.35	20.815		
7,600.00	7,247.46	7,227.46	7,247.46	35.98	250.59	36.95	2,248.23	-6,358.46	5,803.13	5,518.80	284.32	20.410		
7,700.00	7,260.92	7,240.92	7,260.92	37.04	251.06	73.20	2,248.23	-6,358.46	5,705.63	5,420.83	284.79	20.034		
7,800.00	7,261.75	7,241.75	7,261.75	38.23	251.09	91.16	2,248.23	-6,358.46	5,607.65	5,322.86	284.79	19.690		
7,900.00	7,261.33	7,241.33	7,261.33	39.59	251.07	91.14	2,248.23	-6,358.46	5,509.78	5,225.03	284.75	19.349		
8,000.00	7,260.91	7,240.91	7,260.91	41.10	251.06	91.12	2,248.23	-6,358.46	5,411.99	5,127.25	284.73	19.007		
8,100.00	7,260.49	7,240.49	7,260.49	42.75	251.04	91.10	2,248.23	-6,358.46	5,314.27	5,029.55	284.72	18.665		
8,200.00	7,260.07	7,240.07	7,260.07	44.53	251.03	91.08	2,248.23	-6,358.46	5,216.65	4,931.91	284.73	18.321		
8,300.00	7,259.65	7,239.65	7,259.65	46.41	251.01	91.05	2,248.23	-6,358.46	5,119.11	4,834.35	284.76	17.977		
8,400.00	7,259.23	7,239.23	7,259.23	48.39	251.00	91.03	2,248.23	-6,358.46	5,021.67	4,736.87	284.81	17.632		
8,500.00	7,258.81	7,238.81	7,258.81	50.45	250.98	91.01	2,248.23	-6,358.46	4,924.34	4,639.46	284.87	17.286		
8,600.00	7,258.39	7,238.39	7,258.39	52.59	250.97	90.99	2,248.23	-6,358.46	4,827.11	4,542.14	284.97	16.939		
8,700.00	7,257.97	7,237.97	7,257.97	54.79	250.95	90.97	2,248.23	-6,358.46	4,730.00	4,444.91	285.09	16.591		
8,800.00	7,257.55	7,237.55	7,257.55	57.05	250.94	90.95	2,248.23	-6,358.46	4,633.01	4,347.77	285.24	16.243		
8,900.00	7,257.13	7,237.13	7,257.13	59.36	250.92	90.93	2,248.23	-6,358.46	4,536.15	4,250.73	285.42	15.893		
9,000.00	7,256.71	7,236.71	7,256.71	61.72	250.91	90.91	2,248.23	-6,358.46	4,439.44	4,153.79	285.64	15.542		
9,100.00	7,256.29	7,236.29	7,256.29	64.12	250.90	90.89	2,248.23	-6,358.46	4,342.87	4,056.97	285.90	15.190		
9,200.00	7,255.87	7,235.87	7,255.87	66.56	250.88	90.86	2,248.23	-6,358.46	4,246.46	3,960.25	286.20	14.837		
9,300.00	7,255.45	7,235.45	7,255.45	69.02	250.87	90.84	2,248.23	-6,358.46	4,150.22	3,863.66	286.55	14.483		
9,400.00	7,255.03	7,235.03	7,255.03	71.52	250.85	90.82	2,248.23	-6,358.46	4,054.16	3,767.20	286.96	14.128		
9,500.00	7,254.61	7,234.61	7,254.61	74.04	250.84	90.80	2,248.23	-6,358.46	3,958.29	3,670.88	287.42	13.772		
9,600.00	7,254.19	7,234.19	7,254.19	76.58	250.82	90.78	2,248.23	-6,358.46	3,862.64	3,574.70	287.94	13.415		
9,700.00	7,253.77	7,233.77	7,253.77	79.15	250.81	90.76	2,248.23	-6,358.46	3,767.21	3,478.68	288.53	13.057		
9,800.00	7,253.35	7,233.35	7,253.35	81.74	250.79	90.74	2,248.23	-6,358.46	3,672.03	3,382.83	289.19	12.698		
9,900.00	7,252.92	7,232.92	7,252.92	84.34	250.78	90.72	2,248.23	-6,358.46	3,577.10	3,287.17	289.94	12.338		
10,000.00	7,252.50	7,232.50	7,252.50	86.96	250.76	90.70	2,248.23	-6,358.46	3,482.47	3,191.70	290.77	11.977		
10,100.00	7,252.08	7,232.08	7,252.08	89.59	250.75	90.67	2,248.23	-6,358.46	3,388.14	3,096.44	291.70	11.615		
10,200.00	7,251.66	7,231.66	7,251.66	92.24	250.73	90.65	2,248.23	-6,358.46	3,294.14	3,001.41	292.73	11.253		
10,300.00	7,251.24	7,231.24	7,251.24	94.90	250.72	90.63	2,248.23	-6,358.46	3,200.51	2,906.63	293.88	10.891		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,230.82	7,250.82	97.57	250.70	90.61	2,248.23	-6,358.46	3,107.27	2,812.13	295.15	10.528		
10,500.00	7,250.40	7,230.40	7,250.40	100.25	250.69	90.59	2,248.23	-6,358.46	3,014.47	2,717.92	296.55	10.165		
10,600.00	7,249.98	7,229.98	7,249.98	102.93	250.68	90.57	2,248.23	-6,358.46	2,922.15	2,624.05	298.10	9.803		
10,700.00	7,249.56	7,229.56	7,249.56	105.63	250.66	90.55	2,248.23	-6,358.46	2,830.34	2,530.54	299.80	9.441		
10,800.00	7,249.14	7,229.14	7,249.14	108.34	250.65	90.53	2,248.23	-6,358.46	2,739.11	2,437.44	301.67	9.080		
10,900.00	7,248.72	7,228.72	7,248.72	111.05	250.63	90.50	2,248.23	-6,358.46	2,648.51	2,344.79	303.73	8.720		
11,000.00	7,248.30	7,228.30	7,248.30	113.77	250.62	90.48	2,248.23	-6,358.46	2,558.61	2,252.63	305.98	8.362		
11,100.00	7,247.88	7,227.88	7,247.88	116.50	250.60	90.46	2,248.23	-6,358.46	2,469.49	2,161.04	308.45	8.006		
11,200.00	7,247.46	7,227.46	7,247.46	119.23	250.59	90.44	2,248.23	-6,358.46	2,381.24	2,070.08	311.15	7.653		
11,300.00	7,247.04	7,227.04	7,247.04	121.97	250.57	90.42	2,248.23	-6,358.46	2,293.94	1,979.83	314.11	7.303		
11,400.00	7,246.62	7,226.62	7,246.62	124.72	250.56	90.40	2,248.23	-6,358.46	2,207.73	1,890.39	317.34	6.957		
11,500.00	7,246.20	7,226.20	7,246.20	127.46	250.54	90.38	2,248.23	-6,358.46	2,122.73	1,801.86	320.86	6.616		
11,600.00	7,245.78	7,225.78	7,245.78	130.22	250.53	90.36	2,248.23	-6,358.46	2,039.08	1,714.38	324.70	6.280		
11,700.00	7,245.36	7,225.36	7,245.36	132.98	250.51	90.34	2,248.23	-6,358.46	1,956.97	1,628.09	328.89	5.950		
11,800.00	7,244.94	7,224.94	7,244.94	135.74	250.50	90.31	2,248.23	-6,358.46	1,876.60	1,543.17	333.43	5.628		
11,900.00	7,244.52	7,224.52	7,244.52	138.50	250.48	90.29	2,248.23	-6,358.46	1,798.20	1,459.84	338.36	5.314		
12,000.00	7,244.10	7,224.10	7,244.10	141.27	250.47	90.27	2,248.23	-6,358.46	1,722.04	1,378.34	343.69	5.010		
12,100.00	7,243.68	7,223.68	7,243.68	144.04	250.46	90.25	2,248.23	-6,358.46	1,648.42	1,298.99	349.44	4.717		
12,200.00	7,243.26	7,223.26	7,243.26	146.82	250.44	90.23	2,248.23	-6,358.46	1,577.72	1,222.12	355.60	4.437		
12,300.00	7,242.84	7,222.84	7,242.84	149.60	250.43	90.21	2,248.23	-6,358.46	1,510.32	1,148.16	362.17	4.170		
12,400.00	7,242.42	7,222.42	7,242.42	152.38	250.41	90.19	2,248.23	-6,358.46	1,446.71	1,077.59	369.11	3.919		
12,500.00	7,242.00	7,222.00	7,242.00	155.16	250.40	90.17	2,248.23	-6,358.46	1,387.39	1,011.01	376.38	3.686		
12,600.00	7,241.58	7,221.58	7,241.58	157.95	250.38	90.15	2,248.23	-6,358.46	1,332.94	949.07	383.88	3.472		
12,700.00	7,241.16	7,221.16	7,241.16	160.74	250.37	90.12	2,248.23	-6,358.46	1,283.99	892.51	391.48	3.280		
12,800.00	7,240.74	7,220.74	7,240.74	163.53	250.35	90.10	2,248.23	-6,358.46	1,241.17	842.15	399.02	3.111		
12,900.00	7,240.32	7,220.32	7,240.32	166.32	250.34	90.08	2,248.23	-6,358.46	1,205.15	798.87	406.28	2.966		
13,000.00	7,239.89	7,219.89	7,239.89	169.12	250.32	90.06	2,248.23	-6,358.46	1,176.55	763.53	413.02	2.849		
13,100.00	7,239.47	7,219.47	7,239.47	171.92	250.31	90.04	2,248.23	-6,358.46	1,155.92	736.93	419.00	2.759		
13,200.00	7,239.05	7,219.05	7,239.05	174.72	250.29	90.02	2,248.23	-6,358.46	1,143.70	719.73	423.97	2.698		
13,290.58	7,238.67	7,218.67	7,238.67	177.25	250.28	90.00	2,248.23	-6,358.46	1,140.11	712.66	427.45	2.667 CC		
13,300.00	7,238.63	7,218.63	7,238.63	177.52	250.28	90.00	2,248.23	-6,358.46	1,140.14	712.39	427.75	2.665 ES		
13,400.00	7,238.21	7,218.21	7,238.21	180.32	250.26	89.98	2,248.23	-6,358.46	1,145.34	715.12	430.23	2.662 SF		
13,500.00	7,237.79	7,217.79	7,237.79	183.13	250.25	89.96	2,248.23	-6,358.46	1,159.18	727.81	431.37	2.687		
13,600.00	7,237.37	7,217.37	7,237.37	185.93	250.23	89.93	2,248.23	-6,358.46	1,181.35	750.09	431.26	2.739		
13,700.00	7,236.95	7,216.95	7,236.95	188.74	250.22	89.91	2,248.23	-6,358.46	1,211.39	781.37	430.02	2.817		
13,800.00	7,236.53	7,216.53	7,236.53	191.55	250.21	89.89	2,248.23	-6,358.46	1,248.74	820.90	427.84	2.919		
13,900.00	7,236.11	7,216.11	7,236.11	194.36	250.19	89.87	2,248.23	-6,358.46	1,292.76	867.84	424.91	3.042		
14,000.00	7,235.69	7,215.69	7,235.69	197.17	250.18	89.85	2,248.23	-6,358.46	1,342.80	921.35	421.45	3.186		
14,100.00	7,235.27	7,215.27	7,235.27	199.98	250.16	89.83	2,248.23	-6,358.46	1,398.21	980.58	417.63	3.348		
14,200.00	7,234.85	7,214.85	7,234.85	202.80	250.15	89.81	2,248.23	-6,358.46	1,458.38	1,044.79	413.59	3.526		
14,300.00	7,234.43	7,214.43	7,234.43	205.61	250.13	89.79	2,248.23	-6,358.46	1,522.74	1,113.29	409.46	3.719		
14,400.00	7,234.01	7,214.01	7,234.01	208.43	250.12	89.77	2,248.23	-6,358.46	1,590.80	1,185.47	405.33	3.925		
14,500.00	7,233.59	7,213.59	7,233.59	211.25	250.10	89.74	2,248.23	-6,358.46	1,662.08	1,260.81	401.27	4.142		
14,600.00	7,233.17	7,213.17	7,233.17	214.06	250.09	89.72	2,248.23	-6,358.46	1,736.20	1,338.88	397.32	4.370		
14,700.00	7,232.75	7,212.75	7,232.75	216.88	250.07	89.70	2,248.23	-6,358.46	1,812.81	1,419.28	393.52	4.607		
14,800.00	7,232.33	7,212.33	7,232.33	219.70	250.06	89.68	2,248.23	-6,358.46	1,891.60	1,501.71	389.89	4.852		
14,900.00	7,231.91	7,211.91	7,231.91	222.52	250.04	89.66	2,248.23	-6,358.46	1,972.31	1,585.88	386.43	5.104		
15,000.00	7,231.49	7,211.49	7,231.49	225.35	250.03	89.64	2,248.23	-6,358.46	2,054.73	1,671.58	383.15	5.363		
15,100.00	7,231.07	7,211.07	7,231.07	228.17	250.01	89.62	2,248.23	-6,358.46	2,138.64	1,758.59	380.05	5.627		
15,116.21	7,231.00	7,211.00	7,231.00	228.63	250.01	89.61	2,248.23	-6,358.46	2,152.37	1,772.81	379.56	5.671		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	17.00	0.00	3.28	-74.47	2,183.09	-7,854.72	8,152.47					
100.00	100.00	83.00	100.00	0.18	3.59	-74.47	2,183.09	-7,854.72	8,152.45	8,148.69	3.76	2,167.492		
200.00	200.00	183.00	200.00	0.61	5.68	-74.47	2,183.09	-7,854.72	8,152.45	8,146.15	6.30	1,294.242		
300.00	300.00	283.00	300.00	1.05	8.77	-74.47	2,183.09	-7,854.72	8,152.45	8,142.63	9.82	829.891		
400.00	400.00	383.00	400.00	1.49	12.08	-74.47	2,183.09	-7,854.72	8,152.45	8,138.88	13.57	600.738		
500.00	500.00	483.00	500.00	1.93	15.47	-74.47	2,183.09	-7,854.72	8,152.45	8,135.05	17.40	468.574		
600.00	599.98	582.98	599.98	2.37	18.89	-66.74	2,183.09	-7,854.72	8,151.76	8,130.50	21.26	383.400		
700.00	699.84	682.84	699.84	2.81	22.33	-66.82	2,183.09	-7,854.72	8,149.69	8,124.55	25.14	324.166		
800.00	799.45	782.45	799.45	3.26	25.78	-66.94	2,183.09	-7,854.72	8,146.26	8,117.24	29.02	280.679		
900.00	898.70	881.70	898.70	3.70	29.22	-67.10	2,183.09	-7,854.72	8,141.47	8,108.57	32.90	247.433		
1,000.00	997.47	980.47	997.47	4.15	32.65	-67.32	2,183.09	-7,854.72	8,135.35	8,098.57	36.78	221.209		
1,100.00	1,095.78	1,078.78	1,095.78	4.60	36.06	-67.48	2,183.09	-7,854.72	8,128.21	8,087.57	40.64	199.994		
1,200.00	1,194.05	1,177.05	1,194.05	5.05	39.48	-67.59	2,183.09	-7,854.72	8,121.05	8,076.53	44.51	182.440		
1,300.00	1,292.33	1,275.33	1,292.33	5.50	42.90	-67.71	2,183.09	-7,854.72	8,113.92	8,065.53	48.39	167.676		
1,400.00	1,390.61	1,373.61	1,390.61	5.96	46.32	-67.83	2,183.09	-7,854.72	8,106.82	8,054.55	52.27	155.090		
1,500.00	1,488.89	1,471.89	1,488.89	6.43	49.75	-67.95	2,183.09	-7,854.72	8,099.76	8,043.60	56.16	144.235		
1,600.00	1,587.16	1,570.16	1,587.16	6.89	53.17	-68.07	2,183.09	-7,854.72	8,092.74	8,032.69	60.04	134.780		
1,700.00	1,685.44	1,668.44	1,685.44	7.36	56.60	-68.19	2,183.09	-7,854.72	8,085.75	8,021.82	63.93	126.470		
1,800.00	1,783.72	1,766.72	1,783.72	7.83	60.02	-68.31	2,183.09	-7,854.72	8,078.80	8,010.97	67.83	119.111		
1,900.00	1,882.00	1,865.00	1,882.00	8.30	63.45	-68.43	2,183.09	-7,854.72	8,071.88	8,000.16	71.72	112.549		
2,000.00	1,980.27	1,963.27	1,980.27	8.77	66.87	-68.55	2,183.09	-7,854.72	8,065.00	7,989.39	75.61	106.661		
2,100.00	2,078.55	2,061.55	2,078.55	9.25	70.30	-68.67	2,183.09	-7,854.72	8,058.16	7,978.65	79.51	101.349		
2,200.00	2,176.83	2,159.83	2,176.83	9.72	73.73	-68.79	2,183.09	-7,854.72	8,051.36	7,967.95	83.41	96.532		
2,300.00	2,275.11	2,258.11	2,275.11	10.19	77.15	-68.91	2,183.09	-7,854.72	8,044.59	7,957.28	87.30	92.145		
2,400.00	2,373.38	2,356.38	2,373.38	10.66	80.58	-69.03	2,183.09	-7,854.72	8,037.86	7,946.65	91.20	88.132		
2,500.00	2,471.66	2,454.66	2,471.66	11.14	84.01	-69.16	2,183.09	-7,854.72	8,031.16	7,936.06	95.10	84.449		
2,600.00	2,569.94	2,552.94	2,569.94	11.61	87.44	-69.28	2,183.09	-7,854.72	8,024.50	7,925.50	99.00	81.055		
2,700.00	2,668.22	2,651.22	2,668.22	12.09	90.87	-69.40	2,183.09	-7,854.72	8,017.88	7,914.98	102.90	77.919		
2,800.00	2,766.49	2,749.49	2,766.49	12.56	94.30	-69.52	2,183.09	-7,854.72	8,011.30	7,904.50	106.80	75.011		
2,900.00	2,864.77	2,847.77	2,864.77	13.04	97.73	-69.64	2,183.09	-7,854.72	8,004.75	7,894.05	110.70	72.309		
3,000.00	2,963.05	2,946.05	2,963.05	13.51	101.15	-69.76	2,183.09	-7,854.72	7,998.24	7,883.64	114.60	69.790		
3,100.00	3,061.33	3,044.33	3,061.33	13.99	104.58	-69.89	2,183.09	-7,854.72	7,991.77	7,873.26	118.51	67.438		
3,200.00	3,159.60	3,142.60	3,159.60	14.46	108.01	-70.01	2,183.09	-7,854.72	7,985.34	7,862.93	122.41	65.235		
3,300.00	3,257.88	3,240.88	3,257.88	14.94	111.44	-70.13	2,183.09	-7,854.72	7,978.94	7,852.63	126.31	63.169		
3,400.00	3,356.16	3,339.16	3,356.16	15.41	114.87	-70.26	2,183.09	-7,854.72	7,972.58	7,842.37	130.21	61.227		
3,500.00	3,454.43	3,437.43	3,454.43	15.89	118.30	-70.38	2,183.09	-7,854.72	7,966.26	7,832.14	134.12	59.398		
3,600.00	3,552.71	3,535.71	3,552.71	16.36	121.73	-70.50	2,183.09	-7,854.72	7,959.98	7,821.96	138.02	57.673		
3,700.00	3,650.99	3,633.99	3,650.99	16.84	125.16	-70.63	2,183.09	-7,854.72	7,953.73	7,811.81	141.92	56.042		
3,800.00	3,749.27	3,732.27	3,749.27	17.32	128.59	-70.75	2,183.09	-7,854.72	7,947.52	7,801.70	145.83	54.500		
3,900.00	3,847.54	3,830.54	3,847.54	17.79	132.02	-70.87	2,183.09	-7,854.72	7,941.35	7,791.62	149.73	53.038		
4,000.00	3,945.82	3,928.82	3,945.82	18.27	135.45	-71.00	2,183.09	-7,854.72	7,935.22	7,781.59	153.64	51.650		
4,100.00	4,044.10	4,027.10	4,044.10	18.75	138.88	-71.12	2,183.09	-7,854.72	7,929.13	7,771.59	157.54	50.331		
4,200.00	4,142.38	4,125.38	4,142.38	19.22	142.31	-71.25	2,183.09	-7,854.72	7,923.08	7,761.63	161.44	49.076		
4,300.00	4,240.65	4,223.65	4,240.65	19.70	145.74	-71.37	2,183.09	-7,854.72	7,917.06	7,751.71	165.35	47.881		
4,400.00	4,338.93	4,321.93	4,338.93	20.18	149.17	-71.50	2,183.09	-7,854.72	7,911.08	7,741.83	169.25	46.741		
4,500.00	4,437.21	4,420.21	4,437.21	20.65	152.60	-71.62	2,183.09	-7,854.72	7,905.15	7,731.99	173.16	45.653		
4,600.00	4,535.49	4,518.49	4,535.49	21.13	156.03	-71.75	2,183.09	-7,854.72	7,899.25	7,722.18	177.06	44.613		
4,700.00	4,633.76	4,616.76	4,633.76	21.61	159.46	-71.87	2,183.09	-7,854.72	7,893.39	7,712.42	180.97	43.617		
4,800.00	4,732.04	4,715.04	4,732.04	22.08	162.89	-72.00	2,183.09	-7,854.72	7,887.56	7,702.69	184.87	42.665		
4,900.00	4,830.32	4,813.32	4,830.32	22.56	166.32	-72.12	2,183.09	-7,854.72	7,881.78	7,693.00	188.78	41.751		
5,000.00	4,928.60	4,911.60	4,928.60	23.04	169.75	-72.25	2,183.09	-7,854.72	7,876.04	7,683.35	192.68	40.875		
5,100.00	5,026.87	5,009.87	5,026.87	23.51	173.18	-72.37	2,183.09	-7,854.72	7,870.33	7,673.74	196.59	40.034		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,108.15	5,125.15	23.99	176.61	-72.50	2,183.09	-7,854.72	7,864.67	7,664.17	200.50	39.226		
5,300.00	5,223.43	5,206.43	5,223.43	24.47	180.04	-72.63	2,183.09	-7,854.72	7,859.04	7,654.64	204.40	38.449		
5,400.00	5,321.71	5,304.71	5,321.71	24.94	183.47	-72.75	2,183.09	-7,854.72	7,853.46	7,645.15	208.31	37.701		
5,500.00	5,419.98	5,402.98	5,419.98	25.42	186.90	-72.88	2,183.09	-7,854.72	7,847.91	7,635.70	212.21	36.981		
5,600.00	5,518.26	5,501.26	5,518.26	25.90	190.33	-73.01	2,183.09	-7,854.72	7,842.40	7,626.28	216.12	36.287		
5,700.00	5,616.54	5,600.46	5,616.54	26.38	193.79	-73.14	2,183.09	-7,854.72	7,836.94	7,616.88	220.06	35.613		
5,800.00	5,714.82	5,702.18	5,714.82	26.85	197.35	-73.26	2,183.09	-7,854.72	7,831.51	7,607.42	224.09	34.949		
5,900.00	5,813.09	5,803.91	5,813.09	27.33	200.90	-73.39	2,183.09	-7,854.72	7,826.12	7,598.01	228.11	34.308		
6,000.00	5,911.37	5,905.63	5,911.37	27.81	204.45	-73.52	2,183.09	-7,854.72	7,820.77	7,588.63	232.14	33.690		
6,100.00	6,009.65	6,007.35	6,009.65	28.28	208.00	-73.65	2,183.09	-7,854.72	7,815.46	7,579.30	236.17	33.093		
6,200.00	6,107.93	6,109.07	6,107.93	28.76	211.55	-73.77	2,183.09	-7,854.72	7,810.20	7,570.00	240.19	32.516		
6,300.00	6,206.20	6,189.20	6,206.20	29.24	214.35	-73.90	2,183.09	-7,854.72	7,804.97	7,561.50	243.47	32.058		
6,400.00	6,304.48	6,287.48	6,304.48	29.72	217.78	-74.03	2,183.09	-7,854.72	7,799.78	7,552.41	247.37	31.530		
6,500.00	6,402.76	6,385.76	6,402.76	30.19	221.21	-74.16	2,183.09	-7,854.72	7,794.64	7,543.36	251.28	31.020		
6,600.00	6,501.04	6,484.04	6,501.04	30.67	224.64	-74.29	2,183.09	-7,854.72	7,789.53	7,534.34	255.19	30.525		
6,700.00	6,599.31	6,582.31	6,599.31	31.15	228.07	-74.42	2,183.09	-7,854.72	7,784.46	7,525.37	259.10	30.045		
6,800.00	6,697.50	6,680.50	6,697.50	31.63	231.49	-53.53	2,183.09	-7,854.72	7,777.62	7,514.62	263.00	29.573		
6,900.00	6,794.18	6,777.18	6,794.18	32.10	234.87	-27.52	2,183.09	-7,854.72	7,775.51	7,490.67	266.84	29.072		
7,000.00	6,886.96	6,869.96	6,886.96	32.55	238.11	-15.58	2,183.09	-7,854.72	7,772.54	7,482.03	270.51	28.548		
7,100.00	6,973.57	6,956.57	6,973.57	32.99	241.13	-8.91	2,183.09	-7,854.72	7,767.56	7,399.63	273.93	28.013		
7,200.00	7,051.87	7,034.87	7,051.87	33.41	243.86	-4.22	2,183.09	-7,854.72	7,761.76	7,334.76	277.00	27.480		
7,300.00	7,119.93	7,102.93	7,119.93	33.85	246.24	-0.03	2,183.09	-7,854.72	7,538.66	7,259.02	279.65	26.958		
7,400.00	7,176.09	7,159.09	7,176.09	34.39	248.20	4.87	2,183.09	-7,854.72	7,456.06	7,174.25	281.81	26.458		
7,500.00	7,218.95	7,201.95	7,218.95	35.09	249.70	12.38	2,183.09	-7,854.72	7,366.00	7,082.56	283.44	25.988		
7,600.00	7,247.46	7,230.46	7,247.46	35.98	250.69	27.92	2,183.09	-7,854.72	7,270.69	6,986.20	284.49	25.557		
7,700.00	7,260.92	7,243.92	7,260.92	37.04	251.16	67.99	2,183.09	-7,854.72	7,172.50	6,887.53	284.96	25.170		
7,800.00	7,261.75	7,244.75	7,261.75	38.23	251.19	91.53	2,183.09	-7,854.72	7,073.68	6,788.72	284.96	24.823		
7,900.00	7,261.33	7,244.33	7,261.33	39.59	251.18	91.51	2,183.09	-7,854.72	6,974.92	6,690.00	284.92	24.480		
8,000.00	7,260.91	7,243.91	7,260.91	41.10	251.16	91.49	2,183.09	-7,854.72	6,876.19	6,591.30	284.89	24.137		
8,100.00	7,260.49	7,243.49	7,260.49	42.75	251.15	91.46	2,183.09	-7,854.72	6,777.50	6,492.64	284.86	23.792		
8,200.00	7,260.07	7,243.07	7,260.07	44.53	251.13	91.44	2,183.09	-7,854.72	6,678.84	6,394.00	284.84	23.448		
8,300.00	7,259.65	7,242.65	7,259.65	46.41	251.12	91.42	2,183.09	-7,854.72	6,580.23	6,295.40	284.83	23.102		
8,400.00	7,259.23	7,242.23	7,259.23	48.39	251.10	91.40	2,183.09	-7,854.72	6,481.66	6,196.82	284.83	22.756		
8,500.00	7,258.81	7,241.81	7,258.81	50.45	251.09	91.38	2,183.09	-7,854.72	6,383.13	6,098.28	284.85	22.409		
8,600.00	7,258.39	7,241.39	7,258.39	52.59	251.07	91.35	2,183.09	-7,854.72	6,284.65	5,999.78	284.87	22.061		
8,700.00	7,257.97	7,240.97	7,257.97	54.79	251.06	91.33	2,183.09	-7,854.72	6,186.22	5,901.31	284.91	21.713		
8,800.00	7,257.55	7,240.55	7,257.55	57.05	251.04	91.31	2,183.09	-7,854.72	6,087.84	5,802.88	284.96	21.364		
8,900.00	7,257.13	7,240.13	7,257.13	59.36	251.03	91.29	2,183.09	-7,854.72	5,989.51	5,704.48	285.03	21.014		
9,000.00	7,256.71	7,239.71	7,256.71	61.72	251.01	91.27	2,183.09	-7,854.72	5,891.24	5,606.13	285.11	20.663		
9,100.00	7,256.29	7,239.29	7,256.29	64.12	251.00	91.25	2,183.09	-7,854.72	5,793.03	5,507.82	285.21	20.311		
9,200.00	7,255.87	7,238.87	7,255.87	66.56	250.99	91.22	2,183.09	-7,854.72	5,694.88	5,409.55	285.33	19.959		
9,300.00	7,255.45	7,238.45	7,255.45	69.02	250.97	91.20	2,183.09	-7,854.72	5,596.80	5,311.33	285.47	19.605		
9,400.00	7,255.03	7,238.03	7,255.03	71.52	250.96	91.18	2,183.09	-7,854.72	5,498.78	5,213.15	285.64	19.251		
9,500.00	7,254.61	7,237.61	7,254.61	74.04	250.94	91.16	2,183.09	-7,854.72	5,400.84	5,115.02	285.82	18.896		
9,600.00	7,254.19	7,237.19	7,254.19	76.58	250.93	91.14	2,183.09	-7,854.72	5,302.98	5,016.94	286.04	18.539		
9,700.00	7,253.77	7,236.77	7,253.77	79.15	250.91	91.11	2,183.09	-7,854.72	5,205.19	4,918.91	286.28	18.182		
9,800.00	7,253.35	7,236.35	7,253.35	81.74	250.90	91.09	2,183.09	-7,854.72	5,107.50	4,820.94	286.55	17.824		
9,900.00	7,252.92	7,235.92	7,252.92	84.34	250.88	91.07	2,183.09	-7,854.72	5,009.89	4,723.03	286.86	17.465		
10,000.00	7,252.50	7,235.50	7,252.50	86.96	250.87	91.05	2,183.09	-7,854.72	4,912.38	4,625.18	287.20	17.105		
10,100.00	7,252.08	7,235.08	7,252.08	89.59	250.85	91.03	2,183.09	-7,854.72	4,814.97	4,527.39	287.58	16.743		
10,200.00	7,251.66	7,234.66	7,251.66	92.24	250.84	91.00	2,183.09	-7,854.72	4,717.67	4,429.67	288.00	16.381		
10,300.00	7,251.24	7,234.24	7,251.24	94.90	250.82	90.98	2,183.09	-7,854.72	4,620.48	4,332.03	288.46	16.018		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,233.82	7,250.82	97.57	250.81	90.96	2,183.09	-7,854.72	4,523.42	4,234.45	288.97	15.654		
10,500.00	7,250.40	7,233.40	7,250.40	100.25	250.79	90.94	2,183.09	-7,854.72	4,426.49	4,136.96	289.53	15.288		
10,600.00	7,249.98	7,232.98	7,249.98	102.93	250.78	90.92	2,183.09	-7,854.72	4,329.70	4,039.55	290.15	14.922		
10,700.00	7,249.56	7,232.56	7,249.56	105.63	250.77	90.90	2,183.09	-7,854.72	4,233.06	3,942.23	290.83	14.555		
10,800.00	7,249.14	7,232.14	7,249.14	108.34	250.75	90.87	2,183.09	-7,854.72	4,136.57	3,845.00	291.57	14.187		
10,900.00	7,248.72	7,231.72	7,248.72	111.05	250.74	90.85	2,183.09	-7,854.72	4,040.26	3,747.88	292.38	13.819		
11,000.00	7,248.30	7,231.30	7,248.30	113.77	250.72	90.83	2,183.09	-7,854.72	3,944.13	3,650.87	293.26	13.449		
11,100.00	7,247.88	7,230.88	7,247.88	116.50	250.71	90.81	2,183.09	-7,854.72	3,848.20	3,553.97	294.22	13.079		
11,200.00	7,247.46	7,230.46	7,247.46	119.23	250.69	90.79	2,183.09	-7,854.72	3,752.48	3,457.21	295.27	12.709		
11,300.00	7,247.04	7,230.04	7,247.04	121.97	250.68	90.76	2,183.09	-7,854.72	3,656.99	3,360.58	296.41	12.338		
11,400.00	7,246.62	7,229.62	7,246.62	124.72	250.66	90.74	2,183.09	-7,854.72	3,561.75	3,264.10	297.65	11.966		
11,500.00	7,246.20	7,229.20	7,246.20	127.46	250.65	90.72	2,183.09	-7,854.72	3,466.77	3,167.78	298.99	11.595		
11,600.00	7,245.78	7,228.78	7,245.78	130.22	250.63	90.70	2,183.09	-7,854.72	3,372.09	3,071.63	300.45	11.223		
11,700.00	7,245.36	7,228.36	7,245.36	132.98	250.62	90.68	2,183.09	-7,854.72	3,277.72	2,975.68	302.03	10.852		
11,800.00	7,244.94	7,227.94	7,244.94	135.74	250.60	90.65	2,183.09	-7,854.72	3,183.69	2,879.94	303.75	10.481		
11,900.00	7,244.52	7,227.52	7,244.52	138.50	250.59	90.63	2,183.09	-7,854.72	3,090.04	2,784.44	305.60	10.111		
12,000.00	7,244.10	7,227.10	7,244.10	141.27	250.57	90.61	2,183.09	-7,854.72	2,996.80	2,689.18	307.62	9.742		
12,100.00	7,243.68	7,226.68	7,243.68	144.04	250.56	90.59	2,183.09	-7,854.72	2,904.01	2,594.21	309.80	9.374		
12,200.00	7,243.26	7,226.26	7,243.26	146.82	250.55	90.57	2,183.09	-7,854.72	2,811.72	2,499.56	312.16	9.007		
12,300.00	7,242.84	7,225.84	7,242.84	149.60	250.53	90.54	2,183.09	-7,854.72	2,719.97	2,405.25	314.72	8.643		
12,400.00	7,242.42	7,225.42	7,242.42	152.38	250.52	90.52	2,183.09	-7,854.72	2,628.82	2,311.33	317.49	8.280		
12,500.00	7,242.00	7,225.00	7,242.00	155.16	250.50	90.50	2,183.09	-7,854.72	2,538.33	2,217.85	320.49	7.920		
12,600.00	7,241.58	7,224.58	7,241.58	157.95	250.49	90.48	2,183.09	-7,854.72	2,448.59	2,124.85	323.74	7.563		
12,700.00	7,241.16	7,224.16	7,241.16	160.74	250.47	90.46	2,183.09	-7,854.72	2,359.67	2,032.41	327.26	7.210		
12,800.00	7,240.74	7,223.74	7,240.74	163.53	250.46	90.44	2,183.09	-7,854.72	2,271.68	1,940.60	331.08	6.861		
12,900.00	7,240.32	7,223.32	7,240.32	166.32	250.44	90.41	2,183.09	-7,854.72	2,184.72	1,849.50	335.22	6.517		
13,000.00	7,239.89	7,222.89	7,239.89	169.12	250.43	90.39	2,183.09	-7,854.72	2,098.92	1,759.21	339.71	6.179		
13,100.00	7,239.47	7,222.47	7,239.47	171.92	250.41	90.37	2,183.09	-7,854.72	2,014.43	1,669.86	344.57	5.846		
13,200.00	7,239.05	7,222.05	7,239.05	174.72	250.40	90.35	2,183.09	-7,854.72	1,931.42	1,581.58	349.83	5.521		
13,300.00	7,238.63	7,221.63	7,238.63	177.52	250.38	90.33	2,183.09	-7,854.72	1,850.09	1,494.56	355.53	5.204		
13,400.00	7,238.21	7,221.21	7,238.21	180.32	250.37	90.30	2,183.09	-7,854.72	1,770.67	1,408.99	361.69	4.896		
13,500.00	7,237.79	7,220.79	7,237.79	183.13	250.35	90.28	2,183.09	-7,854.72	1,693.44	1,325.12	368.32	4.598		
13,600.00	7,237.37	7,220.37	7,237.37	185.93	250.34	90.26	2,183.09	-7,854.72	1,618.71	1,243.25	375.46	4.311		
13,700.00	7,236.95	7,219.95	7,236.95	188.74	250.33	90.24	2,183.09	-7,854.72	1,546.82	1,163.73	383.10	4.038		
13,800.00	7,236.53	7,219.53	7,236.53	191.55	250.31	90.22	2,183.09	-7,854.72	1,478.22	1,086.99	391.23	3.778		
13,900.00	7,236.11	7,219.11	7,236.11	194.36	250.30	90.19	2,183.09	-7,854.72	1,413.36	1,013.55	399.81	3.535		
14,000.00	7,235.69	7,218.69	7,235.69	197.17	250.28	90.17	2,183.09	-7,854.72	1,352.79	944.02	408.77	3.309		
14,100.00	7,235.27	7,218.27	7,235.27	199.98	250.27	90.15	2,183.09	-7,854.72	1,297.11	879.11	418.00	3.103		
14,200.00	7,234.85	7,217.85	7,234.85	202.80	250.25	90.13	2,183.09	-7,854.72	1,246.98	819.65	427.32	2.918		
14,300.00	7,234.43	7,217.43	7,234.43	205.61	250.24	90.11	2,183.09	-7,854.72	1,203.08	766.56	436.52	2.756		
14,400.00	7,234.01	7,217.01	7,234.01	208.43	250.22	90.08	2,183.09	-7,854.72	1,166.13	720.83	445.30	2.619		
14,500.00	7,233.59	7,216.59	7,233.59	211.25	250.21	90.06	2,183.09	-7,854.72	1,136.80	683.46	453.34	2.508		
14,600.00	7,233.17	7,216.17	7,233.17	214.06	250.19	90.04	2,183.09	-7,854.72	1,115.69	655.38	460.31	2.424		
14,700.00	7,232.75	7,215.75	7,232.75	216.88	250.18	90.02	2,183.09	-7,854.72	1,103.28	637.39	465.89	2.368		
14,787.73	7,232.38	7,215.38	7,232.38	219.36	250.17	90.00	2,183.09	-7,854.72	1,099.79	630.34	469.45	2.343 CC		
14,800.00	7,232.33	7,215.33	7,232.33	219.70	250.16	90.00	2,183.09	-7,854.72	1,099.86	630.01	469.84	2.341 ES, SF		
14,900.00	7,231.91	7,214.91	7,231.91	222.52	250.15	89.98	2,183.09	-7,854.72	1,105.50	633.47	472.04	2.342		
15,000.00	7,231.49	7,214.49	7,231.49	225.35	250.13	89.95	2,183.09	-7,854.72	1,120.09	647.62	472.47	2.371		
15,100.00	7,231.07	7,214.07	7,231.07	228.17	250.12	89.93	2,183.09	-7,854.72	1,143.26	672.00	471.26	2.426		
15,116.21	7,231.00	7,214.00	7,231.00	228.63	250.12	89.93	2,183.09	-7,854.72	1,147.80	676.87	470.93	2.437		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	3.28	-57.66	2,298.68	-3,630.18	4,296.76					
100.00	100.00	100.00	100.00	0.18	3.72	-57.66	2,298.68	-3,630.18	4,296.76	4,292.87	3.89	1,104.269		
200.00	200.00	200.00	200.00	0.61	6.18	-57.66	2,298.68	-3,630.18	4,296.76	4,289.96	6.79	632.506		
300.00	300.00	300.00	300.00	1.05	9.32	-57.66	2,298.68	-3,630.18	4,296.76	4,286.38	10.38	414.083		
400.00	400.00	400.00	400.00	1.49	12.65	-57.66	2,298.68	-3,630.18	4,296.76	4,282.61	14.14	303.810		
500.00	500.00	500.00	500.00	1.93	16.05	-57.66	2,298.68	-3,630.18	4,296.76	4,278.78	17.98	238.989		
600.00	599.98	600.02	599.98	2.37	19.48	-49.95	2,298.68	-3,630.18	4,295.63	4,273.79	21.85	196.612		
700.00	699.84	700.16	699.84	2.81	22.93	-50.05	2,298.68	-3,630.18	4,292.27	4,266.53	25.74	166.750		
800.00	799.45	800.55	799.45	3.26	26.41	-50.23	2,298.68	-3,630.18	4,286.67	4,257.01	29.65	144.558		
900.00	898.70	901.30	898.70	3.70	29.90	-50.47	2,298.68	-3,630.18	4,278.86	4,245.27	33.59	127.391		
1,000.00	997.47	1,002.53	997.47	4.15	33.41	-50.79	2,298.68	-3,630.18	4,268.86	4,231.31	37.55	113.690		
1,100.00	1,095.78	1,104.22	1,095.78	4.60	36.95	-51.03	2,298.68	-3,630.18	4,257.21	4,215.68	41.53	102.507		
1,200.00	1,194.05	1,205.95	1,194.05	5.05	40.49	-51.23	2,298.68	-3,630.18	4,245.49	4,199.97	45.52	93.269		
1,300.00	1,292.33	1,307.67	1,292.33	5.50	44.03	-51.42	2,298.68	-3,630.18	4,233.82	4,184.30	49.51	85.512		
1,400.00	1,390.61	1,409.39	1,390.61	5.96	47.57	-51.61	2,298.68	-3,630.18	4,222.19	4,168.68	53.51	78.906		
1,500.00	1,488.89	1,488.89	1,488.89	6.43	50.34	-51.81	2,298.68	-3,630.18	4,210.62	4,153.88	56.74	74.215		
1,600.00	1,587.16	1,587.16	1,587.16	6.89	53.76	-52.00	2,298.68	-3,630.18	4,199.10	4,138.48	60.62	69.270		
1,700.00	1,685.44	1,685.44	1,685.44	7.36	57.19	-52.20	2,298.68	-3,630.18	4,187.62	4,123.12	64.50	64.920		
1,800.00	1,783.72	1,783.72	1,783.72	7.83	60.61	-52.40	2,298.68	-3,630.18	4,176.20	4,107.80	68.39	61.063		
1,900.00	1,882.00	1,882.00	1,882.00	8.30	64.04	-52.60	2,298.68	-3,630.18	4,164.82	4,092.54	72.28	57.620		
2,000.00	1,980.27	1,980.27	1,980.27	8.77	67.47	-52.80	2,298.68	-3,630.18	4,153.50	4,077.33	76.17	54.528		
2,100.00	2,078.55	2,078.55	2,078.55	9.25	70.89	-53.00	2,298.68	-3,630.18	4,142.23	4,062.17	80.06	51.737		
2,200.00	2,176.83	2,176.83	2,176.83	9.72	74.32	-53.20	2,298.68	-3,630.18	4,131.01	4,047.06	83.96	49.204		
2,300.00	2,275.11	2,275.11	2,275.11	10.19	77.75	-53.41	2,298.68	-3,630.18	4,119.84	4,031.99	87.85	46.897		
2,400.00	2,373.38	2,373.38	2,373.38	10.66	81.18	-53.61	2,298.68	-3,630.18	4,108.73	4,016.99	91.74	44.785		
2,500.00	2,471.66	2,471.66	2,471.66	11.14	84.60	-53.82	2,298.68	-3,630.18	4,097.67	4,002.03	95.64	42.845		
2,600.00	2,569.94	2,569.94	2,569.94	11.61	88.03	-54.02	2,298.68	-3,630.18	4,086.66	3,987.13	99.53	41.058		
2,700.00	2,668.22	2,668.22	2,668.22	12.09	91.46	-54.23	2,298.68	-3,630.18	4,075.71	3,972.28	103.43	39.405		
2,800.00	2,766.49	2,766.49	2,766.49	12.56	94.89	-54.44	2,298.68	-3,630.18	4,064.81	3,957.48	107.33	37.873		
2,900.00	2,864.77	2,864.77	2,864.77	13.04	98.32	-54.65	2,298.68	-3,630.18	4,053.97	3,942.74	111.23	36.448		
3,000.00	2,963.05	2,963.05	2,963.05	13.51	101.75	-54.86	2,298.68	-3,630.18	4,043.18	3,928.06	115.12	35.120		
3,100.00	3,061.33	3,061.33	3,061.33	13.99	105.18	-55.07	2,298.68	-3,630.18	4,032.45	3,913.43	119.02	33.880		
3,200.00	3,159.60	3,159.60	3,159.60	14.46	108.61	-55.29	2,298.68	-3,630.18	4,021.77	3,898.85	122.92	32.718		
3,300.00	3,257.88	3,257.88	3,257.88	14.94	112.04	-55.50	2,298.68	-3,630.18	4,011.15	3,884.33	126.82	31.629		
3,400.00	3,356.16	3,356.16	3,356.16	15.41	115.46	-55.72	2,298.68	-3,630.18	4,000.59	3,869.87	130.72	30.604		
3,500.00	3,454.43	3,454.43	3,454.43	15.89	118.89	-55.93	2,298.68	-3,630.18	3,990.09	3,855.47	134.62	29.640		
3,600.00	3,552.71	3,552.71	3,552.71	16.36	122.32	-56.15	2,298.68	-3,630.18	3,979.64	3,841.12	138.52	28.730		
3,700.00	3,650.99	3,650.99	3,650.99	16.84	125.75	-56.37	2,298.68	-3,630.18	3,969.25	3,826.83	142.42	27.870		
3,800.00	3,749.27	3,749.27	3,749.27	17.32	129.18	-56.59	2,298.68	-3,630.18	3,958.92	3,812.60	146.32	27.056		
3,900.00	3,847.54	3,847.54	3,847.54	17.79	132.61	-56.81	2,298.68	-3,630.18	3,948.65	3,798.43	150.22	26.286		
4,000.00	3,945.82	3,945.82	3,945.82	18.27	136.04	-57.03	2,298.68	-3,630.18	3,938.44	3,784.32	154.12	25.554		
4,100.00	4,044.10	4,044.10	4,044.10	18.75	139.47	-57.26	2,298.68	-3,630.18	3,928.30	3,770.27	158.02	24.859		
4,200.00	4,142.38	4,142.38	4,142.38	19.22	142.90	-57.48	2,298.68	-3,630.18	3,918.21	3,756.28	161.93	24.197		
4,300.00	4,240.65	4,240.65	4,240.65	19.70	146.33	-57.71	2,298.68	-3,630.18	3,908.18	3,742.35	165.83	23.568		
4,400.00	4,338.93	4,338.93	4,338.93	20.18	149.76	-57.93	2,298.68	-3,630.18	3,898.22	3,728.49	169.73	22.967		
4,500.00	4,437.21	4,437.21	4,437.21	20.65	153.19	-58.16	2,298.68	-3,630.18	3,888.31	3,714.68	173.63	22.394		
4,600.00	4,535.49	4,535.49	4,535.49	21.13	156.62	-58.39	2,298.68	-3,630.18	3,878.47	3,700.94	177.54	21.846		
4,700.00	4,633.76	4,633.76	4,633.76	21.61	160.05	-58.62	2,298.68	-3,630.18	3,868.70	3,687.26	181.44	21.322		
4,800.00	4,732.04	4,732.04	4,732.04	22.08	163.48	-58.85	2,298.68	-3,630.18	3,858.98	3,673.64	185.34	20.821		
4,900.00	4,830.32	4,830.32	4,830.32	22.56	166.91	-59.09	2,298.68	-3,630.18	3,849.34	3,660.09	189.25	20.340		
5,000.00	4,928.60	4,928.60	4,928.60	23.04	170.34	-59.32	2,298.68	-3,630.18	3,839.75	3,646.60	193.15	19.880		
5,100.00	5,026.87	5,026.87	5,026.87	23.51	173.77	-59.55	2,298.68	-3,630.18	3,830.23	3,633.18	197.05	19.438		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,125.15	5,125.15	23.99	177.20	-59.79	2,298.68	-3,630.18	3,820.78	3,619.82	200.96	19.013		
5,300.00	5,223.43	5,223.43	5,223.43	24.47	180.63	-60.03	2,298.68	-3,630.18	3,811.39	3,606.53	204.86	18.605		
5,400.00	5,321.71	5,321.71	5,321.71	24.94	184.06	-60.27	2,298.68	-3,630.18	3,802.07	3,593.31	208.77	18.212		
5,500.00	5,419.98	5,419.98	5,419.98	25.42	187.50	-60.50	2,298.68	-3,630.18	3,792.82	3,580.15	212.67	17.834		
5,600.00	5,518.26	5,518.26	5,518.26	25.90	190.93	-60.74	2,298.68	-3,630.18	3,783.64	3,567.06	216.58	17.470		
5,700.00	5,616.54	5,616.54	5,616.54	26.38	194.36	-60.99	2,298.68	-3,630.18	3,774.52	3,554.04	220.48	17.119		
5,800.00	5,714.82	5,714.82	5,714.82	26.85	197.79	-61.23	2,298.68	-3,630.18	3,765.47	3,541.08	224.39	16.781		
5,900.00	5,813.09	5,813.09	5,813.09	27.33	201.22	-61.47	2,298.68	-3,630.18	3,756.49	3,528.20	228.29	16.455		
6,000.00	5,911.37	5,911.37	5,911.37	27.81	204.65	-61.72	2,298.68	-3,630.18	3,747.58	3,515.38	232.20	16.140		
6,100.00	6,009.65	6,009.65	6,009.65	28.28	208.08	-61.96	2,298.68	-3,630.18	3,738.74	3,502.64	236.10	15.835		
6,200.00	6,107.93	6,107.93	6,107.93	28.76	211.51	-62.21	2,298.68	-3,630.18	3,729.97	3,489.96	240.01	15.541		
6,300.00	6,206.20	6,206.20	6,206.20	29.24	214.94	-62.46	2,298.68	-3,630.18	3,721.27	3,477.36	243.92	15.256		
6,400.00	6,304.48	6,304.48	6,304.48	29.72	218.37	-62.71	2,298.68	-3,630.18	3,712.65	3,464.82	247.82	14.981		
6,500.00	6,402.76	6,402.76	6,402.76	30.19	221.80	-62.96	2,298.68	-3,630.18	3,704.09	3,452.36	251.73	14.715		
6,600.00	6,501.04	6,501.04	6,501.04	30.67	225.23	-63.21	2,298.68	-3,630.18	3,695.61	3,439.98	255.64	14.457		
6,700.00	6,599.31	6,600.69	6,599.31	31.15	228.71	-63.46	2,298.68	-3,630.18	3,687.20	3,427.61	259.59	14.204		
6,800.00	6,697.50	6,702.50	6,697.50	31.63	232.26	-42.57	2,298.68	-3,630.18	3,677.14	3,413.52	263.62	13.949		
6,900.00	6,794.18	6,805.82	6,794.18	32.10	235.87	-16.20	2,298.68	-3,630.18	3,654.52	3,386.83	267.69	13.652		
7,000.00	6,886.96	6,886.96	6,886.96	32.55	238.70	-3.52	2,298.68	-3,630.18	3,617.88	3,346.93	270.95	13.353		
7,100.00	6,973.57	6,973.57	6,973.57	32.99	241.72	4.35	2,298.68	-3,630.18	3,568.09	3,293.74	274.35	13.006		
7,200.00	7,051.87	7,051.87	7,051.87	33.41	244.46	10.87	2,298.68	-3,630.18	3,506.40	3,228.99	277.41	12.640		
7,300.00	7,119.93	7,119.93	7,119.93	33.85	246.83	17.83	2,298.68	-3,630.18	3,434.35	3,154.31	280.04	12.264		
7,400.00	7,176.09	7,176.09	7,176.09	34.39	248.79	26.77	2,298.68	-3,630.18	3,353.77	3,071.59	282.18	11.885		
7,500.00	7,218.95	7,218.95	7,218.95	35.09	250.29	39.62	2,298.68	-3,630.18	3,266.75	2,982.95	283.80	11.511		
7,600.00	7,247.46	7,247.46	7,247.46	35.98	251.29	58.31	2,298.68	-3,630.18	3,175.54	2,890.68	284.86	11.148		
7,700.00	7,260.92	7,260.92	7,260.92	37.04	251.76	81.48	2,298.68	-3,630.18	3,082.53	2,797.16	285.37	10.802		
7,800.00	7,261.75	7,261.75	7,261.75	38.23	251.78	90.58	2,298.68	-3,630.18	2,989.85	2,704.41	285.44	10.474		
7,900.00	7,261.33	7,261.33	7,261.33	39.59	251.77	90.56	2,298.68	-3,630.18	2,897.73	2,612.21	285.52	10.149		
8,000.00	7,260.91	7,260.91	7,260.91	41.10	251.75	90.54	2,298.68	-3,630.18	2,806.15	2,520.48	285.67	9.823		
8,100.00	7,260.49	7,260.49	7,260.49	42.75	251.74	90.52	2,298.68	-3,630.18	2,715.17	2,429.27	285.90	9.497		
8,200.00	7,260.07	7,260.07	7,260.07	44.53	251.73	90.50	2,298.68	-3,630.18	2,624.84	2,338.63	286.21	9.171		
8,300.00	7,259.65	7,259.65	7,259.65	46.41	251.71	90.48	2,298.68	-3,630.18	2,535.24	2,248.60	286.64	8.845		
8,400.00	7,259.23	7,259.23	7,259.23	48.39	251.70	90.45	2,298.68	-3,630.18	2,446.44	2,159.25	287.19	8.519		
8,500.00	7,258.81	7,258.81	7,258.81	50.45	251.68	90.43	2,298.68	-3,630.18	2,358.54	2,070.67	287.88	8.193		
8,600.00	7,258.39	7,258.39	7,258.39	52.59	251.67	90.41	2,298.68	-3,630.18	2,271.64	1,982.92	288.73	7.868		
8,700.00	7,257.97	7,257.97	7,257.97	54.79	251.65	90.39	2,298.68	-3,630.18	2,185.86	1,896.10	289.76	7.544		
8,800.00	7,257.55	7,257.55	7,257.55	57.05	251.64	90.37	2,298.68	-3,630.18	2,101.34	1,810.34	291.00	7.221		
8,900.00	7,257.13	7,257.13	7,257.13	59.36	251.62	90.35	2,298.68	-3,630.18	2,018.24	1,725.77	292.47	6.901		
9,000.00	7,256.71	7,256.71	7,256.71	61.72	251.61	90.33	2,298.68	-3,630.18	1,936.73	1,642.54	294.19	6.583		
9,100.00	7,256.29	7,256.29	7,256.29	64.12	251.59	90.31	2,298.68	-3,630.18	1,857.03	1,560.85	296.19	6.270		
9,200.00	7,255.87	7,255.87	7,255.87	66.56	251.58	90.29	2,298.68	-3,630.18	1,779.39	1,480.90	298.48	5.961		
9,300.00	7,255.45	7,255.45	7,255.45	69.02	251.56	90.27	2,298.68	-3,630.18	1,704.07	1,402.97	301.10	5.659		
9,400.00	7,255.03	7,255.03	7,255.03	71.52	251.55	90.24	2,298.68	-3,630.18	1,631.41	1,327.36	304.05	5.366		
9,500.00	7,254.61	7,254.61	7,254.61	74.04	251.53	90.22	2,298.68	-3,630.18	1,561.77	1,254.42	307.35	5.081		
9,600.00	7,254.19	7,254.19	7,254.19	76.58	251.52	90.20	2,298.68	-3,630.18	1,495.59	1,184.59	311.00	4.809		
9,700.00	7,253.77	7,253.77	7,253.77	79.15	251.51	90.18	2,298.68	-3,630.18	1,433.32	1,118.34	314.98	4.550		
9,800.00	7,253.35	7,253.35	7,253.35	81.74	251.49	90.16	2,298.68	-3,630.18	1,375.52	1,056.24	319.28	4.308		
9,900.00	7,252.92	7,252.92	7,252.92	84.34	251.48	90.14	2,298.68	-3,630.18	1,322.76	998.91	323.85	4.084		
10,000.00	7,252.50	7,252.50	7,252.50	86.96	251.46	90.12	2,298.68	-3,630.18	1,275.67	947.06	328.61	3.882		
10,100.00	7,252.08	7,252.08	7,252.08	89.59	251.45	90.10	2,298.68	-3,630.18	1,234.90	901.43	333.47	3.703		
10,200.00	7,251.66	7,251.66	7,251.66	92.24	251.43	90.08	2,298.68	-3,630.18	1,201.09	862.80	338.29	3.550		
10,300.00	7,251.24	7,251.24	7,251.24	94.90	251.42	90.06	2,298.68	-3,630.18	1,174.84	831.90	342.94	3.426		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,250.82	7,250.82	97.57	251.40	90.03	2,298.68	-3,630.18	1,156.67	809.42	347.25	3.331		
10,500.00	7,250.40	7,250.40	7,250.40	100.25	251.39	90.01	2,298.68	-3,630.18	1,146.96	795.89	351.07	3.267		
10,561.82	7,250.14	7,250.14	7,250.14	101.91	251.38	90.00	2,298.68	-3,630.18	1,145.30	792.16	353.14	3.243 CC		
10,600.00	7,249.98	7,249.98	7,249.98	102.93	251.37	89.99	2,298.68	-3,630.18	1,145.93	791.65	354.28	3.235 ES		
10,700.00	7,249.56	7,249.56	7,249.56	105.63	251.36	89.97	2,298.68	-3,630.18	1,153.60	796.81	356.79	3.233 SF		
10,800.00	7,249.14	7,249.14	7,249.14	108.34	251.34	89.95	2,298.68	-3,630.18	1,169.80	811.23	358.57	3.262		
10,900.00	7,248.72	7,248.72	7,248.72	111.05	251.33	89.93	2,298.68	-3,630.18	1,194.18	834.55	359.63	3.321		
11,000.00	7,248.30	7,248.30	7,248.30	113.77	251.31	89.91	2,298.68	-3,630.18	1,226.26	866.22	360.04	3.406		
11,100.00	7,247.88	7,247.88	7,247.88	116.50	251.30	89.89	2,298.68	-3,630.18	1,265.44	905.57	359.87	3.516		
11,200.00	7,247.46	7,247.46	7,247.46	119.23	251.29	89.87	2,298.68	-3,630.18	1,311.10	951.87	359.23	3.650		
11,300.00	7,247.04	7,247.04	7,247.04	121.97	251.27	89.84	2,298.68	-3,630.18	1,362.57	1,004.35	358.22	3.804		
11,400.00	7,246.62	7,246.62	7,246.62	124.72	251.26	89.82	2,298.68	-3,630.18	1,419.24	1,062.30	356.94	3.976		
11,500.00	7,246.20	7,246.20	7,246.20	127.46	251.24	89.80	2,298.68	-3,630.18	1,480.50	1,125.02	355.48	4.165		
11,600.00	7,245.78	7,245.78	7,245.78	130.22	251.23	89.78	2,298.68	-3,630.18	1,545.80	1,191.91	353.89	4.368		
11,700.00	7,245.36	7,245.36	7,245.36	132.98	251.21	89.76	2,298.68	-3,630.18	1,614.67	1,262.42	352.24	4.584		
11,800.00	7,244.94	7,244.94	7,244.94	135.74	251.20	89.74	2,298.68	-3,630.18	1,686.65	1,336.08	350.57	4.811		
11,900.00	7,244.52	7,244.52	7,244.52	138.50	251.18	89.72	2,298.68	-3,630.18	1,761.37	1,412.46	348.91	5.048		
12,000.00	7,244.10	7,244.10	7,244.10	141.27	251.17	89.70	2,298.68	-3,630.18	1,838.49	1,491.21	347.27	5.294		
12,100.00	7,243.68	7,243.68	7,243.68	144.04	251.15	89.68	2,298.68	-3,630.18	1,917.73	1,572.04	345.69	5.548		
12,200.00	7,243.26	7,243.26	7,243.26	146.82	251.14	89.66	2,298.68	-3,630.18	1,998.83	1,654.67	344.16	5.808		
12,300.00	7,242.84	7,242.84	7,242.84	149.60	251.12	89.63	2,298.68	-3,630.18	2,081.57	1,738.88	342.69	6.074		
12,400.00	7,242.42	7,242.42	7,242.42	152.38	251.11	89.61	2,298.68	-3,630.18	2,165.77	1,824.48	341.29	6.346		
12,500.00	7,242.00	7,242.00	7,242.00	155.16	251.09	89.59	2,298.68	-3,630.18	2,251.26	1,911.31	339.96	6.622		
12,600.00	7,241.58	7,241.58	7,241.58	157.95	251.08	89.57	2,298.68	-3,630.18	2,337.91	1,999.22	338.69	6.903		
12,700.00	7,241.16	7,241.16	7,241.16	160.74	251.07	89.55	2,298.68	-3,630.18	2,425.58	2,088.09	337.49	7.187		
12,800.00	7,240.74	7,240.74	7,240.74	163.53	251.05	89.53	2,298.68	-3,630.18	2,514.18	2,177.83	336.35	7.475		
12,900.00	7,240.32	7,240.32	7,240.32	166.32	251.04	89.51	2,298.68	-3,630.18	2,603.60	2,268.33	335.27	7.766		
13,000.00	7,239.89	7,239.89	7,239.89	169.12	251.02	89.49	2,298.68	-3,630.18	2,693.76	2,359.51	334.25	8.059		
13,100.00	7,239.47	7,239.47	7,239.47	171.92	251.01	89.47	2,298.68	-3,630.18	2,784.59	2,451.32	333.28	8.355		
13,200.00	7,239.05	7,239.05	7,239.05	174.72	250.99	89.45	2,298.68	-3,630.18	2,876.04	2,543.68	332.36	8.653		
13,300.00	7,238.63	7,238.63	7,238.63	177.52	250.98	89.42	2,298.68	-3,630.18	2,968.03	2,636.54	331.50	8.953		
13,400.00	7,238.21	7,238.21	7,238.21	180.32	250.96	89.40	2,298.68	-3,630.18	3,060.53	2,729.86	330.67	9.255		
13,500.00	7,237.79	7,237.79	7,237.79	183.13	250.95	89.38	2,298.68	-3,630.18	3,153.49	2,823.59	329.89	9.559		
13,600.00	7,237.37	7,237.37	7,237.37	185.93	250.93	89.36	2,298.68	-3,630.18	3,246.86	2,917.70	329.16	9.864		
13,700.00	7,236.95	7,236.95	7,236.95	188.74	250.92	89.34	2,298.68	-3,630.18	3,340.62	3,012.16	328.46	10.171		
13,800.00	7,236.53	7,236.53	7,236.53	191.55	250.90	89.32	2,298.68	-3,630.18	3,434.73	3,106.94	327.79	10.478		
13,900.00	7,236.11	7,236.11	7,236.11	194.36	250.89	89.30	2,298.68	-3,630.18	3,529.16	3,202.00	327.16	10.787		
14,000.00	7,235.69	7,235.69	7,235.69	197.17	250.87	89.28	2,298.68	-3,630.18	3,623.89	3,297.33	326.56	11.097		
14,100.00	7,235.27	7,235.27	7,235.27	199.98	250.86	89.26	2,298.68	-3,630.18	3,718.90	3,392.91	325.99	11.408		
14,200.00	7,234.85	7,234.85	7,234.85	202.80	250.85	89.24	2,298.68	-3,630.18	3,814.16	3,488.72	325.45	11.720		
14,300.00	7,234.43	7,234.43	7,234.43	205.61	250.83	89.21	2,298.68	-3,630.18	3,909.66	3,584.73	324.93	12.032		
14,400.00	7,234.01	7,234.01	7,234.01	208.43	250.82	89.19	2,298.68	-3,630.18	4,005.38	3,680.94	324.44	12.346		
14,500.00	7,233.59	7,233.59	7,233.59	211.25	250.80	89.17	2,298.68	-3,630.18	4,101.31	3,777.34	323.97	12.659		
14,600.00	7,233.17	7,233.17	7,233.17	214.06	250.79	89.15	2,298.68	-3,630.18	4,197.42	3,873.90	323.53	12.974		
14,700.00	7,232.75	7,232.75	7,232.75	216.88	250.77	89.13	2,298.68	-3,630.18	4,293.71	3,970.61	323.10	13.289		
14,800.00	7,232.33	7,232.33	7,232.33	219.70	250.76	89.11	2,298.68	-3,630.18	4,390.17	4,067.47	322.69	13.605		
14,900.00	7,231.91	7,231.91	7,231.91	222.52	250.74	89.09	2,298.68	-3,630.18	4,486.78	4,164.47	322.31	13.921		
15,000.00	7,231.49	7,231.49	7,231.49	225.35	250.73	89.07	2,298.68	-3,630.18	4,583.54	4,261.60	321.94	14.237		
15,100.00	7,231.07	7,231.07	7,231.07	228.17	250.71	89.05	2,298.68	-3,630.18	4,680.43	4,358.85	321.58	14.554		
15,116.21	7,231.00	7,231.00	7,231.00	228.63	250.71	89.04	2,298.68	-3,630.18	4,696.15	4,374.62	321.53	14.606		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	40.00	0.00	3.28	-64.90	2,269.74	-4,845.53	5,350.93				
100.00	100.00	60.00	100.00	0.18	3.44	-64.90	2,269.74	-4,845.53	5,350.78	5,347.16	3.62	1,478.655	
200.00	200.00	160.00	200.00	0.61	5.05	-64.90	2,269.74	-4,845.53	5,350.78	5,345.12	5.66	944.616	
300.00	300.00	260.00	300.00	1.05	8.03	-64.90	2,269.74	-4,845.53	5,350.78	5,341.70	9.08	589.004	
400.00	400.00	360.00	400.00	1.49	11.31	-64.90	2,269.74	-4,845.53	5,350.78	5,337.98	12.80	418.027	
500.00	500.00	460.00	500.00	1.93	14.68	-64.90	2,269.74	-4,845.53	5,350.78	5,334.17	16.61	322.051	
600.00	599.98	559.98	599.98	2.37	18.10	-57.19	2,269.74	-4,845.53	5,349.84	5,329.36	20.47	261.327	
700.00	699.84	659.84	699.84	2.81	21.54	-57.28	2,269.74	-4,845.53	5,347.00	5,322.65	24.35	219.611	
800.00	799.45	759.45	799.45	3.26	24.98	-57.44	2,269.74	-4,845.53	5,342.29	5,314.06	28.23	189.248	
900.00	898.70	858.70	898.70	3.70	28.42	-57.66	2,269.74	-4,845.53	5,335.71	5,303.60	32.11	166.178	
1,000.00	997.47	957.47	997.47	4.15	31.85	-57.94	2,269.74	-4,845.53	5,327.30	5,291.32	35.98	148.061	
1,100.00	1,095.78	1,055.78	1,095.78	4.60	35.26	-58.16	2,269.74	-4,845.53	5,317.50	5,277.66	39.84	133.456	
1,200.00	1,194.05	1,154.05	1,194.05	5.05	38.68	-58.33	2,269.74	-4,845.53	5,307.66	5,263.94	43.71	121.420	
1,300.00	1,292.33	1,252.33	1,292.33	5.50	42.10	-58.50	2,269.74	-4,845.53	5,297.85	5,250.27	47.59	111.329	
1,400.00	1,390.61	1,350.61	1,390.61	5.96	45.52	-58.67	2,269.74	-4,845.53	5,288.10	5,236.63	51.47	102.750	
1,500.00	1,488.89	1,448.89	1,488.89	6.43	48.95	-58.83	2,269.74	-4,845.53	5,278.39	5,223.04	55.35	95.367	
1,600.00	1,587.16	1,547.16	1,587.16	6.89	52.37	-59.00	2,269.74	-4,845.53	5,268.73	5,209.49	59.23	88.949	
1,700.00	1,685.44	1,645.44	1,685.44	7.36	55.79	-59.17	2,269.74	-4,845.53	5,259.11	5,195.99	63.12	83.319	
1,800.00	1,783.72	1,743.72	1,783.72	7.83	59.22	-59.35	2,269.74	-4,845.53	5,249.54	5,182.53	67.01	78.340	
1,900.00	1,882.00	1,842.00	1,882.00	8.30	62.64	-59.52	2,269.74	-4,845.53	5,240.02	5,169.12	70.90	73.907	
2,000.00	1,980.27	1,940.27	1,980.27	8.77	66.07	-59.69	2,269.74	-4,845.53	5,230.55	5,155.76	74.79	69.934	
2,100.00	2,078.55	2,038.55	2,078.55	9.25	69.50	-59.86	2,269.74	-4,845.53	5,221.13	5,142.44	78.69	66.354	
2,200.00	2,176.83	2,136.83	2,176.83	9.72	72.93	-60.04	2,269.74	-4,845.53	5,211.75	5,129.17	82.58	63.111	
2,300.00	2,275.11	2,235.11	2,275.11	10.19	76.35	-60.21	2,269.74	-4,845.53	5,202.42	5,115.95	86.48	60.160	
2,400.00	2,373.38	2,333.38	2,373.38	10.66	79.78	-60.38	2,269.74	-4,845.53	5,193.15	5,102.77	90.37	57.464	
2,500.00	2,471.66	2,431.66	2,471.66	11.14	83.21	-60.56	2,269.74	-4,845.53	5,183.92	5,089.65	94.27	54.991	
2,600.00	2,569.94	2,529.94	2,569.94	11.61	86.64	-60.74	2,269.74	-4,845.53	5,174.74	5,076.57	98.17	52.714	
2,700.00	2,668.22	2,628.22	2,668.22	12.09	90.07	-60.91	2,269.74	-4,845.53	5,165.61	5,063.54	102.06	50.611	
2,800.00	2,766.49	2,726.49	2,766.49	12.56	93.49	-61.09	2,269.74	-4,845.53	5,156.53	5,050.57	105.96	48.663	
2,900.00	2,864.77	2,824.77	2,864.77	13.04	96.92	-61.27	2,269.74	-4,845.53	5,147.50	5,037.64	109.86	46.854	
3,000.00	2,963.05	2,923.05	2,963.05	13.51	100.35	-61.45	2,269.74	-4,845.53	5,138.52	5,024.76	113.76	45.169	
3,100.00	3,061.33	3,021.33	3,061.33	13.99	103.78	-61.62	2,269.74	-4,845.53	5,129.60	5,011.93	117.66	43.596	
3,200.00	3,159.60	3,119.60	3,159.60	14.46	107.21	-61.80	2,269.74	-4,845.53	5,120.72	4,999.16	121.56	42.124	
3,300.00	3,257.88	3,217.88	3,257.88	14.94	110.64	-61.98	2,269.74	-4,845.53	5,111.90	4,986.43	125.46	40.744	
3,400.00	3,356.16	3,316.16	3,356.16	15.41	114.07	-62.16	2,269.74	-4,845.53	5,103.12	4,973.76	129.36	39.448	
3,500.00	3,454.43	3,414.43	3,454.43	15.89	117.50	-62.35	2,269.74	-4,845.53	5,094.40	4,961.14	133.27	38.227	
3,600.00	3,552.71	3,512.71	3,552.71	16.36	120.93	-62.53	2,269.74	-4,845.53	5,085.73	4,948.57	137.17	37.077	
3,700.00	3,650.99	3,610.99	3,650.99	16.84	124.36	-62.71	2,269.74	-4,845.53	5,077.12	4,936.05	141.07	35.990	
3,800.00	3,749.27	3,709.27	3,749.27	17.32	127.79	-62.89	2,269.74	-4,845.53	5,068.55	4,923.58	144.97	34.962	
3,900.00	3,847.54	3,807.54	3,847.54	17.79	131.22	-63.08	2,269.74	-4,845.53	5,060.04	4,911.17	148.87	33.989	
4,000.00	3,945.82	3,905.82	3,945.82	18.27	134.65	-63.26	2,269.74	-4,845.53	5,051.59	4,898.81	152.78	33.065	
4,100.00	4,044.10	4,004.10	4,044.10	18.75	138.08	-63.45	2,269.74	-4,845.53	5,043.18	4,886.50	156.68	32.188	
4,200.00	4,142.38	4,102.38	4,142.38	19.22	141.51	-63.63	2,269.74	-4,845.53	5,034.83	4,874.25	160.58	31.353	
4,300.00	4,240.65	4,200.65	4,240.65	19.70	144.94	-63.82	2,269.74	-4,845.53	5,026.54	4,862.05	164.49	30.559	
4,400.00	4,338.93	4,301.07	4,338.93	20.18	148.44	-64.00	2,269.74	-4,845.53	5,018.29	4,849.83	168.46	29.788	
4,500.00	4,437.21	4,402.79	4,437.21	20.65	151.99	-64.19	2,269.74	-4,845.53	5,010.11	4,837.62	172.49	29.046	
4,600.00	4,535.49	4,504.51	4,535.49	21.13	155.54	-64.38	2,269.74	-4,845.53	5,001.97	4,825.46	176.51	28.338	
4,700.00	4,633.76	4,606.24	4,633.76	21.61	159.09	-64.57	2,269.74	-4,845.53	4,993.90	4,813.36	180.54	27.661	
4,800.00	4,732.04	4,707.96	4,732.04	22.08	162.64	-64.76	2,269.74	-4,845.53	4,985.88	4,801.31	184.56	27.015	
4,900.00	4,830.32	4,809.68	4,830.32	22.56	166.19	-64.95	2,269.74	-4,845.53	4,977.91	4,789.32	188.59	26.396	
5,000.00	4,928.60	4,888.60	4,928.60	23.04	168.95	-65.14	2,269.74	-4,845.53	4,970.00	4,778.19	191.82	25.910	
5,100.00	5,026.87	4,986.87	5,026.87	23.51	172.38	-65.33	2,269.74	-4,845.53	4,962.15	4,766.43	195.72	25.353	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,085.15	5,125.15	23.99	175.81	-65.52	2,269.74	-4,845.53	4,954.35	4,754.72	199.63	24.818		
5,300.00	5,223.43	5,183.43	5,223.43	24.47	179.24	-65.71	2,269.74	-4,845.53	4,946.61	4,743.08	203.53	24.304		
5,400.00	5,321.71	5,281.71	5,321.71	24.94	182.67	-65.90	2,269.74	-4,845.53	4,938.93	4,731.49	207.44	23.809		
5,500.00	5,419.98	5,379.98	5,419.98	25.42	186.10	-66.10	2,269.74	-4,845.53	4,931.30	4,719.96	211.34	23.333		
5,600.00	5,518.26	5,478.26	5,518.26	25.90	189.53	-66.29	2,269.74	-4,845.53	4,923.73	4,708.48	215.25	22.875		
5,700.00	5,616.54	5,576.54	5,616.54	26.38	192.96	-66.49	2,269.74	-4,845.53	4,916.22	4,697.07	219.15	22.433		
5,800.00	5,714.82	5,674.82	5,714.82	26.85	196.39	-66.68	2,269.74	-4,845.53	4,908.77	4,685.71	223.06	22.007		
5,900.00	5,813.09	5,773.09	5,813.09	27.33	199.82	-66.88	2,269.74	-4,845.53	4,901.37	4,674.41	226.97	21.595		
6,000.00	5,911.37	5,871.37	5,911.37	27.81	203.25	-67.07	2,269.74	-4,845.53	4,894.04	4,663.17	230.87	21.198		
6,100.00	6,009.65	5,969.65	6,009.65	28.28	206.68	-67.27	2,269.74	-4,845.53	4,886.76	4,651.98	234.78	20.814		
6,200.00	6,107.93	6,067.93	6,107.93	28.76	210.11	-67.47	2,269.74	-4,845.53	4,879.54	4,640.86	238.68	20.444		
6,300.00	6,206.20	6,166.20	6,206.20	29.24	213.54	-67.66	2,269.74	-4,845.53	4,872.39	4,629.80	242.59	20.085		
6,400.00	6,304.48	6,264.48	6,304.48	29.72	216.97	-67.86	2,269.74	-4,845.53	4,865.29	4,618.79	246.50	19.738		
6,500.00	6,402.76	6,362.76	6,402.76	30.19	220.40	-68.06	2,269.74	-4,845.53	4,858.25	4,607.84	250.40	19.402		
6,600.00	6,501.04	6,461.04	6,501.04	30.67	223.83	-68.26	2,269.74	-4,845.53	4,851.27	4,596.96	254.31	19.076		
6,700.00	6,599.31	6,559.31	6,599.31	31.15	227.26	-68.46	2,269.74	-4,845.53	4,844.35	4,586.13	258.22	18.761		
6,800.00	6,697.50	6,657.50	6,697.50	31.63	230.69	-47.58	2,269.74	-4,845.53	4,835.72	4,573.60	262.12	18.448		
6,900.00	6,794.18	6,754.18	6,794.18	32.10	234.07	-21.40	2,269.74	-4,845.53	4,814.14	4,548.18	265.96	18.101		
7,000.00	6,886.96	6,846.96	6,886.96	32.55	237.30	-9.07	2,269.74	-4,845.53	4,778.10	4,508.48	269.63	17.721		
7,100.00	6,973.57	6,933.57	6,973.57	32.99	240.33	-1.76	2,269.74	-4,845.53	4,728.46	4,455.43	273.04	17.318		
7,200.00	7,051.87	7,011.87	7,051.87	33.41	243.06	3.92	2,269.74	-4,845.53	4,666.44	4,390.34	276.10	16.901		
7,300.00	7,119.93	7,079.93	7,119.93	33.85	245.44	9.66	2,269.74	-4,845.53	4,593.55	4,314.82	278.74	16.480		
7,400.00	7,176.09	7,136.09	7,176.09	34.39	247.40	16.96	2,269.74	-4,845.53	4,511.62	4,230.73	280.88	16.062		
7,500.00	7,218.95	7,178.95	7,218.95	35.09	248.89	28.13	2,269.74	-4,845.53	4,422.69	4,140.19	282.50	15.656		
7,600.00	7,247.46	7,207.46	7,247.46	35.98	249.89	47.40	2,269.74	-4,845.53	4,329.01	4,045.46	283.55	15.267		
7,700.00	7,260.92	7,220.92	7,260.92	37.04	250.36	77.73	2,269.74	-4,845.53	4,232.93	3,948.91	284.02	14.904		
7,800.00	7,261.75	7,221.75	7,261.75	38.23	250.39	90.84	2,269.74	-4,845.53	4,136.64	3,852.61	284.03	14.564		
7,900.00	7,261.33	7,221.33	7,261.33	39.59	250.37	90.82	2,269.74	-4,845.53	4,040.59	3,756.56	284.02	14.226		
8,000.00	7,260.91	7,220.91	7,260.91	41.10	250.36	90.80	2,269.74	-4,845.53	3,944.73	3,660.68	284.04	13.888		
8,100.00	7,260.49	7,220.49	7,260.49	42.75	250.34	90.78	2,269.74	-4,845.53	3,849.07	3,564.98	284.09	13.549		
8,200.00	7,260.07	7,220.07	7,260.07	44.53	250.33	90.76	2,269.74	-4,845.53	3,753.65	3,469.47	284.18	13.209		
8,300.00	7,259.65	7,219.65	7,259.65	46.41	250.31	90.74	2,269.74	-4,845.53	3,658.47	3,374.16	284.31	12.868		
8,400.00	7,259.23	7,219.23	7,259.23	48.39	250.30	90.72	2,269.74	-4,845.53	3,563.55	3,279.07	284.49	12.526		
8,500.00	7,258.81	7,218.81	7,258.81	50.45	250.29	90.69	2,269.74	-4,845.53	3,468.92	3,184.21	284.72	12.184		
8,600.00	7,258.39	7,218.39	7,258.39	52.59	250.27	90.67	2,269.74	-4,845.53	3,374.60	3,089.60	285.01	11.840		
8,700.00	7,257.97	7,217.97	7,257.97	54.79	250.26	90.65	2,269.74	-4,845.53	3,280.62	2,995.25	285.37	11.496		
8,800.00	7,257.55	7,217.55	7,257.55	57.05	250.24	90.63	2,269.74	-4,845.53	3,187.00	2,901.20	285.80	11.151		
8,900.00	7,257.13	7,217.13	7,257.13	59.36	250.23	90.61	2,269.74	-4,845.53	3,093.78	2,807.46	286.32	10.805		
9,000.00	7,256.71	7,216.71	7,256.71	61.72	250.21	90.59	2,269.74	-4,845.53	3,001.00	2,714.06	286.94	10.459		
9,100.00	7,256.29	7,216.29	7,256.29	64.12	250.20	90.57	2,269.74	-4,845.53	2,908.70	2,621.03	287.67	10.111		
9,200.00	7,255.87	7,215.87	7,255.87	66.56	250.18	90.55	2,269.74	-4,845.53	2,816.92	2,528.40	288.51	9.764		
9,300.00	7,255.45	7,215.45	7,255.45	69.02	250.17	90.52	2,269.74	-4,845.53	2,725.72	2,436.22	289.49	9.416		
9,400.00	7,255.03	7,215.03	7,255.03	71.52	250.15	90.50	2,269.74	-4,845.53	2,635.15	2,344.54	290.62	9.067		
9,500.00	7,254.61	7,214.61	7,254.61	74.04	250.14	90.48	2,269.74	-4,845.53	2,545.30	2,253.40	291.90	8.720		
9,600.00	7,254.19	7,214.19	7,254.19	76.58	250.12	90.46	2,269.74	-4,845.53	2,456.23	2,162.86	293.37	8.373		
9,700.00	7,253.77	7,213.77	7,253.77	79.15	250.11	90.44	2,269.74	-4,845.53	2,368.03	2,073.00	295.03	8.026		
9,800.00	7,253.35	7,213.35	7,253.35	81.74	250.09	90.42	2,269.74	-4,845.53	2,280.81	1,983.90	296.90	7.682		
9,900.00	7,252.92	7,212.92	7,252.92	84.34	250.08	90.40	2,269.74	-4,845.53	2,194.67	1,895.66	299.01	7.340		
10,000.00	7,252.50	7,212.50	7,252.50	86.96	250.07	90.38	2,269.74	-4,845.53	2,109.76	1,808.39	301.37	7.001		
10,100.00	7,252.08	7,212.08	7,252.08	89.59	250.05	90.36	2,269.74	-4,845.53	2,026.23	1,722.23	304.00	6.665		
10,200.00	7,251.66	7,211.66	7,251.66	92.24	250.04	90.33	2,269.74	-4,845.53	1,944.25	1,637.32	306.93	6.335		
10,300.00	7,251.24	7,211.24	7,251.24	94.90	250.02	90.31	2,269.74	-4,845.53	1,864.03	1,553.86	310.17	6.010		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,250.82	7,210.82	7,250.82	97.57	250.01	90.29	2,269.74	-4,845.53	1,785.81	1,472.06	313.76	5.692		
10,500.00	7,250.40	7,210.40	7,250.40	100.25	249.99	90.27	2,269.74	-4,845.53	1,709.86	1,392.17	317.69	5.382		
10,600.00	7,249.98	7,209.98	7,249.98	102.93	249.98	90.25	2,269.74	-4,845.53	1,636.50	1,314.51	321.99	5.082		
10,700.00	7,249.56	7,209.56	7,249.56	105.63	249.96	90.23	2,269.74	-4,845.53	1,566.09	1,239.43	326.66	4.794		
10,800.00	7,249.14	7,209.14	7,249.14	108.34	249.95	90.21	2,269.74	-4,845.53	1,499.05	1,167.34	331.71	4.519		
10,900.00	7,248.72	7,208.72	7,248.72	111.05	249.93	90.19	2,269.74	-4,845.53	1,435.85	1,098.75	337.10	4.259		
11,000.00	7,248.30	7,208.30	7,248.30	113.77	249.92	90.16	2,269.74	-4,845.53	1,377.01	1,034.21	342.81	4.017		
11,100.00	7,247.88	7,207.88	7,247.88	116.50	249.90	90.14	2,269.74	-4,845.53	1,323.13	974.37	348.76	3.794		
11,200.00	7,247.46	7,207.46	7,247.46	119.23	249.89	90.12	2,269.74	-4,845.53	1,274.82	919.97	354.86	3.593		
11,300.00	7,247.04	7,207.04	7,247.04	121.97	249.87	90.10	2,269.74	-4,845.53	1,232.75	871.78	360.97	3.415		
11,400.00	7,246.62	7,206.62	7,246.62	124.72	249.86	90.08	2,269.74	-4,845.53	1,197.57	830.63	366.94	3.264		
11,500.00	7,246.20	7,206.20	7,246.20	127.46	249.84	90.06	2,269.74	-4,845.53	1,169.91	797.34	372.57	3.140		
11,600.00	7,245.78	7,205.78	7,245.78	130.22	249.83	90.04	2,269.74	-4,845.53	1,150.30	772.63	377.66	3.046		
11,700.00	7,245.36	7,205.36	7,245.36	132.98	249.82	90.02	2,269.74	-4,845.53	1,139.16	757.13	382.03	2.982		
11,777.49	7,245.03	7,205.03	7,245.03	135.12	249.80	90.00	2,269.74	-4,845.53	1,136.52	751.72	384.81	2.953 CC		
11,800.00	7,244.94	7,204.94	7,244.94	135.74	249.80	90.00	2,269.74	-4,845.53	1,136.75	751.24	385.51	2.949 ES		
11,900.00	7,244.52	7,204.52	7,244.52	138.50	249.79	89.97	2,269.74	-4,845.53	1,143.11	755.10	388.00	2.946 SF		
12,000.00	7,244.10	7,204.10	7,244.10	141.27	249.77	89.95	2,269.74	-4,845.53	1,158.10	768.61	389.49	2.973		
12,100.00	7,243.68	7,203.68	7,243.68	144.04	249.76	89.93	2,269.74	-4,845.53	1,181.40	791.38	390.02	3.029		
12,200.00	7,243.26	7,203.26	7,243.26	146.82	249.74	89.91	2,269.74	-4,845.53	1,212.52	822.85	389.67	3.112		
12,300.00	7,242.84	7,202.84	7,242.84	149.60	249.73	89.89	2,269.74	-4,845.53	1,250.88	862.30	388.58	3.219		
12,400.00	7,242.42	7,202.42	7,242.42	152.38	249.71	89.87	2,269.74	-4,845.53	1,295.84	908.94	386.90	3.349		
12,500.00	7,242.00	7,202.00	7,242.00	155.16	249.70	89.85	2,269.74	-4,845.53	1,346.74	961.96	384.77	3.500		
12,600.00	7,241.58	7,201.58	7,241.58	157.95	249.68	89.83	2,269.74	-4,845.53	1,402.92	1,020.58	382.34	3.669		
12,700.00	7,241.16	7,201.16	7,241.16	160.74	249.67	89.80	2,269.74	-4,845.53	1,463.80	1,084.08	379.71	3.855		
12,800.00	7,240.74	7,200.74	7,240.74	163.53	249.65	89.78	2,269.74	-4,845.53	1,528.79	1,151.81	376.98	4.055		
12,900.00	7,240.32	7,200.32	7,240.32	166.32	249.64	89.76	2,269.74	-4,845.53	1,597.40	1,223.18	374.22	4.269		
13,000.00	7,239.89	7,200.11	7,239.89	169.12	249.63	89.74	2,269.74	-4,845.53	1,669.19	1,297.70	371.49	4.493		
13,100.00	7,239.47	7,200.53	7,239.47	171.92	249.65	89.72	2,269.74	-4,845.53	1,743.76	1,374.92	368.83	4.728		
13,200.00	7,239.05	7,200.95	7,239.05	174.72	249.66	89.70	2,269.74	-4,845.53	1,820.77	1,454.50	366.27	4.971		
13,300.00	7,238.63	7,201.37	7,238.63	177.52	249.68	89.68	2,269.74	-4,845.53	1,899.92	1,536.12	363.80	5.222		
13,400.00	7,238.21	7,201.79	7,238.21	180.32	249.69	89.66	2,269.74	-4,845.53	1,980.95	1,619.51	361.44	5.481		
13,500.00	7,237.79	7,202.21	7,237.79	183.13	249.71	89.64	2,269.74	-4,845.53	2,063.66	1,704.45	359.20	5.745		
13,600.00	7,237.37	7,202.63	7,237.37	185.93	249.72	89.61	2,269.74	-4,845.53	2,147.83	1,790.75	357.08	6.015		
13,700.00	7,236.95	7,203.05	7,236.95	188.74	249.73	89.59	2,269.74	-4,845.53	2,233.31	1,878.24	355.07	6.290		
13,800.00	7,236.53	7,203.47	7,236.53	191.55	249.75	89.57	2,269.74	-4,845.53	2,319.95	1,966.78	353.17	6.569		
13,900.00	7,236.11	7,203.89	7,236.11	194.36	249.76	89.55	2,269.74	-4,845.53	2,407.63	2,056.25	351.38	6.852		
14,000.00	7,235.69	7,204.31	7,235.69	197.17	249.78	89.53	2,269.74	-4,845.53	2,496.23	2,146.54	349.69	7.138		
14,100.00	7,235.27	7,204.73	7,235.27	199.98	249.79	89.51	2,269.74	-4,845.53	2,585.66	2,237.57	348.09	7.428		
14,200.00	7,234.85	7,205.15	7,234.85	202.80	249.81	89.49	2,269.74	-4,845.53	2,675.84	2,329.25	346.59	7.720		
14,300.00	7,234.43	7,205.57	7,234.43	205.61	249.82	89.47	2,269.74	-4,845.53	2,766.70	2,421.53	345.18	8.015		
14,400.00	7,234.01	7,205.99	7,234.01	208.43	249.84	89.44	2,269.74	-4,845.53	2,858.17	2,514.33	343.84	8.313		
14,500.00	7,233.59	7,206.41	7,233.59	211.25	249.85	89.42	2,269.74	-4,845.53	2,950.19	2,607.61	342.58	8.612		
14,600.00	7,233.17	7,206.83	7,233.17	214.06	249.87	89.40	2,269.74	-4,845.53	3,042.71	2,701.33	341.39	8.913		
14,700.00	7,232.75	7,207.25	7,232.75	216.88	249.88	89.38	2,269.74	-4,845.53	3,135.70	2,795.43	340.26	9.215		
14,800.00	7,232.33	7,207.67	7,232.33	219.70	249.90	89.36	2,269.74	-4,845.53	3,229.10	2,889.90	339.20	9.520		
14,900.00	7,231.91	7,208.09	7,231.91	222.52	249.91	89.34	2,269.74	-4,845.53	3,322.89	2,984.69	338.20	9.825		
15,000.00	7,231.49	7,208.51	7,231.49	225.35	249.93	89.32	2,269.74	-4,845.53	3,417.03	3,079.78	337.24	10.132		
15,100.00	7,231.07	7,208.93	7,231.07	228.17	249.94	89.30	2,269.74	-4,845.53	3,511.49	3,175.15	336.34	10.440		
15,116.21	7,231.00	7,209.00	7,231.00	228.63	249.94	89.29	2,269.74	-4,845.53	3,526.83	3,190.63	336.20	10.490		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	67.00	0.00	3.28	-124.41	-4,351.89	-6,352.65	7,700.62					
100.00	100.00	33.00	100.00	0.18	3.33	-124.41	-4,351.89	-6,352.65	7,700.33	7,696.82	3.51	2,196.497		
200.00	200.00	133.00	200.00	0.61	4.38	-124.41	-4,351.89	-6,352.65	7,700.33	7,695.34	4.99	1,542.899		
300.00	300.00	233.00	300.00	1.05	7.18	-124.41	-4,351.89	-6,352.65	7,700.33	7,692.09	8.23	935.141		
400.00	400.00	333.00	400.00	1.49	10.41	-124.41	-4,351.89	-6,352.65	7,700.33	7,688.43	11.90	646.999		
500.00	500.00	433.00	500.00	1.93	13.77	-124.41	-4,351.89	-6,352.65	7,700.33	7,684.63	15.70	490.542		
600.00	599.98	532.98	599.98	2.37	17.18	-116.66	-4,351.89	-6,352.65	7,701.11	7,681.57	19.55	394.003		
700.00	699.84	632.84	699.84	2.81	20.61	-116.66	-4,351.89	-6,352.65	7,703.46	7,680.05	23.42	328.969		
800.00	799.45	732.45	799.45	3.26	24.05	-116.64	-4,351.89	-6,352.65	7,707.38	7,680.09	27.30	282.361		
900.00	898.70	831.70	898.70	3.70	27.49	-116.63	-4,351.89	-6,352.65	7,712.88	7,681.71	31.17	247.406		
1,000.00	997.47	930.47	997.47	4.15	30.91	-116.60	-4,351.89	-6,352.65	7,719.96	7,684.91	35.05	220.269		
1,100.00	1,095.78	1,028.78	1,095.78	4.60	34.33	-116.67	-4,351.89	-6,352.65	7,728.27	7,689.36	38.91	198.599		
1,200.00	1,194.05	1,127.05	1,194.05	5.05	37.74	-116.79	-4,351.89	-6,352.65	7,736.70	7,693.92	42.79	180.825		
1,300.00	1,292.33	1,225.33	1,292.33	5.50	41.16	-116.92	-4,351.89	-6,352.65	7,745.16	7,698.50	46.66	165.981		
1,400.00	1,390.61	1,323.61	1,390.61	5.96	44.58	-117.04	-4,351.89	-6,352.65	7,753.66	7,703.12	50.54	153.402		
1,500.00	1,488.89	1,421.89	1,488.89	6.43	48.00	-117.16	-4,351.89	-6,352.65	7,762.20	7,707.77	54.43	142.609		
1,600.00	1,587.16	1,520.16	1,587.16	6.89	51.43	-117.27	-4,351.89	-6,352.65	7,770.77	7,712.45	58.32	133.249		
1,700.00	1,685.44	1,618.44	1,685.44	7.36	54.85	-117.39	-4,351.89	-6,352.65	7,779.37	7,717.16	62.21	125.054		
1,800.00	1,783.72	1,716.72	1,783.72	7.83	58.28	-117.51	-4,351.89	-6,352.65	7,788.01	7,721.91	66.10	117.822		
1,900.00	1,882.00	1,815.00	1,882.00	8.30	61.70	-117.63	-4,351.89	-6,352.65	7,796.68	7,726.68	69.99	111.392		
2,000.00	1,980.27	1,913.27	1,980.27	8.77	65.13	-117.75	-4,351.89	-6,352.65	7,805.38	7,731.50	73.89	105.638		
2,100.00	2,078.55	2,011.55	2,078.55	9.25	68.56	-117.87	-4,351.89	-6,352.65	7,814.12	7,736.34	77.78	100.460		
2,200.00	2,176.83	2,109.83	2,176.83	9.72	71.98	-117.99	-4,351.89	-6,352.65	7,822.90	7,741.22	81.68	95.774		
2,300.00	2,275.11	2,208.11	2,275.11	10.19	75.41	-118.10	-4,351.89	-6,352.65	7,831.70	7,746.13	85.58	91.516		
2,400.00	2,373.38	2,306.38	2,373.38	10.66	78.84	-118.22	-4,351.89	-6,352.65	7,840.54	7,751.07	89.48	87.627		
2,500.00	2,471.66	2,404.66	2,471.66	11.14	82.27	-118.34	-4,351.89	-6,352.65	7,849.42	7,756.04	93.37	84.064		
2,600.00	2,569.94	2,502.94	2,569.94	11.61	85.70	-118.46	-4,351.89	-6,352.65	7,858.33	7,761.05	97.27	80.786		
2,700.00	2,668.22	2,601.22	2,668.22	12.09	89.12	-118.57	-4,351.89	-6,352.65	7,867.27	7,766.10	101.17	77.760		
2,800.00	2,766.49	2,700.51	2,766.49	12.56	92.59	-118.69	-4,351.89	-6,352.65	7,876.24	7,771.13	105.11	74.934		
2,900.00	2,864.77	2,802.23	2,864.77	13.04	96.14	-118.81	-4,351.89	-6,352.65	7,885.25	7,776.12	109.13	72.256		
3,000.00	2,963.05	2,903.95	2,963.05	13.51	99.69	-118.92	-4,351.89	-6,352.65	7,894.29	7,781.14	113.15	69.769		
3,100.00	3,061.33	3,005.67	3,061.33	13.99	103.23	-119.04	-4,351.89	-6,352.65	7,903.36	7,786.19	117.17	67.452		
3,200.00	3,159.60	3,107.40	3,159.60	14.46	106.78	-119.15	-4,351.89	-6,352.65	7,912.47	7,791.28	121.19	65.289		
3,300.00	3,257.88	3,209.12	3,257.88	14.94	110.33	-119.27	-4,351.89	-6,352.65	7,921.61	7,796.40	125.21	63.265		
3,400.00	3,356.16	3,289.16	3,356.16	15.41	113.13	-119.38	-4,351.89	-6,352.65	7,930.78	7,802.30	128.48	61.729		
3,500.00	3,454.43	3,387.43	3,454.43	15.89	116.56	-119.50	-4,351.89	-6,352.65	7,939.99	7,807.61	132.38	59.979		
3,600.00	3,552.71	3,485.71	3,552.71	16.36	119.99	-119.61	-4,351.89	-6,352.65	7,949.22	7,812.94	136.28	58.329		
3,700.00	3,650.99	3,583.99	3,650.99	16.84	123.42	-119.73	-4,351.89	-6,352.65	7,958.49	7,818.31	140.18	56.772		
3,800.00	3,749.27	3,682.27	3,749.27	17.32	126.85	-119.84	-4,351.89	-6,352.65	7,967.79	7,823.70	144.09	55.299		
3,900.00	3,847.54	3,780.54	3,847.54	17.79	130.27	-119.95	-4,351.89	-6,352.65	7,977.12	7,829.14	147.99	53.904		
4,000.00	3,945.82	3,878.82	3,945.82	18.27	133.70	-120.07	-4,351.89	-6,352.65	7,986.49	7,834.60	151.89	52.581		
4,100.00	4,044.10	3,977.10	4,044.10	18.75	137.13	-120.18	-4,351.89	-6,352.65	7,995.88	7,840.09	155.79	51.324		
4,200.00	4,142.38	4,075.38	4,142.38	19.22	140.56	-120.29	-4,351.89	-6,352.65	8,005.31	7,845.62	159.69	50.129		
4,300.00	4,240.65	4,173.65	4,240.65	19.70	143.99	-120.41	-4,351.89	-6,352.65	8,014.77	7,851.17	163.60	48.991		
4,400.00	4,338.93	4,271.93	4,338.93	20.18	147.42	-120.52	-4,351.89	-6,352.65	8,024.26	7,856.76	167.50	47.907		
4,500.00	4,437.21	4,370.21	4,437.21	20.65	150.85	-120.63	-4,351.89	-6,352.65	8,033.78	7,862.38	171.40	46.871		
4,600.00	4,535.49	4,462.00	4,519.00	21.13	153.71	-120.72	-4,351.89	-6,352.65	8,043.35	7,868.63	174.72	46.035		
4,700.00	4,633.76	4,452.00	4,519.00	21.61	153.71	-120.72	-4,351.89	-6,352.65	8,053.74	7,878.58	175.16	45.980		
4,800.00	4,732.04	4,452.00	4,519.00	22.08	153.71	-120.72	-4,351.89	-6,352.65	8,065.35	7,889.78	175.56	45.940		
4,900.00	4,830.32	4,452.00	4,519.00	22.56	153.71	-120.72	-4,351.89	-6,352.65	8,078.18	7,902.24	175.94	45.913		
5,000.00	4,928.60	4,452.00	4,519.00	23.04	153.71	-120.72	-4,351.89	-6,352.65	8,092.23	7,915.93	176.30	45.901		
5,100.00	5,026.87	4,452.00	4,519.00	23.51	153.71	-120.72	-4,351.89	-6,352.65	8,107.49	7,930.86	176.62	45.903		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	5,125.15	4,452.00	4,519.00	23.99	153.71	-120.72	-4,351.89	-6,352.65	8,123.95	7,947.02	176.92	45.918		
5,300.00	5,223.43	4,452.00	4,519.00	24.47	153.71	-120.72	-4,351.89	-6,352.65	8,141.60	7,964.41	177.20	45.947		
5,400.00	5,321.71	4,452.00	4,519.00	24.94	153.71	-120.72	-4,351.89	-6,352.65	8,160.44	7,983.00	177.44	45.989		
5,500.00	5,419.98	4,452.00	4,519.00	25.42	153.71	-120.72	-4,351.89	-6,352.65	8,180.47	8,002.80	177.66	46.044		
5,600.00	5,518.26	4,452.00	4,519.00	25.90	153.71	-120.72	-4,351.89	-6,352.65	8,201.66	8,023.80	177.86	46.113		
5,700.00	5,616.54	4,452.00	4,519.00	26.38	153.71	-120.72	-4,351.89	-6,352.65	8,224.01	8,045.98	178.03	46.195		
5,800.00	5,714.82	4,452.00	4,519.00	26.85	153.71	-120.72	-4,351.89	-6,352.65	8,247.52	8,069.34	178.17	46.289		
5,900.00	5,813.09	4,452.00	4,519.00	27.33	153.71	-120.72	-4,351.89	-6,352.65	8,272.16	8,093.87	178.29	46.396		
6,000.00	5,911.37	4,452.00	4,519.00	27.81	153.71	-120.72	-4,351.89	-6,352.65	8,297.94	8,119.55	178.39	46.515		
6,100.00	6,009.65	4,452.00	4,519.00	28.28	153.71	-120.72	-4,351.89	-6,352.65	8,324.84	8,146.38	178.46	46.647		
6,200.00	6,107.93	4,452.00	4,519.00	28.76	153.71	-120.72	-4,351.89	-6,352.65	8,352.86	8,174.34	178.51	46.791		
6,300.00	6,206.20	4,452.00	4,519.00	29.24	153.71	-120.72	-4,351.89	-6,352.65	8,381.97	8,203.43	178.54	46.947		
6,400.00	6,304.48	4,452.00	4,519.00	29.72	153.71	-120.72	-4,351.89	-6,352.65	8,412.17	8,233.62	178.54	47.116		
6,500.00	6,402.76	4,452.00	4,519.00	30.19	153.71	-120.72	-4,351.89	-6,352.65	8,443.44	8,264.92	178.53	47.295		
6,600.00	6,501.04	4,452.00	4,519.00	30.67	153.71	-120.72	-4,351.89	-6,352.65	8,475.78	8,297.29	178.49	47.487		
6,700.00	6,599.31	4,452.00	4,519.00	31.15	153.71	-120.72	-4,351.89	-6,352.65	8,509.17	8,330.75	178.43	47.690		
6,800.00	6,697.50	4,452.00	4,519.00	31.63	153.71	-98.88	-4,351.89	-6,352.65	8,542.22	8,363.87	178.35	47.897		
6,900.00	6,794.18	4,452.00	4,519.00	32.10	153.71	-71.77	-4,351.89	-6,352.65	8,565.83	8,387.58	178.25	48.056		
7,000.00	6,886.96	4,452.00	4,519.00	32.55	153.71	-59.63	-4,351.89	-6,352.65	8,577.97	8,399.84	178.13	48.155		
7,100.00	6,973.57	4,452.00	4,519.00	32.99	153.71	-53.73	-4,351.89	-6,352.65	8,578.40	8,400.38	178.02	48.188		
7,200.00	7,051.87	4,452.00	4,519.00	33.41	153.71	-50.92	-4,351.89	-6,352.65	8,567.11	8,389.18	177.93	48.149		
7,300.00	7,119.93	4,452.00	4,519.00	33.85	153.71	-50.03	-4,351.89	-6,352.65	8,544.32	8,366.43	177.89	48.031		
7,400.00	7,176.09	4,452.00	4,519.00	34.39	153.71	-50.63	-4,351.89	-6,352.65	8,510.51	8,332.57	177.94	47.827		
7,500.00	7,218.95	4,452.00	4,519.00	35.09	153.71	-52.59	-4,351.89	-6,352.65	8,466.39	8,288.28	178.11	47.535		
7,600.00	7,247.46	4,452.00	4,519.00	35.98	153.71	-55.99	-4,351.89	-6,352.65	8,412.90	8,234.48	178.42	47.153		
7,700.00	7,260.92	4,452.00	4,519.00	37.04	153.71	-60.99	-4,351.89	-6,352.65	8,351.17	8,172.31	178.87	46.690		
7,800.00	7,261.75	4,452.00	4,519.00	38.23	153.71	-63.52	-4,351.89	-6,352.65	8,283.75	8,104.31	179.44	46.164		
7,900.00	7,261.33	4,452.00	4,519.00	39.59	153.71	-63.52	-4,351.89	-6,352.65	8,216.41	8,036.29	180.12	45.616		
8,000.00	7,260.91	4,452.00	4,519.00	41.10	153.71	-63.52	-4,351.89	-6,352.65	8,149.74	7,968.84	180.90	45.051		
8,100.00	7,260.49	4,452.00	4,519.00	42.75	153.71	-63.52	-4,351.89	-6,352.65	8,083.76	7,901.98	181.78	44.470		
8,200.00	7,260.07	4,452.00	4,519.00	44.53	153.71	-63.52	-4,351.89	-6,352.65	8,018.48	7,835.73	182.75	43.876		
8,300.00	7,259.65	4,452.00	4,519.00	46.41	153.71	-63.52	-4,351.89	-6,352.65	7,953.92	7,770.10	183.82	43.270		
8,400.00	7,259.23	4,452.00	4,519.00	48.39	153.71	-63.52	-4,351.89	-6,352.65	7,890.11	7,705.13	184.98	42.655		
8,500.00	7,258.81	4,452.00	4,519.00	50.45	153.71	-63.52	-4,351.89	-6,352.65	7,827.04	7,640.83	186.22	42.032		
8,600.00	7,258.39	4,452.00	4,519.00	52.59	153.71	-63.52	-4,351.89	-6,352.65	7,764.76	7,577.22	187.54	41.403		
8,700.00	7,257.97	4,452.00	4,519.00	54.79	153.71	-63.52	-4,351.89	-6,352.65	7,703.27	7,514.33	188.94	40.771		
8,800.00	7,257.55	4,452.00	4,519.00	57.05	153.71	-63.52	-4,351.89	-6,352.65	7,642.59	7,452.18	190.41	40.137		
8,900.00	7,257.13	4,452.00	4,519.00	59.36	153.71	-63.52	-4,351.89	-6,352.65	7,582.75	7,390.79	191.96	39.501		
9,000.00	7,256.71	4,452.00	4,519.00	61.72	153.71	-63.52	-4,351.89	-6,352.65	7,523.76	7,330.18	193.58	38.867		
9,100.00	7,256.29	4,452.00	4,519.00	64.12	153.71	-63.52	-4,351.89	-6,352.65	7,465.64	7,270.39	195.26	38.235		
9,200.00	7,255.87	4,452.00	4,519.00	66.56	153.71	-63.52	-4,351.89	-6,352.65	7,408.42	7,211.42	197.00	37.606		
9,300.00	7,255.45	4,452.00	4,519.00	69.02	153.71	-63.52	-4,351.89	-6,352.65	7,352.11	7,153.31	198.80	36.982		
9,400.00	7,255.03	4,452.00	4,519.00	71.52	153.71	-63.52	-4,351.89	-6,352.65	7,296.74	7,096.08	200.66	36.363		
9,500.00	7,254.61	4,452.00	4,519.00	74.04	153.71	-63.52	-4,351.89	-6,352.65	7,242.33	7,039.75	202.58	35.751		
9,600.00	7,254.19	4,452.00	4,519.00	76.58	153.71	-63.52	-4,351.89	-6,352.65	7,188.89	6,984.34	204.55	35.145		
9,700.00	7,253.77	4,452.00	4,519.00	79.15	153.71	-63.52	-4,351.89	-6,352.65	7,136.46	6,929.89	206.57	34.548		
9,800.00	7,253.35	4,452.00	4,519.00	81.74	153.71	-63.52	-4,351.89	-6,352.65	7,085.05	6,876.41	208.63	33.959		
9,900.00	7,252.92	4,452.00	4,519.00	84.34	153.71	-63.52	-4,351.89	-6,352.65	7,034.68	6,823.93	210.75	33.380		
10,000.00	7,252.50	4,452.00	4,519.00	86.96	153.71	-63.52	-4,351.89	-6,352.65	6,985.39	6,772.48	212.91	32.810		
10,100.00	7,252.08	4,452.00	4,519.00	89.59	153.71	-63.52	-4,351.89	-6,352.65	6,937.18	6,722.07	215.11	32.250		
10,200.00	7,251.66	4,452.00	4,519.00	92.24	153.71	-63.52	-4,351.89	-6,352.65	6,890.09	6,672.74	217.35	31.700		
10,300.00	7,251.24	4,452.00	4,519.00	94.90	153.71	-63.52	-4,351.89	-6,352.65	6,844.14	6,624.50	219.63	31.162		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	4,452.00	4,519.00	97.57	153.71	-63.52	-4,351.89	-6,352.65	6,799.34	6,577.39	221.95	30.634		
10,500.00	7,250.40	4,452.00	4,519.00	100.25	153.71	-63.52	-4,351.89	-6,352.65	6,755.73	6,531.43	224.31	30.118		
10,600.00	7,249.98	4,452.00	4,519.00	102.93	153.71	-63.52	-4,351.89	-6,352.65	6,713.33	6,486.63	226.70	29.614		
10,700.00	7,249.56	4,452.00	4,519.00	105.63	153.71	-63.52	-4,351.89	-6,352.65	6,672.16	6,443.04	229.12	29.121		
10,800.00	7,249.14	4,452.00	4,519.00	108.34	153.71	-63.52	-4,351.89	-6,352.65	6,632.23	6,400.67	231.57	28.641		
10,900.00	7,248.72	4,452.00	4,519.00	111.05	153.71	-63.52	-4,351.89	-6,352.65	6,593.59	6,359.54	234.05	28.172		
11,000.00	7,248.30	4,452.00	4,519.00	113.77	153.71	-63.52	-4,351.89	-6,352.65	6,556.24	6,319.69	236.55	27.716		
11,100.00	7,247.88	4,452.00	4,519.00	116.50	153.71	-63.52	-4,351.89	-6,352.65	6,520.21	6,281.13	239.08	27.272		
11,200.00	7,247.46	4,452.00	4,519.00	119.23	153.71	-63.52	-4,351.89	-6,352.65	6,485.52	6,243.89	241.63	26.840		
11,300.00	7,247.04	4,452.00	4,519.00	121.97	153.71	-63.52	-4,351.89	-6,352.65	6,452.20	6,207.99	244.21	26.421		
11,400.00	7,246.62	4,452.00	4,519.00	124.72	153.71	-63.52	-4,351.89	-6,352.65	6,420.26	6,173.46	246.80	26.014		
11,500.00	7,246.20	4,452.00	4,519.00	127.46	153.71	-63.52	-4,351.89	-6,352.65	6,389.72	6,140.32	249.41	25.620		
11,600.00	7,245.78	4,452.00	4,519.00	130.22	153.71	-63.52	-4,351.89	-6,352.65	6,360.62	6,108.59	252.03	25.238		
11,700.00	7,245.36	4,452.00	4,519.00	132.98	153.71	-63.52	-4,351.89	-6,352.65	6,332.95	6,078.29	254.66	24.868		
11,800.00	7,244.94	4,452.00	4,519.00	135.74	153.71	-63.52	-4,351.89	-6,352.65	6,306.76	6,049.45	257.30	24.511		
11,900.00	7,244.52	4,452.00	4,519.00	138.50	153.71	-63.52	-4,351.89	-6,352.65	6,282.04	6,022.09	259.95	24.166		
12,000.00	7,244.10	4,452.00	4,519.00	141.27	153.71	-63.52	-4,351.89	-6,352.65	6,258.83	5,996.22	262.61	23.833		
12,100.00	7,243.68	4,452.00	4,519.00	144.04	153.71	-63.52	-4,351.89	-6,352.65	6,237.13	5,971.86	265.27	23.513		
12,200.00	7,243.26	4,452.00	4,519.00	146.82	153.71	-63.52	-4,351.89	-6,352.65	6,216.96	5,949.04	267.93	23.204		
12,300.00	7,242.84	4,452.00	4,519.00	149.60	153.71	-63.52	-4,351.89	-6,352.65	6,198.35	5,927.77	270.58	22.907		
12,400.00	7,242.42	4,452.00	4,519.00	152.38	153.71	-63.52	-4,351.89	-6,352.65	6,181.29	5,908.06	273.23	22.623		
12,500.00	7,242.00	4,452.00	4,519.00	155.16	153.71	-63.52	-4,351.89	-6,352.65	6,165.81	5,889.93	275.88	22.350		
12,600.00	7,241.58	4,452.00	4,519.00	157.95	153.71	-63.52	-4,351.89	-6,352.65	6,151.92	5,873.41	278.51	22.089		
12,700.00	7,241.16	4,452.00	4,519.00	160.74	153.71	-63.52	-4,351.89	-6,352.65	6,139.62	5,858.49	281.13	21.839		
12,800.00	7,240.74	4,452.00	4,519.00	163.53	153.71	-63.52	-4,351.89	-6,352.65	6,128.93	5,845.19	283.74	21.600		
12,900.00	7,240.32	4,452.00	4,519.00	166.32	153.71	-63.52	-4,351.89	-6,352.65	6,119.86	5,833.53	286.33	21.373		
13,000.00	7,239.89	4,452.00	4,519.00	169.12	153.71	-63.52	-4,351.89	-6,352.65	6,112.41	5,823.50	288.91	21.157		
13,100.00	7,239.47	4,452.00	4,519.00	171.92	153.71	-63.52	-4,351.89	-6,352.65	6,106.59	5,815.13	291.46	20.952		
13,200.00	7,239.05	4,452.00	4,519.00	174.72	153.71	-63.52	-4,351.89	-6,352.65	6,102.40	5,808.42	293.98	20.758		
13,300.00	7,238.63	4,452.00	4,519.00	177.52	153.71	-63.52	-4,351.89	-6,352.65	6,099.85	5,803.37	296.48	20.574		
13,400.00	7,238.21	4,452.00	4,519.00	180.32	153.71	-63.52	-4,351.89	-6,352.65	6,098.94	5,799.98	298.95	20.401		
13,405.67	7,238.19	4,452.00	4,519.00	180.48	153.71	-63.52	-4,351.89	-6,352.65	6,098.93	5,799.84	299.09	20.391 CC		
13,500.00	7,237.79	4,452.00	4,519.00	183.13	153.71	-63.52	-4,351.89	-6,352.65	6,099.66	5,798.27	301.39	20.238		
13,600.00	7,237.37	4,452.00	4,519.00	185.93	153.71	-63.52	-4,351.89	-6,352.65	6,102.03	5,798.23	303.80	20.086 ES		
13,700.00	7,236.95	4,452.00	4,519.00	188.74	153.71	-63.52	-4,351.89	-6,352.65	6,106.03	5,799.86	306.17	19.943		
13,800.00	7,236.53	4,452.00	4,519.00	191.55	153.71	-63.52	-4,351.89	-6,352.65	6,111.67	5,803.16	308.51	19.810		
13,900.00	7,236.11	4,452.00	4,519.00	194.36	153.71	-63.52	-4,351.89	-6,352.65	6,118.93	5,808.12	310.81	19.687		
14,000.00	7,235.69	4,452.00	4,519.00	197.17	153.71	-63.52	-4,351.89	-6,352.65	6,127.82	5,814.76	313.07	19.574		
14,100.00	7,235.27	4,452.00	4,519.00	199.98	153.71	-63.52	-4,351.89	-6,352.65	6,138.33	5,823.05	315.28	19.469		
14,200.00	7,234.85	4,452.00	4,519.00	202.80	153.71	-63.52	-4,351.89	-6,352.65	6,150.44	5,832.99	317.45	19.374		
14,300.00	7,234.43	4,452.00	4,519.00	205.61	153.71	-63.52	-4,351.89	-6,352.65	6,164.15	5,844.57	319.58	19.288		
14,400.00	7,234.01	4,452.00	4,519.00	208.43	153.71	-63.52	-4,351.89	-6,352.65	6,179.46	5,857.79	321.66	19.211		
14,500.00	7,233.59	4,452.00	4,519.00	211.25	153.71	-63.52	-4,351.89	-6,352.65	6,196.33	5,872.63	323.70	19.142		
14,600.00	7,233.17	4,452.00	4,519.00	214.06	153.71	-63.52	-4,351.89	-6,352.65	6,214.77	5,889.09	325.69	19.082		
14,700.00	7,232.75	4,452.00	4,519.00	216.88	153.71	-63.52	-4,351.89	-6,352.65	6,234.76	5,907.14	327.62	19.030		
14,800.00	7,232.33	4,452.00	4,519.00	219.70	153.71	-63.52	-4,351.89	-6,352.65	6,256.29	5,926.78	329.51	18.987		
14,900.00	7,231.91	4,452.00	4,519.00	222.52	153.71	-63.52	-4,351.89	-6,352.65	6,279.33	5,947.98	331.35	18.951		
15,000.00	7,231.49	4,452.00	4,519.00	225.35	153.71	-63.52	-4,351.89	-6,352.65	6,303.88	5,970.74	333.14	18.923		
15,100.00	7,231.07	4,452.00	4,519.00	228.17	153.71	-63.52	-4,351.89	-6,352.65	6,329.91	5,995.03	334.87	18.902		
15,116.21	7,231.00	4,452.00	4,519.00	228.63	153.71	-63.52	-4,351.89	-6,352.65	6,334.27	5,999.12	335.15	18.900 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1,377.00	1,308.28	0.00	7.39	-108.38	-2,929.24	-8,816.28	9,381.83					
100.00	100.00	1,414.91	1,345.73	0.18	7.57	-108.36	-2,924.86	-8,812.32	9,368.22	9,360.37	7.85	1,193.641		
200.00	200.00	1,471.00	1,401.14	0.61	7.85	-108.33	-2,917.96	-8,807.04	9,355.28	9,347.07	8.21	1,139.575		
300.00	300.00	1,550.65	1,550.65	1.05	3.39	-108.25	-2,899.76	-8,792.81	9,342.71	9,337.90	4.82	1,939.739		
400.00	400.00	1,660.00	1,587.91	1.49	8.77	-108.23	-2,895.42	-8,788.94	9,329.53	9,319.88	9.65	966.477		
500.00	500.00	1,708.06	1,635.43	1.93	9.00	-108.21	-2,890.25	-8,783.92	9,316.65	9,306.43	10.23	910.912		
600.00	599.98	1,755.00	1,681.96	2.37	9.23	-100.68	-2,885.50	-8,780.02	9,305.45	9,294.63	10.82	859.977		
700.00	699.84	1,942.27	1,867.23	2.81	10.16	-100.86	-2,863.80	-8,763.53	9,294.44	9,282.37	12.08	769.696		
800.00	799.45	2,280.14	2,200.31	3.26	11.93	-101.09	-2,818.57	-8,729.72	9,282.55	9,268.46	14.08	659.161		
900.00	898.70	900.00	2,385.21	3.70	4.85	-101.38	-2,792.51	-8,708.09	9,269.75	9,261.21	8.54	1,085.502		
1,000.00	997.47	2,542.71	2,458.53	4.15	13.37	-101.66	-2,782.40	-8,698.77	9,256.61	9,240.45	16.16	572.700		
1,100.00	1,095.78	2,569.60	2,485.01	4.60	13.52	-101.76	-2,778.99	-8,695.54	9,244.70	9,227.98	16.72	552.963		
1,200.00	1,194.05	2,759.24	2,671.71	5.05	14.56	-101.88	-2,755.00	-8,672.63	9,232.83	9,214.78	18.05	511.504		
1,300.00	1,292.33	2,792.00	2,703.94	5.50	14.74	-101.90	-2,750.72	-8,668.58	9,220.67	9,202.01	18.65	494.349		
1,400.00	1,390.61	2,792.00	2,703.94	5.96	14.74	-101.90	-2,750.72	-8,668.58	9,209.48	9,190.37	19.11	482.045		
1,500.00	1,488.89	2,833.15	2,744.50	6.43	14.95	-101.93	-2,745.65	-8,663.90	9,198.82	9,179.07	19.75	465.731		
1,600.00	1,587.16	2,887.00	2,797.81	6.89	15.23	-101.96	-2,739.90	-8,658.89	9,189.68	9,169.22	20.46	449.169		
1,700.00	1,685.44	1,700.00	2,796.97	7.36	9.28	-101.96	-2,739.99	-8,658.96	9,180.69	9,165.10	15.59	588.976		
1,800.00	1,783.72	3,054.57	2,963.51	7.83	16.10	-102.07	-2,720.47	-8,643.32	9,171.79	9,149.63	22.16	413.877		
1,900.00	1,882.00	3,201.12	3,108.19	8.30	16.88	-102.16	-2,701.88	-8,629.25	9,162.24	9,138.92	23.31	392.999		
2,000.00	1,980.27	3,262.00	3,168.33	8.77	17.20	-102.20	-2,694.48	-8,623.34	9,152.79	9,128.72	24.07	380.299		
2,100.00	2,078.55	3,394.09	3,298.80	9.25	17.90	-102.28	-2,678.53	-8,610.20	9,143.12	9,117.96	25.15	363.532		
2,200.00	2,176.83	3,457.09	3,361.04	9.72	18.23	-102.32	-2,670.93	-8,604.10	9,133.75	9,107.83	25.92	352.436		
2,300.00	2,275.11	4,109.00	4,001.00	10.19	21.92	-102.66	-2,575.78	-8,529.77	9,123.93	9,094.45	29.48	309.492		
2,400.00	2,373.38	4,488.00	4,369.51	10.66	24.30	-102.84	-2,512.10	-8,469.23	9,106.50	9,074.73	31.78	286.585		
2,500.00	2,471.66	4,543.99	4,423.83	11.14	24.66	-102.87	-2,502.97	-8,459.19	9,088.21	9,055.68	32.53	279.371		
2,600.00	2,569.94	4,583.00	4,461.81	11.61	24.90	-102.89	-2,496.88	-8,452.67	9,070.89	9,037.69	33.21	273.156		
2,700.00	2,668.22	4,583.00	4,461.81	12.09	24.90	-102.89	-2,496.88	-8,452.67	9,054.34	9,020.64	33.70	268.655		
2,800.00	2,766.49	4,583.00	4,461.81	12.56	24.90	-102.89	-2,496.88	-8,452.67	9,038.87	9,004.67	34.20	264.324		
2,900.00	2,864.77	4,624.19	4,502.06	13.04	25.15	-102.92	-2,490.87	-8,446.37	9,023.91	8,989.03	34.88	258.736		
3,000.00	2,963.05	4,678.00	4,554.95	13.51	25.46	-102.96	-2,483.93	-8,439.30	9,010.53	8,974.92	35.62	252.997		
3,100.00	3,061.33	4,678.00	4,554.95	13.99	25.46	-102.96	-2,483.93	-8,439.30	8,997.28	8,961.17	36.11	249.186		
3,200.00	3,159.60	4,678.00	4,554.95	14.46	25.46	-102.96	-2,483.93	-8,439.30	8,985.11	8,948.52	36.60	245.523		
3,300.00	3,257.88	4,704.20	4,580.79	14.94	25.60	-102.97	-2,480.86	-8,436.23	8,973.95	8,936.75	37.20	241.235		
3,400.00	3,356.16	4,741.31	4,617.43	15.41	25.80	-103.00	-2,476.74	-8,432.03	8,963.49	8,925.64	37.85	236.803		
3,500.00	3,454.43	4,772.00	4,647.77	15.89	25.96	-103.03	-2,473.52	-8,428.69	8,953.74	8,915.26	38.47	232.720		
3,600.00	3,552.71	4,830.49	4,705.65	16.36	26.27	-103.07	-2,467.72	-8,422.57	8,944.57	8,905.35	39.22	228.086		
3,700.00	3,650.99	4,867.00	4,741.81	16.84	26.45	-103.10	-2,464.28	-8,418.89	8,935.99	8,896.13	39.86	224.190		
3,800.00	3,749.27	4,911.04	4,785.46	17.32	26.67	-103.14	-2,460.32	-8,414.68	8,928.07	8,887.53	40.53	220.273		
3,900.00	3,847.54	4,961.00	4,835.06	17.79	26.92	-103.18	-2,456.07	-8,410.33	8,920.92	8,879.69	41.23	216.370		
4,000.00	3,945.82	4,993.76	4,867.60	18.27	27.08	-103.21	-2,453.41	-8,407.66	8,914.39	8,872.54	41.85	213.016		
4,100.00	4,044.10	5,056.00	4,929.46	18.75	27.37	-103.26	-2,448.56	-8,402.75	8,908.40	8,865.80	42.60	209.136		
4,200.00	4,142.38	5,056.00	4,929.46	19.22	27.37	-103.26	-2,448.56	-8,402.75	8,903.15	8,860.08	43.07	206.733		
4,300.00	4,240.65	5,106.02	4,979.22	19.70	27.60	-103.31	-2,444.96	-8,399.24	8,898.49	8,854.74	43.75	203.380		
4,400.00	4,338.93	5,150.00	5,023.04	20.18	27.80	-103.35	-2,442.08	-8,396.75	8,894.85	8,850.44	44.41	200.280		
4,500.00	4,437.21	5,168.90	5,041.88	20.65	27.88	-103.37	-2,440.93	-8,395.79	8,891.90	8,846.94	44.96	197.793		
4,600.00	4,535.49	5,230.94	5,103.74	21.13	28.15	-103.42	-2,437.47	-8,392.73	8,889.54	8,843.85	45.69	194.573		
4,700.00	4,633.76	5,243.00	5,115.77	21.61	28.20	-103.44	-2,436.85	-8,392.14	8,887.84	8,841.65	46.20	192.397		
4,800.00	4,732.04	5,297.94	5,170.60	22.08	28.43	-103.49	-2,434.30	-8,389.81	8,886.70	8,839.82	46.89	189.530		
4,894.05	4,824.47	5,336.00	5,208.61	22.53	28.59	-103.53	-2,432.76	-8,388.59	8,886.47	8,838.99	47.48	187.171		
4,900.00	4,830.32	5,336.00	5,208.61	22.56	28.59	-103.53	-2,432.76	-8,388.59	8,886.47	8,838.97	47.50	187.066		
5,000.00	4,928.60	5,371.14	5,243.72	23.04	28.72	-103.56	-2,431.55	-8,387.63	8,886.96	8,838.85	48.10	184.752		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	5,430.00	5,302.54	23.51	28.95	-103.63	-2,430.09	-8,386.19	8,888.08	8,839.28	48.80	182.126		
5,200.00	5,125.15	5,481.38	5,353.90	23.99	29.15	-103.68	-2,429.05	-8,385.12	8,889.70	8,840.24	49.47	179.711		
5,300.00	5,223.43	5,550.64	5,423.14	24.47	29.41	-103.75	-2,427.40	-8,383.97	8,891.71	8,841.50	50.21	177.092		
5,400.00	5,321.71	5,620.02	5,492.48	24.94	29.67	-103.83	-2,425.48	-8,383.18	8,894.07	8,843.12	50.95	174.556		
5,500.00	5,419.98	5,711.00	5,583.41	25.42	30.01	-103.91	-2,422.54	-8,382.67	8,896.82	8,845.03	51.79	171.780		
5,600.00	5,518.26	5,758.27	5,630.66	25.90	30.19	-103.96	-2,420.92	-8,382.62	8,899.85	8,847.42	52.44	169.731		
5,700.00	5,616.54	5,826.66	5,699.01	26.38	30.44	-104.02	-2,418.64	-8,382.73	8,903.28	8,850.11	53.17	167.441		
5,800.00	5,714.82	5,895.03	5,767.35	26.85	30.70	-104.09	-2,416.45	-8,383.05	8,907.08	8,853.17	53.91	165.223		
5,900.00	5,813.09	5,963.39	5,835.67	27.33	30.95	-104.16	-2,414.36	-8,383.59	8,911.23	8,856.59	54.64	163.075		
6,000.00	5,911.37	6,052.58	5,924.81	27.81	31.28	-104.24	-2,411.74	-8,384.52	8,915.69	8,860.21	55.47	160.716		
6,100.00	6,009.65	6,159.68	6,031.86	28.28	31.67	-104.34	-2,408.76	-8,385.50	8,920.12	8,863.74	56.39	158.198		
6,200.00	6,107.93	6,266.71	6,138.86	28.76	32.07	-104.45	-2,405.95	-8,386.32	8,924.49	8,867.19	57.30	155.761		
6,300.00	6,206.20	6,376.73	6,248.82	29.24	32.48	-104.55	-2,402.76	-8,387.15	8,928.78	8,870.55	58.23	153.337		
6,400.00	6,304.48	6,487.40	6,359.41	29.72	32.90	-104.65	-2,398.54	-8,388.24	8,932.96	8,873.79	59.17	150.977		
6,500.00	6,402.76	6,635.34	6,507.16	30.19	33.48	-104.78	-2,391.28	-8,389.99	8,936.97	8,876.67	60.29	148.228		
6,600.00	6,501.04	6,863.33	6,734.62	30.67	34.41	-104.94	-2,375.97	-8,391.72	8,939.86	8,878.06	61.81	144.637		
6,700.00	6,599.31	6,926.20	6,797.30	31.15	34.67	-104.99	-2,371.08	-8,392.21	8,942.33	8,879.78	62.55	142.960		
6,800.00	6,697.50	7,000.74	6,871.60	31.63	34.99	-84.09	-2,365.12	-8,393.04	8,943.37	8,880.03	63.35	141.179		
6,900.00	6,794.18	7,074.34	6,944.94	32.10	35.29	-58.72	-2,359.07	-8,394.14	8,932.10	8,867.96	64.14	139.265		
7,000.00	6,886.96	7,129.00	6,999.40	32.55	35.52	-48.20	-2,354.47	-8,395.15	8,906.87	8,842.05	64.82	137.412		
7,100.00	6,973.57	7,206.79	7,076.93	32.99	35.84	-44.00	-2,348.26	-8,396.69	8,868.29	8,802.70	65.59	135.208		
7,200.00	7,051.87	7,263.39	7,133.37	33.41	36.07	-43.11	-2,344.22	-8,397.79	8,817.35	8,751.10	66.24	133.108		
7,300.00	7,119.93	7,312.76	7,182.63	33.85	36.27	-44.66	-2,341.03	-8,398.74	8,755.26	8,688.41	66.85	130.972		
7,400.00	7,176.09	7,353.71	7,223.50	34.39	36.44	-48.67	-2,338.63	-8,399.52	8,683.52	8,616.11	67.41	128.818		
7,500.00	7,218.95	7,386.66	7,256.39	35.09	36.57	-55.74	-2,336.85	-8,400.14	8,603.86	8,535.92	67.93	126.654		
7,600.00	7,247.46	7,417.13	7,286.82	35.98	36.69	-67.06	-2,335.25	-8,400.72	8,518.17	8,449.72	68.45	124.451		
7,700.00	7,260.92	7,432.49	7,302.15	37.04	36.75	-83.43	-2,334.44	-8,401.01	8,428.55	8,359.65	68.89	122.341		
7,800.00	7,261.75	7,435.13	7,304.79	38.23	36.76	-91.26	-2,334.30	-8,401.06	8,337.30	8,268.00	69.29	120.320		
7,900.00	7,261.33	7,436.51	7,306.17	39.59	36.77	-91.28	-2,334.23	-8,401.09	8,246.14	8,176.41	69.73	118.262		
8,000.00	7,260.91	7,437.90	7,307.55	41.10	36.77	-91.31	-2,334.16	-8,401.11	8,155.19	8,084.97	70.21	116.152		
8,100.00	7,260.49	7,434.00	7,303.66	42.75	36.76	-91.24	-2,334.36	-8,401.04	8,064.45	7,993.73	70.72	114.035		
8,200.00	7,260.07	7,434.00	7,303.66	44.53	36.76	-91.24	-2,334.36	-8,401.04	7,973.93	7,902.64	71.30	111.842		
8,300.00	7,259.65	7,434.00	7,303.66	46.41	36.76	-91.24	-2,334.36	-8,401.04	7,883.65	7,811.72	71.93	109.609		
8,400.00	7,259.23	7,434.00	7,303.66	48.39	36.76	-91.24	-2,334.36	-8,401.04	7,793.60	7,720.99	72.61	107.339		
8,500.00	7,258.81	7,434.00	7,303.66	50.45	36.76	-91.24	-2,334.36	-8,401.04	7,703.80	7,630.45	73.34	105.038		
8,600.00	7,258.39	7,434.00	7,303.66	52.59	36.76	-91.24	-2,334.36	-8,401.04	7,614.25	7,540.11	74.13	102.711		
8,700.00	7,257.97	7,434.00	7,303.66	54.79	36.76	-91.24	-2,334.36	-8,401.04	7,524.96	7,449.98	74.98	100.362		
8,800.00	7,257.55	7,434.00	7,303.66	57.05	36.76	-91.24	-2,334.36	-8,401.04	7,435.95	7,360.07	75.88	97.996		
8,900.00	7,257.13	7,434.00	7,303.66	59.36	36.76	-91.24	-2,334.36	-8,401.04	7,347.22	7,270.38	76.84	95.618		
9,000.00	7,256.71	7,434.00	7,303.66	61.72	36.76	-91.24	-2,334.36	-8,401.04	7,258.78	7,180.92	77.86	93.234		
9,100.00	7,256.29	7,434.00	7,303.66	64.12	36.76	-91.24	-2,334.36	-8,401.04	7,170.64	7,091.71	78.93	90.848		
9,200.00	7,255.87	7,434.00	7,303.66	66.56	36.76	-91.24	-2,334.36	-8,401.04	7,082.83	7,002.76	80.06	88.465		
9,300.00	7,255.45	7,434.00	7,303.66	69.02	36.76	-91.24	-2,334.36	-8,401.04	6,995.33	6,914.08	81.26	86.088		
9,400.00	7,255.03	7,434.00	7,303.66	71.52	36.76	-91.24	-2,334.36	-8,401.04	6,908.18	6,825.67	82.51	83.724		
9,500.00	7,254.61	7,434.00	7,303.66	74.04	36.76	-91.24	-2,334.36	-8,401.04	6,821.38	6,737.56	83.83	81.375		
9,600.00	7,254.19	7,434.00	7,303.66	76.58	36.76	-91.24	-2,334.36	-8,401.04	6,734.95	6,649.75	85.20	79.045		
9,700.00	7,253.77	7,434.00	7,303.66	79.15	36.76	-91.24	-2,334.36	-8,401.04	6,648.90	6,562.25	86.64	76.739		
9,800.00	7,253.35	7,434.00	7,303.66	81.74	36.76	-91.24	-2,334.36	-8,401.04	6,563.24	6,475.09	88.15	74.459		
9,900.00	7,252.92	7,434.00	7,303.66	84.34	36.76	-91.24	-2,334.36	-8,401.04	6,477.99	6,388.28	89.71	72.208		
10,000.00	7,252.50	7,434.00	7,303.66	86.96	36.76	-91.24	-2,334.36	-8,401.04	6,393.17	6,301.83	91.35	69.989		
10,100.00	7,252.08	7,434.00	7,303.66	89.59	36.76	-91.24	-2,334.36	-8,401.04	6,308.80	6,215.76	93.04	67.805		
10,200.00	7,251.66	7,434.00	7,303.66	92.24	36.76	-91.24	-2,334.36	-8,401.04	6,224.89	6,130.08	94.81	65.657		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,434.00	7,303.66	94.90	36.76	-91.24	-2,334.36	-8,401.04	6,141.46	6,044.82	96.64	63.549		
10,400.00	7,250.82	7,434.00	7,303.66	97.57	36.76	-91.24	-2,334.36	-8,401.04	6,058.53	5,959.99	98.54	61.481		
10,500.00	7,250.40	7,434.00	7,303.66	100.25	36.76	-91.24	-2,334.36	-8,401.04	5,976.13	5,875.61	100.52	59.455		
10,600.00	7,249.98	7,434.00	7,303.66	102.93	36.76	-91.24	-2,334.36	-8,401.04	5,894.26	5,791.71	102.56	57.472		
10,700.00	7,249.56	7,434.00	7,303.66	105.63	36.76	-91.24	-2,334.36	-8,401.04	5,812.97	5,708.30	104.67	55.535		
10,800.00	7,249.14	7,434.00	7,303.66	108.34	36.76	-91.24	-2,334.36	-8,401.04	5,732.27	5,625.41	106.86	53.642		
10,900.00	7,248.72	7,434.00	7,303.66	111.05	36.76	-91.24	-2,334.36	-8,401.04	5,652.19	5,543.06	109.12	51.796		
11,000.00	7,248.30	7,434.00	7,303.66	113.77	36.76	-91.24	-2,334.36	-8,401.04	5,572.74	5,461.28	111.46	49.997		
11,100.00	7,247.88	7,434.00	7,303.66	116.50	36.76	-91.24	-2,334.36	-8,401.04	5,493.97	5,380.10	113.88	48.245		
11,200.00	7,247.46	7,434.00	7,303.66	119.23	36.76	-91.24	-2,334.36	-8,401.04	5,415.91	5,299.54	116.37	46.540		
11,300.00	7,247.04	7,434.00	7,303.66	121.97	36.76	-91.24	-2,334.36	-8,401.04	5,338.57	5,219.63	118.94	44.884		
11,400.00	7,246.62	7,434.00	7,303.66	124.72	36.76	-91.24	-2,334.36	-8,401.04	5,262.00	5,140.40	121.60	43.275		
11,500.00	7,246.20	7,434.00	7,303.66	127.46	36.76	-91.24	-2,334.36	-8,401.04	5,186.22	5,061.89	124.33	41.714		
11,600.00	7,245.78	7,434.00	7,303.66	130.22	36.76	-91.24	-2,334.36	-8,401.04	5,111.28	4,984.13	127.15	40.200		
11,700.00	7,245.36	7,434.00	7,303.66	132.98	36.76	-91.24	-2,334.36	-8,401.04	5,037.21	4,907.16	130.04	38.734		
11,800.00	7,244.94	7,434.00	7,303.66	135.74	36.76	-91.24	-2,334.36	-8,401.04	4,964.04	4,831.01	133.03	37.316		
11,900.00	7,244.52	7,434.00	7,303.66	138.50	36.76	-91.24	-2,334.36	-8,401.04	4,891.83	4,755.73	136.10	35.944		
12,000.00	7,244.10	7,434.00	7,303.66	141.27	36.76	-91.24	-2,334.36	-8,401.04	4,820.61	4,681.36	139.25	34.618		
12,100.00	7,243.68	7,434.00	7,303.66	144.04	36.76	-91.24	-2,334.36	-8,401.04	4,750.43	4,607.94	142.49	33.339		
12,200.00	7,243.26	7,434.00	7,303.66	146.82	36.76	-91.24	-2,334.36	-8,401.04	4,681.33	4,535.52	145.81	32.105		
12,300.00	7,242.84	7,434.00	7,303.66	149.60	36.76	-91.24	-2,334.36	-8,401.04	4,613.36	4,464.14	149.22	30.916		
12,400.00	7,242.42	7,434.00	7,303.66	152.38	36.76	-91.24	-2,334.36	-8,401.04	4,546.58	4,393.86	152.72	29.771		
12,500.00	7,242.00	7,434.00	7,303.66	155.16	36.76	-91.24	-2,334.36	-8,401.04	4,481.04	4,324.74	156.30	28.670		
12,600.00	7,241.58	7,434.00	7,303.66	157.95	36.76	-91.24	-2,334.36	-8,401.04	4,416.78	4,256.82	159.96	27.612		
12,700.00	7,241.16	7,434.00	7,303.66	160.74	36.76	-91.24	-2,334.36	-8,401.04	4,353.88	4,190.17	163.70	26.596		
12,800.00	7,240.74	7,434.00	7,303.66	163.53	36.76	-91.24	-2,334.36	-8,401.04	4,292.38	4,124.85	167.53	25.622		
12,900.00	7,240.32	7,434.00	7,303.66	166.32	36.76	-91.24	-2,334.36	-8,401.04	4,232.35	4,060.93	171.42	24.689		
13,000.00	7,239.89	7,434.00	7,303.66	169.12	36.76	-91.24	-2,334.36	-8,401.04	4,173.86	3,998.46	175.40	23.797		
13,100.00	7,239.47	7,434.00	7,303.66	171.92	36.76	-91.24	-2,334.36	-8,401.04	4,116.96	3,937.52	179.44	22.944		
13,200.00	7,239.05	7,434.00	7,303.66	174.72	36.76	-91.24	-2,334.36	-8,401.04	4,061.73	3,878.19	183.54	22.130		
13,300.00	7,238.63	7,434.00	7,303.66	177.52	36.76	-91.24	-2,334.36	-8,401.04	4,008.23	3,820.53	187.71	21.354		
13,400.00	7,238.21	7,434.00	7,303.66	180.32	36.76	-91.24	-2,334.36	-8,401.04	3,956.54	3,764.62	191.92	20.615		
13,500.00	7,237.79	7,434.00	7,303.66	183.13	36.76	-91.24	-2,334.36	-8,401.04	3,906.72	3,710.54	196.19	19.913		
13,600.00	7,237.37	7,434.00	7,303.66	185.93	36.76	-91.24	-2,334.36	-8,401.04	3,858.86	3,658.37	200.49	19.247		
13,700.00	7,236.95	7,434.00	7,303.66	188.74	36.76	-91.24	-2,334.36	-8,401.04	3,813.01	3,608.19	204.82	18.617		
13,800.00	7,236.53	7,434.00	7,303.66	191.55	36.76	-91.24	-2,334.36	-8,401.04	3,769.26	3,560.09	209.17	18.020		
13,900.00	7,236.11	7,434.00	7,303.66	194.36	36.76	-91.24	-2,334.36	-8,401.04	3,727.68	3,514.15	213.53	17.458		
14,000.00	7,235.69	7,434.00	7,303.66	197.17	36.76	-91.24	-2,334.36	-8,401.04	3,688.35	3,470.46	217.89	16.928		
14,100.00	7,235.27	7,434.00	7,303.66	199.98	36.76	-91.24	-2,334.36	-8,401.04	3,651.32	3,429.09	222.23	16.430		
14,200.00	7,234.85	7,434.00	7,303.66	202.80	36.76	-91.24	-2,334.36	-8,401.04	3,616.69	3,390.14	226.55	15.964		
14,300.00	7,234.43	7,434.00	7,303.66	205.61	36.76	-91.24	-2,334.36	-8,401.04	3,584.51	3,353.69	230.82	15.529		
14,400.00	7,234.01	7,434.00	7,303.66	208.43	36.76	-91.24	-2,334.36	-8,401.04	3,554.86	3,319.81	235.05	15.124		
14,500.00	7,233.59	7,434.00	7,303.66	211.25	36.76	-91.24	-2,334.36	-8,401.04	3,527.79	3,288.59	239.20	14.748		
14,600.00	7,233.17	7,434.00	7,303.66	214.06	36.76	-91.24	-2,334.36	-8,401.04	3,503.37	3,260.10	243.27	14.401		
14,700.00	7,232.75	7,434.00	7,303.66	216.88	36.76	-91.24	-2,334.36	-8,401.04	3,481.65	3,234.40	247.24	14.082		
14,800.00	7,232.33	7,434.00	7,303.66	219.70	36.76	-91.24	-2,334.36	-8,401.04	3,462.68	3,211.58	251.10	13.790		
14,900.00	7,231.91	7,434.00	7,303.66	222.52	36.76	-91.24	-2,334.36	-8,401.04	3,446.51	3,191.68	254.83	13.525		
15,000.00	7,231.49	7,434.00	7,303.66	225.35	36.76	-91.24	-2,334.36	-8,401.04	3,433.18	3,174.76	258.42	13.285		
15,100.00	7,231.07	7,434.00	7,303.66	228.17	36.76	-91.24	-2,334.36	-8,401.04	3,422.71	3,160.86	261.85	13.071		
15,116.21	7,231.00	7,434.00	7,303.66	228.63	36.76	-91.24	-2,334.36	-8,401.04	3,421.29	3,158.90	262.40	13.039 CC, ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	31.00	0.00	3.28	-83.40	1,057.83	-9,145.57	9,206.60					
100.00	100.00	69.00	100.00	0.18	3.49	-83.40	1,057.83	-9,145.57	9,206.55	9,202.88	3.67	2,508.822		
200.00	200.00	169.00	200.00	0.61	5.29	-83.40	1,057.83	-9,145.57	9,206.55	9,200.64	5.91	1,558.491		
300.00	300.00	269.00	300.00	1.05	8.32	-83.40	1,057.83	-9,145.57	9,206.55	9,197.17	9.37	982.320		
400.00	400.00	369.00	400.00	1.49	11.61	-83.40	1,057.83	-9,145.57	9,206.55	9,193.45	13.10	702.730		
500.00	500.00	469.00	500.00	1.93	14.99	-83.40	1,057.83	-9,145.57	9,206.55	9,189.63	16.92	544.085		
600.00	599.98	568.98	599.98	2.37	18.41	-75.67	1,057.83	-9,145.57	9,206.11	9,185.33	20.78	443.016		
700.00	699.84	668.84	699.84	2.81	21.85	-75.73	1,057.83	-9,145.57	9,204.82	9,180.16	24.66	373.320		
800.00	799.45	768.45	799.45	3.26	25.29	-75.82	1,057.83	-9,145.57	9,202.67	9,174.13	28.54	322.474		
900.00	898.70	867.70	898.70	3.70	28.73	-75.96	1,057.83	-9,145.57	9,199.68	9,167.26	32.42	283.793		
1,000.00	997.47	966.47	997.47	4.15	32.16	-76.12	1,057.83	-9,145.57	9,195.86	9,159.57	36.29	253.404		
1,100.00	1,095.78	1,064.78	1,095.78	4.60	35.58	-76.26	1,057.83	-9,145.57	9,191.42	9,151.27	40.16	228.898		
1,200.00	1,194.05	1,163.05	1,194.05	5.05	38.99	-76.37	1,057.83	-9,145.57	9,186.98	9,142.95	44.03	208.663		
1,300.00	1,292.33	1,261.33	1,292.33	5.50	42.41	-76.48	1,057.83	-9,145.57	9,182.57	9,134.66	47.91	191.678		
1,400.00	1,390.61	1,359.61	1,390.61	5.96	45.84	-76.59	1,057.83	-9,145.57	9,178.20	9,126.41	51.79	177.222		
1,500.00	1,488.89	1,457.89	1,488.89	6.43	49.26	-76.70	1,057.83	-9,145.57	9,173.86	9,118.18	55.68	164.774		
1,600.00	1,587.16	1,556.16	1,587.16	6.89	52.68	-76.81	1,057.83	-9,145.57	9,169.55	9,109.99	59.56	153.943		
1,700.00	1,685.44	1,654.44	1,685.44	7.36	56.11	-76.92	1,057.83	-9,145.57	9,165.28	9,101.83	63.46	144.435		
1,800.00	1,783.72	1,752.72	1,783.72	7.83	59.53	-77.03	1,057.83	-9,145.57	9,161.05	9,093.70	67.35	136.022		
1,900.00	1,882.00	1,851.00	1,882.00	8.30	62.96	-77.14	1,057.83	-9,145.57	9,156.85	9,085.61	71.24	128.527		
2,000.00	1,980.27	1,949.27	1,980.27	8.77	66.38	-77.25	1,057.83	-9,145.57	9,152.69	9,077.55	75.14	121.807		
2,100.00	2,078.55	2,047.55	2,078.55	9.25	69.81	-77.37	1,057.83	-9,145.57	9,148.56	9,069.52	79.04	115.748		
2,200.00	2,176.83	2,145.83	2,176.83	9.72	73.24	-77.48	1,057.83	-9,145.57	9,144.47	9,061.53	82.94	110.258		
2,300.00	2,275.11	2,244.11	2,275.11	10.19	76.67	-77.59	1,057.83	-9,145.57	9,140.41	9,053.58	86.84	105.261		
2,400.00	2,373.38	2,342.38	2,373.38	10.66	80.09	-77.70	1,057.83	-9,145.57	9,136.39	9,045.66	90.74	100.692		
2,500.00	2,471.66	2,440.66	2,471.66	11.14	83.52	-77.81	1,057.83	-9,145.57	9,132.41	9,037.77	94.64	96.499		
2,600.00	2,569.94	2,538.94	2,569.94	11.61	86.95	-77.92	1,057.83	-9,145.57	9,128.46	9,029.92	98.54	92.639		
2,700.00	2,668.22	2,637.22	2,668.22	12.09	90.38	-78.03	1,057.83	-9,145.57	9,124.55	9,022.11	102.44	89.072		
2,800.00	2,766.49	2,735.49	2,766.49	12.56	93.81	-78.15	1,057.83	-9,145.57	9,120.67	9,014.33	106.34	85.767		
2,900.00	2,864.77	2,833.77	2,864.77	13.04	97.24	-78.26	1,057.83	-9,145.57	9,116.83	9,006.58	110.24	82.696		
3,000.00	2,963.05	2,932.05	2,963.05	13.51	100.67	-78.37	1,057.83	-9,145.57	9,113.02	8,998.87	114.15	79.835		
3,100.00	3,061.33	3,030.33	3,061.33	13.99	104.10	-78.48	1,057.83	-9,145.57	9,109.25	8,991.20	118.05	77.163		
3,200.00	3,159.60	3,128.60	3,159.60	14.46	107.52	-78.59	1,057.83	-9,145.57	9,105.51	8,983.56	121.96	74.663		
3,300.00	3,257.88	3,226.88	3,257.88	14.94	110.95	-78.71	1,057.83	-9,145.57	9,101.82	8,975.96	125.86	72.317		
3,400.00	3,356.16	3,325.16	3,356.16	15.41	114.38	-78.82	1,057.83	-9,145.57	9,098.15	8,968.39	129.76	70.113		
3,500.00	3,454.43	3,423.43	3,454.43	15.89	117.81	-78.93	1,057.83	-9,145.57	9,094.53	8,960.86	133.67	68.038		
3,600.00	3,552.71	3,521.71	3,552.71	16.36	121.24	-79.04	1,057.83	-9,145.57	9,090.94	8,953.36	137.57	66.081		
3,700.00	3,650.99	3,619.99	3,650.99	16.84	124.67	-79.16	1,057.83	-9,145.57	9,087.38	8,945.91	141.48	64.232		
3,800.00	3,749.27	3,718.27	3,749.27	17.32	128.10	-79.27	1,057.83	-9,145.57	9,083.87	8,938.48	145.38	62.482		
3,900.00	3,847.54	3,816.54	3,847.54	17.79	131.53	-79.38	1,057.83	-9,145.57	9,080.38	8,931.10	149.29	60.825		
4,000.00	3,945.82	3,914.82	3,945.82	18.27	134.96	-79.49	1,057.83	-9,145.57	9,076.94	8,923.75	153.19	59.251		
4,100.00	4,044.10	4,013.10	4,044.10	18.75	138.39	-79.61	1,057.83	-9,145.57	9,073.53	8,916.43	157.10	57.757		
4,200.00	4,142.38	4,111.38	4,142.38	19.22	141.82	-79.72	1,057.83	-9,145.57	9,070.16	8,909.15	161.01	56.335		
4,300.00	4,240.65	4,209.65	4,240.65	19.70	145.25	-79.83	1,057.83	-9,145.57	9,066.82	8,901.91	164.91	54.980		
4,400.00	4,338.93	4,307.93	4,338.93	20.18	148.68	-79.95	1,057.83	-9,145.57	9,063.52	8,894.70	168.82	53.688		
4,500.00	4,437.21	4,406.21	4,437.21	20.65	152.11	-80.06	1,057.83	-9,145.57	9,060.26	8,887.54	172.72	52.455		
4,600.00	4,535.49	4,504.49	4,535.49	21.13	155.54	-80.17	1,057.83	-9,145.57	9,057.03	8,880.40	176.63	51.277		
4,700.00	4,633.76	4,602.76	4,633.76	21.61	158.97	-80.28	1,057.83	-9,145.57	9,053.84	8,873.31	180.54	50.150		
4,800.00	4,732.04	4,701.04	4,732.04	22.08	162.40	-80.40	1,057.83	-9,145.57	9,050.69	8,866.25	184.44	49.070		
4,900.00	4,830.32	4,800.68	4,830.32	22.56	165.88	-80.51	1,057.83	-9,145.57	9,047.57	8,859.18	188.40	48.024		
5,000.00	4,928.60	4,902.40	4,928.60	23.04	169.43	-80.63	1,057.83	-9,145.57	9,044.49	8,852.07	192.42	47.003		
5,100.00	5,026.87	5,004.13	5,026.87	23.51	172.98	-80.74	1,057.83	-9,145.57	9,041.45	8,845.00	196.45	46.024		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,105.85	5,125.15	23.99	176.53	-80.85	1,057.83	-9,145.57	9,038.44	8,837.96	200.48	45.084		
5,300.00	5,223.43	5,207.57	5,223.43	24.47	180.08	-80.97	1,057.83	-9,145.57	9,035.47	8,830.97	204.51	44.182		
5,400.00	5,321.71	5,309.29	5,321.71	24.94	183.63	-81.08	1,057.83	-9,145.57	9,032.54	8,824.01	208.53	43.315		
5,500.00	5,419.98	5,388.98	5,419.98	25.42	186.41	-81.19	1,057.83	-9,145.57	9,029.64	8,817.85	211.79	42.635		
5,600.00	5,518.26	5,487.26	5,518.26	25.90	189.84	-81.31	1,057.83	-9,145.57	9,026.78	8,811.09	215.70	41.849		
5,700.00	5,616.54	5,585.54	5,616.54	26.38	193.27	-81.42	1,057.83	-9,145.57	9,023.96	8,804.36	219.61	41.092		
5,800.00	5,714.82	5,683.82	5,714.82	26.85	196.70	-81.54	1,057.83	-9,145.57	9,021.18	8,797.66	223.51	40.361		
5,900.00	5,813.09	5,782.09	5,813.09	27.33	200.13	-81.65	1,057.83	-9,145.57	9,018.43	8,791.01	227.42	39.655		
6,000.00	5,911.37	5,880.37	5,911.37	27.81	203.57	-81.76	1,057.83	-9,145.57	9,015.72	8,784.39	231.33	38.974		
6,100.00	6,009.65	5,978.65	6,009.65	28.28	207.00	-81.88	1,057.83	-9,145.57	9,013.04	8,777.81	235.24	38.315		
6,200.00	6,107.93	6,076.93	6,107.93	28.76	210.43	-81.99	1,057.83	-9,145.57	9,010.41	8,771.26	239.14	37.678		
6,300.00	6,206.20	6,175.20	6,206.20	29.24	213.86	-82.11	1,057.83	-9,145.57	9,007.81	8,764.75	243.05	37.061		
6,400.00	6,304.48	6,273.48	6,304.48	29.72	217.29	-82.22	1,057.83	-9,145.57	9,005.24	8,758.28	246.96	36.465		
6,500.00	6,402.76	6,371.76	6,402.76	30.19	220.72	-82.34	1,057.83	-9,145.57	9,002.72	8,751.85	250.87	35.886		
6,600.00	6,501.04	6,470.04	6,501.04	30.67	224.15	-82.45	1,057.83	-9,145.57	9,000.23	8,745.45	254.77	35.326		
6,700.00	6,599.31	6,568.31	6,599.31	31.15	227.58	-82.57	1,057.83	-9,145.57	8,997.78	8,739.10	258.68	34.783		
6,800.00	6,697.50	6,666.50	6,697.50	31.63	231.01	-61.72	1,057.83	-9,145.57	8,993.52	8,730.94	262.59	34.250		
6,900.00	6,794.18	6,763.18	6,794.18	32.10	234.38	-35.99	1,057.83	-9,145.57	8,975.80	8,709.37	266.43	33.689		
7,000.00	6,886.96	6,855.96	6,886.96	32.55	237.62	-24.57	1,057.83	-9,145.57	8,942.94	8,672.83	270.11	33.108		
7,100.00	6,973.57	6,942.57	6,973.57	32.99	240.64	-18.78	1,057.83	-9,145.57	8,895.76	8,622.23	273.54	32.521		
7,200.00	7,051.87	7,020.87	7,051.87	33.41	243.38	-15.46	1,057.83	-9,145.57	8,835.42	8,558.79	276.63	31.940		
7,300.00	7,119.93	7,088.93	7,119.93	33.85	245.75	-13.42	1,057.83	-9,145.57	8,763.38	8,484.07	279.30	31.376		
7,400.00	7,176.09	7,145.09	7,176.09	34.39	247.71	-12.14	1,057.83	-9,145.57	8,681.41	8,399.91	281.50	30.840		
7,500.00	7,218.95	7,187.95	7,218.95	35.09	249.21	-11.38	1,057.83	-9,145.57	8,591.53	8,308.36	283.17	30.341		
7,600.00	7,247.46	7,216.46	7,247.46	35.98	250.20	-11.06	1,057.83	-9,145.57	8,495.94	8,211.67	284.27	29.887		
7,700.00	7,260.92	7,229.92	7,260.92	37.04	250.67	-11.76	1,057.83	-9,145.57	8,396.99	8,112.20	284.79	29.485		
7,800.00	7,261.75	7,230.75	7,261.75	38.23	250.70	-173.61	1,057.83	-9,145.57	8,297.01	8,012.18	284.83	29.129		
7,900.00	7,261.33	7,230.33	7,261.33	39.59	250.69	-173.53	1,057.83	-9,145.57	8,197.01	7,912.18	284.83	28.779		
8,000.00	7,260.91	7,229.91	7,260.91	41.10	250.67	-173.45	1,057.83	-9,145.57	8,097.01	7,812.19	284.82	28.428		
8,100.00	7,260.49	7,229.49	7,260.49	42.75	250.66	-173.37	1,057.83	-9,145.57	7,997.01	7,712.19	284.82	28.077		
8,200.00	7,260.07	7,229.07	7,260.07	44.53	250.64	-173.29	1,057.83	-9,145.57	7,897.01	7,612.20	284.82	27.726		
8,300.00	7,259.65	7,228.65	7,259.65	46.41	250.63	-173.20	1,057.83	-9,145.57	7,797.01	7,512.20	284.82	27.375		
8,400.00	7,259.23	7,228.23	7,259.23	48.39	250.61	-173.12	1,057.83	-9,145.57	7,697.02	7,412.20	284.82	27.024		
8,500.00	7,258.81	7,227.81	7,258.81	50.45	250.60	-173.03	1,057.83	-9,145.57	7,597.02	7,312.20	284.82	26.673		
8,600.00	7,258.39	7,227.39	7,258.39	52.59	250.58	-172.93	1,057.83	-9,145.57	7,497.02	7,212.20	284.82	26.322		
8,700.00	7,257.97	7,226.97	7,257.97	54.79	250.57	-172.84	1,057.83	-9,145.57	7,397.02	7,112.19	284.82	25.970		
8,800.00	7,257.55	7,226.55	7,257.55	57.05	250.56	-172.74	1,057.83	-9,145.57	7,297.02	7,012.19	284.83	25.619		
8,900.00	7,257.13	7,226.13	7,257.13	59.36	250.54	-172.64	1,057.83	-9,145.57	7,197.02	6,912.19	284.83	25.267		
9,000.00	7,256.71	7,225.71	7,256.71	61.72	250.53	-172.54	1,057.83	-9,145.57	7,097.02	6,812.18	284.84	24.916		
9,100.00	7,256.29	7,225.29	7,256.29	64.12	250.51	-172.43	1,057.83	-9,145.57	6,997.02	6,712.17	284.85	24.564		
9,200.00	7,255.87	7,224.87	7,255.87	66.56	250.50	-172.33	1,057.83	-9,145.57	6,897.02	6,612.17	284.86	24.212		
9,300.00	7,255.45	7,224.45	7,255.45	69.02	250.48	-172.21	1,057.83	-9,145.57	6,797.02	6,512.16	284.87	23.860		
9,400.00	7,255.03	7,224.03	7,255.03	71.52	250.47	-172.10	1,057.83	-9,145.57	6,697.02	6,412.15	284.88	23.508		
9,500.00	7,254.61	7,223.61	7,254.61	74.04	250.45	-171.98	1,057.83	-9,145.57	6,597.03	6,312.14	284.89	23.156		
9,600.00	7,254.19	7,223.19	7,254.19	76.58	250.44	-171.86	1,057.83	-9,145.57	6,497.03	6,212.12	284.90	22.804		
9,700.00	7,253.77	7,222.77	7,253.77	79.15	250.42	-171.73	1,057.83	-9,145.57	6,397.03	6,112.11	284.92	22.452		
9,800.00	7,253.35	7,222.35	7,253.35	81.74	250.41	-171.60	1,057.83	-9,145.57	6,297.03	6,012.10	284.93	22.100		
9,900.00	7,252.92	7,221.92	7,252.92	84.34	250.39	-171.47	1,057.83	-9,145.57	6,197.03	5,912.08	284.95	21.748		
10,000.00	7,252.50	7,221.50	7,252.50	86.96	250.38	-171.33	1,057.83	-9,145.57	6,097.03	5,812.07	284.96	21.396		
10,100.00	7,252.08	7,221.08	7,252.08	89.59	250.36	-171.19	1,057.83	-9,145.57	5,997.03	5,712.05	284.98	21.044		
10,200.00	7,251.66	7,220.66	7,251.66	92.24	250.35	-171.04	1,057.83	-9,145.57	5,897.03	5,612.03	285.00	20.691		
10,300.00	7,251.24	7,220.24	7,251.24	94.90	250.34	-170.89	1,057.83	-9,145.57	5,797.03	5,512.01	285.02	20.339		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,219.82	7,250.82	97.57	250.32	-170.74	1,057.83	-9,145.57	5,697.03	5,411.99	285.04	19.987		
10,500.00	7,250.40	7,219.40	7,250.40	100.25	250.31	-170.57	1,057.83	-9,145.57	5,597.03	5,311.97	285.07	19.634		
10,600.00	7,249.98	7,218.98	7,249.98	102.93	250.29	-170.40	1,057.83	-9,145.57	5,497.04	5,211.95	285.09	19.282		
10,700.00	7,249.56	7,218.56	7,249.56	105.63	250.28	-170.23	1,057.83	-9,145.57	5,397.04	5,111.92	285.11	18.929		
10,800.00	7,249.14	7,218.14	7,249.14	108.34	250.26	-170.05	1,057.83	-9,145.57	5,297.04	5,011.90	285.14	18.577		
10,900.00	7,248.72	7,217.72	7,248.72	111.05	250.25	-169.86	1,057.83	-9,145.57	5,197.04	4,911.87	285.17	18.225		
11,000.00	7,248.30	7,217.30	7,248.30	113.77	250.23	-169.67	1,057.83	-9,145.57	5,097.04	4,811.85	285.19	17.872		
11,100.00	7,247.88	7,216.88	7,247.88	116.50	250.22	-169.46	1,057.83	-9,145.57	4,997.04	4,711.82	285.22	17.520		
11,200.00	7,247.46	7,216.46	7,247.46	119.23	250.20	-169.25	1,057.83	-9,145.57	4,897.04	4,611.79	285.25	17.167		
11,300.00	7,247.04	7,216.04	7,247.04	121.97	250.19	-169.04	1,057.83	-9,145.57	4,797.04	4,511.76	285.28	16.815		
11,400.00	7,246.62	7,215.62	7,246.62	124.72	250.17	-168.81	1,057.83	-9,145.57	4,697.04	4,411.73	285.31	16.463		
11,500.00	7,246.20	7,215.20	7,246.20	127.46	250.16	-168.57	1,057.83	-9,145.57	4,597.04	4,311.70	285.35	16.110		
11,600.00	7,245.78	7,214.78	7,245.78	130.22	250.14	-168.32	1,057.83	-9,145.57	4,497.04	4,211.67	285.38	15.758		
11,700.00	7,245.36	7,214.36	7,245.36	132.98	250.13	-168.07	1,057.83	-9,145.57	4,397.05	4,111.63	285.41	15.406		
11,800.00	7,244.94	7,213.94	7,244.94	135.74	250.12	-167.80	1,057.83	-9,145.57	4,297.05	4,011.60	285.45	15.054		
11,900.00	7,244.52	7,213.52	7,244.52	138.50	250.10	-167.51	1,057.83	-9,145.57	4,197.05	3,911.56	285.49	14.701		
12,000.00	7,244.10	7,213.10	7,244.10	141.27	250.09	-167.22	1,057.83	-9,145.57	4,097.05	3,811.52	285.52	14.349		
12,100.00	7,243.68	7,212.68	7,243.68	144.04	250.07	-166.91	1,057.83	-9,145.57	3,997.05	3,711.49	285.56	13.997		
12,200.00	7,243.26	7,212.26	7,243.26	146.82	250.06	-166.59	1,057.83	-9,145.57	3,897.05	3,611.45	285.60	13.645		
12,300.00	7,242.84	7,211.84	7,242.84	149.60	250.04	-166.25	1,057.83	-9,145.57	3,797.05	3,511.41	285.64	13.293		
12,400.00	7,242.42	7,211.42	7,242.42	152.38	250.03	-165.89	1,057.83	-9,145.57	3,697.05	3,411.37	285.68	12.941		
12,500.00	7,242.00	7,211.00	7,242.00	155.16	250.01	-165.51	1,057.83	-9,145.57	3,597.05	3,311.33	285.73	12.589		
12,600.00	7,241.58	7,210.58	7,241.58	157.95	250.00	-165.12	1,057.83	-9,145.57	3,497.05	3,211.28	285.77	12.237		
12,700.00	7,241.16	7,210.16	7,241.16	160.74	249.98	-164.70	1,057.83	-9,145.57	3,397.05	3,111.24	285.82	11.885		
12,800.00	7,240.74	7,209.74	7,240.74	163.53	249.97	-164.26	1,057.83	-9,145.57	3,297.06	3,011.19	285.86	11.534		
12,900.00	7,240.32	7,209.32	7,240.32	166.32	249.95	-163.79	1,057.83	-9,145.57	3,197.06	2,911.15	285.91	11.182		
13,000.00	7,239.89	7,208.89	7,239.89	169.12	249.94	-163.30	1,057.83	-9,145.57	3,097.06	2,811.10	285.96	10.831		
13,100.00	7,239.47	7,208.47	7,239.47	171.92	249.92	-162.77	1,057.83	-9,145.57	2,997.06	2,711.05	286.00	10.479		
13,200.00	7,239.05	7,208.05	7,239.05	174.72	249.91	-162.21	1,057.83	-9,145.57	2,897.06	2,611.01	286.05	10.128		
13,300.00	7,238.63	7,207.63	7,238.63	177.52	249.90	-161.62	1,057.83	-9,145.57	2,797.06	2,510.96	286.10	9.776		
13,400.00	7,238.21	7,207.21	7,238.21	180.32	249.88	-160.99	1,057.83	-9,145.57	2,697.06	2,410.90	286.16	9.425		
13,500.00	7,237.79	7,206.79	7,237.79	183.13	249.87	-160.31	1,057.83	-9,145.57	2,597.06	2,310.85	286.21	9.074		
13,600.00	7,237.37	7,206.37	7,237.37	185.93	249.85	-159.59	1,057.83	-9,145.57	2,497.06	2,210.80	286.26	8.723		
13,700.00	7,236.95	7,205.95	7,236.95	188.74	249.84	-158.81	1,057.83	-9,145.57	2,397.06	2,110.75	286.32	8.372		
13,800.00	7,236.53	7,205.53	7,236.53	191.55	249.82	-157.97	1,057.83	-9,145.57	2,297.07	2,010.69	286.37	8.021		
13,900.00	7,236.11	7,205.11	7,236.11	194.36	249.81	-157.07	1,057.83	-9,145.57	2,197.07	1,910.63	286.43	7.670		
14,000.00	7,235.69	7,204.69	7,235.69	197.17	249.79	-156.10	1,057.83	-9,145.57	2,097.07	1,810.58	286.49	7.320		
14,100.00	7,235.27	7,204.27	7,235.27	199.98	249.78	-155.04	1,057.83	-9,145.57	1,997.07	1,710.52	286.55	6.969		
14,200.00	7,234.85	7,203.85	7,234.85	202.80	249.76	-153.90	1,057.83	-9,145.57	1,897.07	1,610.46	286.61	6.619		
14,300.00	7,234.43	7,203.43	7,234.43	205.61	249.75	-152.65	1,057.83	-9,145.57	1,797.07	1,510.40	286.67	6.269		
14,400.00	7,234.01	7,203.01	7,234.01	208.43	249.73	-151.29	1,057.83	-9,145.57	1,697.07	1,410.34	286.74	5.919		
14,500.00	7,233.59	7,202.59	7,233.59	211.25	249.72	-149.80	1,057.83	-9,145.57	1,597.07	1,310.27	286.80	5.569		
14,600.00	7,233.17	7,202.17	7,233.17	214.06	249.70	-148.17	1,057.83	-9,145.57	1,497.07	1,210.21	286.87	5.219		
14,700.00	7,232.75	7,201.75	7,232.75	216.88	249.69	-146.37	1,057.83	-9,145.57	1,397.08	1,110.14	286.94	4.869		
14,800.00	7,232.33	7,201.33	7,232.33	219.70	249.67	-144.38	1,057.83	-9,145.57	1,297.08	1,010.07	287.01	4.519		
14,900.00	7,231.91	7,200.91	7,231.91	222.52	249.66	-142.18	1,057.83	-9,145.57	1,197.08	910.00	287.08	4.170		
15,000.00	7,231.49	7,200.49	7,231.49	225.35	249.65	-139.73	1,057.83	-9,145.57	1,097.08	809.92	287.16	3.820		
15,100.00	7,231.07	7,200.07	7,231.07	228.17	249.63	-137.01	1,057.83	-9,145.57	997.08	709.85	287.24	3.471		
15,116.21	7,231.00	7,200.00	7,231.00	228.63	249.63	-136.54	1,057.83	-9,145.57	980.87	693.62	287.25	3.415 CC, ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	13.04	1.04	0.00	3.28	3.17	2,104.23	116.52	2,107.45				
100.00	100.00	122.28	110.28	0.18	3.29	3.16	2,103.96	116.16	2,107.19	2,103.72	3.47	606.639	
200.00	200.00	230.60	218.59	0.61	3.37	3.16	2,103.17	116.01	2,106.45	2,102.46	3.99	528.240	
300.00	300.00	328.44	316.43	1.05	3.49	3.16	2,102.32	115.99	2,105.58	2,101.03	4.55	463.268	
400.00	400.00	419.91	407.90	1.49	3.64	3.14	2,101.81	115.46	2,104.99	2,099.86	5.14	409.901	
500.00	500.00	510.35	498.34	1.93	3.83	3.12	2,101.72	114.67	2,104.85	2,099.09	5.76	365.526	
531.89	531.89	539.87	527.86	2.07	3.90	10.86	2,101.78	114.39	2,104.72	2,098.75	5.97	352.837	
600.00	599.98	602.91	590.89	2.37	4.05	10.86	2,102.01	113.78	2,103.39	2,096.98	6.42	327.835	
700.00	699.84	693.89	681.87	2.81	4.29	10.89	2,102.62	113.34	2,098.90	2,091.80	7.10	295.746	
800.00	799.45	812.20	800.17	3.26	4.63	10.97	2,103.15	113.39	2,090.79	2,082.91	7.88	265.264	
900.00	898.70	895.72	883.70	3.70	4.88	11.08	2,103.51	113.56	2,079.26	2,070.67	8.59	242.179	
1,000.00	997.47	1,012.79	1,000.76	4.15	5.26	11.24	2,103.86	113.88	2,064.22	2,054.80	9.42	219.243	
1,100.00	1,095.78	1,107.99	1,095.96	4.60	5.59	11.38	2,103.81	114.34	2,046.24	2,036.05	10.19	200.853	
1,200.00	1,194.05	1,200.70	1,188.67	5.05	5.91	11.49	2,103.90	115.07	2,028.25	2,017.29	10.96	185.111	
1,300.00	1,292.33	1,311.97	1,299.94	5.50	6.31	11.63	2,103.79	115.76	2,010.07	1,998.27	11.80	170.307	
1,400.00	1,390.61	1,402.06	1,390.02	5.96	6.65	11.73	2,103.69	115.86	1,991.86	1,979.27	12.58	158.282	
1,500.00	1,488.89	1,511.20	1,499.16	6.43	7.05	11.86	2,103.41	116.06	1,973.51	1,960.07	13.44	146.829	
1,600.00	1,587.16	1,614.61	1,602.58	6.89	7.45	11.99	2,102.71	116.24	1,954.76	1,940.48	14.28	136.844	
1,700.00	1,685.44	1,713.02	1,700.98	7.36	7.83	12.09	2,101.96	115.93	1,935.90	1,920.79	15.12	128.064	
1,800.00	1,783.72	1,813.67	1,801.62	7.83	8.22	12.19	2,101.09	115.16	1,916.92	1,900.96	15.96	120.095	
1,900.00	1,882.00	1,901.94	1,889.89	8.30	8.57	12.27	2,100.56	114.40	1,898.19	1,881.42	16.77	113.201	
2,000.00	1,980.27	2,012.19	2,000.13	8.77	9.01	12.38	2,099.81	113.57	1,879.40	1,861.74	17.65	106.456	
2,100.00	2,078.55	2,099.10	2,087.03	9.25	9.35	12.46	2,099.29	112.62	1,860.66	1,842.19	18.46	100.773	
2,200.00	2,176.83	2,191.86	2,179.79	9.72	9.73	12.54	2,099.10	111.48	1,842.30	1,823.00	19.30	95.474	
2,300.00	2,275.11	2,276.38	2,264.30	10.19	10.07	12.63	2,099.32	110.73	1,824.44	1,804.33	20.10	90.754	
2,400.00	2,373.38	2,365.23	2,353.15	10.66	10.43	12.72	2,100.19	109.94	1,807.27	1,786.35	20.93	86.361	
2,500.00	2,471.66	2,453.88	2,441.78	11.14	10.79	12.79	2,101.51	108.65	1,790.58	1,768.83	21.75	82.316	
2,600.00	2,569.94	2,542.47	2,530.33	11.61	11.15	12.86	2,103.37	107.34	1,774.49	1,751.91	22.58	78.587	
2,700.00	2,668.22	2,641.92	2,629.74	12.09	11.56	12.93	2,105.89	105.76	1,758.81	1,735.36	23.45	75.012	
2,800.00	2,766.49	2,746.43	2,734.22	12.56	11.99	13.02	2,107.99	104.16	1,742.61	1,718.28	24.33	71.617	
2,900.00	2,864.77	2,846.29	2,834.04	13.04	12.40	13.09	2,110.09	102.29	1,726.50	1,701.29	25.20	68.501	
3,000.00	2,963.05	2,951.27	2,938.97	13.51	12.84	13.15	2,111.93	99.86	1,710.00	1,683.90	26.09	65.534	
3,100.00	3,061.33	3,046.02	3,033.69	13.99	13.23	13.22	2,113.47	97.90	1,693.40	1,666.45	26.95	62.834	
3,200.00	3,159.60	3,141.88	3,129.52	14.46	13.63	13.29	2,115.41	96.07	1,677.20	1,649.39	27.81	60.305	
3,300.00	3,257.88	3,238.20	3,225.80	14.94	14.03	13.37	2,117.19	94.50	1,660.88	1,632.20	28.68	57.919	
3,400.00	3,356.16	3,322.90	3,310.47	15.41	14.39	13.44	2,119.33	93.17	1,645.21	1,615.71	29.50	55.763	
3,500.00	3,454.43	3,412.57	3,400.08	15.89	14.76	13.53	2,122.30	92.06	1,630.34	1,600.00	30.35	53.723	
3,600.00	3,552.71	3,525.73	3,513.19	16.36	15.23	13.68	2,125.44	91.58	1,615.03	1,583.76	31.27	51.650	
3,700.00	3,650.99	3,625.30	3,612.72	16.84	15.65	13.81	2,128.12	91.12	1,599.66	1,567.51	32.15	49.763	
3,800.00	3,749.27	3,742.12	3,729.53	17.32	16.14	13.95	2,130.04	90.08	1,583.17	1,550.09	33.07	47.868	
3,900.00	3,847.54	3,841.41	3,828.80	17.79	16.56	14.07	2,131.48	89.07	1,566.54	1,532.59	33.95	46.142	
4,000.00	3,945.82	3,952.34	3,939.70	18.27	17.02	14.17	2,132.66	88.74	1,549.42	1,514.56	34.86	44.449	
4,100.00	4,044.10	4,058.08	4,045.41	18.75	17.47	14.25	2,133.02	84.00	1,531.54	1,495.79	35.75	42.840	
4,200.00	4,142.38	4,151.96	4,139.24	19.22	17.86	14.31	2,133.28	81.41	1,513.58	1,476.97	36.61	41.338	
4,300.00	4,240.65	4,244.75	4,232.01	19.70	18.25	14.40	2,133.92	79.50	1,496.10	1,458.63	37.48	39.920	
4,400.00	4,338.93	4,337.67	4,324.92	20.18	18.64	14.50	2,134.74	77.93	1,478.87	1,440.53	38.34	38.572	
4,500.00	4,437.21	4,428.13	4,415.36	20.65	19.02	14.63	2,136.01	77.05	1,462.22	1,423.03	39.20	37.303	
4,600.00	4,535.49	4,522.51	4,509.73	21.13	19.42	14.76	2,137.64	76.02	1,445.89	1,405.83	40.07	36.087	
4,700.00	4,633.76	4,614.20	4,601.38	21.61	19.81	14.86	2,139.77	74.59	1,430.09	1,389.16	40.93	34.941	
4,800.00	4,732.04	4,725.02	4,712.16	22.08	20.28	14.99	2,142.01	72.62	1,413.98	1,372.14	41.84	33.797	
4,900.00	4,830.32	4,831.92	4,819.02	22.56	20.73	15.10	2,143.54	70.29	1,397.25	1,354.51	42.73	32.697	
5,000.00	4,928.60	4,934.95	4,922.01	23.04	21.16	15.19	2,144.36	67.68	1,379.85	1,336.23	43.62	31.633	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	5,029.62	5,016.64	23.51	21.57	15.27	2,145.40	64.94	1,362.71	1,318.22	44.49	30.627		
5,200.00	5,125.15	5,130.28	5,117.26	23.99	21.99	15.37	2,146.28	62.56	1,345.41	1,300.04	45.38	29.650		
5,300.00	5,223.43	5,222.79	5,209.76	24.47	22.38	15.51	2,147.23	61.27	1,328.40	1,282.15	46.25	28.725		
5,400.00	5,321.71	5,318.95	5,305.91	24.94	22.79	15.66	2,148.49	60.01	1,311.69	1,264.57	47.12	27.836		
5,500.00	5,419.98	5,416.64	5,403.58	25.42	23.21	15.84	2,149.80	59.31	1,295.10	1,247.09	48.00	26.980		
5,600.00	5,518.26	5,512.83	5,499.77	25.90	23.61	16.04	2,151.12	59.03	1,278.61	1,229.73	48.88	26.159		
5,700.00	5,616.54	5,603.43	5,590.36	26.38	24.00	16.24	2,152.74	59.12	1,262.59	1,212.84	49.75	25.380		
5,800.00	5,714.82	5,709.20	5,696.10	26.85	24.44	16.52	2,154.54	59.94	1,246.61	1,195.97	50.64	24.616		
5,900.00	5,813.09	5,818.84	5,805.73	27.33	24.91	16.82	2,155.57	60.63	1,229.88	1,178.34	51.54	23.863		
6,000.00	5,911.37	5,924.56	5,911.46	27.81	25.36	17.09	2,155.93	60.64	1,212.52	1,160.09	52.43	23.128		
6,100.00	6,009.65	6,032.56	6,019.45	28.28	25.81	17.36	2,155.46	60.28	1,194.36	1,141.05	53.31	22.404		
6,200.00	6,107.93	6,133.65	6,120.53	28.76	26.24	17.62	2,154.55	59.76	1,175.74	1,121.56	54.19	21.698		
6,300.00	6,206.20	6,231.76	6,218.64	29.24	26.66	17.88	2,153.54	59.25	1,157.03	1,101.96	55.07	21.012		
6,400.00	6,304.48	6,327.69	6,314.56	29.72	27.06	18.13	2,152.71	58.49	1,138.45	1,082.51	55.95	20.349		
6,500.00	6,402.76	6,421.66	6,408.52	30.19	27.46	18.35	2,152.20	57.32	1,120.12	1,063.30	56.83	19.711		
6,600.00	6,501.04	6,512.39	6,499.24	30.67	27.85	18.56	2,152.35	56.03	1,102.47	1,044.76	57.71	19.104		
6,700.00	6,599.31	6,616.66	6,603.51	31.15	28.29	18.83	2,152.44	54.77	1,084.80	1,026.21	58.59	18.515		
6,800.00	6,697.50	6,717.75	6,704.58	31.63	28.72	19.08	2,152.19	53.25	1,067.16	1,007.69	59.47	17.944		
6,900.00	6,794.18	6,816.00	6,802.82	32.10	29.14	19.35	2,151.76	51.66	1,052.62	992.25	60.36	17.438		
7,000.00	6,886.96	6,909.04	6,895.85	32.55	29.54	19.62	2,151.30	50.19	1,042.96	981.70	61.26	17.025		
7,087.47	6,963.13	6,983.31	6,970.11	32.93	29.85	19.71	2,150.96	49.30	1,039.94	977.89	62.05	16.760 CC		
7,100.00	6,973.57	6,993.48	6,980.29	32.99	29.90	19.77	2,150.92	49.21	1,040.00	977.85	62.16	16.731 ES		
7,200.00	7,051.87	7,072.81	7,059.61	33.41	30.23	19.99	2,150.48	48.80	1,045.63	982.56	63.07	16.579 SF		
7,300.00	7,119.93	7,146.20	7,133.99	33.85	30.54	20.22	2,149.80	48.70	1,061.42	997.41	64.01	16.582		
7,400.00	7,176.09	7,209.02	7,195.81	34.39	30.81	20.41	2,148.75	48.65	1,088.43	1,023.45	64.99	16.749		
7,500.00	7,218.95	7,250.84	7,237.61	35.09	30.99	20.29	2,147.95	48.63	1,127.43	1,061.45	65.98	17.089		
7,600.00	7,247.46	7,279.33	7,266.10	35.98	31.11	19.96	2,147.41	48.61	1,177.90	1,110.98	66.92	17.601		
7,700.00	7,260.92	7,292.83	7,279.61	37.04	31.17	19.96	2,147.15	48.60	1,238.31	1,170.54	67.77	18.271		
7,800.00	7,261.75	7,293.76	7,280.53	38.23	31.17	19.92	2,147.13	48.60	1,306.03	1,237.53	68.50	19.066		
7,900.00	7,261.33	7,293.43	7,280.20	39.59	31.17	19.90	2,147.13	48.60	1,377.86	1,308.69	69.18	19.918		
8,000.00	7,260.91	7,293.11	7,279.88	41.10	31.17	19.88	2,147.14	48.60	1,453.04	1,383.23	69.80	20.816		
8,100.00	7,260.49	7,292.79	7,279.56	42.75	31.17	19.86	2,147.15	48.60	1,531.05	1,460.67	70.38	21.754		
8,200.00	7,260.07	7,292.46	7,279.23	44.53	31.16	19.84	2,147.15	48.60	1,611.50	1,540.59	70.91	22.727		
8,300.00	7,259.65	7,292.14	7,278.91	46.41	31.16	19.82	2,147.16	48.60	1,694.03	1,622.64	71.39	23.731		
8,400.00	7,259.23	7,291.81	7,278.59	48.39	31.16	19.80	2,147.17	48.60	1,778.35	1,706.53	71.82	24.761		
8,500.00	7,258.81	7,291.49	7,278.26	50.45	31.16	19.78	2,147.17	48.60	1,864.23	1,792.02	72.21	25.816		
8,600.00	7,258.39	7,291.17	7,277.94	52.59	31.16	19.76	2,147.18	48.60	1,951.45	1,878.88	72.57	26.890		
8,700.00	7,257.97	7,290.84	7,277.61	54.79	31.16	19.74	2,147.18	48.60	2,039.84	1,966.95	72.90	27.983		
8,800.00	7,257.55	7,290.52	7,277.29	57.05	31.16	19.72	2,147.19	48.60	2,129.26	2,056.07	73.19	29.091		
8,900.00	7,257.13	7,290.20	7,276.97	59.36	31.16	19.70	2,147.20	48.60	2,219.59	2,146.12	73.46	30.213		
9,000.00	7,256.71	7,289.87	7,276.64	61.72	31.15	19.68	2,147.20	48.60	2,310.71	2,236.99	73.71	31.347		
9,100.00	7,256.29	7,289.55	7,276.32	64.12	31.15	19.66	2,147.21	48.60	2,402.54	2,328.59	73.94	32.491		
9,200.00	7,255.87	7,289.22	7,276.00	66.56	31.15	19.64	2,147.22	48.60	2,494.99	2,420.84	74.16	33.645		
9,300.00	7,255.45	7,288.90	7,275.67	69.02	31.15	19.62	2,147.22	48.60	2,588.01	2,513.66	74.35	34.808		
9,400.00	7,255.03	7,288.58	7,275.35	71.52	31.15	19.60	2,147.23	48.60	2,681.53	2,606.99	74.53	35.977		
9,500.00	7,254.61	7,288.25	7,275.02	74.04	31.15	19.58	2,147.23	48.60	2,775.50	2,700.79	74.70	37.153		
9,600.00	7,254.19	7,287.93	7,274.70	76.58	31.15	19.56	2,147.24	48.60	2,869.88	2,795.01	74.86	38.334		
9,700.00	7,253.77	7,287.60	7,274.38	79.15	31.14	19.54	2,147.25	48.60	2,964.62	2,889.61	75.01	39.521		
9,800.00	7,253.35	7,287.28	7,274.05	81.74	31.14	19.52	2,147.25	48.60	3,059.71	2,984.55	75.15	40.712		
9,900.00	7,252.92	7,286.96	7,273.73	84.34	31.14	19.50	2,147.26	48.60	3,155.09	3,079.80	75.29	41.907		
10,000.00	7,252.50	7,286.63	7,273.41	86.96	31.14	19.48	2,147.27	48.60	3,250.75	3,175.34	75.41	43.105		
10,100.00	7,252.08	7,286.31	7,273.08	89.59	31.14	19.46	2,147.27	48.60	3,346.67	3,271.14	75.53	44.307		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,285.99	7,272.76	92.24	31.14	90.44	2,147.28	48.60	3,442.82	3,367.17	75.65	45.510		
10,300.00	7,251.24	7,285.66	7,272.43	94.90	31.14	90.42	2,147.28	48.60	3,539.18	3,463.42	75.76	46.717		
10,400.00	7,250.82	7,285.34	7,272.11	97.57	31.13	90.40	2,147.29	48.60	3,635.74	3,559.88	75.86	47.925		
10,500.00	7,250.40	7,285.01	7,271.79	100.25	31.13	90.38	2,147.30	48.60	3,732.48	3,656.52	75.96	49.135		
10,600.00	7,249.98	7,284.69	7,271.46	102.93	31.13	90.36	2,147.30	48.60	3,829.39	3,753.33	76.06	50.346		
10,700.00	7,249.56	7,284.37	7,271.14	105.63	31.13	90.34	2,147.31	48.60	3,926.45	3,850.30	76.15	51.559		
10,800.00	7,249.14	7,284.04	7,270.82	108.34	31.13	90.32	2,147.32	48.60	4,023.66	3,947.41	76.25	52.772		
10,900.00	7,248.72	7,283.72	7,270.49	111.05	31.13	90.30	2,147.32	48.60	4,121.00	4,044.66	76.33	53.986		
11,000.00	7,248.30	7,283.40	7,270.17	113.77	31.13	90.28	2,147.33	48.60	4,218.46	4,142.04	76.42	55.201		
11,100.00	7,247.88	7,283.07	7,269.84	116.50	31.12	90.26	2,147.33	48.60	4,316.04	4,239.54	76.50	56.417		
11,200.00	7,247.46	7,282.75	7,269.52	119.23	31.12	90.24	2,147.34	48.60	4,413.73	4,337.15	76.58	57.632		
11,300.00	7,247.04	7,282.42	7,269.20	121.97	31.12	90.22	2,147.35	48.60	4,511.52	4,434.86	76.66	58.848		
11,400.00	7,246.62	7,282.10	7,268.87	124.72	31.12	90.20	2,147.35	48.60	4,609.41	4,532.66	76.74	60.063		
11,500.00	7,246.20	7,281.78	7,268.55	127.46	31.12	90.18	2,147.36	48.61	4,707.38	4,630.56	76.82	61.279		
11,600.00	7,245.78	7,281.45	7,268.23	130.22	31.12	90.16	2,147.36	48.61	4,805.44	4,728.54	76.89	62.494		
11,700.00	7,245.36	7,281.13	7,267.90	132.98	31.12	90.14	2,147.37	48.61	4,903.57	4,826.60	76.97	63.708		
11,800.00	7,244.94	7,280.80	7,267.58	135.74	31.12	90.12	2,147.38	48.61	5,001.78	4,924.74	77.04	64.923		
11,900.00	7,244.52	7,280.48	7,267.25	138.50	31.11	90.10	2,147.38	48.61	5,100.06	5,022.95	77.11	66.136		
12,000.00	7,244.10	7,280.16	7,266.93	141.27	31.11	90.08	2,147.39	48.61	5,198.40	5,121.22	77.19	67.349		
12,100.00	7,243.68	7,279.83	7,266.61	144.04	31.11	90.06	2,147.40	48.61	5,296.81	5,219.55	77.26	68.561		
12,200.00	7,243.26	7,279.51	7,266.28	146.82	31.11	90.04	2,147.40	48.61	5,395.28	5,317.95	77.33	69.772		
12,300.00	7,242.84	7,279.19	7,265.96	149.60	31.11	90.02	2,147.41	48.61	5,493.80	5,416.40	77.40	70.983		
12,400.00	7,242.42	7,278.86	7,265.64	152.38	31.11	90.00	2,147.41	48.61	5,592.37	5,514.90	77.47	72.192		
12,500.00	7,242.00	7,278.54	7,265.31	155.16	31.11	89.98	2,147.42	48.61	5,690.99	5,613.46	77.53	73.400		
12,600.00	7,241.58	7,278.21	7,264.99	157.95	31.10	89.96	2,147.43	48.61	5,789.66	5,712.06	77.60	74.607		
12,700.00	7,241.16	7,277.89	7,264.66	160.74	31.10	89.94	2,147.43	48.61	5,888.38	5,810.71	77.67	75.812		
12,800.00	7,240.74	7,277.57	7,264.34	163.53	31.10	89.92	2,147.44	48.61	5,987.14	5,909.40	77.74	77.017		
12,900.00	7,240.32	7,277.24	7,264.02	166.32	31.10	89.90	2,147.45	48.61	6,085.93	6,008.13	77.81	78.219		
13,000.00	7,239.89	7,276.92	7,263.69	169.12	31.10	89.88	2,147.45	48.61	6,184.77	6,106.90	77.87	79.421		
13,100.00	7,239.47	7,276.59	7,263.37	171.92	31.10	89.86	2,147.46	48.61	6,283.64	6,205.70	77.94	80.621		
13,200.00	7,239.05	7,276.27	7,263.04	174.72	31.10	89.84	2,147.46	48.61	6,382.55	6,304.54	78.01	81.819		
13,300.00	7,238.63	7,275.95	7,262.72	177.52	31.09	89.82	2,147.47	48.61	6,481.49	6,403.42	78.08	83.016		
13,400.00	7,238.21	7,275.62	7,262.40	180.32	31.09	89.80	2,147.48	48.61	6,580.47	6,502.33	78.14	84.211		
13,500.00	7,237.79	7,275.30	7,262.07	183.13	31.09	89.78	2,147.48	48.61	6,679.47	6,601.26	78.21	85.404		
13,600.00	7,237.37	7,274.98	7,261.75	185.93	31.09	89.76	2,147.49	48.61	6,778.51	6,700.23	78.28	86.596		
13,700.00	7,236.95	7,274.65	7,261.43	188.74	31.09	89.74	2,147.50	48.61	6,877.57	6,799.22	78.34	87.786		
13,800.00	7,236.53	7,274.33	7,261.10	191.55	31.09	89.72	2,147.50	48.61	6,976.66	6,898.24	78.41	88.974		
13,900.00	7,236.11	7,274.00	7,260.78	194.36	31.09	89.70	2,147.51	48.61	7,075.77	6,997.29	78.48	90.160		
14,000.00	7,235.69	7,273.68	7,260.45	197.17	31.08	89.68	2,147.51	48.61	7,174.91	7,096.36	78.55	91.344		
14,100.00	7,235.27	7,273.36	7,260.13	199.98	31.08	89.66	2,147.52	48.61	7,274.07	7,195.46	78.62	92.526		
14,200.00	7,234.85	7,273.03	7,259.81	202.80	31.08	89.64	2,147.53	48.61	7,373.26	7,294.57	78.68	93.706		
14,300.00	7,234.43	7,272.71	7,259.48	205.61	31.08	89.62	2,147.53	48.61	7,472.46	7,393.71	78.75	94.884		
14,400.00	7,234.01	7,272.39	7,259.16	208.43	31.08	89.61	2,147.54	48.61	7,571.69	7,492.87	78.82	96.060		
14,500.00	7,233.59	7,272.06	7,258.84	211.25	31.08	89.59	2,147.55	48.61	7,670.94	7,592.05	78.89	97.234		
14,600.00	7,233.17	7,271.74	7,258.51	214.06	31.08	89.57	2,147.55	48.61	7,770.21	7,691.24	78.96	98.406		
14,700.00	7,232.75	7,271.41	7,258.19	216.88	31.08	89.55	2,147.56	48.61	7,869.49	7,790.46	79.03	99.575		
14,800.00	7,232.33	7,271.09	7,257.86	219.70	31.07	89.53	2,147.56	48.61	7,968.79	7,889.69	79.10	100.742		
14,900.00	7,231.91	7,270.77	7,257.54	222.52	31.07	89.51	2,147.57	48.61	8,068.11	7,988.94	79.17	101.907		
15,000.00	7,231.49	7,270.44	7,257.22	225.35	31.07	89.49	2,147.58	48.61	8,167.45	8,088.21	79.24	103.070		
15,100.00	7,231.07	7,270.12	7,256.89	228.17	31.07	89.47	2,147.58	48.61	8,266.80	8,187.49	79.31	104.230		
15,116.21	7,231.00	7,270.07	7,256.84	228.63	31.07	89.46	2,147.58	48.61	8,282.91	8,203.59	79.32	104.418		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	61.00	0.00	3.28	-166.37	-4,319.90	-1,047.37	4,445.47					
100.00	100.00	39.00	100.00	0.18	3.35	-166.37	-4,319.90	-1,047.37	4,445.05	4,441.53	3.53	1,260.851		
200.00	200.00	139.00	200.00	0.61	4.52	-166.37	-4,319.90	-1,047.37	4,445.05	4,439.92	5.13	866.107		
300.00	300.00	239.00	300.00	1.05	7.37	-166.37	-4,319.90	-1,047.37	4,445.05	4,436.63	8.42	527.831		
400.00	400.00	339.00	400.00	1.49	10.61	-166.37	-4,319.90	-1,047.37	4,445.05	4,432.95	12.10	367.341		
500.00	500.00	439.00	500.00	1.93	13.97	-166.37	-4,319.90	-1,047.37	4,445.05	4,429.15	15.90	279.544	CC	
600.00	599.98	538.98	599.98	2.37	17.38	-158.62	-4,319.90	-1,047.37	4,446.68	4,426.92	19.75	225.119	ES	
700.00	699.84	638.84	699.84	2.81	20.82	-158.61	-4,319.90	-1,047.37	4,451.55	4,427.92	23.63	188.394		
800.00	799.45	738.45	799.45	3.26	24.26	-158.59	-4,319.90	-1,047.37	4,459.67	4,432.16	27.51	162.091		
900.00	898.70	837.70	898.70	3.70	27.69	-158.56	-4,319.90	-1,047.37	4,471.03	4,439.63	31.40	142.405		
1,000.00	997.47	936.47	997.47	4.15	31.12	-158.53	-4,319.90	-1,047.37	4,485.61	4,450.34	35.27	127.175		
1,100.00	1,095.78	1,034.78	1,095.78	4.60	34.53	-158.57	-4,319.90	-1,047.37	4,502.68	4,463.54	39.14	115.054		
1,200.00	1,194.05	1,133.05	1,194.05	5.05	37.95	-158.66	-4,319.90	-1,047.37	4,519.93	4,476.93	43.00	105.121		
1,300.00	1,292.33	1,231.33	1,292.33	5.50	41.37	-158.74	-4,319.90	-1,047.37	4,537.18	4,490.32	46.86	96.815		
1,400.00	1,390.61	1,329.61	1,390.61	5.96	44.79	-158.83	-4,319.90	-1,047.37	4,554.45	4,503.72	50.74	89.769		
1,500.00	1,488.89	1,427.89	1,488.89	6.43	48.21	-158.91	-4,319.90	-1,047.37	4,571.73	4,517.12	54.61	83.716		
1,600.00	1,587.16	1,526.16	1,587.16	6.89	51.64	-159.00	-4,319.90	-1,047.37	4,589.01	4,530.53	58.49	78.462		
1,700.00	1,685.44	1,624.44	1,685.44	7.36	55.06	-159.08	-4,319.90	-1,047.37	4,606.31	4,543.94	62.37	73.860		
1,800.00	1,783.72	1,722.72	1,783.72	7.83	58.49	-159.16	-4,319.90	-1,047.37	4,623.61	4,557.37	66.25	69.794		
1,900.00	1,882.00	1,821.00	1,882.00	8.30	61.91	-159.24	-4,319.90	-1,047.37	4,640.93	4,570.80	70.13	66.177		
2,000.00	1,980.27	1,919.27	1,980.27	8.77	65.34	-159.32	-4,319.90	-1,047.37	4,658.25	4,584.24	74.01	62.939		
2,100.00	2,078.55	2,017.55	2,078.55	9.25	68.77	-159.40	-4,319.90	-1,047.37	4,675.58	4,597.69	77.90	60.023		
2,200.00	2,176.83	2,115.83	2,176.83	9.72	72.19	-159.48	-4,319.90	-1,047.37	4,692.92	4,611.14	81.78	57.384		
2,300.00	2,275.11	2,214.11	2,275.11	10.19	75.62	-159.56	-4,319.90	-1,047.37	4,710.27	4,624.60	85.67	54.983		
2,400.00	2,373.38	2,312.38	2,373.38	10.66	79.05	-159.64	-4,319.90	-1,047.37	4,727.63	4,638.07	89.55	52.791		
2,500.00	2,471.66	2,410.66	2,471.66	11.14	82.48	-159.71	-4,319.90	-1,047.37	4,744.99	4,651.55	93.44	50.781		
2,600.00	2,569.94	2,508.94	2,569.94	11.61	85.90	-159.79	-4,319.90	-1,047.37	4,762.37	4,665.04	97.33	48.931		
2,700.00	2,668.22	2,607.22	2,668.22	12.09	89.33	-159.87	-4,319.90	-1,047.37	4,779.75	4,678.54	101.22	47.223		
2,800.00	2,766.49	2,705.49	2,766.49	12.56	92.76	-159.94	-4,319.90	-1,047.37	4,797.14	4,692.04	105.10	45.641		
2,900.00	2,864.77	2,803.77	2,864.77	13.04	96.19	-160.02	-4,319.90	-1,047.37	4,814.54	4,705.55	108.99	44.173		
3,000.00	2,963.05	2,902.05	2,963.05	13.51	99.62	-160.09	-4,319.90	-1,047.37	4,831.95	4,719.07	112.88	42.805		
3,100.00	3,061.33	3,000.33	3,061.33	13.99	103.05	-160.17	-4,319.90	-1,047.37	4,849.36	4,732.59	116.77	41.529		
3,200.00	3,159.60	3,101.40	3,159.60	14.46	106.57	-160.24	-4,319.90	-1,047.37	4,866.79	4,746.03	120.76	40.302		
3,300.00	3,257.88	3,203.12	3,257.88	14.94	110.12	-160.31	-4,319.90	-1,047.37	4,884.22	4,759.45	124.77	39.146		
3,400.00	3,356.16	3,304.84	3,356.16	15.41	113.67	-160.39	-4,319.90	-1,047.37	4,901.66	4,772.88	128.78	38.063		
3,500.00	3,454.43	3,406.57	3,454.43	15.89	117.22	-160.46	-4,319.90	-1,047.37	4,919.10	4,786.31	132.79	37.044		
3,600.00	3,552.71	3,508.29	3,552.71	16.36	120.77	-160.53	-4,319.90	-1,047.37	4,936.56	4,799.76	136.80	36.086		
3,700.00	3,650.99	3,589.99	3,650.99	16.84	123.62	-160.60	-4,319.90	-1,047.37	4,954.02	4,813.91	140.11	35.358		
3,800.00	3,749.27	3,688.27	3,749.27	17.32	127.05	-160.67	-4,319.90	-1,047.37	4,971.48	4,827.48	144.00	34.524		
3,900.00	3,847.54	3,786.54	3,847.54	17.79	130.48	-160.74	-4,319.90	-1,047.37	4,988.96	4,841.07	147.89	33.734		
4,000.00	3,945.82	3,884.82	3,945.82	18.27	133.91	-160.81	-4,319.90	-1,047.37	5,006.44	4,854.66	151.78	32.984		
4,100.00	4,044.10	3,983.10	4,044.10	18.75	137.34	-160.88	-4,319.90	-1,047.37	5,023.93	4,868.26	155.67	32.272		
4,200.00	4,142.38	4,081.38	4,142.38	19.22	140.77	-160.95	-4,319.90	-1,047.37	5,041.43	4,881.87	159.56	31.595		
4,300.00	4,240.65	4,179.65	4,240.65	19.70	144.20	-161.02	-4,319.90	-1,047.37	5,058.93	4,895.48	163.46	30.950		
4,400.00	4,338.93	4,277.93	4,338.93	20.18	147.63	-161.09	-4,319.90	-1,047.37	5,076.45	4,909.10	167.35	30.335		
4,500.00	4,437.21	4,376.21	4,437.21	20.65	151.06	-161.15	-4,319.90	-1,047.37	5,093.96	4,922.73	171.24	29.748		
4,600.00	4,535.49	4,474.49	4,535.49	21.13	154.49	-161.22	-4,319.90	-1,047.37	5,111.49	4,936.36	175.13	29.187		
4,700.00	4,633.76	4,572.76	4,633.76	21.61	157.92	-161.29	-4,319.90	-1,047.37	5,129.02	4,950.00	179.02	28.650		
4,800.00	4,732.04	4,671.04	4,732.04	22.08	161.35	-161.35	-4,319.90	-1,047.37	5,146.56	4,963.65	182.91	28.137		
4,900.00	4,830.32	4,769.32	4,830.32	22.56	164.78	-161.42	-4,319.90	-1,047.37	5,164.10	4,977.30	186.80	27.645		
5,000.00	4,928.60	4,867.60	4,928.60	23.04	168.21	-161.48	-4,319.90	-1,047.37	5,181.65	4,990.96	190.69	27.173		
5,100.00	5,026.87	4,965.87	5,026.87	23.51	171.64	-161.55	-4,319.90	-1,047.37	5,199.21	5,004.62	194.59	26.719		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,064.15	5,125.15	23.99	175.08	-161.61	-4,319.90	-1,047.37	5,216.77	5,018.30	198.48	26.284		
5,300.00	5,223.43	5,162.43	5,223.43	24.47	178.51	-161.67	-4,319.90	-1,047.37	5,234.35	5,031.98	202.37	25.865		
5,400.00	5,321.71	5,260.71	5,321.71	24.94	181.94	-161.74	-4,319.90	-1,047.37	5,251.92	5,045.66	206.26	25.463		
5,500.00	5,419.98	5,358.98	5,419.98	25.42	185.37	-161.80	-4,319.90	-1,047.37	5,269.50	5,059.35	210.15	25.075		
5,600.00	5,518.26	5,457.26	5,518.26	25.90	188.80	-161.86	-4,319.90	-1,047.37	5,287.09	5,073.05	214.04	24.701		
5,700.00	5,616.54	5,555.54	5,616.54	26.38	192.23	-161.93	-4,319.90	-1,047.37	5,304.69	5,086.75	217.94	24.341		
5,800.00	5,714.82	5,653.82	5,714.82	26.85	195.66	-161.99	-4,319.90	-1,047.37	5,322.29	5,100.46	221.83	23.993		
5,900.00	5,813.09	5,752.09	5,813.09	27.33	199.09	-162.05	-4,319.90	-1,047.37	5,339.90	5,114.18	225.72	23.657		
6,000.00	5,911.37	5,850.37	5,911.37	27.81	202.52	-162.11	-4,319.90	-1,047.37	5,357.51	5,127.90	229.61	23.333		
6,100.00	6,009.65	5,948.65	6,009.65	28.28	205.95	-162.17	-4,319.90	-1,047.37	5,375.13	5,141.62	233.50	23.020		
6,200.00	6,107.93	6,046.93	6,107.93	28.76	209.38	-162.23	-4,319.90	-1,047.37	5,392.75	5,155.36	237.39	22.716		
6,300.00	6,206.20	6,145.20	6,206.20	29.24	212.81	-162.29	-4,319.90	-1,047.37	5,410.38	5,169.09	241.29	22.423		
6,400.00	6,304.48	6,243.48	6,304.48	29.72	216.24	-162.35	-4,319.90	-1,047.37	5,428.02	5,182.84	245.18	22.139		
6,500.00	6,402.76	6,341.76	6,402.76	30.19	219.67	-162.41	-4,319.90	-1,047.37	5,445.66	5,196.59	249.07	21.864		
6,600.00	6,501.04	6,440.04	6,501.04	30.67	223.10	-162.47	-4,319.90	-1,047.37	5,463.30	5,210.34	252.96	21.597		
6,700.00	6,599.31	6,538.31	6,599.31	31.15	226.53	-162.52	-4,319.90	-1,047.37	5,480.96	5,224.10	256.85	21.339		
6,800.00	6,697.59	6,636.59	6,697.59	31.63	229.96	-140.91	-4,319.90	-1,047.37	5,498.27	5,237.53	260.74	21.087		
6,900.00	6,794.18	6,733.18	6,794.18	32.10	233.33	-113.98	-4,319.90	-1,047.37	5,512.94	5,248.35	264.59	20.836		
7,000.00	6,886.96	6,825.96	6,886.96	32.55	236.57	-101.81	-4,319.90	-1,047.37	5,524.39	5,256.10	268.29	20.591		
7,100.00	6,973.57	6,912.57	6,973.57	32.99	239.60	-95.65	-4,319.90	-1,047.37	5,532.62	5,260.83	271.79	20.356		
7,200.00	7,051.87	7,009.13	7,051.87	33.41	242.97	-92.30	-4,319.90	-1,047.37	5,537.77	5,262.10	275.66	20.089		
7,300.00	7,119.93	7,058.93	7,119.93	33.85	244.70	-90.48	-4,319.90	-1,047.37	5,540.11	5,262.15	277.96	19.931		
7,400.00	7,176.09	7,115.09	7,176.09	34.39	246.66	-89.60	-4,319.90	-1,047.37	5,540.00	5,259.42	280.58	19.745		
7,500.00	7,218.95	7,157.95	7,218.95	35.09	248.16	-89.32	-4,319.90	-1,047.37	5,537.83	5,254.95	282.87	19.577		
7,600.00	7,247.46	7,186.46	7,247.46	35.98	249.16	-89.43	-4,319.90	-1,047.37	5,533.95	5,249.14	284.81	19.431		
7,700.00	7,260.92	7,200.08	7,260.92	37.04	249.63	-89.80	-4,319.90	-1,047.37	5,528.68	5,242.33	286.35	19.307		
7,800.00	7,261.75	7,200.75	7,261.75	38.23	249.65	-90.01	-4,319.90	-1,047.37	5,522.78	5,235.21	287.57	19.205		
7,900.00	7,261.33	7,200.33	7,261.33	39.59	249.64	-90.01	-4,319.90	-1,047.37	5,518.45	5,229.55	288.90	19.102		
8,000.00	7,260.91	7,200.09	7,260.91	41.10	249.63	-90.00	-4,319.90	-1,047.37	5,515.93	5,225.55	290.38	18.995		
8,089.12	7,260.54	7,200.46	7,260.54	42.57	249.64	-90.00	-4,319.90	-1,047.37	5,515.21	5,223.37	291.83	18.898		
8,100.00	7,260.49	7,200.51	7,260.49	42.75	249.65	-90.00	-4,319.90	-1,047.37	5,515.22	5,223.21	292.01	18.887		
8,200.00	7,260.07	7,200.93	7,260.07	44.53	249.66	-90.00	-4,319.90	-1,047.37	5,516.32	5,222.58	293.75	18.779		
8,300.00	7,259.65	7,201.35	7,259.65	46.41	249.68	-89.99	-4,319.90	-1,047.37	5,519.24	5,223.66	295.58	18.673		
8,400.00	7,259.23	7,201.77	7,259.23	48.39	249.69	-89.99	-4,319.90	-1,047.37	5,523.96	5,226.48	297.48	18.569		
8,500.00	7,258.81	7,202.19	7,258.81	50.45	249.71	-89.98	-4,319.90	-1,047.37	5,530.49	5,231.03	299.46	18.468		
8,600.00	7,258.39	7,202.61	7,258.39	52.59	249.72	-89.98	-4,319.90	-1,047.37	5,538.82	5,237.34	301.48	18.372		
8,700.00	7,257.97	7,203.03	7,257.97	54.79	249.73	-89.97	-4,319.90	-1,047.37	5,548.94	5,245.38	303.55	18.280		
8,800.00	7,257.55	7,203.45	7,257.55	57.05	249.75	-89.97	-4,319.90	-1,047.37	5,560.83	5,255.18	305.65	18.193		
8,900.00	7,257.13	7,203.87	7,257.13	59.36	249.76	-89.96	-4,319.90	-1,047.37	5,574.50	5,266.72	307.78	18.112		
9,000.00	7,256.71	7,204.29	7,256.71	61.72	249.78	-89.96	-4,319.90	-1,047.37	5,589.92	5,280.00	309.92	18.037		
9,100.00	7,256.29	7,204.71	7,256.29	64.12	249.79	-89.96	-4,319.90	-1,047.37	5,607.08	5,295.01	312.07	17.967		
9,200.00	7,255.87	7,205.13	7,255.87	66.56	249.81	-89.95	-4,319.90	-1,047.37	5,625.97	5,311.74	314.23	17.904		
9,300.00	7,255.45	7,205.55	7,255.45	69.02	249.82	-89.95	-4,319.90	-1,047.37	5,646.57	5,330.19	316.38	17.847		
9,400.00	7,255.03	7,205.97	7,255.03	71.52	249.84	-89.94	-4,319.90	-1,047.37	5,668.85	5,350.33	318.52	17.797		
9,500.00	7,254.61	7,206.39	7,254.61	74.04	249.85	-89.94	-4,319.90	-1,047.37	5,692.81	5,372.15	320.66	17.753		
9,600.00	7,254.19	7,206.81	7,254.19	76.58	249.87	-89.93	-4,319.90	-1,047.37	5,718.41	5,395.64	322.78	17.716		
9,700.00	7,253.77	7,207.23	7,253.77	79.15	249.88	-89.93	-4,319.90	-1,047.37	5,745.64	5,420.77	324.88	17.686		
9,800.00	7,253.35	7,207.66	7,253.35	81.74	249.90	-89.93	-4,319.90	-1,047.37	5,774.48	5,447.52	326.95	17.662		
9,900.00	7,252.92	7,208.08	7,252.92	84.34	249.91	-89.92	-4,319.90	-1,047.37	5,804.89	5,475.89	329.00	17.644		
10,000.00	7,252.50	7,208.50	7,252.50	86.96	249.93	-89.92	-4,319.90	-1,047.37	5,836.86	5,505.83	331.03	17.632		
10,100.00	7,252.08	7,208.92	7,252.08	89.59	249.94	-89.91	-4,319.90	-1,047.37	5,870.36	5,537.33	333.02	17.627 SF		
10,200.00	7,251.66	7,209.34	7,251.66	92.24	249.95	-89.91	-4,319.90	-1,047.37	5,905.36	5,570.37	334.99	17.629		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,209.76	7,251.24	94.90	249.97	-89.90	-4,319.90	-1,047.37	5,941.84	5,604.92	336.92	17.636		
10,400.00	7,250.82	7,189.82	7,250.82	97.57	249.27	-89.90	-4,319.90	-1,047.37	5,979.77	5,641.66	338.11	17.686		
10,500.00	7,250.40	7,189.40	7,250.40	100.25	249.26	-89.89	-4,319.90	-1,047.37	6,019.12	5,679.18	339.94	17.707		
10,600.00	7,249.98	7,188.98	7,249.98	102.93	249.24	-89.89	-4,319.90	-1,047.37	6,059.86	5,718.13	341.73	17.733		
10,700.00	7,249.56	7,188.56	7,249.56	105.63	249.23	-89.89	-4,319.90	-1,047.37	6,101.98	5,758.48	343.49	17.765		
10,800.00	7,249.14	7,188.14	7,249.14	108.34	249.21	-89.88	-4,319.90	-1,047.37	6,145.43	5,800.21	345.21	17.802		
10,900.00	7,248.72	7,187.72	7,248.72	111.05	249.20	-89.88	-4,319.90	-1,047.37	6,190.19	5,843.29	346.90	17.844		
11,000.00	7,248.30	7,187.30	7,248.30	113.77	249.19	-89.87	-4,319.90	-1,047.37	6,236.23	5,887.69	348.54	17.892		
11,100.00	7,247.88	7,186.88	7,247.88	116.50	249.17	-89.87	-4,319.90	-1,047.37	6,283.53	5,933.38	350.15	17.945		
11,200.00	7,247.46	7,186.46	7,247.46	119.23	249.16	-89.86	-4,319.90	-1,047.37	6,332.06	5,980.34	351.72	18.003		
11,300.00	7,247.04	7,186.04	7,247.04	121.97	249.14	-89.86	-4,319.90	-1,047.37	6,381.78	6,028.53	353.25	18.066		
11,400.00	7,246.62	7,185.62	7,246.62	124.72	249.13	-89.86	-4,319.90	-1,047.37	6,432.67	6,077.93	354.74	18.133		
11,500.00	7,246.20	7,185.20	7,246.20	127.46	249.11	-89.85	-4,319.90	-1,047.37	6,484.71	6,128.51	356.20	18.205		
11,600.00	7,245.78	7,184.78	7,245.78	130.22	249.10	-89.85	-4,319.90	-1,047.37	6,537.86	6,180.25	357.61	18.282		
11,700.00	7,245.36	7,184.36	7,245.36	132.98	249.08	-89.84	-4,319.90	-1,047.37	6,592.10	6,233.11	358.99	18.363		
11,800.00	7,244.94	7,183.94	7,244.94	135.74	249.07	-89.84	-4,319.90	-1,047.37	6,647.40	6,287.07	360.33	18.448		
11,900.00	7,244.52	7,183.52	7,244.52	138.50	249.05	-89.83	-4,319.90	-1,047.37	6,703.74	6,342.10	361.64	18.537		
12,000.00	7,244.10	7,183.10	7,244.10	141.27	249.04	-89.83	-4,319.90	-1,047.37	6,761.08	6,398.17	362.91	18.630		
12,100.00	7,243.68	7,182.68	7,243.68	144.04	249.02	-89.82	-4,319.90	-1,047.37	6,819.41	6,455.27	364.15	18.727		
12,200.00	7,243.26	7,182.26	7,243.26	146.82	249.01	-89.82	-4,319.90	-1,047.37	6,878.70	6,513.35	365.35	18.828		
12,300.00	7,242.84	7,181.84	7,242.84	149.60	248.99	-89.82	-4,319.90	-1,047.37	6,938.93	6,572.41	366.52	18.932		
12,400.00	7,242.42	7,181.42	7,242.42	152.38	248.98	-89.81	-4,319.90	-1,047.37	7,000.06	6,632.41	367.65	19.040		
12,500.00	7,242.00	7,181.00	7,242.00	155.16	248.97	-89.81	-4,319.90	-1,047.37	7,062.09	6,693.33	368.76	19.151		
12,600.00	7,241.58	7,180.58	7,241.58	157.95	248.95	-89.80	-4,319.90	-1,047.37	7,124.97	6,755.15	369.83	19.266		
12,700.00	7,241.16	7,180.16	7,241.16	160.74	248.94	-89.80	-4,319.90	-1,047.37	7,188.70	6,817.83	370.87	19.384		
12,800.00	7,240.74	7,179.74	7,240.74	163.53	248.92	-89.79	-4,319.90	-1,047.37	7,253.24	6,881.37	371.88	19.504		
12,900.00	7,240.32	7,179.32	7,240.32	166.32	248.91	-89.79	-4,319.90	-1,047.37	7,318.59	6,945.73	372.86	19.628		
13,000.00	7,239.89	7,178.89	7,239.89	169.12	248.89	-89.79	-4,319.90	-1,047.37	7,384.70	7,010.90	373.81	19.755		
13,100.00	7,239.47	7,178.47	7,239.47	171.92	248.88	-89.78	-4,319.90	-1,047.37	7,451.58	7,076.85	374.73	19.885		
13,200.00	7,239.05	7,178.05	7,239.05	174.72	248.86	-89.78	-4,319.90	-1,047.37	7,519.19	7,143.56	375.63	20.018		
13,300.00	7,238.63	7,177.63	7,238.63	177.52	248.85	-89.77	-4,319.90	-1,047.37	7,587.51	7,211.01	376.50	20.153		
13,400.00	7,238.21	7,177.21	7,238.21	180.32	248.83	-89.77	-4,319.90	-1,047.37	7,656.53	7,279.19	377.34	20.291		
13,500.00	7,237.79	7,176.79	7,237.79	183.13	248.82	-89.76	-4,319.90	-1,047.37	7,726.23	7,348.07	378.16	20.431		
13,600.00	7,237.37	7,176.37	7,237.37	185.93	248.80	-89.76	-4,319.90	-1,047.37	7,796.59	7,417.63	378.96	20.574		
13,700.00	7,236.95	7,175.95	7,236.95	188.74	248.79	-89.76	-4,319.90	-1,047.37	7,867.59	7,487.86	379.73	20.719		
13,800.00	7,236.53	7,175.53	7,236.53	191.55	248.77	-89.75	-4,319.90	-1,047.37	7,939.21	7,558.74	380.48	20.866		
13,900.00	7,236.11	7,175.11	7,236.11	194.36	248.76	-89.75	-4,319.90	-1,047.37	8,011.45	7,630.24	381.21	21.016		
14,000.00	7,235.69	7,174.69	7,235.69	197.17	248.75	-89.74	-4,319.90	-1,047.37	8,084.27	7,702.36	381.91	21.168		
14,100.00	7,235.27	7,174.27	7,235.27	199.98	248.73	-89.74	-4,319.90	-1,047.37	8,157.67	7,775.08	382.59	21.322		
14,200.00	7,234.85	7,173.85	7,234.85	202.80	248.72	-89.73	-4,319.90	-1,047.37	8,231.63	7,848.37	383.26	21.478		
14,300.00	7,234.43	7,173.43	7,234.43	205.61	248.70	-89.73	-4,319.90	-1,047.37	8,306.14	7,922.23	383.90	21.636		
14,400.00	7,234.01	7,173.01	7,234.01	208.43	248.69	-89.72	-4,319.90	-1,047.37	8,381.17	7,996.65	384.53	21.796		
14,500.00	7,233.59	7,172.59	7,233.59	211.25	248.67	-89.72	-4,319.90	-1,047.37	8,456.73	8,071.59	385.13	21.958		
14,600.00	7,233.17	7,172.17	7,233.17	214.06	248.66	-89.72	-4,319.90	-1,047.37	8,532.78	8,147.06	385.72	22.122		
14,700.00	7,232.75	7,171.75	7,232.75	216.88	248.64	-89.71	-4,319.90	-1,047.37	8,609.33	8,223.03	386.29	22.287		
14,800.00	7,232.33	7,171.33	7,232.33	219.70	248.63	-89.71	-4,319.90	-1,047.37	8,686.35	8,299.50	386.85	22.454		
14,900.00	7,231.91	7,170.91	7,231.91	222.52	248.61	-89.70	-4,319.90	-1,047.37	8,763.84	8,376.45	387.39	22.623		
15,000.00	7,231.49	7,170.49	7,231.49	225.35	248.60	-89.70	-4,319.90	-1,047.37	8,841.77	8,453.86	387.91	22.793		
15,100.00	7,231.07	7,170.07	7,231.07	228.17	248.58	-89.69	-4,319.90	-1,047.37	8,920.15	8,531.73	388.42	22.965		
15,116.21	7,231.00	7,170.00	7,231.00	228.63	248.58	-89.69	-4,319.90	-1,047.37	8,932.90	8,544.40	388.50	22.993		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	6.00	0.00	0.00	3.28	-47.38	1,070.73	-1,163.39	1,581.12					
100.00	100.00	106.00	100.00	0.18	3.82	-47.38	1,070.73	-1,163.39	1,581.12	1,577.13	3.99	395.882		
200.00	200.00	206.00	200.00	0.61	6.36	-47.38	1,070.73	-1,163.39	1,581.12	1,574.15	6.97	226.791		
300.00	300.00	306.00	300.00	1.05	9.52	-47.38	1,070.73	-1,163.39	1,581.12	1,570.55	10.57	149.545		
400.00	400.00	406.00	400.00	1.49	12.85	-47.38	1,070.73	-1,163.39	1,581.12	1,566.78	14.35	110.219		
500.00	500.00	506.00	500.00	1.93	16.25	-47.38	1,070.73	-1,163.39	1,581.12	1,562.94	18.18	86.951		
600.00	599.98	606.02	599.98	2.37	19.69	-39.69	1,070.73	-1,163.39	1,579.78	1,557.72	22.06	71.629		
700.00	699.84	706.16	699.84	2.81	23.14	-39.86	1,070.73	-1,163.39	1,575.75	1,549.80	25.95	60.724		
800.00	799.45	806.55	799.45	3.26	26.61	-40.15	1,070.73	-1,163.39	1,569.07	1,539.20	29.86	52.540		
900.00	898.70	907.30	898.70	3.70	30.11	-40.56	1,070.73	-1,163.39	1,559.75	1,525.95	33.80	46.146		
1,000.00	997.47	1,008.53	997.47	4.15	33.62	-41.09	1,070.73	-1,163.39	1,547.85	1,510.09	37.76	40.991		
1,100.00	1,095.78	1,089.78	1,095.78	4.60	36.45	-41.59	1,070.73	-1,163.39	1,534.01	1,492.98	41.03	37.386		
1,200.00	1,194.05	1,188.05	1,194.05	5.05	39.86	-42.05	1,070.73	-1,163.39	1,520.14	1,475.24	44.90	33.858		
1,300.00	1,292.33	1,286.33	1,292.33	5.50	43.28	-42.52	1,070.73	-1,163.39	1,506.36	1,457.59	48.77	30.889		
1,400.00	1,390.61	1,384.61	1,390.61	5.96	46.71	-43.00	1,070.73	-1,163.39	1,492.68	1,440.04	52.64	28.355		
1,500.00	1,488.89	1,482.89	1,488.89	6.43	50.13	-43.48	1,070.73	-1,163.39	1,479.11	1,422.59	56.52	26.169		
1,600.00	1,587.16	1,581.16	1,587.16	6.89	53.55	-43.97	1,070.73	-1,163.39	1,465.64	1,405.24	60.40	24.265		
1,700.00	1,685.44	1,679.44	1,685.44	7.36	56.98	-44.48	1,070.73	-1,163.39	1,452.29	1,388.00	64.29	22.591		
1,800.00	1,783.72	1,777.72	1,783.72	7.83	60.40	-44.99	1,070.73	-1,163.39	1,439.04	1,370.87	68.17	21.109		
1,900.00	1,882.00	1,876.00	1,882.00	8.30	63.83	-45.51	1,070.73	-1,163.39	1,425.92	1,353.86	72.06	19.788		
2,000.00	1,980.27	1,974.27	1,980.27	8.77	67.26	-46.04	1,070.73	-1,163.39	1,412.91	1,336.97	75.95	18.604		
2,100.00	2,078.55	2,072.55	2,078.55	9.25	70.68	-46.58	1,070.73	-1,163.39	1,400.03	1,320.19	79.84	17.536		
2,200.00	2,176.83	2,170.83	2,176.83	9.72	74.11	-47.13	1,070.73	-1,163.39	1,387.28	1,303.55	83.73	16.569		
2,300.00	2,275.11	2,269.11	2,275.11	10.19	77.54	-47.68	1,070.73	-1,163.39	1,374.65	1,287.03	87.62	15.688		
2,400.00	2,373.38	2,367.38	2,373.38	10.66	80.97	-48.25	1,070.73	-1,163.39	1,362.16	1,270.64	91.52	14.884		
2,500.00	2,471.66	2,465.66	2,471.66	11.14	84.39	-48.83	1,070.73	-1,163.39	1,349.80	1,254.39	95.41	14.147		
2,600.00	2,569.94	2,563.94	2,569.94	11.61	87.82	-49.42	1,070.73	-1,163.39	1,337.59	1,238.28	99.31	13.469		
2,700.00	2,668.22	2,662.22	2,668.22	12.09	91.25	-50.02	1,070.73	-1,163.39	1,325.52	1,222.32	103.20	12.844		
2,800.00	2,766.49	2,760.49	2,766.49	12.56	94.68	-50.64	1,070.73	-1,163.39	1,313.60	1,206.50	107.10	12.265		
2,900.00	2,864.77	2,858.77	2,864.77	13.04	98.11	-51.26	1,070.73	-1,163.39	1,301.84	1,190.84	111.00	11.728		
3,000.00	2,963.05	2,957.05	2,963.05	13.51	101.54	-51.89	1,070.73	-1,163.39	1,290.23	1,175.33	114.90	11.229		
3,100.00	3,061.33	3,055.33	3,061.33	13.99	104.97	-52.54	1,070.73	-1,163.39	1,278.78	1,159.99	118.80	10.764		
3,200.00	3,159.60	3,153.60	3,159.60	14.46	108.40	-53.19	1,070.73	-1,163.39	1,267.50	1,144.81	122.70	10.330		
3,300.00	3,257.88	3,251.88	3,257.88	14.94	111.83	-53.86	1,070.73	-1,163.39	1,256.39	1,129.79	126.60	9.924		
3,400.00	3,356.16	3,350.16	3,356.16	15.41	115.26	-54.54	1,070.73	-1,163.39	1,245.46	1,114.96	130.50	9.544		
3,500.00	3,454.43	3,448.43	3,454.43	15.89	118.68	-55.23	1,070.73	-1,163.39	1,234.70	1,100.30	134.40	9.186		
3,600.00	3,552.71	3,546.71	3,552.71	16.36	122.11	-55.93	1,070.73	-1,163.39	1,224.13	1,085.83	138.31	8.851		
3,700.00	3,650.99	3,644.99	3,650.99	16.84	125.54	-56.64	1,070.73	-1,163.39	1,213.75	1,071.54	142.21	8.535		
3,800.00	3,749.27	3,743.27	3,749.27	17.32	128.97	-57.37	1,070.73	-1,163.39	1,203.57	1,057.45	146.12	8.237		
3,900.00	3,847.54	3,841.54	3,847.54	17.79	132.40	-58.11	1,070.73	-1,163.39	1,193.58	1,043.56	150.02	7.956		
4,000.00	3,945.82	3,939.82	3,945.82	18.27	135.83	-58.86	1,070.73	-1,163.39	1,183.80	1,029.87	153.93	7.691		
4,100.00	4,044.10	4,038.10	4,044.10	18.75	139.26	-59.62	1,070.73	-1,163.39	1,174.22	1,016.39	157.84	7.440		
4,200.00	4,142.38	4,136.38	4,142.38	19.22	142.69	-60.39	1,070.73	-1,163.39	1,164.86	1,003.12	161.74	7.202		
4,300.00	4,240.65	4,234.65	4,240.65	19.70	146.12	-61.18	1,070.73	-1,163.39	1,155.72	990.07	165.65	6.977		
4,400.00	4,338.93	4,332.93	4,338.93	20.18	149.55	-61.98	1,070.73	-1,163.39	1,146.81	977.25	169.56	6.763		
4,500.00	4,437.21	4,431.21	4,437.21	20.65	152.98	-62.79	1,070.73	-1,163.39	1,138.12	964.66	173.47	6.561		
4,600.00	4,535.49	4,529.49	4,535.49	21.13	156.41	-63.61	1,070.73	-1,163.39	1,129.68	952.30	177.38	6.369		
4,700.00	4,633.76	4,627.76	4,633.76	21.61	159.84	-64.44	1,070.73	-1,163.39	1,121.47	940.18	181.29	6.186		
4,800.00	4,732.04	4,726.04	4,732.04	22.08	163.27	-65.29	1,070.73	-1,163.39	1,113.51	928.31	185.20	6.013		
4,900.00	4,830.32	4,824.32	4,830.32	22.56	166.70	-66.15	1,070.73	-1,163.39	1,105.80	916.69	189.11	5.847		
5,000.00	4,928.60	4,922.60	4,928.60	23.04	170.13	-67.02	1,070.73	-1,163.39	1,098.34	905.32	193.02	5.690		
5,100.00	5,026.87	5,020.87	5,026.87	23.51	173.56	-67.90	1,070.73	-1,163.39	1,091.15	894.22	196.93	5.541		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,119.15	5,125.15	23.99	176.99	-68.79	1,070.73	-1,163.39	1,084.23	883.38	200.85	5.398		
5,300.00	5,223.43	5,217.43	5,223.43	24.47	180.43	-69.69	1,070.73	-1,163.39	1,077.58	872.82	204.76	5.263		
5,400.00	5,321.71	5,315.71	5,321.71	24.94	183.86	-70.60	1,070.73	-1,163.39	1,071.21	862.53	208.67	5.133		
5,500.00	5,419.98	5,413.98	5,419.98	25.42	187.29	-71.53	1,070.73	-1,163.39	1,065.11	852.53	212.59	5.010		
5,600.00	5,518.26	5,512.26	5,518.26	25.90	190.72	-72.46	1,070.73	-1,163.39	1,059.31	842.81	216.50	4.893		
5,700.00	5,616.54	5,610.54	5,616.54	26.38	194.15	-73.40	1,070.73	-1,163.39	1,053.80	833.39	220.41	4.781		
5,800.00	5,714.82	5,708.82	5,714.82	26.85	197.58	-74.36	1,070.73	-1,163.39	1,048.59	824.26	224.33	4.674		
5,900.00	5,813.09	5,807.09	5,813.09	27.33	201.01	-75.32	1,070.73	-1,163.39	1,043.67	815.43	228.24	4.573		
6,000.00	5,911.37	5,905.37	5,911.37	27.81	204.44	-76.29	1,070.73	-1,163.39	1,039.06	806.91	232.16	4.476		
6,100.00	6,009.65	6,003.65	6,009.65	28.28	207.87	-77.26	1,070.73	-1,163.39	1,034.77	798.69	236.07	4.383		
6,200.00	6,107.93	6,101.93	6,107.93	28.76	211.30	-78.25	1,070.73	-1,163.39	1,030.78	790.79	239.99	4.295		
6,300.00	6,206.20	6,200.20	6,206.20	29.24	214.73	-79.24	1,070.73	-1,163.39	1,027.11	783.21	243.90	4.211		
6,400.00	6,304.48	6,301.52	6,304.48	29.72	218.27	-80.24	1,070.73	-1,163.39	1,023.77	775.84	247.92	4.129		
6,500.00	6,402.76	6,403.24	6,402.76	30.19	221.82	-81.25	1,070.73	-1,163.39	1,020.74	768.79	251.96	4.051		
6,600.00	6,501.04	6,504.96	6,501.04	30.67	225.37	-82.26	1,070.73	-1,163.39	1,018.05	762.06	255.99	3.977		
6,700.00	6,599.31	6,606.69	6,599.31	31.15	228.92	-83.27	1,070.73	-1,163.39	1,015.68	755.65	260.03	3.906		
6,800.00	6,697.50	6,708.50	6,697.50	31.63	232.47	-83.34	1,070.73	-1,163.39	1,011.80	747.74	264.06	3.832		
6,900.00	6,794.18	6,788.18	6,794.18	32.10	235.25	-83.61	1,070.73	-1,163.39	994.75	727.43	267.32	3.721		
7,000.00	6,886.96	6,880.96	6,886.96	32.55	238.49	-84.00	1,070.73	-1,163.39	962.86	691.85	271.01	3.553		
7,100.00	6,973.57	6,967.57	6,973.57	32.99	241.52	-84.15	1,070.73	-1,163.39	916.94	642.48	274.45	3.341		
7,200.00	7,051.87	7,045.87	7,051.87	33.41	244.25	-84.29	1,070.73	-1,163.39	858.15	580.58	277.57	3.092		
7,300.00	7,119.93	7,113.93	7,119.93	33.85	246.62	-84.19	1,070.73	-1,163.39	787.99	507.71	280.28	2.811		
7,400.00	7,176.09	7,170.09	7,176.09	34.39	248.58	-84.13	1,070.73	-1,163.39	708.25	425.70	282.56	2.507		
7,500.00	7,218.95	7,212.95	7,218.95	35.09	250.08	-84.49	1,070.73	-1,163.39	621.01	336.66	284.35	2.184		
7,600.00	7,247.46	7,241.46	7,247.46	35.98	251.08	-84.84	1,070.73	-1,163.39	528.58	242.92	285.66	1.850		
7,700.00	7,260.92	7,254.92	7,260.92	37.04	251.55	-84.98	1,070.73	-1,163.39	433.56	147.03	286.53	1.513		
7,800.00	7,261.75	7,255.75	7,261.75	38.23	251.57	-84.62	1,070.73	-1,163.39	338.97	51.80	287.18	1.180 Level 2		
7,900.00	7,261.33	7,255.33	7,261.33	39.59	251.56	-84.42	1,070.73	-1,163.39	248.52	-39.86	288.38	0.862 Level 1		
8,000.00	7,260.91	7,254.91	7,260.91	41.10	251.55	-84.23	1,070.73	-1,163.39	169.17	-121.85	291.01	0.581 Level 1		
8,100.00	7,260.49	7,254.49	7,260.49	42.75	251.53	-84.03	1,070.73	-1,163.39	124.40	-169.82	294.22	0.423 Level 1		
8,115.72	7,260.42	7,254.42	7,260.42	43.03	251.53	-84.00	1,070.73	-1,163.39	123.40	-170.78	294.18	0.419 Level 1, CC, ES, SF		
8,200.00	7,260.07	7,254.07	7,260.07	44.53	251.52	-83.84	1,070.73	-1,163.39	149.43	-141.46	290.89	0.514 Level 1		
8,300.00	7,259.65	7,253.65	7,259.65	46.41	251.50	-83.64	1,070.73	-1,163.39	221.78	-65.77	287.55	0.771 Level 1		
8,400.00	7,259.23	7,253.23	7,259.23	48.39	251.49	-83.45	1,070.73	-1,163.39	309.91	23.65	286.26	1.083 Level 2		
8,500.00	7,258.81	7,252.81	7,258.81	50.45	251.47	-83.25	1,070.73	-1,163.39	403.61	117.86	285.74	1.412 Level 3		
8,600.00	7,258.39	7,252.39	7,258.39	52.59	251.46	-83.05	1,070.73	-1,163.39	499.75	214.24	285.51	1.750		
8,700.00	7,257.97	7,251.97	7,257.97	54.79	251.44	-82.86	1,070.73	-1,163.39	597.17	311.77	285.39	2.092		
8,800.00	7,257.55	7,251.55	7,257.55	57.05	251.43	-82.66	1,070.73	-1,163.39	695.31	409.98	285.33	2.437		
8,900.00	7,257.13	7,251.13	7,257.13	59.36	251.41	-82.47	1,070.73	-1,163.39	793.92	508.62	285.30	2.783		
9,000.00	7,256.71	7,250.71	7,256.71	61.72	251.40	-82.27	1,070.73	-1,163.39	892.84	607.56	285.29	3.130		
9,100.00	7,256.29	7,250.29	7,256.29	64.12	251.38	-82.08	1,070.73	-1,163.39	991.98	706.70	285.28	3.477		
9,200.00	7,255.87	7,249.87	7,255.87	66.56	251.37	-81.88	1,070.73	-1,163.39	1,091.27	805.99	285.28	3.825		
9,300.00	7,255.45	7,249.45	7,255.45	69.02	251.35	-81.69	1,070.73	-1,163.39	1,190.68	905.40	285.28	4.174		
9,400.00	7,255.03	7,249.03	7,255.03	71.52	251.34	-81.50	1,070.73	-1,163.39	1,290.19	1,004.89	285.29	4.522		
9,500.00	7,254.61	7,248.61	7,254.61	74.04	251.33	-81.30	1,070.73	-1,163.39	1,389.76	1,104.46	285.30	4.871		
9,600.00	7,254.19	7,248.19	7,254.19	76.58	251.31	-81.11	1,070.73	-1,163.39	1,489.39	1,204.07	285.32	5.220		
9,700.00	7,253.77	7,247.77	7,253.77	79.15	251.30	-80.91	1,070.73	-1,163.39	1,589.07	1,303.74	285.33	5.569		
9,800.00	7,253.35	7,247.35	7,253.35	81.74	251.28	-80.72	1,070.73	-1,163.39	1,688.78	1,403.44	285.35	5.918		
9,900.00	7,252.92	7,246.92	7,252.92	84.34	251.27	-80.52	1,070.73	-1,163.39	1,788.53	1,503.16	285.36	6.268		
10,000.00	7,252.50	7,246.50	7,252.50	86.96	251.25	-80.33	1,070.73	-1,163.39	1,888.30	1,602.92	285.38	6.617		
10,100.00	7,252.08	7,246.08	7,252.08	89.59	251.24	-80.13	1,070.73	-1,163.39	1,988.10	1,702.70	285.40	6.966		
10,200.00	7,251.66	7,245.66	7,251.66	92.24	251.22	-80.94	1,070.73	-1,163.39	2,087.91	1,802.49	285.42	7.315		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,300.00	7,251.24	7,245.24	7,251.24	94.90	251.21	-85.75	1,070.73	-1,163.39	2,187.75	1,902.30	285.44	7.664		
10,400.00	7,250.82	7,244.82	7,250.82	97.57	251.19	-85.55	1,070.73	-1,163.39	2,287.59	2,002.13	285.47	8.014		
10,500.00	7,250.40	7,244.40	7,250.40	100.25	251.18	-85.36	1,070.73	-1,163.39	2,387.45	2,101.96	285.49	8.363		
10,600.00	7,249.98	7,243.98	7,249.98	102.93	251.16	-85.16	1,070.73	-1,163.39	2,487.32	2,201.81	285.51	8.712		
10,700.00	7,249.56	7,243.56	7,249.56	105.63	251.15	-84.97	1,070.73	-1,163.39	2,587.20	2,301.66	285.54	9.061		
10,800.00	7,249.14	7,243.14	7,249.14	108.34	251.13	-84.78	1,070.73	-1,163.39	2,687.09	2,401.53	285.57	9.410		
10,900.00	7,248.72	7,242.72	7,248.72	111.05	251.12	-84.58	1,070.73	-1,163.39	2,786.99	2,501.40	285.59	9.759		
11,000.00	7,248.30	7,242.30	7,248.30	113.77	251.11	-84.39	1,070.73	-1,163.39	2,886.90	2,601.27	285.62	10.107		
11,100.00	7,247.88	7,241.88	7,247.88	116.50	251.09	-84.20	1,070.73	-1,163.39	2,986.81	2,701.15	285.65	10.456		
11,200.00	7,247.46	7,241.46	7,247.46	119.23	251.08	-84.00	1,070.73	-1,163.39	3,086.72	2,801.04	285.68	10.805		
11,300.00	7,247.04	7,241.04	7,247.04	121.97	251.06	-83.81	1,070.73	-1,163.39	3,186.64	2,900.93	285.72	11.153		
11,400.00	7,246.62	7,240.62	7,246.62	124.72	251.05	-83.62	1,070.73	-1,163.39	3,286.57	3,000.82	285.75	11.502		
11,500.00	7,246.20	7,240.20	7,246.20	127.46	251.03	-83.42	1,070.73	-1,163.39	3,386.50	3,100.72	285.78	11.850		
11,600.00	7,245.78	7,239.78	7,245.78	130.22	251.02	-83.23	1,070.73	-1,163.39	3,486.44	3,200.62	285.82	12.198		
11,700.00	7,245.36	7,239.36	7,245.36	132.98	251.00	-83.04	1,070.73	-1,163.39	3,586.37	3,300.52	285.85	12.546		
11,800.00	7,244.94	7,238.94	7,244.94	135.74	250.99	-82.85	1,070.73	-1,163.39	3,686.32	3,400.43	285.89	12.894		
11,900.00	7,244.52	7,238.52	7,244.52	138.50	250.97	-82.66	1,070.73	-1,163.39	3,786.26	3,500.34	285.92	13.242		
12,000.00	7,244.10	7,238.10	7,244.10	141.27	250.96	-82.46	1,070.73	-1,163.39	3,886.21	3,600.24	285.96	13.590		
12,100.00	7,243.68	7,237.68	7,243.68	144.04	250.94	-82.27	1,070.73	-1,163.39	3,986.16	3,700.16	286.00	13.938		
12,200.00	7,243.26	7,237.26	7,243.26	146.82	250.93	-82.08	1,070.73	-1,163.39	4,086.11	3,800.07	286.04	14.285		
12,300.00	7,242.84	7,236.84	7,242.84	149.60	250.91	-81.89	1,070.73	-1,163.39	4,186.06	3,899.98	286.08	14.632		
12,400.00	7,242.42	7,236.42	7,242.42	152.38	250.90	-81.70	1,070.73	-1,163.39	4,286.02	3,999.90	286.13	14.980		
12,500.00	7,242.00	7,236.00	7,242.00	155.16	250.89	-81.51	1,070.73	-1,163.39	4,385.98	4,099.81	286.17	15.327		
12,600.00	7,241.58	7,235.58	7,241.58	157.95	250.87	-81.32	1,070.73	-1,163.39	4,485.94	4,199.73	286.21	15.673		
12,700.00	7,241.16	7,235.16	7,241.16	160.74	250.86	-81.13	1,070.73	-1,163.39	4,585.90	4,299.65	286.26	16.020		
12,800.00	7,240.74	7,234.74	7,240.74	163.53	250.84	-80.93	1,070.73	-1,163.39	4,685.87	4,399.56	286.30	16.367		
12,900.00	7,240.32	7,234.32	7,240.32	166.32	250.83	-80.74	1,070.73	-1,163.39	4,785.83	4,499.48	286.35	16.713		
13,000.00	7,239.89	7,233.89	7,239.89	169.12	250.81	-80.55	1,070.73	-1,163.39	4,885.80	4,599.40	286.40	17.060		
13,100.00	7,239.47	7,233.47	7,239.47	171.92	250.80	-80.36	1,070.73	-1,163.39	4,985.77	4,699.32	286.44	17.406		
13,200.00	7,239.05	7,233.05	7,239.05	174.72	250.78	-80.18	1,070.73	-1,163.39	5,085.73	4,799.24	286.49	17.752		
13,300.00	7,238.63	7,232.63	7,238.63	177.52	250.77	-79.99	1,070.73	-1,163.39	5,185.70	4,899.16	286.54	18.097		
13,400.00	7,238.21	7,232.21	7,238.21	180.32	250.75	-79.80	1,070.73	-1,163.39	5,285.68	4,999.08	286.60	18.443		
13,500.00	7,237.79	7,231.79	7,237.79	183.13	250.74	-79.61	1,070.73	-1,163.39	5,385.65	5,099.00	286.65	18.788		
13,600.00	7,237.37	7,231.37	7,237.37	185.93	250.72	-79.42	1,070.73	-1,163.39	5,485.62	5,198.92	286.70	19.134		
13,700.00	7,236.95	7,230.95	7,236.95	188.74	250.71	-79.23	1,070.73	-1,163.39	5,585.60	5,298.84	286.75	19.479		
13,800.00	7,236.53	7,230.53	7,236.53	191.55	250.69	-79.04	1,070.73	-1,163.39	5,685.57	5,398.76	286.81	19.824		
13,900.00	7,236.11	7,230.11	7,236.11	194.36	250.68	-78.85	1,070.73	-1,163.39	5,785.55	5,498.68	286.86	20.168		
14,000.00	7,235.69	7,229.69	7,235.69	197.17	250.66	-78.67	1,070.73	-1,163.39	5,885.52	5,598.60	286.92	20.513		
14,100.00	7,235.27	7,229.27	7,235.27	199.98	250.65	-78.48	1,070.73	-1,163.39	5,985.50	5,698.52	286.98	20.857		
14,200.00	7,234.85	7,228.85	7,234.85	202.80	250.64	-78.29	1,070.73	-1,163.39	6,085.48	5,798.45	287.03	21.201		
14,300.00	7,234.43	7,228.43	7,234.43	205.61	250.62	-78.10	1,070.73	-1,163.39	6,185.46	5,898.37	287.09	21.545		
14,400.00	7,234.01	7,228.01	7,234.01	208.43	250.61	-77.92	1,070.73	-1,163.39	6,285.44	5,998.28	287.15	21.889		
14,500.00	7,233.59	7,227.59	7,233.59	211.25	250.59	-77.73	1,070.73	-1,163.39	6,385.42	6,098.20	287.21	22.232		
14,600.00	7,233.17	7,227.17	7,233.17	214.06	250.58	-77.55	1,070.73	-1,163.39	6,485.40	6,198.12	287.27	22.576		
14,700.00	7,232.75	7,226.75	7,232.75	216.88	250.56	-77.36	1,070.73	-1,163.39	6,585.38	6,298.04	287.34	22.919		
14,800.00	7,232.33	7,226.33	7,232.33	219.70	250.55	-77.17	1,070.73	-1,163.39	6,685.36	6,397.96	287.40	23.262		
14,900.00	7,231.91	7,225.91	7,231.91	222.52	250.53	-76.99	1,070.73	-1,163.39	6,785.34	6,497.88	287.46	23.604		
15,000.00	7,231.49	7,225.49	7,231.49	225.35	250.52	-76.80	1,070.73	-1,163.39	6,885.33	6,597.80	287.53	23.947		
15,100.00	7,231.07	7,225.07	7,231.07	228.17	250.50	-76.62	1,070.73	-1,163.39	6,985.31	6,697.72	287.59	24.289		
15,116.21	7,231.00	7,225.00	7,231.00	228.63	250.50	-76.59	1,070.73	-1,163.39	7,001.52	6,713.91	287.60	24.344		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	20.00	0.00	3.28	-101.93	-233.49	-1,105.05	1,129.62					
100.00	100.00	80.00	100.00	0.18	3.56	-101.93	-233.49	-1,105.05	1,129.44	1,125.70	3.74	301.958		
200.00	200.00	180.00	200.00	0.61	5.60	-101.93	-233.49	-1,105.05	1,129.44	1,123.23	6.21	181.764		
300.00	300.00	280.00	300.00	1.05	8.67	-101.93	-233.49	-1,105.05	1,129.44	1,119.72	9.73	116.121		
400.00	400.00	380.00	400.00	1.49	11.98	-101.93	-233.49	-1,105.05	1,129.44	1,115.97	13.47	83.849		
500.00	500.00	480.00	500.00	1.93	15.37	-101.93	-233.49	-1,105.05	1,129.44	1,112.15	17.30	65.301 CC		
600.00	599.98	579.98	599.98	2.37	18.79	-94.27	-233.49	-1,105.05	1,129.57	1,108.41	21.16	53.386		
700.00	699.84	679.84	699.84	2.81	22.23	-94.53	-233.49	-1,105.05	1,129.98	1,104.94	25.04	45.133		
800.00	799.45	779.45	799.45	3.26	25.68	-94.95	-233.49	-1,105.05	1,130.70	1,101.78	28.92	39.099		
900.00	898.70	878.70	898.70	3.70	29.12	-95.54	-233.49	-1,105.05	1,131.82	1,099.02	32.80	34.508		
1,000.00	997.47	977.47	997.47	4.15	32.54	-96.28	-233.49	-1,105.05	1,133.45	1,096.78	36.67	30.907		
1,100.00	1,095.78	1,075.78	1,095.78	4.60	35.96	-97.17	-233.49	-1,105.05	1,135.63	1,095.09	40.54	28.012		
1,200.00	1,194.05	1,174.05	1,194.05	5.05	39.38	-98.08	-233.49	-1,105.05	1,138.12	1,093.71	44.42	25.624		
1,300.00	1,292.33	1,272.33	1,292.33	5.50	42.80	-98.98	-233.49	-1,105.05	1,140.91	1,092.62	48.30	23.623		
1,400.00	1,390.61	1,370.61	1,390.61	5.96	46.22	-99.88	-233.49	-1,105.05	1,143.99	1,091.81	52.18	21.924		
1,500.00	1,488.89	1,468.89	1,488.89	6.43	49.64	-100.78	-233.49	-1,105.05	1,147.36	1,091.29	56.07	20.463		
1,600.00	1,587.16	1,567.16	1,587.16	6.89	53.07	-101.66	-233.49	-1,105.05	1,151.02	1,091.06	59.96	19.197 ES		
1,700.00	1,685.44	1,665.44	1,685.44	7.36	56.49	-102.55	-233.49	-1,105.05	1,154.96	1,091.11	63.85	18.088		
1,800.00	1,783.72	1,763.72	1,783.72	7.83	59.92	-103.42	-233.49	-1,105.05	1,159.18	1,091.44	67.75	17.110		
1,900.00	1,882.00	1,862.00	1,882.00	8.30	63.34	-104.30	-233.49	-1,105.05	1,163.68	1,092.04	71.64	16.243		
2,000.00	1,980.27	1,960.27	1,980.27	8.77	66.77	-105.16	-233.49	-1,105.05	1,168.46	1,092.92	75.54	15.468		
2,100.00	2,078.55	2,058.55	2,078.55	9.25	70.20	-106.02	-233.49	-1,105.05	1,173.51	1,094.07	79.44	14.773		
2,200.00	2,176.83	2,156.83	2,176.83	9.72	73.62	-106.87	-233.49	-1,105.05	1,178.82	1,095.49	83.34	14.145		
2,300.00	2,275.11	2,255.11	2,275.11	10.19	77.05	-107.71	-233.49	-1,105.05	1,184.40	1,097.17	87.23	13.577		
2,400.00	2,373.38	2,353.38	2,373.38	10.66	80.48	-108.54	-233.49	-1,105.05	1,190.24	1,099.11	91.13	13.060		
2,500.00	2,471.66	2,451.66	2,471.66	11.14	83.91	-109.37	-233.49	-1,105.05	1,196.34	1,101.31	95.03	12.589		
2,600.00	2,569.94	2,549.94	2,569.94	11.61	87.33	-110.19	-233.49	-1,105.05	1,202.69	1,103.76	98.93	12.157		
2,700.00	2,668.22	2,648.22	2,668.22	12.09	90.76	-111.00	-233.49	-1,105.05	1,209.29	1,106.46	102.83	11.760		
2,800.00	2,766.49	2,746.49	2,766.49	12.56	94.19	-111.80	-233.49	-1,105.05	1,216.13	1,109.40	106.73	11.394		
2,900.00	2,864.77	2,844.77	2,864.77	13.04	97.62	-112.59	-233.49	-1,105.05	1,223.22	1,112.59	110.63	11.057		
3,000.00	2,963.05	2,943.05	2,963.05	13.51	101.05	-113.37	-233.49	-1,105.05	1,230.54	1,116.01	114.53	10.744		
3,100.00	3,061.33	3,041.33	3,061.33	13.99	104.48	-114.15	-233.49	-1,105.05	1,238.10	1,119.66	118.43	10.454		
3,200.00	3,159.60	3,139.60	3,159.60	14.46	107.91	-114.91	-233.49	-1,105.05	1,245.88	1,123.55	122.33	10.184		
3,300.00	3,257.88	3,237.88	3,257.88	14.94	111.34	-115.67	-233.49	-1,105.05	1,253.89	1,127.66	126.23	9.933		
3,400.00	3,356.16	3,336.16	3,356.16	15.41	114.77	-116.41	-233.49	-1,105.05	1,262.12	1,131.98	130.13	9.699		
3,500.00	3,454.43	3,434.43	3,454.43	15.89	118.20	-117.15	-233.49	-1,105.05	1,270.56	1,136.53	134.03	9.480		
3,600.00	3,552.71	3,532.71	3,552.71	16.36	121.63	-117.88	-233.49	-1,105.05	1,279.21	1,141.28	137.93	9.274		
3,700.00	3,650.99	3,630.99	3,650.99	16.84	125.06	-118.59	-233.49	-1,105.05	1,288.07	1,146.24	141.83	9.082		
3,800.00	3,749.27	3,729.27	3,749.27	17.32	128.49	-119.30	-233.49	-1,105.05	1,297.14	1,151.41	145.73	8.901		
3,900.00	3,847.54	3,827.54	3,847.54	17.79	131.92	-120.00	-233.49	-1,105.05	1,306.40	1,156.77	149.63	8.731		
4,000.00	3,945.82	3,925.82	3,945.82	18.27	135.34	-120.69	-233.49	-1,105.05	1,315.86	1,162.33	153.53	8.571		
4,100.00	4,044.10	4,024.10	4,044.10	18.75	138.77	-121.36	-233.49	-1,105.05	1,325.50	1,168.08	157.42	8.420		
4,200.00	4,142.38	4,122.38	4,142.38	19.22	142.20	-122.03	-233.49	-1,105.05	1,335.34	1,174.02	161.32	8.278		
4,300.00	4,240.65	4,220.65	4,240.65	19.70	145.63	-122.69	-233.49	-1,105.05	1,345.35	1,180.13	165.22	8.143		
4,400.00	4,338.93	4,318.93	4,338.93	20.18	149.06	-123.34	-233.49	-1,105.05	1,355.55	1,186.43	169.12	8.015		
4,500.00	4,437.21	4,417.21	4,437.21	20.65	152.49	-123.98	-233.49	-1,105.05	1,365.91	1,192.90	173.01	7.895		
4,600.00	4,535.49	4,515.49	4,535.49	21.13	155.92	-124.61	-233.49	-1,105.05	1,376.45	1,199.54	176.91	7.781		
4,700.00	4,633.76	4,613.76	4,633.76	21.61	159.36	-125.23	-233.49	-1,105.05	1,387.15	1,206.35	180.81	7.672		
4,800.00	4,732.04	4,712.04	4,732.04	22.08	162.79	-125.84	-233.49	-1,105.05	1,398.02	1,213.32	184.70	7.569		
4,900.00	4,830.32	4,810.32	4,830.32	22.56	166.22	-126.45	-233.49	-1,105.05	1,409.04	1,220.45	188.60	7.471		
5,000.00	4,928.60	4,908.60	4,928.60	23.04	169.65	-127.04	-233.49	-1,105.05	1,420.22	1,227.73	192.50	7.378		
5,100.00	5,026.87	5,006.87	5,026.87	23.51	173.08	-127.62	-233.49	-1,105.05	1,431.55	1,235.16	196.39	7.289		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,105.15	5,125.15	23.99	176.51	-128.20	-233.49	-1,105.05	1,443.03	1,242.75	200.29	7.205		
5,300.00	5,223.43	5,203.43	5,223.43	24.47	179.94	-128.77	-233.49	-1,105.05	1,454.66	1,250.47	204.18	7.124		
5,400.00	5,321.71	5,301.71	5,321.71	24.94	183.37	-129.32	-233.49	-1,105.05	1,466.42	1,258.34	208.08	7.048		
5,500.00	5,419.98	5,400.02	5,419.98	25.42	186.80	-129.87	-233.49	-1,105.05	1,478.32	1,266.35	211.97	6.974		
5,600.00	5,518.26	5,501.74	5,518.26	25.90	190.35	-130.41	-233.49	-1,105.05	1,490.35	1,274.37	215.99	6.900		
5,700.00	5,616.54	5,603.46	5,616.54	26.38	193.90	-130.94	-233.49	-1,105.05	1,502.52	1,282.52	220.00	6.830		
5,800.00	5,714.82	5,705.18	5,714.82	26.85	197.45	-131.47	-233.49	-1,105.05	1,514.81	1,290.80	224.02	6.762		
5,900.00	5,813.09	5,806.91	5,813.09	27.33	201.00	-131.98	-233.49	-1,105.05	1,527.23	1,299.20	228.03	6.698		
6,000.00	5,911.37	5,908.63	5,911.37	27.81	204.55	-132.49	-233.49	-1,105.05	1,539.77	1,307.73	232.04	6.636		
6,100.00	6,009.65	5,989.65	6,009.65	28.28	207.38	-132.98	-233.49	-1,105.05	1,552.43	1,317.10	235.34	6.597		
6,200.00	6,107.93	6,087.93	6,107.93	28.76	210.81	-133.48	-233.49	-1,105.05	1,565.21	1,325.98	239.23	6.543		
6,300.00	6,206.20	6,186.20	6,206.20	29.24	214.24	-133.96	-233.49	-1,105.05	1,578.09	1,334.97	243.12	6.491		
6,400.00	6,304.48	6,284.48	6,304.48	29.72	217.67	-134.43	-233.49	-1,105.05	1,591.09	1,344.08	247.02	6.441		
6,500.00	6,402.76	6,382.76	6,402.76	30.19	221.10	-134.90	-233.49	-1,105.05	1,604.20	1,353.29	250.91	6.394		
6,600.00	6,501.04	6,481.04	6,501.04	30.67	224.53	-135.36	-233.49	-1,105.05	1,617.41	1,362.61	254.80	6.348		
6,700.00	6,599.31	6,579.31	6,599.31	31.15	227.96	-135.81	-233.49	-1,105.05	1,630.72	1,372.03	258.69	6.304		
6,800.00	6,697.50	6,677.50	6,697.50	31.63	231.39	-114.96	-233.49	-1,105.05	1,643.03	1,380.44	262.58	6.257		
6,900.00	6,794.18	6,774.18	6,794.18	32.10	234.76	-89.66	-233.49	-1,105.05	1,647.35	1,380.92	266.42	6.183		
7,000.00	6,886.96	6,866.96	6,886.96	32.55	238.00	-79.67	-233.49	-1,105.05	1,642.86	1,372.74	270.12	6.082		
7,100.00	6,973.57	6,953.57	6,973.57	32.99	241.03	-76.20	-233.49	-1,105.05	1,630.47	1,356.87	273.61	5.959		
7,200.00	7,051.87	7,031.87	7,051.87	33.41	243.76	-75.98	-233.49	-1,105.05	1,611.46	1,334.63	276.82	5.821		
7,300.00	7,119.93	7,100.07	7,119.93	33.85	246.14	-77.62	-233.49	-1,105.05	1,587.42	1,307.68	279.75	5.675		
7,400.00	7,176.09	7,156.09	7,176.09	34.39	248.10	-80.30	-233.49	-1,105.05	1,560.18	1,277.84	282.34	5.526		
7,500.00	7,218.95	7,201.05	7,218.95	35.09	249.67	-83.42	-233.49	-1,105.05	1,531.62	1,246.94	284.68	5.380		
7,600.00	7,247.46	7,227.46	7,247.46	35.98	250.59	-86.50	-233.49	-1,105.05	1,503.56	1,217.05	286.52	5.248		
7,700.00	7,260.92	7,240.92	7,260.92	37.04	251.06	-89.16	-233.49	-1,105.05	1,477.60	1,189.56	288.04	5.130		
7,800.00	7,261.75	7,241.75	7,261.75	38.23	251.09	-90.05	-233.49	-1,105.05	1,455.40	1,166.16	289.24	5.032		
7,900.00	7,261.33	7,241.33	7,261.33	39.59	251.07	-90.03	-233.49	-1,105.05	1,439.58	1,149.05	290.53	4.955		
8,000.00	7,260.91	7,240.91	7,260.91	41.10	251.06	-90.01	-233.49	-1,105.05	1,430.59	1,138.67	291.92	4.901		
8,079.01	7,260.58	7,240.58	7,260.58	42.41	251.05	-90.00	-233.49	-1,105.05	1,428.40	1,135.34	293.07	4.874		
8,100.00	7,260.49	7,240.49	7,260.49	42.75	251.04	-90.00	-233.49	-1,105.05	1,428.56	1,135.20	293.36	4.870		
8,200.00	7,260.07	7,240.07	7,260.07	44.53	251.03	-89.98	-233.49	-1,105.05	1,433.52	1,138.70	294.82	4.862 SF		
8,300.00	7,259.65	7,239.65	7,259.65	46.41	251.01	-89.96	-233.49	-1,105.05	1,445.40	1,149.15	296.24	4.879		
8,400.00	7,259.23	7,239.23	7,259.23	48.39	251.00	-89.95	-233.49	-1,105.05	1,464.03	1,166.42	297.60	4.919		
8,500.00	7,258.81	7,238.81	7,258.81	50.45	250.98	-89.93	-233.49	-1,105.05	1,489.15	1,190.28	298.87	4.983		
8,600.00	7,258.39	7,238.39	7,258.39	52.59	250.97	-89.91	-233.49	-1,105.05	1,520.45	1,220.43	300.02	5.068		
8,700.00	7,257.97	7,237.97	7,257.97	54.79	250.95	-89.90	-233.49	-1,105.05	1,557.55	1,256.50	301.05	5.174		
8,800.00	7,257.55	7,237.55	7,257.55	57.05	250.94	-89.88	-233.49	-1,105.05	1,600.05	1,298.10	301.95	5.299		
8,900.00	7,257.13	7,237.13	7,257.13	59.36	250.92	-89.86	-233.49	-1,105.05	1,647.53	1,344.81	302.72	5.442		
9,000.00	7,256.71	7,236.71	7,256.71	61.72	250.91	-89.84	-233.49	-1,105.05	1,699.57	1,396.19	303.38	5.602		
9,100.00	7,256.29	7,236.29	7,256.29	64.12	250.90	-89.83	-233.49	-1,105.05	1,755.77	1,451.84	303.93	5.777		
9,200.00	7,255.87	7,235.87	7,255.87	66.56	250.88	-89.81	-233.49	-1,105.05	1,815.75	1,511.36	304.39	5.965		
9,300.00	7,255.45	7,235.45	7,255.45	69.02	250.87	-89.79	-233.49	-1,105.05	1,879.13	1,574.37	304.76	6.166		
9,400.00	7,255.03	7,235.03	7,255.03	71.52	250.85	-89.78	-233.49	-1,105.05	1,945.59	1,640.54	305.05	6.378		
9,500.00	7,254.61	7,234.61	7,254.61	74.04	250.84	-89.76	-233.49	-1,105.05	2,014.82	1,709.54	305.28	6.600		
9,600.00	7,254.19	7,234.19	7,254.19	76.58	250.82	-89.74	-233.49	-1,105.05	2,086.55	1,781.09	305.46	6.831		
9,700.00	7,253.77	7,233.77	7,253.77	79.15	250.81	-89.73	-233.49	-1,105.05	2,160.53	1,854.94	305.59	7.070		
9,800.00	7,253.35	7,233.35	7,253.35	81.74	250.79	-89.71	-233.49	-1,105.05	2,236.54	1,930.85	305.69	7.316		
9,900.00	7,252.92	7,232.92	7,252.92	84.34	250.78	-89.69	-233.49	-1,105.05	2,314.36	2,008.62	305.75	7.570		
10,000.00	7,252.50	7,232.50	7,252.50	86.96	250.76	-89.68	-233.49	-1,105.05	2,393.84	2,088.06	305.78	7.829		
10,100.00	7,252.08	7,232.08	7,252.08	89.59	250.75	-89.66	-233.49	-1,105.05	2,474.81	2,169.01	305.80	8.093		
10,200.00	7,251.66	7,231.66	7,251.66	92.24	250.73	-89.64	-233.49	-1,105.05	2,557.12	2,251.33	305.79	8.362		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,231.24	7,251.24	94.90	250.72	-89.63	-233.49	-1,105.05	2,640.65	2,334.88	305.77	8.636		
10,400.00	7,250.82	7,230.82	7,250.82	97.57	250.70	-89.61	-233.49	-1,105.05	2,725.30	2,419.55	305.75	8.914		
10,500.00	7,250.40	7,230.40	7,250.40	100.25	250.69	-89.59	-233.49	-1,105.05	2,810.95	2,505.24	305.71	9.195		
10,600.00	7,249.98	7,229.98	7,249.98	102.93	250.68	-89.57	-233.49	-1,105.05	2,897.52	2,591.86	305.66	9.480		
10,700.00	7,249.56	7,229.56	7,249.56	105.63	250.66	-89.56	-233.49	-1,105.05	2,984.93	2,679.32	305.61	9.767		
10,800.00	7,249.14	7,229.14	7,249.14	108.34	250.65	-89.54	-233.49	-1,105.05	3,073.11	2,767.55	305.55	10.057		
10,900.00	7,248.72	7,228.72	7,248.72	111.05	250.63	-89.52	-233.49	-1,105.05	3,161.99	2,856.49	305.50	10.350		
11,000.00	7,248.30	7,228.30	7,248.30	113.77	250.62	-89.51	-233.49	-1,105.05	3,251.52	2,946.08	305.44	10.645		
11,100.00	7,247.88	7,227.88	7,247.88	116.50	250.60	-89.49	-233.49	-1,105.05	3,341.64	3,036.27	305.37	10.943		
11,200.00	7,247.46	7,227.46	7,247.46	119.23	250.59	-89.47	-233.49	-1,105.05	3,432.31	3,127.00	305.31	11.242		
11,300.00	7,247.04	7,227.04	7,247.04	121.97	250.57	-89.46	-233.49	-1,105.05	3,523.48	3,218.23	305.25	11.543		
11,400.00	7,246.62	7,226.62	7,246.62	124.72	250.56	-89.44	-233.49	-1,105.05	3,615.12	3,309.93	305.19	11.846		
11,500.00	7,246.20	7,226.20	7,246.20	127.46	250.54	-89.42	-233.49	-1,105.05	3,707.20	3,402.07	305.13	12.150		
11,600.00	7,245.78	7,225.78	7,245.78	130.22	250.53	-89.41	-233.49	-1,105.05	3,799.67	3,494.60	305.07	12.455		
11,700.00	7,245.36	7,225.36	7,245.36	132.98	250.51	-89.39	-233.49	-1,105.05	3,892.52	3,587.50	305.01	12.762		
11,800.00	7,244.94	7,224.94	7,244.94	135.74	250.50	-89.37	-233.49	-1,105.05	3,985.71	3,680.75	304.95	13.070		
11,900.00	7,244.52	7,224.52	7,244.52	138.50	250.48	-89.36	-233.49	-1,105.05	4,079.22	3,774.32	304.90	13.379		
12,000.00	7,244.10	7,224.10	7,244.10	141.27	250.47	-89.34	-233.49	-1,105.05	4,173.04	3,868.19	304.85	13.689		
12,100.00	7,243.68	7,223.68	7,243.68	144.04	250.46	-89.32	-233.49	-1,105.05	4,267.13	3,962.34	304.79	14.000		
12,200.00	7,243.26	7,223.26	7,243.26	146.82	250.44	-89.31	-233.49	-1,105.05	4,361.49	4,056.75	304.74	14.312		
12,300.00	7,242.84	7,222.84	7,242.84	149.60	250.43	-89.29	-233.49	-1,105.05	4,456.09	4,151.40	304.70	14.625		
12,400.00	7,242.42	7,222.42	7,242.42	152.38	250.41	-89.27	-233.49	-1,105.05	4,550.93	4,246.28	304.65	14.938		
12,500.00	7,242.00	7,222.00	7,242.00	155.16	250.40	-89.25	-233.49	-1,105.05	4,645.98	4,341.37	304.61	15.252		
12,600.00	7,241.58	7,221.58	7,241.58	157.95	250.38	-89.24	-233.49	-1,105.05	4,741.24	4,436.67	304.57	15.567		
12,700.00	7,241.16	7,221.16	7,241.16	160.74	250.37	-89.22	-233.49	-1,105.05	4,836.68	4,532.16	304.53	15.883		
12,800.00	7,240.74	7,220.74	7,240.74	163.53	250.35	-89.20	-233.49	-1,105.05	4,932.31	4,627.82	304.49	16.199		
12,900.00	7,240.32	7,220.32	7,240.32	166.32	250.34	-89.19	-233.49	-1,105.05	5,028.11	4,723.65	304.46	16.515		
13,000.00	7,239.89	7,219.89	7,239.89	169.12	250.32	-89.17	-233.49	-1,105.05	5,124.07	4,819.64	304.42	16.832		
13,100.00	7,239.47	7,219.47	7,239.47	171.92	250.31	-89.15	-233.49	-1,105.05	5,220.18	4,915.78	304.39	17.150		
13,200.00	7,239.05	7,219.05	7,239.05	174.72	250.29	-89.14	-233.49	-1,105.05	5,316.43	5,012.07	304.36	17.467		
13,300.00	7,238.63	7,218.63	7,238.63	177.52	250.28	-89.12	-233.49	-1,105.05	5,412.82	5,108.48	304.34	17.786		
13,400.00	7,238.21	7,218.21	7,238.21	180.32	250.26	-89.10	-233.49	-1,105.05	5,509.33	5,205.02	304.31	18.104		
13,500.00	7,237.79	7,217.79	7,237.79	183.13	250.25	-89.09	-233.49	-1,105.05	5,605.97	5,301.69	304.29	18.423		
13,600.00	7,237.37	7,217.37	7,237.37	185.93	250.23	-89.07	-233.49	-1,105.05	5,702.73	5,398.46	304.27	18.742		
13,700.00	7,236.95	7,216.95	7,236.95	188.74	250.22	-89.05	-233.49	-1,105.05	5,799.60	5,495.35	304.25	19.062		
13,800.00	7,236.53	7,216.53	7,236.53	191.55	250.21	-89.04	-233.49	-1,105.05	5,896.57	5,592.33	304.23	19.382		
13,900.00	7,236.11	7,216.11	7,236.11	194.36	250.19	-89.02	-233.49	-1,105.05	5,993.64	5,689.42	304.22	19.702		
14,000.00	7,235.69	7,215.69	7,235.69	197.17	250.18	-89.00	-233.49	-1,105.05	6,090.80	5,786.60	304.20	20.022		
14,100.00	7,235.27	7,215.27	7,235.27	199.98	250.16	-88.99	-233.49	-1,105.05	6,188.05	5,883.86	304.19	20.343		
14,200.00	7,234.85	7,214.85	7,234.85	202.80	250.15	-88.97	-233.49	-1,105.05	6,285.40	5,981.21	304.18	20.663		
14,300.00	7,234.43	7,214.43	7,234.43	205.61	250.13	-88.95	-233.49	-1,105.05	6,382.82	6,078.65	304.17	20.984		
14,400.00	7,234.01	7,214.01	7,234.01	208.43	250.12	-88.93	-233.49	-1,105.05	6,480.32	6,176.15	304.17	21.305		
14,500.00	7,233.59	7,213.59	7,233.59	211.25	250.10	-88.92	-233.49	-1,105.05	6,577.90	6,273.74	304.16	21.626		
14,600.00	7,233.17	7,213.17	7,233.17	214.06	250.09	-88.90	-233.49	-1,105.05	6,675.54	6,371.39	304.16	21.948		
14,700.00	7,232.75	7,212.75	7,232.75	216.88	250.07	-88.88	-233.49	-1,105.05	6,773.26	6,469.11	304.15	22.269		
14,800.00	7,232.33	7,212.33	7,232.33	219.70	250.06	-88.87	-233.49	-1,105.05	6,871.04	6,566.89	304.15	22.591		
14,900.00	7,231.91	7,211.91	7,231.91	222.52	250.04	-88.85	-233.49	-1,105.05	6,968.89	6,664.73	304.16	22.912		
15,000.00	7,231.49	7,211.49	7,231.49	225.35	250.03	-88.83	-233.49	-1,105.05	7,066.80	6,762.64	304.16	23.234		
15,100.00	7,231.07	7,211.07	7,231.07	228.17	250.01	-88.82	-233.49	-1,105.05	7,164.76	6,860.60	304.16	23.556		
15,116.21	7,231.00	7,211.00	7,231.00	228.63	250.01	-88.81	-233.49	-1,105.05	7,180.65	6,876.48	304.16	23.608		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	13.00	0.00	3.28	-73.20	447.78	-1,483.28	1,549.45					
100.00	100.00	87.00	100.00	0.18	3.61	-73.20	447.78	-1,483.28	1,549.39	1,545.60	3.79	408.810		
200.00	200.00	187.00	200.00	0.61	5.80	-73.20	447.78	-1,483.28	1,549.39	1,542.98	6.41	241.578		
300.00	300.00	287.00	300.00	1.05	8.90	-73.20	447.78	-1,483.28	1,549.39	1,539.44	9.95	155.668		
400.00	400.00	387.00	400.00	1.49	12.21	-73.20	447.78	-1,483.28	1,549.39	1,535.69	13.71	113.052		
500.00	500.00	487.00	500.00	1.93	15.60	-73.20	447.78	-1,483.28	1,549.39	1,531.86	17.53	88.360		
600.00	599.98	586.98	599.98	2.37	19.03	-65.53	447.78	-1,483.28	1,548.67	1,527.27	21.40	72.370		
700.00	699.84	686.84	699.84	2.81	22.47	-65.74	447.78	-1,483.28	1,546.51	1,521.23	25.28	61.178		
800.00	799.45	786.45	799.45	3.26	25.92	-66.10	447.78	-1,483.28	1,542.94	1,513.78	29.16	52.909		
900.00	898.70	885.70	898.70	3.70	29.36	-66.60	447.78	-1,483.28	1,538.02	1,504.98	33.04	46.547		
1,000.00	997.47	984.47	997.47	4.15	32.79	-67.25	447.78	-1,483.28	1,531.82	1,494.91	36.92	41.495		
1,100.00	1,095.78	1,082.78	1,095.78	4.60	36.20	-67.92	447.78	-1,483.28	1,524.75	1,483.97	40.78	37.388		
1,200.00	1,194.05	1,181.05	1,194.05	5.05	39.62	-68.55	447.78	-1,483.28	1,517.79	1,473.14	44.65	33.991		
1,300.00	1,292.33	1,279.33	1,292.33	5.50	43.04	-69.20	447.78	-1,483.28	1,511.03	1,462.50	48.53	31.136		
1,400.00	1,390.61	1,377.61	1,390.61	5.96	46.46	-69.84	447.78	-1,483.28	1,504.46	1,452.05	52.41	28.704		
1,500.00	1,488.89	1,475.89	1,488.89	6.43	49.89	-70.50	447.78	-1,483.28	1,498.10	1,441.80	56.30	26.610		
1,600.00	1,587.16	1,574.16	1,587.16	6.89	53.31	-71.16	447.78	-1,483.28	1,491.93	1,431.75	60.19	24.788		
1,700.00	1,685.44	1,672.44	1,685.44	7.36	56.73	-71.82	447.78	-1,483.28	1,485.97	1,421.90	64.08	23.190		
1,800.00	1,783.72	1,770.72	1,783.72	7.83	60.16	-72.49	447.78	-1,483.28	1,480.22	1,412.25	67.97	21.777		
1,900.00	1,882.00	1,869.00	1,882.00	8.30	63.59	-73.16	447.78	-1,483.28	1,474.68	1,402.81	71.87	20.520		
2,000.00	1,980.27	1,967.27	1,980.27	8.77	67.01	-73.84	447.78	-1,483.28	1,469.35	1,393.58	75.76	19.394		
2,100.00	2,078.55	2,065.55	2,078.55	9.25	70.44	-74.53	447.78	-1,483.28	1,464.23	1,384.57	79.66	18.381		
2,200.00	2,176.83	2,163.83	2,176.83	9.72	73.87	-75.21	447.78	-1,483.28	1,459.32	1,375.76	83.56	17.464		
2,300.00	2,275.11	2,262.11	2,275.11	10.19	77.29	-75.91	447.78	-1,483.28	1,454.64	1,367.18	87.46	16.632		
2,400.00	2,373.38	2,360.38	2,373.38	10.66	80.72	-76.60	447.78	-1,483.28	1,450.18	1,358.81	91.36	15.873		
2,500.00	2,471.66	2,458.66	2,471.66	11.14	84.15	-77.30	447.78	-1,483.28	1,445.93	1,350.67	95.26	15.178		
2,600.00	2,569.94	2,556.94	2,569.94	11.61	87.58	-78.01	447.78	-1,483.28	1,441.92	1,342.75	99.17	14.540		
2,700.00	2,668.22	2,655.22	2,668.22	12.09	91.01	-78.72	447.78	-1,483.28	1,438.13	1,335.06	103.07	13.953		
2,800.00	2,766.49	2,753.49	2,766.49	12.56	94.44	-79.43	447.78	-1,483.28	1,434.56	1,327.59	106.97	13.410		
2,900.00	2,864.77	2,851.77	2,864.77	13.04	97.86	-80.14	447.78	-1,483.28	1,431.23	1,320.35	110.88	12.908		
3,000.00	2,963.05	2,950.05	2,963.05	13.51	101.29	-80.86	447.78	-1,483.28	1,428.13	1,313.35	114.78	12.442		
3,100.00	3,061.33	3,048.33	3,061.33	13.99	104.72	-81.58	447.78	-1,483.28	1,425.26	1,306.57	118.69	12.008		
3,200.00	3,159.60	3,146.60	3,159.60	14.46	108.15	-82.31	447.78	-1,483.28	1,422.63	1,300.03	122.59	11.604		
3,300.00	3,257.88	3,244.88	3,257.88	14.94	111.58	-83.03	447.78	-1,483.28	1,420.23	1,293.73	126.50	11.227		
3,400.00	3,356.16	3,343.16	3,356.16	15.41	115.01	-83.76	447.78	-1,483.28	1,418.07	1,287.66	130.41	10.874		
3,500.00	3,454.43	3,441.43	3,454.43	15.89	118.44	-84.49	447.78	-1,483.28	1,416.14	1,281.83	134.31	10.543		
3,600.00	3,552.71	3,539.71	3,552.71	16.36	121.87	-85.22	447.78	-1,483.28	1,414.46	1,276.24	138.22	10.233		
3,700.00	3,650.99	3,637.99	3,650.99	16.84	125.30	-85.96	447.78	-1,483.28	1,413.01	1,270.88	142.13	9.942		
3,800.00	3,749.27	3,736.27	3,749.27	17.32	128.73	-86.69	447.78	-1,483.28	1,411.81	1,265.77	146.04	9.668		
3,900.00	3,847.54	3,834.54	3,847.54	17.79	132.16	-87.43	447.78	-1,483.28	1,410.85	1,260.90	149.94	9.409		
4,000.00	3,945.82	3,932.82	3,945.82	18.27	135.59	-88.17	447.78	-1,483.28	1,410.12	1,256.27	153.85	9.165		
4,100.00	4,044.10	4,031.10	4,044.10	18.75	139.02	-88.91	447.78	-1,483.28	1,409.64	1,251.88	157.76	8.935		
4,200.00	4,142.38	4,129.38	4,142.38	19.22	142.45	-89.64	447.78	-1,483.28	1,409.40	1,247.74	161.67	8.718		
4,248.22	4,189.76	4,176.76	4,189.76	19.45	144.10	-90.00	447.78	-1,483.28	1,409.38	1,245.83	163.55	8.617		
4,300.00	4,240.65	4,227.65	4,240.65	19.70	145.88	-90.38	447.78	-1,483.28	1,409.41	1,243.83	165.57	8.512		
4,400.00	4,338.93	4,325.93	4,338.93	20.18	149.31	-91.12	447.78	-1,483.28	1,409.66	1,240.17	169.48	8.317		
4,500.00	4,437.21	4,424.21	4,437.21	20.65	152.74	-91.86	447.78	-1,483.28	1,410.14	1,236.75	173.39	8.133		
4,600.00	4,535.49	4,522.49	4,535.49	21.13	156.17	-92.60	447.78	-1,483.28	1,410.88	1,233.58	177.30	7.958		
4,700.00	4,633.76	4,620.76	4,633.76	21.61	159.60	-93.33	447.78	-1,483.28	1,411.85	1,230.64	181.20	7.791		
4,800.00	4,732.04	4,719.04	4,732.04	22.08	163.03	-94.07	447.78	-1,483.28	1,413.06	1,227.95	185.11	7.634		
4,900.00	4,830.32	4,817.32	4,830.32	22.56	166.46	-94.80	447.78	-1,483.28	1,414.51	1,225.50	189.02	7.483		
5,000.00	4,928.60	4,915.60	4,928.60	23.04	169.89	-95.53	447.78	-1,483.28	1,416.21	1,223.28	192.93	7.341		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	5,026.87	5,013.87	5,026.87	23.51	173.32	-96.26	447.78	-1,483.28	1,418.14	1,221.31	196.83	7.205	
5,200.00	5,125.15	5,112.15	5,125.15	23.99	176.75	-96.99	447.78	-1,483.28	1,420.31	1,219.57	200.74	7.075	
5,300.00	5,223.43	5,210.43	5,223.43	24.47	180.18	-97.72	447.78	-1,483.28	1,422.72	1,218.07	204.65	6.952	
5,400.00	5,321.71	5,308.71	5,321.71	24.94	183.61	-98.44	447.78	-1,483.28	1,425.36	1,216.81	208.55	6.835	
5,500.00	5,419.98	5,406.98	5,419.98	25.42	187.04	-99.16	447.78	-1,483.28	1,428.24	1,215.78	212.46	6.722	
5,600.00	5,518.26	5,505.26	5,518.26	25.90	190.47	-99.88	447.78	-1,483.28	1,431.35	1,214.98	216.37	6.615	
5,700.00	5,616.54	5,603.54	5,616.54	26.38	193.90	-100.60	447.78	-1,483.28	1,434.69	1,214.42	220.27	6.513	
5,800.00	5,714.82	5,701.82	5,714.82	26.85	197.33	-101.31	447.78	-1,483.28	1,438.26	1,214.08	224.18	6.416	
5,900.00	5,813.09	5,800.09	5,813.09	27.33	200.76	-102.02	447.78	-1,483.28	1,442.06	1,213.98	228.08	6.323	
6,000.00	5,911.37	5,901.63	5,911.37	27.81	204.31	-102.72	447.78	-1,483.28	1,446.08	1,213.98	232.10	6.230	
6,100.00	6,009.65	6,003.35	6,009.65	28.28	207.86	-103.42	447.78	-1,483.28	1,450.33	1,214.21	236.12	6.142	
6,200.00	6,107.93	6,105.07	6,107.93	28.76	211.41	-104.12	447.78	-1,483.28	1,454.80	1,214.66	240.15	6.058	
6,300.00	6,206.20	6,206.80	6,206.20	29.24	214.96	-104.81	447.78	-1,483.28	1,459.50	1,215.32	244.17	5.977	
6,400.00	6,304.48	6,308.52	6,304.48	29.72	218.51	-105.50	447.78	-1,483.28	1,464.41	1,216.21	248.20	5.900	
6,500.00	6,402.76	6,389.76	6,402.76	30.19	221.35	-106.18	447.78	-1,483.28	1,469.53	1,218.03	251.50	5.843	
6,600.00	6,501.04	6,488.04	6,501.04	30.67	224.78	-106.86	447.78	-1,483.28	1,474.87	1,219.47	255.41	5.775	
6,700.00	6,599.31	6,586.31	6,599.31	31.15	228.21	-107.53	447.78	-1,483.28	1,480.42	1,221.11	259.31	5.709	
6,800.00	6,697.50	6,684.50	6,697.50	31.63	231.63	-87.23	447.78	-1,483.28	1,484.51	1,221.31	263.21	5.640	
6,900.00	6,794.18	6,781.18	6,794.18	32.10	235.01	-62.61	447.78	-1,483.28	1,476.58	1,209.52	267.05	5.529	
7,000.00	6,886.96	6,873.96	6,886.96	32.55	238.25	-53.16	447.78	-1,483.28	1,455.22	1,184.47	270.75	5.375	
7,100.00	6,973.57	6,960.57	6,973.57	32.99	241.27	-50.31	447.78	-1,483.28	1,421.37	1,147.15	274.22	5.183	
7,200.00	7,051.87	7,038.87	7,051.87	33.41	244.00	-51.13	447.78	-1,483.28	1,376.32	1,098.92	277.40	4.962	
7,300.00	7,119.93	7,106.93	7,119.93	33.85	246.38	-54.64	447.78	-1,483.28	1,321.74	1,041.51	280.23	4.717	
7,400.00	7,176.09	7,163.09	7,176.09	34.39	248.34	-60.50	447.78	-1,483.28	1,259.60	976.91	282.69	4.456	
7,500.00	7,218.95	7,205.95	7,218.95	35.09	249.84	-68.35	447.78	-1,483.28	1,192.16	907.39	284.78	4.186	
7,600.00	7,247.46	7,234.46	7,247.46	35.98	250.83	-77.48	447.78	-1,483.28	1,121.85	835.36	286.49	3.916	
7,700.00	7,260.92	7,247.92	7,260.92	37.04	251.30	-86.74	447.78	-1,483.28	1,051.18	763.35	287.83	3.652	
7,800.00	7,261.75	7,248.75	7,261.75	38.23	251.33	-90.21	447.78	-1,483.28	982.94	694.02	288.92	3.402	
7,900.00	7,261.33	7,248.33	7,261.33	39.59	251.32	-90.18	447.78	-1,483.28	920.33	630.09	290.23	3.171	
8,000.00	7,260.91	7,247.91	7,260.91	41.10	251.30	-90.14	447.78	-1,483.28	864.77	572.95	291.82	2.963	
8,100.00	7,260.49	7,247.49	7,260.49	42.75	251.29	-90.11	447.78	-1,483.28	817.71	524.05	293.66	2.785	
8,200.00	7,260.07	7,247.07	7,260.07	44.53	251.27	-90.08	447.78	-1,483.28	780.69	485.03	295.65	2.641	
8,300.00	7,259.65	7,246.65	7,259.65	46.41	251.26	-90.05	447.78	-1,483.28	755.18	457.51	297.66	2.537	
8,400.00	7,259.23	7,246.23	7,259.23	48.39	251.24	-90.01	447.78	-1,483.28	742.37	442.87	299.50	2.479	
8,445.89	7,259.04	7,246.04	7,259.04	49.34	251.24	-90.00	447.78	-1,483.28	740.95	440.71	300.25	2.468 CC, ES, SF	
8,500.00	7,258.81	7,245.81	7,258.81	50.45	251.23	-89.98	447.78	-1,483.28	742.93	441.94	300.99	2.468	
8,600.00	7,258.39	7,245.39	7,258.39	52.59	251.21	-89.95	447.78	-1,483.28	756.81	454.81	302.00	2.506	
8,700.00	7,257.97	7,244.97	7,257.97	54.79	251.20	-89.92	447.78	-1,483.28	783.32	480.79	302.52	2.589	
8,800.00	7,257.55	7,244.55	7,257.55	57.05	251.18	-89.88	447.78	-1,483.28	821.22	518.62	302.60	2.714	
8,900.00	7,257.13	7,244.13	7,257.13	59.36	251.17	-89.85	447.78	-1,483.28	869.04	566.70	302.34	2.874	
9,000.00	7,256.71	7,243.71	7,256.71	61.72	251.15	-89.82	447.78	-1,483.28	925.23	623.38	301.85	3.065	
9,100.00	7,256.29	7,243.29	7,256.29	64.12	251.14	-89.79	447.78	-1,483.28	988.36	687.13	301.23	3.281	
9,200.00	7,255.87	7,242.87	7,255.87	66.56	251.12	-89.75	447.78	-1,483.28	1,057.21	756.65	300.55	3.518	
9,300.00	7,255.45	7,242.45	7,255.45	69.02	251.11	-89.72	447.78	-1,483.28	1,130.71	830.85	299.86	3.771	
9,400.00	7,255.03	7,242.03	7,255.03	71.52	251.10	-89.69	447.78	-1,483.28	1,208.02	908.84	299.18	4.038	
9,500.00	7,254.61	7,241.61	7,254.61	74.04	251.08	-89.66	447.78	-1,483.28	1,288.46	989.92	298.54	4.316	
9,600.00	7,254.19	7,241.19	7,254.19	76.58	251.07	-89.62	447.78	-1,483.28	1,371.48	1,073.53	297.95	4.603	
9,700.00	7,253.77	7,240.77	7,253.77	79.15	251.05	-89.59	447.78	-1,483.28	1,456.63	1,159.24	297.39	4.898	
9,800.00	7,253.35	7,240.35	7,253.35	81.74	251.04	-89.56	447.78	-1,483.28	1,543.57	1,246.68	296.89	5.199	
9,900.00	7,252.92	7,239.92	7,252.92	84.34	251.02	-89.53	447.78	-1,483.28	1,632.00	1,335.57	296.43	5.506	
10,000.00	7,252.50	7,239.50	7,252.50	86.96	251.01	-89.49	447.78	-1,483.28	1,721.69	1,425.69	296.01	5.816	
10,100.00	7,252.08	7,239.08	7,252.08	89.59	250.99	-89.46	447.78	-1,483.28	1,812.47	1,516.85	295.62	6.131	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,238.66	7,251.66	92.24	250.98	-89.43	447.78	-1,483.28	1,904.17	1,608.90	295.27	6.449		
10,300.00	7,251.24	7,238.24	7,251.24	94.90	250.96	-89.40	447.78	-1,483.28	1,996.67	1,701.71	294.96	6.769		
10,400.00	7,250.82	7,237.82	7,250.82	97.57	250.95	-89.36	447.78	-1,483.28	2,089.85	1,795.19	294.67	7.092		
10,500.00	7,250.40	7,237.40	7,250.40	100.25	250.93	-89.33	447.78	-1,483.28	2,183.65	1,889.24	294.40	7.417		
10,600.00	7,249.98	7,236.98	7,249.98	102.93	250.92	-89.30	447.78	-1,483.28	2,277.96	1,983.80	294.16	7.744		
10,700.00	7,249.56	7,236.56	7,249.56	105.63	250.90	-89.27	447.78	-1,483.28	2,372.75	2,078.81	293.94	8.072		
10,800.00	7,249.14	7,236.14	7,249.14	108.34	250.89	-89.23	447.78	-1,483.28	2,467.94	2,174.20	293.74	8.402		
10,900.00	7,248.72	7,235.72	7,248.72	111.05	250.88	-89.20	447.78	-1,483.28	2,563.51	2,269.95	293.56	8.733		
11,000.00	7,248.30	7,235.30	7,248.30	113.77	250.86	-89.17	447.78	-1,483.28	2,659.39	2,366.01	293.39	9.064		
11,100.00	7,247.88	7,234.88	7,247.88	116.50	250.85	-89.14	447.78	-1,483.28	2,755.57	2,462.34	293.23	9.397		
11,200.00	7,247.46	7,234.46	7,247.46	119.23	250.83	-89.10	447.78	-1,483.28	2,852.02	2,558.93	293.09	9.731		
11,300.00	7,247.04	7,234.04	7,247.04	121.97	250.82	-89.07	447.78	-1,483.28	2,948.70	2,655.74	292.96	10.065		
11,400.00	7,246.62	7,233.62	7,246.62	124.72	250.80	-89.04	447.78	-1,483.28	3,045.59	2,752.75	292.84	10.400		
11,500.00	7,246.20	7,233.20	7,246.20	127.46	250.79	-89.01	447.78	-1,483.28	3,142.68	2,849.95	292.73	10.736		
11,600.00	7,245.78	7,232.78	7,245.78	130.22	250.77	-88.97	447.78	-1,483.28	3,239.95	2,947.31	292.63	11.072		
11,700.00	7,245.36	7,232.36	7,245.36	132.98	250.76	-88.94	447.78	-1,483.28	3,337.37	3,044.83	292.54	11.408		
11,800.00	7,244.94	7,231.94	7,244.94	135.74	250.74	-88.91	447.78	-1,483.28	3,434.95	3,142.49	292.46	11.745		
11,900.00	7,244.52	7,231.52	7,244.52	138.50	250.73	-88.88	447.78	-1,483.28	3,532.66	3,240.28	292.38	12.082		
12,000.00	7,244.10	7,231.10	7,244.10	141.27	250.71	-88.85	447.78	-1,483.28	3,630.49	3,338.18	292.31	12.420		
12,100.00	7,243.68	7,230.68	7,243.68	144.04	250.70	-88.81	447.78	-1,483.28	3,728.44	3,436.19	292.25	12.758		
12,200.00	7,243.26	7,230.26	7,243.26	146.82	250.68	-88.78	447.78	-1,483.28	3,826.50	3,534.31	292.19	13.096		
12,300.00	7,242.84	7,229.84	7,242.84	149.60	250.67	-88.75	447.78	-1,483.28	3,924.65	3,632.51	292.14	13.434		
12,400.00	7,242.42	7,229.42	7,242.42	152.38	250.66	-88.72	447.78	-1,483.28	4,022.90	3,730.80	292.10	13.772		
12,500.00	7,242.00	7,229.00	7,242.00	155.16	250.64	-88.68	447.78	-1,483.28	4,121.23	3,829.17	292.06	14.111		
12,600.00	7,241.58	7,228.58	7,241.58	157.95	250.63	-88.65	447.78	-1,483.28	4,219.64	3,927.62	292.02	14.450		
12,700.00	7,241.16	7,228.16	7,241.16	160.74	250.61	-88.62	447.78	-1,483.28	4,318.12	4,026.13	291.99	14.789		
12,800.00	7,240.74	7,227.74	7,240.74	163.53	250.60	-88.59	447.78	-1,483.28	4,416.67	4,124.71	291.96	15.128		
12,900.00	7,240.32	7,227.32	7,240.32	166.32	250.58	-88.55	447.78	-1,483.28	4,515.28	4,223.35	291.93	15.467		
13,000.00	7,239.89	7,226.89	7,239.89	169.12	250.57	-88.52	447.78	-1,483.28	4,613.95	4,322.04	291.91	15.806		
13,100.00	7,239.47	7,226.47	7,239.47	171.92	250.55	-88.49	447.78	-1,483.28	4,712.68	4,420.78	291.90	16.145		
13,200.00	7,239.05	7,226.05	7,239.05	174.72	250.54	-88.46	447.78	-1,483.28	4,811.46	4,519.58	291.88	16.484		
13,300.00	7,238.63	7,225.63	7,238.63	177.52	250.52	-88.42	447.78	-1,483.28	4,910.29	4,618.42	291.87	16.823		
13,400.00	7,238.21	7,225.21	7,238.21	180.32	250.51	-88.39	447.78	-1,483.28	5,009.17	4,717.30	291.87	17.163		
13,500.00	7,237.79	7,224.79	7,237.79	183.13	250.49	-88.36	447.78	-1,483.28	5,108.09	4,816.23	291.86	17.502		
13,600.00	7,237.37	7,224.37	7,237.37	185.93	250.48	-88.33	447.78	-1,483.28	5,207.05	4,915.19	291.86	17.841		
13,700.00	7,236.95	7,223.95	7,236.95	188.74	250.46	-88.29	447.78	-1,483.28	5,306.05	5,014.19	291.86	18.180		
13,800.00	7,236.53	7,223.53	7,236.53	191.55	250.45	-88.26	447.78	-1,483.28	5,405.09	5,113.23	291.86	18.519		
13,900.00	7,236.11	7,223.11	7,236.11	194.36	250.44	-88.23	447.78	-1,483.28	5,504.16	5,212.29	291.87	18.858		
14,000.00	7,235.69	7,222.69	7,235.69	197.17	250.42	-88.20	447.78	-1,483.28	5,603.27	5,311.39	291.88	19.197		
14,100.00	7,235.27	7,222.27	7,235.27	199.98	250.41	-88.16	447.78	-1,483.28	5,702.40	5,410.51	291.89	19.536		
14,200.00	7,234.85	7,221.85	7,234.85	202.80	250.39	-88.13	447.78	-1,483.28	5,801.57	5,509.67	291.90	19.875		
14,300.00	7,234.43	7,221.43	7,234.43	205.61	250.38	-88.10	447.78	-1,483.28	5,900.76	5,608.85	291.92	20.214		
14,400.00	7,234.01	7,221.01	7,234.01	208.43	250.36	-88.07	447.78	-1,483.28	5,999.98	5,708.05	291.93	20.552		
14,500.00	7,233.59	7,220.59	7,233.59	211.25	250.35	-88.03	447.78	-1,483.28	6,099.23	5,807.28	291.95	20.891		
14,600.00	7,233.17	7,220.17	7,233.17	214.06	250.33	-88.00	447.78	-1,483.28	6,198.50	5,906.53	291.97	21.230		
14,700.00	7,232.75	7,219.75	7,232.75	216.88	250.32	-87.97	447.78	-1,483.28	6,297.79	6,005.80	292.00	21.568		
14,800.00	7,232.33	7,219.33	7,232.33	219.70	250.30	-87.94	447.78	-1,483.28	6,397.11	6,105.09	292.02	21.906		
14,900.00	7,231.91	7,218.91	7,231.91	222.52	250.29	-87.90	447.78	-1,483.28	6,496.45	6,204.40	292.05	22.244		
15,000.00	7,231.49	7,218.49	7,231.49	225.35	250.27	-87.87	447.78	-1,483.28	6,595.80	6,303.73	292.08	22.582		
15,100.00	7,231.07	7,218.07	7,231.07	228.17	250.26	-87.84	447.78	-1,483.28	6,695.18	6,403.07	292.11	22.920		
15,116.21	7,231.00	7,218.00	7,231.00	228.63	250.26	-87.83	447.78	-1,483.28	6,711.29	6,419.18	292.11	22.975		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	50.00	0.00	3.28	-79.16	955.72	-4,991.25	5,082.17					
100.00	100.00	50.00	100.00	0.18	3.39	-79.16	955.72	-4,991.25	5,081.92	5,078.35	3.57	1,423.641		
200.00	200.00	150.00	200.00	0.61	4.79	-79.16	955.72	-4,991.25	5,081.92	5,076.52	5.40	940.326		
300.00	300.00	250.00	300.00	1.05	7.71	-79.16	955.72	-4,991.25	5,081.92	5,073.16	8.77	579.657		
400.00	400.00	350.00	400.00	1.49	10.97	-79.16	955.72	-4,991.25	5,081.92	5,069.46	12.47	407.648		
500.00	500.00	450.00	500.00	1.93	14.34	-79.16	955.72	-4,991.25	5,081.92	5,065.65	16.27	312.260		
600.00	599.98	549.98	599.98	2.37	17.76	-71.44	955.72	-4,991.25	5,081.37	5,061.24	20.13	252.449		
700.00	699.84	649.84	699.84	2.81	21.20	-71.53	955.72	-4,991.25	5,079.70	5,055.70	24.00	211.643		
800.00	799.45	749.45	799.45	3.26	24.64	-71.68	955.72	-4,991.25	5,076.94	5,049.06	27.88	182.096		
900.00	898.70	848.70	898.70	3.70	28.07	-71.88	955.72	-4,991.25	5,073.10	5,041.35	31.76	159.740		
1,000.00	997.47	947.47	997.47	4.15	31.50	-72.14	955.72	-4,991.25	5,068.22	5,032.59	35.63	142.246		
1,100.00	1,095.78	1,045.78	1,095.78	4.60	34.92	-72.37	955.72	-4,991.25	5,062.56	5,023.06	39.49	128.183		
1,200.00	1,194.05	1,144.05	1,194.05	5.05	38.33	-72.56	955.72	-4,991.25	5,056.90	5,013.53	43.37	116.609		
1,300.00	1,292.33	1,242.33	1,292.33	5.50	41.75	-72.76	955.72	-4,991.25	5,051.30	5,004.06	47.24	106.920		
1,400.00	1,390.61	1,340.61	1,390.61	5.96	45.17	-72.96	955.72	-4,991.25	5,045.77	4,994.64	51.13	98.694		
1,500.00	1,488.89	1,438.89	1,488.89	6.43	48.60	-73.15	955.72	-4,991.25	5,040.30	4,985.29	55.01	91.623		
1,600.00	1,587.16	1,537.16	1,587.16	6.89	52.02	-73.35	955.72	-4,991.25	5,034.89	4,975.99	58.90	85.483		
1,700.00	1,685.44	1,635.44	1,685.44	7.36	55.44	-73.55	955.72	-4,991.25	5,029.54	4,966.75	62.79	80.100		
1,800.00	1,783.72	1,733.72	1,783.72	7.83	58.87	-73.75	955.72	-4,991.25	5,024.25	4,957.57	66.68	75.345		
1,900.00	1,882.00	1,832.00	1,882.00	8.30	62.30	-73.95	955.72	-4,991.25	5,019.03	4,948.45	70.58	71.114		
2,000.00	1,980.27	1,930.27	1,980.27	8.77	65.72	-74.15	955.72	-4,991.25	5,013.87	4,939.39	74.47	67.324		
2,100.00	2,078.55	2,028.55	2,078.55	9.25	69.15	-74.35	955.72	-4,991.25	5,008.77	4,930.40	78.37	63.912		
2,200.00	2,176.83	2,126.83	2,176.83	9.72	72.58	-74.55	955.72	-4,991.25	5,003.73	4,921.47	82.27	60.822		
2,300.00	2,275.11	2,225.11	2,275.11	10.19	76.00	-74.75	955.72	-4,991.25	4,998.76	4,912.60	86.17	58.012		
2,400.00	2,373.38	2,323.38	2,373.38	10.66	79.43	-74.95	955.72	-4,991.25	4,993.85	4,903.79	90.07	55.446		
2,500.00	2,471.66	2,421.66	2,471.66	11.14	82.86	-75.15	955.72	-4,991.25	4,989.01	4,895.04	93.97	53.093		
2,600.00	2,569.94	2,519.94	2,569.94	11.61	86.29	-75.36	955.72	-4,991.25	4,984.23	4,886.36	97.87	50.928		
2,700.00	2,668.22	2,618.22	2,668.22	12.09	89.72	-75.56	955.72	-4,991.25	4,979.51	4,877.74	101.77	48.929		
2,800.00	2,766.49	2,716.49	2,766.49	12.56	93.15	-75.76	955.72	-4,991.25	4,974.86	4,869.19	105.67	47.078		
2,900.00	2,864.77	2,814.77	2,864.77	13.04	96.57	-75.96	955.72	-4,991.25	4,970.27	4,860.70	109.57	45.360		
3,000.00	2,963.05	2,913.05	2,963.05	13.51	100.00	-76.17	955.72	-4,991.25	4,965.75	4,852.27	113.48	43.760		
3,100.00	3,061.33	3,011.33	3,061.33	13.99	103.43	-76.37	955.72	-4,991.25	4,961.29	4,843.91	117.38	42.266		
3,200.00	3,159.60	3,109.60	3,159.60	14.46	106.86	-76.58	955.72	-4,991.25	4,956.89	4,835.61	121.28	40.870		
3,300.00	3,257.88	3,207.88	3,257.88	14.94	110.29	-76.78	955.72	-4,991.25	4,952.56	4,827.37	125.19	39.561		
3,400.00	3,356.16	3,306.16	3,356.16	15.41	113.72	-76.98	955.72	-4,991.25	4,948.30	4,819.21	129.09	38.331		
3,500.00	3,454.43	3,404.43	3,454.43	15.89	117.15	-77.19	955.72	-4,991.25	4,944.10	4,811.10	133.00	37.174		
3,600.00	3,552.71	3,502.71	3,552.71	16.36	120.58	-77.40	955.72	-4,991.25	4,939.97	4,803.07	136.90	36.084		
3,700.00	3,650.99	3,600.99	3,650.99	16.84	124.01	-77.60	955.72	-4,991.25	4,935.90	4,795.09	140.81	35.054		
3,800.00	3,749.27	3,700.73	3,749.27	17.32	127.49	-77.81	955.72	-4,991.25	4,931.90	4,787.14	144.76	34.068		
3,900.00	3,847.54	3,802.46	3,847.54	17.79	131.04	-78.01	955.72	-4,991.25	4,927.96	4,779.17	148.79	33.120		
4,000.00	3,945.82	3,904.18	3,945.82	18.27	134.59	-78.22	955.72	-4,991.25	4,924.10	4,771.28	152.82	32.222		
4,100.00	4,044.10	4,005.90	4,044.10	18.75	138.14	-78.43	955.72	-4,991.25	4,920.29	4,763.45	156.84	31.371		
4,200.00	4,142.38	4,107.62	4,142.38	19.22	141.69	-78.64	955.72	-4,991.25	4,916.56	4,755.69	160.87	30.563		
4,300.00	4,240.65	4,209.35	4,240.65	19.70	145.24	-78.84	955.72	-4,991.25	4,912.89	4,747.99	164.90	29.794		
4,400.00	4,338.93	4,288.93	4,338.93	20.18	148.02	-79.05	955.72	-4,991.25	4,909.28	4,741.14	168.15	29.196		
4,500.00	4,437.21	4,387.21	4,437.21	20.65	151.45	-79.26	955.72	-4,991.25	4,905.75	4,733.69	172.06	28.513		
4,600.00	4,535.49	4,485.49	4,535.49	21.13	154.88	-79.47	955.72	-4,991.25	4,902.28	4,726.32	175.96	27.860		
4,700.00	4,633.76	4,583.76	4,633.76	21.61	158.31	-79.68	955.72	-4,991.25	4,898.88	4,719.01	179.87	27.236		
4,800.00	4,732.04	4,682.04	4,732.04	22.08	161.74	-79.89	955.72	-4,991.25	4,895.55	4,711.77	183.78	26.639		
4,900.00	4,830.32	4,780.32	4,830.32	22.56	165.17	-80.10	955.72	-4,991.25	4,892.28	4,704.59	187.68	26.067		
5,000.00	4,928.60	4,878.60	4,928.60	23.04	168.60	-80.31	955.72	-4,991.25	4,889.08	4,697.49	191.59	25.518		
5,100.00	5,026.87	4,976.87	5,026.87	23.51	172.03	-80.52	955.72	-4,991.25	4,885.95	4,690.45	195.50	24.992		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,075.15	5,125.15	23.99	175.46	-80.73	955.72	-4,991.25	4,882.89	4,683.48	199.41	24.487		
5,300.00	5,223.43	5,173.43	5,223.43	24.47	178.89	-80.94	955.72	-4,991.25	4,879.89	4,676.58	203.31	24.002		
5,400.00	5,321.71	5,271.71	5,321.71	24.94	182.32	-81.15	955.72	-4,991.25	4,876.96	4,669.74	207.22	23.535		
5,500.00	5,419.98	5,369.98	5,419.98	25.42	185.75	-81.36	955.72	-4,991.25	4,874.11	4,662.98	211.13	23.086		
5,600.00	5,518.26	5,468.26	5,518.26	25.90	189.18	-81.57	955.72	-4,991.25	4,871.32	4,656.28	215.04	22.653		
5,700.00	5,616.54	5,566.54	5,616.54	26.38	192.61	-81.78	955.72	-4,991.25	4,868.60	4,649.65	218.94	22.237		
5,800.00	5,714.82	5,664.82	5,714.82	26.85	196.04	-81.99	955.72	-4,991.25	4,865.94	4,643.09	222.85	21.835		
5,900.00	5,813.09	5,763.09	5,813.09	27.33	199.47	-82.21	955.72	-4,991.25	4,863.36	4,636.60	226.76	21.447		
6,000.00	5,911.37	5,861.37	5,911.37	27.81	202.90	-82.42	955.72	-4,991.25	4,860.84	4,630.17	230.67	21.073		
6,100.00	6,009.65	5,959.65	6,009.65	28.28	206.33	-82.63	955.72	-4,991.25	4,858.40	4,623.82	234.58	20.711		
6,200.00	6,107.93	6,057.93	6,107.93	28.76	209.76	-82.84	955.72	-4,991.25	4,856.02	4,617.54	238.49	20.362		
6,300.00	6,206.20	6,156.20	6,206.20	29.24	213.19	-83.06	955.72	-4,991.25	4,853.71	4,611.32	242.39	20.024		
6,400.00	6,304.48	6,254.48	6,304.48	29.72	216.62	-83.27	955.72	-4,991.25	4,851.47	4,605.17	246.30	19.697		
6,500.00	6,402.76	6,352.76	6,402.76	30.19	220.05	-83.48	955.72	-4,991.25	4,849.31	4,599.09	250.21	19.381		
6,600.00	6,501.04	6,451.04	6,501.04	30.67	223.48	-83.69	955.72	-4,991.25	4,847.21	4,593.09	254.12	19.075		
6,700.00	6,599.31	6,549.31	6,599.31	31.15	226.92	-83.91	955.72	-4,991.25	4,845.18	4,587.15	258.03	18.778		
6,800.00	6,697.59	6,647.59	6,697.59	31.63	230.34	-63.17	955.72	-4,991.25	4,841.37	4,579.44	261.93	18.483		
6,900.00	6,794.18	6,744.18	6,794.18	32.10	233.72	-37.58	955.72	-4,991.25	4,824.13	4,558.35	265.78	18.151		
7,000.00	6,886.96	6,836.96	6,886.96	32.55	236.96	-26.37	955.72	-4,991.25	4,791.77	4,522.31	269.46	17.783		
7,100.00	6,973.57	6,923.57	6,973.57	32.99	239.98	-20.85	955.72	-4,991.25	4,745.09	4,472.20	272.89	17.388		
7,200.00	7,051.87	7,001.87	7,051.87	33.41	242.71	-17.92	955.72	-4,991.25	4,685.23	4,409.25	275.99	16.976		
7,300.00	7,119.93	7,069.93	7,119.93	33.85	245.09	-16.48	955.72	-4,991.25	4,613.66	4,334.99	278.67	16.556		
7,400.00	7,176.09	7,126.09	7,176.09	34.39	247.05	-16.15	955.72	-4,991.25	4,532.12	4,251.23	280.88	16.135		
7,500.00	7,218.95	7,168.95	7,218.95	35.09	248.54	-17.14	955.72	-4,991.25	4,442.59	4,160.03	282.57	15.722		
7,600.00	7,247.46	7,202.54	7,247.46	35.98	249.72	-20.98	955.72	-4,991.25	4,347.28	4,063.42	283.87	15.315		
7,700.00	7,260.92	7,210.92	7,260.92	37.04	250.01	-42.34	955.72	-4,991.25	4,248.52	3,964.28	284.23	14.947		
7,800.00	7,261.75	7,211.75	7,261.75	38.23	250.04	-95.69	955.72	-4,991.25	4,148.64	3,864.34	284.30	14.593		
7,900.00	7,261.33	7,211.33	7,261.33	39.59	250.02	-95.55	955.72	-4,991.25	4,048.73	3,764.41	284.32	14.240		
8,000.00	7,260.91	7,210.91	7,260.91	41.10	250.01	-95.42	955.72	-4,991.25	3,948.82	3,664.48	284.34	13.888		
8,100.00	7,260.49	7,210.49	7,260.49	42.75	249.99	-95.28	955.72	-4,991.25	3,848.93	3,564.56	284.37	13.535		
8,200.00	7,260.07	7,210.07	7,260.07	44.53	249.98	-95.14	955.72	-4,991.25	3,749.03	3,464.63	284.40	13.182		
8,300.00	7,259.65	7,209.65	7,259.65	46.41	249.97	-95.01	955.72	-4,991.25	3,649.15	3,364.71	284.43	12.830		
8,400.00	7,259.23	7,209.23	7,259.23	48.39	249.95	-94.87	955.72	-4,991.25	3,549.26	3,264.80	284.47	12.477		
8,500.00	7,258.81	7,208.81	7,258.81	50.45	249.94	-94.73	955.72	-4,991.25	3,449.39	3,164.88	284.51	12.124		
8,600.00	7,258.39	7,208.39	7,258.39	52.59	249.92	-94.60	955.72	-4,991.25	3,349.52	3,064.97	284.56	11.771		
8,700.00	7,257.97	7,207.97	7,257.97	54.79	249.91	-94.46	955.72	-4,991.25	3,249.66	2,965.06	284.61	11.418		
8,800.00	7,257.55	7,207.55	7,257.55	57.05	249.89	-94.32	955.72	-4,991.25	3,149.82	2,865.15	284.66	11.065		
8,900.00	7,257.13	7,207.13	7,257.13	59.36	249.88	-94.19	955.72	-4,991.25	3,049.98	2,765.25	284.73	10.712		
9,000.00	7,256.71	7,206.71	7,256.71	61.72	249.86	-94.05	955.72	-4,991.25	2,950.15	2,665.35	284.80	10.359		
9,100.00	7,256.29	7,206.29	7,256.29	64.12	249.85	-93.91	955.72	-4,991.25	2,850.33	2,565.46	284.87	10.006		
9,200.00	7,255.87	7,205.87	7,255.87	66.56	249.83	-93.77	955.72	-4,991.25	2,750.53	2,465.57	284.96	9.652		
9,300.00	7,255.45	7,205.45	7,255.45	69.02	249.82	-93.64	955.72	-4,991.25	2,650.74	2,365.69	285.05	9.299		
9,400.00	7,255.03	7,205.03	7,255.03	71.52	249.80	-93.50	955.72	-4,991.25	2,550.96	2,265.81	285.16	8.946		
9,500.00	7,254.61	7,204.61	7,254.61	74.04	249.79	-93.36	955.72	-4,991.25	2,451.21	2,165.94	285.27	8.593		
9,600.00	7,254.19	7,204.19	7,254.19	76.58	249.77	-93.23	955.72	-4,991.25	2,351.48	2,066.07	285.40	8.239		
9,700.00	7,253.77	7,203.77	7,253.77	79.15	249.76	-93.09	955.72	-4,991.25	2,251.77	1,966.21	285.55	7.886		
9,800.00	7,253.35	7,203.35	7,253.35	81.74	249.75	-92.95	955.72	-4,991.25	2,152.08	1,866.37	285.72	7.532		
9,900.00	7,252.92	7,202.92	7,252.92	84.34	249.73	-92.81	955.72	-4,991.25	2,052.43	1,766.52	285.91	7.179		
10,000.00	7,252.50	7,202.50	7,252.50	86.96	249.72	-92.68	955.72	-4,991.25	1,952.81	1,666.69	286.12	6.825		
10,100.00	7,252.08	7,202.08	7,252.08	89.59	249.70	-92.54	955.72	-4,991.25	1,853.24	1,566.87	286.37	6.472		
10,200.00	7,251.66	7,201.66	7,251.66	92.24	249.69	-92.40	955.72	-4,991.25	1,753.71	1,467.06	286.65	6.118		
10,300.00	7,251.24	7,201.24	7,251.24	94.90	249.67	-92.26	955.72	-4,991.25	1,654.24	1,367.25	286.99	5.764		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,200.82	7,250.82	97.57	249.66	-92.13	955.72	-4,991.25	1,554.84	1,267.46	287.38	5.410		
10,500.00	7,250.40	7,200.40	7,250.40	100.25	249.64	-91.99	955.72	-4,991.25	1,455.52	1,167.68	287.84	5.057		
10,600.00	7,249.98	7,200.02	7,249.98	102.93	249.63	-91.85	955.72	-4,991.25	1,356.30	1,067.90	288.40	4.703		
10,700.00	7,249.56	7,200.44	7,249.56	105.63	249.64	-91.71	955.72	-4,991.25	1,257.20	968.10	289.10	4.349		
10,800.00	7,249.14	7,200.86	7,249.14	108.34	249.66	-91.58	955.72	-4,991.25	1,158.25	868.29	289.96	3.995		
10,900.00	7,248.72	7,201.28	7,248.72	111.05	249.67	-91.44	955.72	-4,991.25	1,059.51	768.48	291.03	3.641		
11,000.00	7,248.30	7,201.70	7,248.30	113.77	249.69	-91.30	955.72	-4,991.25	961.02	668.64	292.38	3.287		
11,100.00	7,247.88	7,202.12	7,247.88	116.50	249.70	-91.16	955.72	-4,991.25	862.89	568.75	294.13	2.934		
11,200.00	7,247.46	7,202.54	7,247.46	119.23	249.72	-91.03	955.72	-4,991.25	765.23	468.78	296.46	2.581		
11,300.00	7,247.04	7,202.96	7,247.04	121.97	249.73	-90.89	955.72	-4,991.25	668.27	368.65	299.62	2.230		
11,400.00	7,246.62	7,203.38	7,246.62	124.72	249.75	-90.75	955.72	-4,991.25	572.36	268.27	304.09	1.882		
11,500.00	7,246.20	7,203.80	7,246.20	127.46	249.76	-90.61	955.72	-4,991.25	478.12	167.51	310.61	1.539		
11,600.00	7,245.78	7,204.22	7,245.78	130.22	249.78	-90.47	955.72	-4,991.25	386.78	66.25	320.53	1.207 Level 2		
11,700.00	7,245.36	7,204.64	7,245.36	132.98	249.79	-90.34	955.72	-4,991.25	301.01	-35.11	336.12	0.896 Level 1		
11,800.00	7,244.94	7,205.06	7,244.94	135.74	249.81	-90.20	955.72	-4,991.25	227.18	-132.72	359.90	0.631 Level 1		
11,900.00	7,244.52	7,205.48	7,244.52	138.50	249.82	-90.06	955.72	-4,991.25	180.59	-204.87	385.46	0.469 Level 1		
11,944.98	7,244.33	7,205.67	7,244.33	139.75	249.83	-90.00	955.72	-4,991.25	174.90	-214.56	389.47	0.449 Level 1, CC, ES, SF		
12,000.00	7,244.10	7,205.90	7,244.10	141.27	249.83	-89.92	955.72	-4,991.25	183.35	-199.95	383.30	0.478 Level 1		
12,100.00	7,243.68	7,206.32	7,243.68	144.04	249.85	-89.79	955.72	-4,991.25	233.71	-122.87	356.58	0.655 Level 1		
12,200.00	7,243.26	7,206.74	7,243.26	146.82	249.86	-89.65	955.72	-4,991.25	309.23	-24.37	333.60	0.927 Level 1		
12,300.00	7,242.84	7,207.16	7,242.84	149.60	249.88	-89.51	955.72	-4,991.25	395.76	76.97	318.78	1.241 Level 2		
12,400.00	7,242.42	7,207.58	7,242.42	152.38	249.89	-89.37	955.72	-4,991.25	487.47	178.04	309.43	1.575		
12,500.00	7,242.00	7,208.00	7,242.00	155.16	249.91	-89.24	955.72	-4,991.25	581.92	278.59	303.32	1.918		
12,600.00	7,241.58	7,208.42	7,241.58	157.95	249.92	-89.10	955.72	-4,991.25	677.96	378.76	299.20	2.266		
12,700.00	7,241.16	7,208.84	7,241.16	160.74	249.94	-88.96	955.72	-4,991.25	775.00	478.69	296.32	2.615		
12,800.00	7,240.74	7,209.26	7,240.74	163.53	249.95	-88.82	955.72	-4,991.25	872.71	578.47	294.25	2.966		
12,900.00	7,240.32	7,209.69	7,240.32	166.32	249.97	-88.69	955.72	-4,991.25	970.89	678.17	292.72	3.317		
13,000.00	7,239.89	7,189.89	7,239.89	169.12	249.28	-88.55	955.72	-4,991.25	1,069.41	778.53	290.88	3.677		
13,100.00	7,239.47	7,189.47	7,239.47	171.92	249.26	-88.41	955.72	-4,991.25	1,168.17	878.20	289.98	4.029		
13,200.00	7,239.05	7,189.05	7,239.05	174.72	249.25	-88.27	955.72	-4,991.25	1,267.13	977.86	289.28	4.380		
13,300.00	7,238.63	7,188.63	7,238.63	177.52	249.23	-88.13	955.72	-4,991.25	1,366.25	1,077.52	288.73	4.732		
13,400.00	7,238.21	7,188.21	7,238.21	180.32	249.22	-88.00	955.72	-4,991.25	1,465.48	1,177.19	288.29	5.083		
13,500.00	7,237.79	7,187.79	7,237.79	183.13	249.20	-87.86	955.72	-4,991.25	1,564.81	1,276.87	287.94	5.435		
13,600.00	7,237.37	7,187.37	7,237.37	185.93	249.19	-87.72	955.72	-4,991.25	1,664.22	1,376.56	287.65	5.786		
13,700.00	7,236.95	7,186.95	7,236.95	188.74	249.17	-87.58	955.72	-4,991.25	1,763.69	1,476.27	287.42	6.136		
13,800.00	7,236.53	7,186.53	7,236.53	191.55	249.16	-87.45	955.72	-4,991.25	1,863.23	1,575.99	287.24	6.487		
13,900.00	7,236.11	7,186.11	7,236.11	194.36	249.14	-87.31	955.72	-4,991.25	1,962.81	1,675.72	287.09	6.837		
14,000.00	7,235.69	7,185.69	7,235.69	197.17	249.13	-87.17	955.72	-4,991.25	2,062.43	1,775.46	286.97	7.187		
14,100.00	7,235.27	7,185.27	7,235.27	199.98	249.11	-87.04	955.72	-4,991.25	2,162.08	1,875.21	286.88	7.537		
14,200.00	7,234.85	7,184.85	7,234.85	202.80	249.10	-86.90	955.72	-4,991.25	2,261.77	1,974.97	286.80	7.886		
14,300.00	7,234.43	7,184.43	7,234.43	205.61	249.09	-86.76	955.72	-4,991.25	2,361.48	2,074.74	286.74	8.236		
14,400.00	7,234.01	7,184.01	7,234.01	208.43	249.07	-86.62	955.72	-4,991.25	2,461.22	2,174.52	286.70	8.585		
14,500.00	7,233.59	7,183.59	7,233.59	211.25	249.06	-86.49	955.72	-4,991.25	2,560.97	2,274.30	286.67	8.934		
14,600.00	7,233.17	7,183.17	7,233.17	214.06	249.04	-86.35	955.72	-4,991.25	2,660.75	2,374.10	286.65	9.282		
14,700.00	7,232.75	7,182.75	7,232.75	216.88	249.03	-86.21	955.72	-4,991.25	2,760.54	2,473.90	286.64	9.631		
14,800.00	7,232.33	7,182.33	7,232.33	219.70	249.01	-86.08	955.72	-4,991.25	2,860.34	2,573.70	286.64	9.979		
14,900.00	7,231.91	7,181.91	7,231.91	222.52	249.00	-85.94	955.72	-4,991.25	2,960.16	2,673.52	286.65	10.327		
15,000.00	7,231.49	7,181.49	7,231.49	225.35	248.98	-85.80	955.72	-4,991.25	3,059.99	2,773.33	286.66	10.675		
15,100.00	7,231.07	7,181.07	7,231.07	228.17	248.97	-85.66	955.72	-4,991.25	3,159.83	2,873.16	286.68	11.022		
15,116.21	7,231.00	7,181.00	7,231.00	228.63	248.97	-85.64	955.72	-4,991.25	3,176.02	2,889.34	286.68	11.079		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	48.00	0.00	3.28	-79.20	976.51	-5,121.13	5,213.62					
100.00	100.00	52.00	100.00	0.18	3.40	-79.20	976.51	-5,121.13	5,213.40	5,209.82	3.58	1,456.740		
200.00	200.00	152.00	200.00	0.61	4.84	-79.20	976.51	-5,121.13	5,213.40	5,207.94	5.46	955.614		
300.00	300.00	252.00	300.00	1.05	7.78	-79.20	976.51	-5,121.13	5,213.40	5,204.57	8.83	590.394		
400.00	400.00	352.00	400.00	1.49	11.04	-79.20	976.51	-5,121.13	5,213.40	5,200.86	12.53	415.970		
500.00	500.00	452.00	500.00	1.93	14.41	-79.20	976.51	-5,121.13	5,213.40	5,197.05	16.34	319.006		
600.00	599.98	551.98	599.98	2.37	17.83	-71.49	976.51	-5,121.13	5,212.84	5,192.64	20.20	258.101		
700.00	699.84	651.84	699.84	2.81	21.26	-71.57	976.51	-5,121.13	5,211.18	5,187.11	24.07	216.499		
800.00	799.45	751.45	799.45	3.26	24.71	-71.71	976.51	-5,121.13	5,208.43	5,180.48	27.95	186.350		
900.00	898.70	850.70	898.70	3.70	28.14	-71.91	976.51	-5,121.13	5,204.60	5,172.77	31.83	163.523		
1,000.00	997.47	949.47	997.47	4.15	31.57	-72.17	976.51	-5,121.13	5,199.72	5,164.02	35.70	145.653		
1,100.00	1,095.78	1,047.78	1,095.78	4.60	34.99	-72.39	976.51	-5,121.13	5,194.07	5,154.50	39.56	131.282		
1,200.00	1,194.05	1,146.05	1,194.05	5.05	38.40	-72.58	976.51	-5,121.13	5,188.42	5,144.98	43.44	119.450		
1,300.00	1,292.33	1,244.33	1,292.33	5.50	41.82	-72.78	976.51	-5,121.13	5,182.83	5,135.51	47.31	109.543		
1,400.00	1,390.61	1,342.61	1,390.61	5.96	45.24	-72.97	976.51	-5,121.13	5,177.30	5,126.10	51.20	101.128		
1,500.00	1,488.89	1,440.89	1,488.89	6.43	48.67	-73.16	976.51	-5,121.13	5,171.83	5,116.75	55.08	93.895		
1,600.00	1,587.16	1,539.16	1,587.16	6.89	52.09	-73.35	976.51	-5,121.13	5,166.42	5,107.45	58.97	87.612		
1,700.00	1,685.44	1,637.44	1,685.44	7.36	55.51	-73.55	976.51	-5,121.13	5,161.07	5,098.21	62.86	82.104		
1,800.00	1,783.72	1,735.72	1,783.72	7.83	58.94	-73.74	976.51	-5,121.13	5,155.78	5,089.03	66.75	77.237		
1,900.00	1,882.00	1,834.00	1,882.00	8.30	62.37	-73.94	976.51	-5,121.13	5,150.56	5,079.91	70.65	72.905		
2,000.00	1,980.27	1,932.27	1,980.27	8.77	65.79	-74.13	976.51	-5,121.13	5,145.39	5,070.85	74.54	69.026		
2,100.00	2,078.55	2,030.55	2,078.55	9.25	69.22	-74.33	976.51	-5,121.13	5,140.29	5,061.85	78.44	65.531		
2,200.00	2,176.83	2,128.83	2,176.83	9.72	72.65	-74.52	976.51	-5,121.13	5,135.24	5,052.90	82.34	62.368		
2,300.00	2,275.11	2,227.11	2,275.11	10.19	76.07	-74.72	976.51	-5,121.13	5,130.26	5,044.02	86.24	59.490		
2,400.00	2,373.38	2,325.38	2,373.38	10.66	79.50	-74.91	976.51	-5,121.13	5,125.34	5,035.20	90.14	56.862		
2,500.00	2,471.66	2,423.66	2,471.66	11.14	82.93	-75.11	976.51	-5,121.13	5,120.48	5,026.45	94.04	54.452		
2,600.00	2,569.94	2,521.94	2,569.94	11.61	86.36	-75.31	976.51	-5,121.13	5,115.69	5,017.75	97.94	52.234		
2,700.00	2,668.22	2,620.22	2,668.22	12.09	89.79	-75.50	976.51	-5,121.13	5,110.95	5,009.11	101.84	50.186		
2,800.00	2,766.49	2,718.49	2,766.49	12.56	93.21	-75.70	976.51	-5,121.13	5,106.28	5,000.54	105.74	48.290		
2,900.00	2,864.77	2,816.77	2,864.77	13.04	96.64	-75.90	976.51	-5,121.13	5,101.68	4,992.03	109.64	46.529		
3,000.00	2,963.05	2,915.05	2,963.05	13.51	100.07	-76.10	976.51	-5,121.13	5,097.13	4,983.58	113.55	44.890		
3,100.00	3,061.33	3,013.33	3,061.33	13.99	103.50	-76.30	976.51	-5,121.13	5,092.65	4,975.20	117.45	43.360		
3,200.00	3,159.60	3,111.60	3,159.60	14.46	106.93	-76.49	976.51	-5,121.13	5,088.23	4,966.87	121.35	41.929		
3,300.00	3,257.88	3,209.88	3,257.88	14.94	110.36	-76.69	976.51	-5,121.13	5,083.87	4,958.61	125.26	40.587		
3,400.00	3,356.16	3,308.16	3,356.16	15.41	113.79	-76.89	976.51	-5,121.13	5,079.58	4,950.42	129.16	39.327		
3,500.00	3,454.43	3,406.43	3,454.43	15.89	117.22	-77.09	976.51	-5,121.13	5,075.35	4,942.28	133.07	38.141		
3,600.00	3,552.71	3,504.71	3,552.71	16.36	120.65	-77.29	976.51	-5,121.13	5,071.19	4,934.21	136.97	37.023		
3,700.00	3,650.99	3,602.99	3,650.99	16.84	124.08	-77.49	976.51	-5,121.13	5,067.09	4,926.21	140.88	35.968		
3,800.00	3,749.27	3,701.27	3,749.27	17.32	127.51	-77.69	976.51	-5,121.13	5,063.05	4,918.27	144.78	34.970		
3,900.00	3,847.54	3,800.46	3,847.54	17.79	130.97	-77.90	976.51	-5,121.13	5,059.08	4,910.36	148.72	34.017		
4,000.00	3,945.82	3,902.18	3,945.82	18.27	134.52	-78.10	976.51	-5,121.13	5,055.17	4,902.42	152.75	33.095		
4,100.00	4,044.10	4,003.90	4,044.10	18.75	138.07	-78.30	976.51	-5,121.13	5,051.32	4,894.55	156.77	32.221		
4,200.00	4,142.38	4,105.62	4,142.38	19.22	141.62	-78.50	976.51	-5,121.13	5,047.55	4,886.75	160.80	31.391		
4,300.00	4,240.65	4,207.35	4,240.65	19.70	145.17	-78.70	976.51	-5,121.13	5,043.83	4,879.01	164.82	30.601		
4,400.00	4,338.93	4,309.07	4,338.93	20.18	148.72	-78.91	976.51	-5,121.13	5,040.18	4,871.33	168.85	29.850		
4,500.00	4,437.21	4,389.21	4,437.21	20.65	151.52	-79.11	976.51	-5,121.13	5,036.60	4,864.47	172.12	29.261		
4,600.00	4,535.49	4,487.49	4,535.49	21.13	154.95	-79.31	976.51	-5,121.13	5,033.08	4,857.05	176.03	28.592		
4,700.00	4,633.76	4,585.76	4,633.76	21.61	158.38	-79.51	976.51	-5,121.13	5,029.63	4,849.69	179.94	27.952		
4,800.00	4,732.04	4,684.04	4,732.04	22.08	161.81	-79.72	976.51	-5,121.13	5,026.24	4,842.40	183.85	27.339		
4,900.00	4,830.32	4,782.32	4,830.32	22.56	165.24	-79.92	976.51	-5,121.13	5,022.92	4,835.17	187.75	26.753		
5,000.00	4,928.60	4,880.60	4,928.60	23.04	168.67	-80.13	976.51	-5,121.13	5,019.66	4,828.00	191.66	26.190		
5,100.00	5,026.87	4,978.87	5,026.87	23.51	172.10	-80.33	976.51	-5,121.13	5,016.47	4,820.91	195.57	25.651		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,077.15	5,125.15	23.99	175.53	-80.54	976.51	-5,121.13	5,013.35	4,813.88	199.47	25.133		
5,300.00	5,223.43	5,175.43	5,223.43	24.47	178.96	-80.74	976.51	-5,121.13	5,010.29	4,806.91	203.38	24.635		
5,400.00	5,321.71	5,273.71	5,321.71	24.94	182.39	-80.95	976.51	-5,121.13	5,007.30	4,800.01	207.29	24.156		
5,500.00	5,419.98	5,371.98	5,419.98	25.42	185.82	-81.15	976.51	-5,121.13	5,004.38	4,793.18	211.20	23.695		
5,600.00	5,518.26	5,470.26	5,518.26	25.90	189.25	-81.36	976.51	-5,121.13	5,001.52	4,786.41	215.11	23.251		
5,700.00	5,616.54	5,568.54	5,616.54	26.38	192.68	-81.56	976.51	-5,121.13	4,998.73	4,779.72	219.01	22.824		
5,800.00	5,714.82	5,666.82	5,714.82	26.85	196.11	-81.77	976.51	-5,121.13	4,996.00	4,773.08	222.92	22.412		
5,900.00	5,813.09	5,765.09	5,813.09	27.33	199.54	-81.98	976.51	-5,121.13	4,993.35	4,766.52	226.83	22.014		
6,000.00	5,911.37	5,863.37	5,911.37	27.81	202.97	-82.18	976.51	-5,121.13	4,990.76	4,760.02	230.74	21.630		
6,100.00	6,009.65	5,961.65	6,009.65	28.28	206.40	-82.39	976.51	-5,121.13	4,988.23	4,753.59	234.65	21.259		
6,200.00	6,107.93	6,059.93	6,107.93	28.76	209.83	-82.60	976.51	-5,121.13	4,985.78	4,747.22	238.55	20.900		
6,300.00	6,206.20	6,158.20	6,206.20	29.24	213.26	-82.80	976.51	-5,121.13	4,983.39	4,740.92	242.46	20.553		
6,400.00	6,304.48	6,256.48	6,304.48	29.72	216.69	-83.01	976.51	-5,121.13	4,981.07	4,734.69	246.37	20.218		
6,500.00	6,402.76	6,354.76	6,402.76	30.19	220.12	-83.22	976.51	-5,121.13	4,978.81	4,728.53	250.28	19.893		
6,600.00	6,501.04	6,453.04	6,501.04	30.67	223.55	-83.43	976.51	-5,121.13	4,976.62	4,722.44	254.19	19.579		
6,700.00	6,599.31	6,551.31	6,599.31	31.15	226.98	-83.63	976.51	-5,121.13	4,974.51	4,716.41	258.10	19.274		
6,800.00	6,697.50	6,649.50	6,697.50	31.63	230.41	-82.89	976.51	-5,121.13	4,970.61	4,708.61	262.00	18.972		
6,900.00	6,794.18	6,746.18	6,794.18	32.10	233.79	-37.29	976.51	-5,121.13	4,953.27	4,687.43	265.85	18.632		
7,000.00	6,886.96	6,838.96	6,886.96	32.55	237.03	-26.05	976.51	-5,121.13	4,920.82	4,651.30	269.53	18.257		
7,100.00	6,973.57	6,925.57	6,973.57	32.99	240.05	-20.49	976.51	-5,121.13	4,874.06	4,601.10	272.96	17.856		
7,200.00	7,051.87	7,003.87	7,051.87	33.41	242.78	-17.51	976.51	-5,121.13	4,814.11	4,538.06	276.05	17.439		
7,300.00	7,119.93	7,071.93	7,119.93	33.85	245.16	-15.98	976.51	-5,121.13	4,742.45	4,463.72	278.74	17.014		
7,400.00	7,176.09	7,128.09	7,176.09	34.39	247.12	-15.51	976.51	-5,121.13	4,660.83	4,379.89	280.94	16.590		
7,500.00	7,218.95	7,170.95	7,218.95	35.09	248.61	-16.23	976.51	-5,121.13	4,571.24	4,288.62	282.63	16.174		
7,600.00	7,247.46	7,200.54	7,247.46	35.98	249.65	-19.47	976.51	-5,121.13	4,475.88	4,192.10	283.78	15.772		
7,700.00	7,260.92	7,212.92	7,260.92	37.04	250.08	-38.65	976.51	-5,121.13	4,377.07	4,092.79	284.29	15.397		
7,800.00	7,261.75	7,213.75	7,261.75	38.23	250.11	-96.74	976.51	-5,121.13	4,277.17	3,992.82	284.35	15.042		
7,900.00	7,261.33	7,213.33	7,261.33	39.59	250.09	-96.59	976.51	-5,121.13	4,177.23	3,892.87	284.36	14.690		
8,000.00	7,260.91	7,212.91	7,260.91	41.10	250.08	-96.43	976.51	-5,121.13	4,077.30	3,792.92	284.38	14.337		
8,100.00	7,260.49	7,212.49	7,260.49	42.75	250.06	-96.27	976.51	-5,121.13	3,977.37	3,692.97	284.40	13.985		
8,200.00	7,260.07	7,212.07	7,260.07	44.53	250.05	-96.12	976.51	-5,121.13	3,877.45	3,593.02	284.43	13.633		
8,300.00	7,259.65	7,211.65	7,259.65	46.41	250.04	-95.96	976.51	-5,121.13	3,777.53	3,493.07	284.45	13.280		
8,400.00	7,259.23	7,211.23	7,259.23	48.39	250.02	-95.80	976.51	-5,121.13	3,677.61	3,393.13	284.48	12.927		
8,500.00	7,258.81	7,210.81	7,258.81	50.45	250.01	-95.65	976.51	-5,121.13	3,577.70	3,293.18	284.52	12.575		
8,600.00	7,258.39	7,210.39	7,258.39	52.59	249.99	-95.49	976.51	-5,121.13	3,477.79	3,193.24	284.55	12.222		
8,700.00	7,257.97	7,209.97	7,257.97	54.79	249.98	-95.33	976.51	-5,121.13	3,377.89	3,093.30	284.59	11.869		
8,800.00	7,257.55	7,209.55	7,257.55	57.05	249.96	-95.18	976.51	-5,121.13	3,278.00	2,993.36	284.64	11.516		
8,900.00	7,257.13	7,209.13	7,257.13	59.36	249.95	-95.02	976.51	-5,121.13	3,178.11	2,893.42	284.69	11.163		
9,000.00	7,256.71	7,208.71	7,256.71	61.72	249.93	-94.86	976.51	-5,121.13	3,078.23	2,793.48	284.74	10.811		
9,100.00	7,256.29	7,208.29	7,256.29	64.12	249.92	-94.70	976.51	-5,121.13	2,978.36	2,693.55	284.80	10.458		
9,200.00	7,255.87	7,207.87	7,255.87	66.56	249.90	-94.55	976.51	-5,121.13	2,878.49	2,593.62	284.87	10.105		
9,300.00	7,255.45	7,207.45	7,255.45	69.02	249.89	-94.39	976.51	-5,121.13	2,778.64	2,493.69	284.95	9.751		
9,400.00	7,255.03	7,207.03	7,255.03	71.52	249.87	-94.23	976.51	-5,121.13	2,678.79	2,393.77	285.03	9.398		
9,500.00	7,254.61	7,206.61	7,254.61	74.04	249.86	-94.07	976.51	-5,121.13	2,578.96	2,293.84	285.12	9.045		
9,600.00	7,254.19	7,206.19	7,254.19	76.58	249.84	-93.92	976.51	-5,121.13	2,479.14	2,193.92	285.22	8.692		
9,700.00	7,253.77	7,205.77	7,253.77	79.15	249.83	-93.76	976.51	-5,121.13	2,379.34	2,094.01	285.33	8.339		
9,800.00	7,253.35	7,205.35	7,253.35	81.74	249.82	-93.60	976.51	-5,121.13	2,279.55	1,994.10	285.46	7.986		
9,900.00	7,252.92	7,204.92	7,252.92	84.34	249.80	-93.44	976.51	-5,121.13	2,179.79	1,894.19	285.60	7.632		
10,000.00	7,252.50	7,204.50	7,252.50	86.96	249.79	-93.28	976.51	-5,121.13	2,080.04	1,794.29	285.76	7.279		
10,100.00	7,252.08	7,204.08	7,252.08	89.59	249.77	-93.13	976.51	-5,121.13	1,980.32	1,694.39	285.94	6.926		
10,200.00	7,251.66	7,203.66	7,251.66	92.24	249.76	-92.97	976.51	-5,121.13	1,880.64	1,594.49	286.14	6.572		
10,300.00	7,251.24	7,203.24	7,251.24	94.90	249.74	-92.81	976.51	-5,121.13	1,780.98	1,494.60	286.38	6.219		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,202.82	7,250.82	97.57	249.73	-92.65	976.51	-5,121.13	1,681.37	1,394.71	286.65	5.866		
10,500.00	7,250.40	7,202.40	7,250.40	100.25	249.71	-92.49	976.51	-5,121.13	1,581.80	1,294.83	286.97	5.512		
10,600.00	7,249.98	7,201.98	7,249.98	102.93	249.70	-92.34	976.51	-5,121.13	1,482.30	1,194.95	287.35	5.158		
10,700.00	7,249.56	7,201.56	7,249.56	105.63	249.68	-92.18	976.51	-5,121.13	1,382.87	1,095.06	287.80	4.805		
10,800.00	7,249.14	7,201.14	7,249.14	108.34	249.67	-92.02	976.51	-5,121.13	1,283.52	995.17	288.35	4.451		
10,900.00	7,248.72	7,200.72	7,248.72	111.05	249.65	-91.86	976.51	-5,121.13	1,184.28	895.27	289.02	4.098		
11,000.00	7,248.30	7,200.30	7,248.30	113.77	249.64	-91.70	976.51	-5,121.13	1,085.19	795.34	289.85	3.744		
11,100.00	7,247.88	7,200.12	7,247.88	116.50	249.63	-91.54	976.51	-5,121.13	986.27	695.36	290.91	3.390		
11,200.00	7,247.46	7,200.54	7,247.46	119.23	249.65	-91.39	976.51	-5,121.13	887.60	595.29	292.31	3.037		
11,300.00	7,247.04	7,200.96	7,247.04	121.97	249.66	-91.23	976.51	-5,121.13	789.26	495.11	294.15	2.683		
11,400.00	7,246.62	7,201.38	7,246.62	124.72	249.68	-91.07	976.51	-5,121.13	691.40	394.74	296.66	2.331		
11,500.00	7,246.20	7,201.80	7,246.20	127.46	249.69	-90.91	976.51	-5,121.13	594.26	294.06	300.20	1.980		
11,600.00	7,245.78	7,202.22	7,245.78	130.22	249.71	-90.75	976.51	-5,121.13	498.24	192.84	305.40	1.631		
11,700.00	7,245.36	7,202.64	7,245.36	132.98	249.72	-90.59	976.51	-5,121.13	404.16	90.74	313.41	1.290	Level 3	
11,800.00	7,244.94	7,203.06	7,244.94	135.74	249.74	-90.44	976.51	-5,121.13	313.76	-12.68	326.43	0.961	Level 1	
11,900.00	7,244.52	7,203.48	7,244.52	138.50	249.75	-90.28	976.51	-5,121.13	231.39	-116.86	348.26	0.664	Level 1	
12,000.00	7,244.10	7,203.90	7,244.10	141.27	249.76	-90.12	976.51	-5,121.13	169.24	-210.54	379.79	0.446	Level 1	
12,074.50	7,243.78	7,204.22	7,243.78	143.34	249.78	-90.00	976.51	-5,121.13	151.96	-241.05	393.01	0.387	Level 1, CC, ES, SF	
12,100.00	7,243.68	7,204.32	7,243.68	144.04	249.78	-89.96	976.51	-5,121.13	154.09	-236.88	390.97	0.394	Level 1	
12,200.00	7,243.26	7,204.74	7,243.26	146.82	249.79	-89.80	976.51	-5,121.13	197.08	-164.68	361.76	0.545	Level 1	
12,300.00	7,242.84	7,205.16	7,242.84	149.60	249.81	-89.64	976.51	-5,121.13	271.92	-62.19	334.11	0.814	Level 1	
12,400.00	7,242.42	7,205.58	7,242.42	152.38	249.82	-89.48	976.51	-5,121.13	359.22	41.83	317.39	1.132	Level 2	
12,500.00	7,242.00	7,206.00	7,242.00	155.16	249.84	-89.33	976.51	-5,121.13	451.82	144.34	307.48	1.469	Level 3	
12,600.00	7,241.58	7,206.42	7,241.58	157.95	249.85	-89.17	976.51	-5,121.13	547.02	245.70	301.32	1.815		
12,700.00	7,241.16	7,206.84	7,241.16	160.74	249.87	-89.01	976.51	-5,121.13	643.69	346.36	297.33	2.165		
12,800.00	7,240.74	7,207.26	7,240.74	163.53	249.88	-88.85	976.51	-5,121.13	741.24	446.61	294.62	2.516		
12,900.00	7,240.32	7,207.69	7,240.32	166.32	249.90	-88.69	976.51	-5,121.13	839.36	546.63	292.74	2.867		
13,000.00	7,239.89	7,208.11	7,239.89	169.12	249.91	-88.53	976.51	-5,121.13	937.88	646.50	291.38	3.219		
13,100.00	7,239.47	7,208.53	7,239.47	171.92	249.93	-88.38	976.51	-5,121.13	1,036.69	746.30	290.39	3.570		
13,200.00	7,239.05	7,208.95	7,239.05	174.72	249.94	-88.22	976.51	-5,121.13	1,135.70	846.05	289.65	3.921		
13,300.00	7,238.63	7,209.37	7,238.63	177.52	249.96	-88.06	976.51	-5,121.13	1,234.87	945.78	289.09	4.272		
13,400.00	7,238.21	7,209.79	7,238.21	180.32	249.97	-87.90	976.51	-5,121.13	1,334.17	1,045.50	288.66	4.622		
13,500.00	7,237.79	7,209.79	7,237.79	183.13	249.27	-87.74	976.51	-5,121.13	1,433.56	1,145.94	287.63	4.984		
13,600.00	7,237.37	7,209.79	7,237.37	185.93	249.26	-87.58	976.51	-5,121.13	1,533.03	1,245.69	287.35	5.335		
13,700.00	7,236.95	7,209.79	7,236.95	188.74	249.24	-87.43	976.51	-5,121.13	1,632.57	1,345.44	287.13	5.686		
13,800.00	7,236.53	7,209.79	7,236.53	191.55	249.23	-87.27	976.51	-5,121.13	1,732.16	1,445.21	286.96	6.036		
13,900.00	7,236.11	7,209.79	7,236.11	194.36	249.21	-87.11	976.51	-5,121.13	1,831.80	1,544.98	286.82	6.387		
14,000.00	7,235.69	7,209.79	7,235.69	197.17	249.20	-86.95	976.51	-5,121.13	1,931.47	1,644.75	286.71	6.737		
14,100.00	7,235.27	7,209.79	7,235.27	199.98	249.18	-86.79	976.51	-5,121.13	2,031.17	1,744.54	286.63	7.086		
14,200.00	7,234.85	7,209.79	7,234.85	202.80	249.17	-86.64	976.51	-5,121.13	2,130.90	1,844.33	286.57	7.436		
14,300.00	7,234.43	7,209.79	7,234.43	205.61	249.15	-86.48	976.51	-5,121.13	2,230.66	1,944.13	286.53	7.785		
14,400.00	7,234.01	7,209.79	7,234.01	208.43	249.14	-86.32	976.51	-5,121.13	2,330.44	2,043.94	286.50	8.134		
14,500.00	7,233.59	7,209.79	7,233.59	211.25	249.13	-86.16	976.51	-5,121.13	2,430.23	2,143.75	286.48	8.483		
14,600.00	7,233.17	7,209.79	7,233.17	214.06	249.11	-86.00	976.51	-5,121.13	2,530.04	2,243.57	286.47	8.832		
14,700.00	7,232.75	7,209.79	7,232.75	216.88	249.10	-85.85	976.51	-5,121.13	2,629.87	2,343.39	286.47	9.180		
14,800.00	7,232.33	7,209.79	7,232.33	219.70	249.08	-85.69	976.51	-5,121.13	2,729.71	2,443.22	286.48	9.528		
14,900.00	7,231.91	7,209.79	7,231.91	222.52	249.07	-85.53	976.51	-5,121.13	2,829.56	2,543.06	286.50	9.876		
15,000.00	7,231.49	7,209.79	7,231.49	225.35	249.05	-85.37	976.51	-5,121.13	2,929.42	2,642.90	286.52	10.224		
15,100.00	7,231.07	7,209.79	7,231.07	228.17	249.04	-85.22	976.51	-5,121.13	3,029.28	2,742.74	286.55	10.572		
15,116.21	7,231.00	7,209.79	7,231.00	228.63	249.04	-85.19	976.51	-5,121.13	3,045.48	2,758.92	286.55	10.628		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	55.00	0.00	3.28	-95.75	-495.32	-4,918.39	4,943.57					
100.00	100.00	45.00	100.00	0.18	3.37	-95.75	-495.32	-4,918.39	4,943.27	4,939.72	3.55	1,393.145		
200.00	200.00	145.00	200.00	0.61	4.66	-95.75	-495.32	-4,918.39	4,943.27	4,937.99	5.28	936.447		
300.00	300.00	245.00	300.00	1.05	7.56	-95.75	-495.32	-4,918.39	4,943.27	4,934.66	8.61	574.164		
400.00	400.00	345.00	400.00	1.49	10.81	-95.75	-495.32	-4,918.39	4,943.27	4,930.97	12.30	401.891		
500.00	500.00	445.00	500.00	1.93	14.17	-95.75	-495.32	-4,918.39	4,943.27	4,927.16	16.10	306.944		
600.00	599.98	544.98	599.98	2.37	17.59	-88.03	-495.32	-4,918.39	4,943.21	4,923.25	19.96	247.696		
700.00	699.84	644.84	699.84	2.81	21.02	-88.09	-495.32	-4,918.39	4,943.03	4,919.20	23.83	207.442		
800.00	799.45	744.45	799.45	3.26	24.46	-88.20	-495.32	-4,918.39	4,942.74	4,915.04	27.71	178.394		
900.00	898.70	843.70	898.70	3.70	27.90	-88.34	-495.32	-4,918.39	4,942.37	4,910.79	31.58	156.481		
1,000.00	997.47	942.47	997.47	4.15	31.33	-88.53	-495.32	-4,918.39	4,941.94	4,906.49	35.46	139.382		
1,100.00	1,095.78	1,040.78	1,095.78	4.60	34.74	-88.74	-495.32	-4,918.39	4,941.50	4,902.18	39.32	125.667		
1,200.00	1,194.05	1,139.05	1,194.05	5.05	38.16	-88.95	-495.32	-4,918.39	4,941.12	4,897.93	43.20	114.389		
1,300.00	1,292.33	1,237.33	1,292.33	5.50	41.58	-89.16	-495.32	-4,918.39	4,940.81	4,893.74	47.08	104.956		
1,400.00	1,390.61	1,335.61	1,390.61	5.96	45.00	-89.37	-495.32	-4,918.39	4,940.57	4,889.61	50.96	96.951		
1,500.00	1,488.89	1,433.89	1,488.89	6.43	48.42	-89.58	-495.32	-4,918.39	4,940.40	4,885.55	54.85	90.076		
1,600.00	1,587.16	1,532.16	1,587.16	6.89	51.85	-89.80	-495.32	-4,918.39	4,940.30	4,881.56	58.74	84.108		
1,697.22	1,682.71	1,627.71	1,682.71	7.35	55.18	-90.00	-495.32	-4,918.39	4,940.27	4,877.74	62.52	79.016		
1,700.00	1,685.44	1,630.44	1,685.44	7.36	55.27	-90.01	-495.32	-4,918.39	4,940.27	4,877.64	62.63	78.880		
1,800.00	1,783.72	1,728.72	1,783.72	7.83	58.70	-90.22	-495.32	-4,918.39	4,940.30	4,873.78	66.52	74.262		
1,900.00	1,882.00	1,827.00	1,882.00	8.30	62.12	-90.43	-495.32	-4,918.39	4,940.41	4,869.99	70.42	70.155		
2,000.00	1,980.27	1,925.27	1,980.27	8.77	65.55	-90.64	-495.32	-4,918.39	4,940.58	4,866.26	74.32	66.478		
2,100.00	2,078.55	2,023.55	2,078.55	9.25	68.97	-90.85	-495.32	-4,918.39	4,940.83	4,862.61	78.22	63.168		
2,200.00	2,176.83	2,121.83	2,176.83	9.72	72.40	-91.06	-495.32	-4,918.39	4,941.14	4,859.02	82.12	60.172		
2,300.00	2,275.11	2,220.11	2,275.11	10.19	75.83	-91.27	-495.32	-4,918.39	4,941.52	4,855.50	86.02	57.447		
2,400.00	2,373.38	2,318.38	2,373.38	10.66	79.26	-91.48	-495.32	-4,918.39	4,941.97	4,852.05	89.92	54.960		
2,500.00	2,471.66	2,416.66	2,471.66	11.14	82.69	-91.69	-495.32	-4,918.39	4,942.49	4,848.67	93.82	52.680		
2,600.00	2,569.94	2,514.94	2,569.94	11.61	86.11	-91.90	-495.32	-4,918.39	4,943.08	4,845.36	97.72	50.582		
2,700.00	2,668.22	2,613.22	2,668.22	12.09	89.54	-92.11	-495.32	-4,918.39	4,943.74	4,842.11	101.63	48.646		
2,800.00	2,766.49	2,711.49	2,766.49	12.56	92.97	-92.32	-495.32	-4,918.39	4,944.47	4,838.94	105.53	46.853		
2,900.00	2,864.77	2,809.77	2,864.77	13.04	96.40	-92.53	-495.32	-4,918.39	4,945.26	4,835.83	109.43	45.189		
3,000.00	2,963.05	2,908.05	2,963.05	13.51	99.83	-92.74	-495.32	-4,918.39	4,946.13	4,832.79	113.34	43.640		
3,100.00	3,061.33	3,006.33	3,061.33	13.99	103.26	-92.95	-495.32	-4,918.39	4,947.06	4,829.82	117.24	42.195		
3,200.00	3,159.60	3,104.60	3,159.60	14.46	106.69	-93.16	-495.32	-4,918.39	4,948.07	4,826.92	121.15	40.843		
3,300.00	3,257.88	3,202.88	3,257.88	14.94	110.12	-93.37	-495.32	-4,918.39	4,949.14	4,824.09	125.05	39.576		
3,400.00	3,356.16	3,301.16	3,356.16	15.41	113.55	-93.58	-495.32	-4,918.39	4,950.28	4,821.32	128.96	38.387		
3,500.00	3,454.43	3,400.57	3,454.43	15.89	117.01	-93.79	-495.32	-4,918.39	4,951.49	4,818.58	132.90	37.256		
3,600.00	3,552.71	3,502.29	3,552.71	16.36	120.56	-94.00	-495.32	-4,918.39	4,952.77	4,815.84	136.93	36.170		
3,700.00	3,650.99	3,604.01	3,650.99	16.84	124.11	-94.21	-495.32	-4,918.39	4,954.11	4,813.16	140.95	35.147		
3,800.00	3,749.27	3,705.73	3,749.27	17.32	127.66	-94.42	-495.32	-4,918.39	4,955.53	4,810.55	144.98	34.180		
3,900.00	3,847.54	3,807.46	3,847.54	17.79	131.21	-94.63	-495.32	-4,918.39	4,957.01	4,808.00	149.01	33.267		
4,000.00	3,945.82	3,909.18	3,945.82	18.27	134.76	-94.84	-495.32	-4,918.39	4,958.56	4,805.53	153.03	32.402		
4,100.00	4,044.10	3,989.10	4,044.10	18.75	137.55	-95.05	-495.32	-4,918.39	4,960.18	4,803.88	156.30	31.735		
4,200.00	4,142.38	4,087.38	4,142.38	19.22	140.98	-95.26	-495.32	-4,918.39	4,961.87	4,801.67	160.21	30.972		
4,300.00	4,240.65	4,185.65	4,240.65	19.70	144.41	-95.47	-495.32	-4,918.39	4,963.63	4,799.52	164.11	30.245		
4,400.00	4,338.93	4,283.93	4,338.93	20.18	147.84	-95.67	-495.32	-4,918.39	4,965.45	4,797.43	168.02	29.553		
4,500.00	4,437.21	4,382.21	4,437.21	20.65	151.27	-95.88	-495.32	-4,918.39	4,967.35	4,795.42	171.93	28.892		
4,600.00	4,535.49	4,480.49	4,535.49	21.13	154.70	-96.09	-495.32	-4,918.39	4,969.31	4,793.48	175.83	28.262		
4,700.00	4,633.76	4,578.76	4,633.76	21.61	158.13	-96.30	-495.32	-4,918.39	4,971.34	4,791.60	179.74	27.659		
4,800.00	4,732.04	4,677.04	4,732.04	22.08	161.56	-96.51	-495.32	-4,918.39	4,973.43	4,789.79	183.65	27.082		
4,900.00	4,830.32	4,775.32	4,830.32	22.56	164.99	-96.72	-495.32	-4,918.39	4,975.60	4,788.05	187.55	26.529		
5,000.00	4,928.60	4,873.60	4,928.60	23.04	168.42	-96.92	-495.32	-4,918.39	4,977.83	4,786.37	191.46	25.999		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	4,971.87	5,026.87	23.51	171.85	-97.13	-495.32	-4,918.39	4,980.13	4,784.76	195.37	25.491		
5,200.00	5,125.15	5,070.15	5,125.15	23.99	175.28	-97.34	-495.32	-4,918.39	4,982.50	4,783.22	199.27	25.003		
5,300.00	5,223.43	5,168.43	5,223.43	24.47	178.71	-97.55	-495.32	-4,918.39	4,984.93	4,781.75	203.18	24.534		
5,400.00	5,321.71	5,266.71	5,321.71	24.94	182.15	-97.75	-495.32	-4,918.39	4,987.43	4,780.35	207.09	24.084		
5,500.00	5,419.98	5,364.98	5,419.98	25.42	185.58	-97.96	-495.32	-4,918.39	4,990.00	4,779.01	211.00	23.650		
5,600.00	5,518.26	5,463.26	5,518.26	25.90	189.01	-98.17	-495.32	-4,918.39	4,992.64	4,777.74	214.90	23.232		
5,700.00	5,616.54	5,561.54	5,616.54	26.38	192.44	-98.37	-495.32	-4,918.39	4,995.34	4,776.53	218.81	22.830		
5,800.00	5,714.82	5,659.82	5,714.82	26.85	195.87	-98.58	-495.32	-4,918.39	4,998.11	4,775.40	222.72	22.442		
5,900.00	5,813.09	5,758.09	5,813.09	27.33	199.30	-98.78	-495.32	-4,918.39	5,000.95	4,774.33	226.62	22.067		
6,000.00	5,911.37	5,856.37	5,911.37	27.81	202.73	-98.99	-495.32	-4,918.39	5,003.85	4,773.32	230.53	21.706		
6,100.00	6,009.65	5,954.65	6,009.65	28.28	206.16	-99.19	-495.32	-4,918.39	5,006.82	4,772.39	234.44	21.357		
6,200.00	6,107.93	6,052.93	6,107.93	28.76	209.59	-99.40	-495.32	-4,918.39	5,009.86	4,771.52	238.34	21.019		
6,300.00	6,206.20	6,151.20	6,206.20	29.24	213.02	-99.60	-495.32	-4,918.39	5,012.96	4,770.71	242.25	20.693		
6,400.00	6,304.48	6,249.48	6,304.48	29.72	216.45	-99.81	-495.32	-4,918.39	5,016.13	4,769.97	246.16	20.378		
6,500.00	6,402.76	6,347.76	6,402.76	30.19	219.88	-100.01	-495.32	-4,918.39	5,019.37	4,769.30	250.07	20.072		
6,600.00	6,501.04	6,446.04	6,501.04	30.67	223.31	-100.22	-495.32	-4,918.39	5,022.67	4,768.70	253.97	19.776		
6,700.00	6,599.31	6,544.31	6,599.31	31.15	226.74	-100.42	-495.32	-4,918.39	5,026.04	4,768.16	257.88	19.490		
6,800.00	6,697.59	6,642.59	6,697.59	31.63	230.17	-79.67	-495.32	-4,918.39	5,027.71	4,765.93	261.78	19.206		
6,900.00	6,794.18	6,739.18	6,794.18	32.10	233.54	-54.41	-495.32	-4,918.39	5,016.51	4,750.87	265.63	18.885		
7,000.00	6,886.96	6,831.96	6,886.96	32.55	236.78	-43.97	-495.32	-4,918.39	4,990.77	4,721.43	269.33	18.530		
7,100.00	6,973.57	6,918.57	6,973.57	32.99	239.80	-39.77	-495.32	-4,918.39	4,951.19	4,678.39	272.79	18.150		
7,200.00	7,051.87	7,003.13	7,051.87	33.41	242.76	-38.85	-495.32	-4,918.39	4,898.80	4,622.64	276.16	17.739		
7,300.00	7,119.93	7,064.93	7,119.93	33.85	244.91	-40.38	-495.32	-4,918.39	4,834.95	4,556.24	278.71	17.348		
7,400.00	7,176.09	7,121.09	7,176.09	34.39	246.87	-44.40	-495.32	-4,918.39	4,761.26	4,480.21	281.05	16.941		
7,500.00	7,218.95	7,163.95	7,218.95	35.09	248.37	-51.68	-495.32	-4,918.39	4,679.57	4,396.66	282.91	16.541		
7,600.00	7,247.46	7,207.46	7,247.46	35.98	249.89	-63.67	-495.32	-4,918.39	4,591.91	4,307.12	284.80	16.124		
7,700.00	7,260.92	7,205.92	7,260.92	37.04	249.84	-81.78	-495.32	-4,918.39	4,500.43	4,215.33	285.10	15.786		
7,800.00	7,261.75	7,206.75	7,261.75	38.23	249.86	-90.61	-495.32	-4,918.39	4,407.44	4,121.95	285.49	15.438		
7,900.00	7,261.33	7,206.33	7,261.33	39.59	249.85	-90.59	-495.32	-4,918.39	4,314.66	4,028.78	285.88	15.092		
8,000.00	7,260.91	7,205.91	7,260.91	41.10	249.83	-90.58	-495.32	-4,918.39	4,222.22	3,935.88	286.33	14.746		
8,100.00	7,260.49	7,205.49	7,260.49	42.75	249.82	-90.56	-495.32	-4,918.39	4,130.12	3,843.28	286.84	14.399		
8,200.00	7,260.07	7,205.07	7,260.07	44.53	249.81	-90.55	-495.32	-4,918.39	4,038.40	3,750.98	287.41	14.051		
8,300.00	7,259.65	7,204.65	7,259.65	46.41	249.79	-90.53	-495.32	-4,918.39	3,947.08	3,659.02	288.06	13.703		
8,400.00	7,259.23	7,204.23	7,259.23	48.39	249.78	-90.52	-495.32	-4,918.39	3,856.19	3,567.42	288.77	13.354		
8,500.00	7,258.81	7,203.81	7,258.81	50.45	249.76	-90.50	-495.32	-4,918.39	3,765.76	3,476.20	289.56	13.005		
8,600.00	7,258.39	7,203.39	7,258.39	52.59	249.75	-90.49	-495.32	-4,918.39	3,675.83	3,385.39	290.44	12.656		
8,700.00	7,257.97	7,202.97	7,257.97	54.79	249.73	-90.47	-495.32	-4,918.39	3,586.43	3,295.02	291.41	12.307		
8,800.00	7,257.55	7,202.55	7,257.55	57.05	249.72	-90.46	-495.32	-4,918.39	3,497.61	3,205.13	292.48	11.959		
8,900.00	7,257.13	7,202.13	7,257.13	59.36	249.70	-90.44	-495.32	-4,918.39	3,409.41	3,115.76	293.65	11.611		
9,000.00	7,256.71	7,201.71	7,256.71	61.72	249.69	-90.43	-495.32	-4,918.39	3,321.87	3,026.95	294.92	11.264		
9,100.00	7,256.29	7,201.29	7,256.29	64.12	249.67	-90.41	-495.32	-4,918.39	3,235.06	2,938.74	296.32	10.918		
9,200.00	7,255.87	7,200.87	7,255.87	66.56	249.66	-90.40	-495.32	-4,918.39	3,149.02	2,851.19	297.83	10.573		
9,300.00	7,255.45	7,200.45	7,255.45	69.02	249.64	-90.38	-495.32	-4,918.39	3,063.84	2,764.36	299.48	10.231		
9,400.00	7,255.03	7,200.03	7,255.03	71.52	249.63	-90.37	-495.32	-4,918.39	2,979.58	2,678.32	301.26	9.890		
9,500.00	7,254.61	7,200.39	7,254.61	74.04	249.64	-90.35	-495.32	-4,918.39	2,896.32	2,593.10	303.22	9.552		
9,600.00	7,254.19	7,200.81	7,254.19	76.58	249.66	-90.34	-495.32	-4,918.39	2,814.15	2,508.82	305.33	9.217		
9,700.00	7,253.77	7,201.23	7,253.77	79.15	249.67	-90.33	-495.32	-4,918.39	2,733.17	2,425.57	307.60	8.885		
9,800.00	7,253.35	7,201.66	7,253.35	81.74	249.69	-90.31	-495.32	-4,918.39	2,653.48	2,343.44	310.04	8.559		
9,900.00	7,252.92	7,202.08	7,252.92	84.34	249.70	-90.30	-495.32	-4,918.39	2,575.21	2,262.57	312.65	8.237		
10,000.00	7,252.50	7,202.50	7,252.50	86.96	249.72	-90.28	-495.32	-4,918.39	2,498.50	2,183.06	315.44	7.921		
10,100.00	7,252.08	7,202.92	7,252.08	89.59	249.73	-90.27	-495.32	-4,918.39	2,423.48	2,105.07	318.42	7.611		
10,200.00	7,251.66	7,203.34	7,251.66	92.24	249.75	-90.25	-495.32	-4,918.39	2,350.33	2,028.74	321.58	7.309		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,203.76	7,251.24	94.90	249.76	-90.24	-495.32	-4,918.39	2,279.21	1,954.27	324.94	7.014		
10,400.00	7,250.82	7,204.18	7,250.82	97.57	249.77	-90.22	-495.32	-4,918.39	2,210.33	1,881.84	328.49	6.729		
10,500.00	7,250.40	7,204.60	7,250.40	100.25	249.79	-90.21	-495.32	-4,918.39	2,143.90	1,811.67	332.23	6.453		
10,600.00	7,249.98	7,205.02	7,249.98	102.93	249.80	-90.19	-495.32	-4,918.39	2,080.17	1,744.02	336.15	6.188		
10,700.00	7,249.56	7,205.44	7,249.56	105.63	249.82	-90.18	-495.32	-4,918.39	2,019.37	1,679.13	340.24	5.935		
10,800.00	7,249.14	7,205.86	7,249.14	108.34	249.83	-90.16	-495.32	-4,918.39	1,961.79	1,617.31	344.48	5.695		
10,900.00	7,248.72	7,206.28	7,248.72	111.05	249.85	-90.15	-495.32	-4,918.39	1,907.72	1,558.88	348.84	5.469		
11,000.00	7,248.30	7,206.70	7,248.30	113.77	249.86	-90.13	-495.32	-4,918.39	1,857.46	1,504.16	353.29	5.258		
11,100.00	7,247.88	7,207.12	7,247.88	116.50	249.88	-90.12	-495.32	-4,918.39	1,811.33	1,453.53	357.80	5.062		
11,200.00	7,247.46	7,207.54	7,247.46	119.23	249.89	-90.10	-495.32	-4,918.39	1,769.65	1,407.35	362.30	4.884		
11,300.00	7,247.04	7,207.96	7,247.04	121.97	249.91	-90.09	-495.32	-4,918.39	1,732.75	1,366.00	366.75	4.725		
11,400.00	7,246.62	7,208.38	7,246.62	124.72	249.92	-90.07	-495.32	-4,918.39	1,700.94	1,329.87	371.07	4.584		
11,500.00	7,246.20	7,208.80	7,246.20	127.46	249.94	-90.06	-495.32	-4,918.39	1,674.50	1,299.31	375.19	4.463		
11,600.00	7,245.78	7,209.22	7,245.78	130.22	249.95	-90.04	-495.32	-4,918.39	1,653.70	1,274.64	379.05	4.363		
11,700.00	7,245.36	7,209.64	7,245.36	132.98	249.97	-90.03	-495.32	-4,918.39	1,638.74	1,256.17	382.57	4.283		
11,800.00	7,244.94	7,189.94	7,244.94	135.74	249.28	-90.01	-495.32	-4,918.39	1,629.79	1,244.80	385.00	4.233		
11,896.20	7,244.53	7,189.53	7,244.53	138.40	249.26	-90.00	-495.32	-4,918.39	1,626.95	1,239.40	387.55	4.198 CC		
11,900.00	7,244.52	7,189.52	7,244.52	138.50	249.26	-90.00	-495.32	-4,918.39	1,626.96	1,239.31	387.64	4.197 ES		
12,000.00	7,244.10	7,189.10	7,244.10	141.27	249.25	-89.98	-495.32	-4,918.39	1,630.26	1,240.46	389.80	4.182 SF		
12,100.00	7,243.68	7,188.68	7,243.68	144.04	249.23	-89.97	-495.32	-4,918.39	1,639.67	1,248.21	391.46	4.189		
12,200.00	7,243.26	7,188.26	7,243.26	146.82	249.22	-89.96	-495.32	-4,918.39	1,655.07	1,262.47	392.60	4.216		
12,300.00	7,242.84	7,187.84	7,242.84	149.60	249.20	-89.94	-495.32	-4,918.39	1,676.31	1,283.06	393.26	4.263		
12,400.00	7,242.42	7,187.42	7,242.42	152.38	249.19	-89.93	-495.32	-4,918.39	1,703.17	1,309.72	393.44	4.329		
12,500.00	7,242.00	7,187.00	7,242.00	155.16	249.17	-89.91	-495.32	-4,918.39	1,735.38	1,342.17	393.21	4.413		
12,600.00	7,241.58	7,186.58	7,241.58	157.95	249.16	-89.90	-495.32	-4,918.39	1,772.65	1,380.06	392.59	4.515		
12,700.00	7,241.16	7,186.16	7,241.16	160.74	249.15	-89.88	-495.32	-4,918.39	1,814.68	1,423.02	391.65	4.633		
12,800.00	7,240.74	7,185.74	7,240.74	163.53	249.13	-89.87	-495.32	-4,918.39	1,861.13	1,470.69	390.44	4.767		
12,900.00	7,240.32	7,185.32	7,240.32	166.32	249.12	-89.85	-495.32	-4,918.39	1,911.69	1,522.68	389.01	4.914		
13,000.00	7,239.89	7,184.89	7,239.89	169.12	249.10	-89.84	-495.32	-4,918.39	1,966.04	1,578.64	387.40	5.075		
13,100.00	7,239.47	7,184.47	7,239.47	171.92	249.09	-89.82	-495.32	-4,918.39	2,023.88	1,638.21	385.66	5.248		
13,200.00	7,239.05	7,184.05	7,239.05	174.72	249.07	-89.81	-495.32	-4,918.39	2,084.91	1,701.07	383.83	5.432		
13,300.00	7,238.63	7,183.63	7,238.63	177.52	249.06	-89.79	-495.32	-4,918.39	2,148.86	1,766.92	381.94	5.626		
13,400.00	7,238.21	7,183.21	7,238.21	180.32	249.04	-89.78	-495.32	-4,918.39	2,215.48	1,835.46	380.01	5.830		
13,500.00	7,237.79	7,182.79	7,237.79	183.13	249.03	-89.76	-495.32	-4,918.39	2,284.53	1,906.46	378.08	6.043		
13,600.00	7,237.37	7,182.37	7,237.37	185.93	249.01	-89.75	-495.32	-4,918.39	2,355.81	1,979.67	376.14	6.263		
13,700.00	7,236.95	7,181.95	7,236.95	188.74	249.00	-89.73	-495.32	-4,918.39	2,429.12	2,054.88	374.23	6.491		
13,800.00	7,236.53	7,181.53	7,236.53	191.55	248.98	-89.72	-495.32	-4,918.39	2,504.27	2,131.91	372.36	6.725		
13,900.00	7,236.11	7,181.11	7,236.11	194.36	248.97	-89.70	-495.32	-4,918.39	2,581.11	2,210.59	370.52	6.966		
14,000.00	7,235.69	7,180.69	7,235.69	197.17	248.95	-89.69	-495.32	-4,918.39	2,659.48	2,290.76	368.73	7.213		
14,100.00	7,235.27	7,180.27	7,235.27	199.98	248.94	-89.67	-495.32	-4,918.39	2,739.27	2,372.28	366.99	7.464		
14,200.00	7,234.85	7,179.85	7,234.85	202.80	248.93	-89.66	-495.32	-4,918.39	2,820.35	2,455.05	365.30	7.721		
14,300.00	7,234.43	7,179.43	7,234.43	205.61	248.91	-89.64	-495.32	-4,918.39	2,902.60	2,538.93	363.67	7.981		
14,400.00	7,234.01	7,179.01	7,234.01	208.43	248.90	-89.63	-495.32	-4,918.39	2,985.94	2,623.84	362.10	8.246		
14,500.00	7,233.59	7,178.59	7,233.59	211.25	248.88	-89.61	-495.32	-4,918.39	3,070.28	2,709.69	360.59	8.515		
14,600.00	7,233.17	7,178.17	7,233.17	214.06	248.87	-89.60	-495.32	-4,918.39	3,155.53	2,796.40	359.13	8.787		
14,700.00	7,232.75	7,177.75	7,232.75	216.88	248.85	-89.58	-495.32	-4,918.39	3,241.62	2,883.90	357.72	9.062		
14,800.00	7,232.33	7,177.33	7,232.33	219.70	248.84	-89.57	-495.32	-4,918.39	3,328.49	2,972.12	356.37	9.340		
14,900.00	7,231.91	7,176.91	7,231.91	222.52	248.82	-89.56	-495.32	-4,918.39	3,416.08	3,061.01	355.08	9.621		
15,000.00	7,231.49	7,176.49	7,231.49	225.35	248.81	-89.54	-495.32	-4,918.39	3,504.33	3,150.50	353.83	9.904		
15,100.00	7,231.07	7,176.07	7,231.07	228.17	248.79	-89.53	-495.32	-4,918.39	3,593.20	3,240.57	352.63	10.190		
15,116.21	7,231.00	7,176.00	7,231.00	228.63	248.79	-89.52	-495.32	-4,918.39	3,607.67	3,255.22	352.44	10.236		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	58.00	0.00	3.28	-112.70	-3,202.87	-7,656.15	8,299.30					
100.00	100.00	42.00	100.00	0.18	3.36	-112.70	-3,202.87	-7,656.15	8,299.09	8,295.56	3.54	2,346.717		
200.00	200.00	142.00	200.00	0.61	4.59	-112.70	-3,202.87	-7,656.15	8,299.09	8,293.89	5.20	1,594.485		
300.00	300.00	242.00	300.00	1.05	7.46	-112.70	-3,202.87	-7,656.15	8,299.09	8,290.58	8.52	974.611		
400.00	400.00	342.00	400.00	1.49	10.71	-112.70	-3,202.87	-7,656.15	8,299.09	8,286.89	12.20	680.239		
500.00	500.00	442.00	500.00	1.93	14.07	-112.70	-3,202.87	-7,656.15	8,299.09	8,283.09	16.00	518.599		
600.00	599.98	541.98	599.98	2.37	17.49	-104.96	-3,202.87	-7,656.15	8,299.54	8,279.69	19.85	418.028		
700.00	699.84	641.84	699.84	2.81	20.92	-104.97	-3,202.87	-7,656.15	8,300.90	8,277.17	23.73	349.866		
800.00	799.45	741.45	799.45	3.26	24.36	-104.98	-3,202.87	-7,656.15	8,303.16	8,275.55	27.60	300.785		
900.00	898.70	840.70	898.70	3.70	27.80	-105.00	-3,202.87	-7,656.15	8,306.33	8,274.85	31.48	263.832		
1,000.00	997.47	939.47	997.47	4.15	31.22	-105.02	-3,202.87	-7,656.15	8,310.43	8,275.07	35.36	235.051		
1,100.00	1,095.78	1,037.78	1,095.78	4.60	34.64	-105.11	-3,202.87	-7,656.15	8,315.26	8,276.04	39.22	212.003		
1,200.00	1,194.05	1,136.05	1,194.05	5.05	38.06	-105.23	-3,202.87	-7,656.15	8,320.18	8,277.08	43.10	193.063		
1,300.00	1,292.33	1,234.33	1,292.33	5.50	41.47	-105.36	-3,202.87	-7,656.15	8,325.13	8,278.16	46.97	177.225		
1,400.00	1,390.61	1,332.61	1,390.61	5.96	44.90	-105.48	-3,202.87	-7,656.15	8,330.12	8,279.27	50.86	163.790		
1,500.00	1,488.89	1,430.89	1,488.89	6.43	48.32	-105.60	-3,202.87	-7,656.15	8,335.15	8,280.41	54.75	152.253		
1,600.00	1,587.16	1,529.16	1,587.16	6.89	51.74	-105.72	-3,202.87	-7,656.15	8,340.22	8,281.59	58.64	142.239		
1,700.00	1,685.44	1,627.44	1,685.44	7.36	55.17	-105.84	-3,202.87	-7,656.15	8,345.33	8,282.80	62.53	133.466		
1,800.00	1,783.72	1,725.72	1,783.72	7.83	58.59	-105.96	-3,202.87	-7,656.15	8,350.47	8,284.05	66.42	125.719		
1,900.00	1,882.00	1,824.00	1,882.00	8.30	62.02	-106.08	-3,202.87	-7,656.15	8,355.65	8,285.34	70.32	118.828		
2,000.00	1,980.27	1,922.27	1,980.27	8.77	65.44	-106.20	-3,202.87	-7,656.15	8,360.87	8,286.66	74.21	112.659		
2,100.00	2,078.55	2,020.55	2,078.55	9.25	68.87	-106.32	-3,202.87	-7,656.15	8,366.13	8,288.02	78.11	107.104		
2,200.00	2,176.83	2,118.83	2,176.83	9.72	72.30	-106.44	-3,202.87	-7,656.15	8,371.42	8,289.41	82.01	102.077		
2,300.00	2,275.11	2,217.11	2,275.11	10.19	75.72	-106.55	-3,202.87	-7,656.15	8,376.76	8,290.85	85.91	97.506		
2,400.00	2,373.38	2,315.38	2,373.38	10.66	79.15	-106.67	-3,202.87	-7,656.15	8,382.13	8,292.31	89.81	93.331		
2,500.00	2,471.66	2,413.66	2,471.66	11.14	82.58	-106.79	-3,202.87	-7,656.15	8,387.53	8,293.82	93.71	89.504		
2,600.00	2,569.94	2,511.94	2,569.94	11.61	86.01	-106.91	-3,202.87	-7,656.15	8,392.98	8,295.36	97.61	85.982		
2,700.00	2,668.22	2,610.22	2,668.22	12.09	89.44	-107.03	-3,202.87	-7,656.15	8,398.46	8,296.94	101.51	82.731		
2,800.00	2,766.49	2,708.49	2,766.49	12.56	92.87	-107.15	-3,202.87	-7,656.15	8,403.97	8,298.56	105.42	79.721		
2,900.00	2,864.77	2,806.77	2,864.77	13.04	96.29	-107.27	-3,202.87	-7,656.15	8,409.53	8,300.21	109.32	76.926		
3,000.00	2,963.05	2,905.05	2,963.05	13.51	99.72	-107.39	-3,202.87	-7,656.15	8,415.12	8,301.90	113.22	74.324		
3,100.00	3,061.33	3,003.33	3,061.33	13.99	103.15	-107.50	-3,202.87	-7,656.15	8,420.75	8,303.62	117.13	71.895		
3,200.00	3,159.60	3,101.60	3,159.60	14.46	106.58	-107.62	-3,202.87	-7,656.15	8,426.41	8,305.39	121.03	69.623		
3,300.00	3,257.88	3,200.12	3,257.88	14.94	110.02	-107.74	-3,202.87	-7,656.15	8,432.12	8,307.18	124.94	67.488		
3,400.00	3,356.16	3,301.84	3,356.16	15.41	113.57	-107.86	-3,202.87	-7,656.15	8,437.86	8,308.89	128.97	65.427		
3,500.00	3,454.43	3,403.57	3,454.43	15.89	117.12	-107.98	-3,202.87	-7,656.15	8,443.63	8,310.64	132.99	63.491		
3,600.00	3,552.71	3,505.29	3,552.71	16.36	120.67	-108.09	-3,202.87	-7,656.15	8,449.44	8,312.43	137.01	61.668		
3,700.00	3,650.99	3,607.01	3,650.99	16.84	124.22	-108.21	-3,202.87	-7,656.15	8,455.29	8,314.25	141.04	59.950		
3,800.00	3,749.27	3,708.73	3,749.27	17.32	127.77	-108.33	-3,202.87	-7,656.15	8,461.17	8,316.11	145.06	58.327		
3,900.00	3,847.54	3,789.54	3,847.54	17.79	130.59	-108.44	-3,202.87	-7,656.15	8,467.10	8,318.74	148.36	57.072		
4,000.00	3,945.82	3,887.82	3,945.82	18.27	134.02	-108.56	-3,202.87	-7,656.15	8,473.05	8,320.79	152.26	55.647		
4,100.00	4,044.10	3,986.10	4,044.10	18.75	137.45	-108.68	-3,202.87	-7,656.15	8,479.05	8,322.88	156.17	54.294		
4,200.00	4,142.38	4,084.38	4,142.38	19.22	140.88	-108.79	-3,202.87	-7,656.15	8,485.07	8,325.00	160.07	53.008		
4,300.00	4,240.65	4,182.65	4,240.65	19.70	144.31	-108.91	-3,202.87	-7,656.15	8,491.14	8,327.16	163.98	51.782		
4,400.00	4,338.93	4,280.93	4,338.93	20.18	147.74	-109.03	-3,202.87	-7,656.15	8,497.24	8,329.36	167.88	50.614		
4,500.00	4,437.21	4,379.21	4,437.21	20.65	151.17	-109.14	-3,202.87	-7,656.15	8,503.38	8,331.59	171.79	49.499		
4,600.00	4,535.49	4,477.49	4,535.49	21.13	154.60	-109.26	-3,202.87	-7,656.15	8,509.55	8,333.86	175.69	48.434		
4,700.00	4,633.76	4,575.76	4,633.76	21.61	158.03	-109.37	-3,202.87	-7,656.15	8,515.76	8,336.16	179.60	47.416		
4,800.00	4,732.04	4,674.04	4,732.04	22.08	161.46	-109.49	-3,202.87	-7,656.15	8,522.00	8,338.50	183.50	46.441		
4,900.00	4,830.32	4,772.32	4,830.32	22.56	164.89	-109.60	-3,202.87	-7,656.15	8,528.28	8,340.87	187.41	45.506		
5,000.00	4,928.60	4,870.60	4,928.60	23.04	168.32	-109.72	-3,202.87	-7,656.15	8,534.59	8,343.28	191.31	44.611		
5,100.00	5,026.87	4,968.87	5,026.87	23.51	171.75	-109.83	-3,202.87	-7,656.15	8,540.94	8,345.72	195.22	43.751		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,067.15	5,125.15	23.99	175.18	-109.95	-3,202.87	-7,656.15	8,547.33	8,348.20	199.12	42.925		
5,300.00	5,223.43	5,165.43	5,223.43	24.47	178.61	-110.06	-3,202.87	-7,656.15	8,553.75	8,350.72	203.03	42.131		
5,400.00	5,321.71	5,263.71	5,321.71	24.94	182.04	-110.18	-3,202.87	-7,656.15	8,560.20	8,353.27	206.93	41.367		
5,500.00	5,419.98	5,361.98	5,419.98	25.42	185.47	-110.29	-3,202.87	-7,656.15	8,566.69	8,355.85	210.84	40.631		
5,600.00	5,518.26	5,460.26	5,518.26	25.90	188.90	-110.41	-3,202.87	-7,656.15	8,573.22	8,358.47	214.74	39.923		
5,700.00	5,616.54	5,558.54	5,616.54	26.38	192.33	-110.52	-3,202.87	-7,656.15	8,579.78	8,361.13	218.65	39.240		
5,800.00	5,714.82	5,656.82	5,714.82	26.85	195.76	-110.63	-3,202.87	-7,656.15	8,586.37	8,363.82	222.56	38.581		
5,900.00	5,813.09	5,755.09	5,813.09	27.33	199.19	-110.75	-3,202.87	-7,656.15	8,593.00	8,366.54	226.46	37.945		
6,000.00	5,911.37	5,853.37	5,911.37	27.81	202.62	-110.86	-3,202.87	-7,656.15	8,599.67	8,369.30	230.37	37.330		
6,100.00	6,009.65	5,951.65	6,009.65	28.28	206.05	-110.97	-3,202.87	-7,656.15	8,606.37	8,372.09	234.27	36.737		
6,200.00	6,107.93	6,049.93	6,107.93	28.76	209.48	-111.09	-3,202.87	-7,656.15	8,613.10	8,374.92	238.18	36.163		
6,300.00	6,206.20	6,148.20	6,206.20	29.24	212.91	-111.20	-3,202.87	-7,656.15	8,619.87	8,377.78	242.08	35.607		
6,400.00	6,304.48	6,246.48	6,304.48	29.72	216.34	-111.31	-3,202.87	-7,656.15	8,626.67	8,380.68	245.99	35.070		
6,500.00	6,402.76	6,344.76	6,402.76	30.19	219.77	-111.42	-3,202.87	-7,656.15	8,633.50	8,383.61	249.89	34.549		
6,600.00	6,501.04	6,443.04	6,501.04	30.67	223.21	-111.54	-3,202.87	-7,656.15	8,640.37	8,386.58	253.80	34.044		
6,700.00	6,599.31	6,541.31	6,599.31	31.15	226.64	-111.65	-3,202.87	-7,656.15	8,647.28	8,389.57	257.70	33.555		
6,800.00	6,697.59	6,639.59	6,697.59	31.63	230.06	-90.73	-3,202.87	-7,656.15	8,652.60	8,390.99	261.61	33.075		
6,900.00	6,794.18	6,736.18	6,794.18	32.10	233.44	-65.35	-3,202.87	-7,656.15	8,646.01	8,380.55	265.46	32.570		
7,000.00	6,886.96	6,828.96	6,886.96	32.55	236.68	-54.95	-3,202.87	-7,656.15	8,625.90	8,356.74	269.17	32.047		
7,100.00	6,973.57	6,915.57	6,973.57	32.99	239.70	-50.94	-3,202.87	-7,656.15	8,592.85	8,320.20	272.65	31.517		
7,200.00	7,051.87	7,006.13	7,051.87	33.41	242.86	-50.31	-3,202.87	-7,656.15	8,547.73	8,271.47	276.26	30.941		
7,300.00	7,119.93	7,061.93	7,119.93	33.85	244.81	-52.14	-3,202.87	-7,656.15	8,491.73	8,213.08	278.66	30.474		
7,400.00	7,176.09	7,118.09	7,176.09	34.39	246.77	-56.25	-3,202.87	-7,656.15	8,426.30	8,145.22	281.08	29.978		
7,500.00	7,218.95	7,160.95	7,218.95	35.09	248.27	-62.88	-3,202.87	-7,656.15	8,353.10	8,070.03	283.07	29.509		
7,600.00	7,247.46	7,189.46	7,247.46	35.98	249.26	-72.37	-3,202.87	-7,656.15	8,273.95	7,989.37	284.58	29.074		
7,700.00	7,260.92	7,202.92	7,260.92	37.04	249.73	-84.75	-3,202.87	-7,656.15	8,190.83	7,905.23	285.60	28.679		
7,800.00	7,261.75	7,203.75	7,261.75	38.23	249.76	-90.39	-3,202.87	-7,656.15	8,105.94	7,819.74	286.20	28.322		
7,900.00	7,261.33	7,203.33	7,261.33	39.59	249.74	-90.38	-3,202.87	-7,656.15	8,021.26	7,734.43	286.83	27.965		
8,000.00	7,260.91	7,202.91	7,260.91	41.10	249.73	-90.38	-3,202.87	-7,656.15	7,936.93	7,649.41	287.53	27.604		
8,100.00	7,260.49	7,202.49	7,260.49	42.75	249.72	-90.37	-3,202.87	-7,656.15	7,852.98	7,564.68	288.30	27.239		
8,200.00	7,260.07	7,202.07	7,260.07	44.53	249.70	-90.36	-3,202.87	-7,656.15	7,769.40	7,480.26	289.14	26.871		
8,300.00	7,259.65	7,201.65	7,259.65	46.41	249.69	-90.36	-3,202.87	-7,656.15	7,686.21	7,396.15	290.06	26.499		
8,400.00	7,259.23	7,201.23	7,259.23	48.39	249.67	-90.35	-3,202.87	-7,656.15	7,603.43	7,312.38	291.05	26.124		
8,500.00	7,258.81	7,200.81	7,258.81	50.45	249.66	-90.35	-3,202.87	-7,656.15	7,521.07	7,228.95	292.12	25.746		
8,600.00	7,258.39	7,200.39	7,258.39	52.59	249.64	-90.34	-3,202.87	-7,656.15	7,439.14	7,145.88	293.26	25.367		
8,700.00	7,257.97	7,200.03	7,257.97	54.79	249.63	-90.34	-3,202.87	-7,656.15	7,357.66	7,063.18	294.48	24.985		
8,800.00	7,257.55	7,200.45	7,257.55	57.05	249.64	-90.33	-3,202.87	-7,656.15	7,276.64	6,980.84	295.79	24.600		
8,900.00	7,257.13	7,200.87	7,257.13	59.36	249.66	-90.32	-3,202.87	-7,656.15	7,196.09	6,898.91	297.18	24.214		
9,000.00	7,256.71	7,201.29	7,256.71	61.72	249.67	-90.32	-3,202.87	-7,656.15	7,116.04	6,817.40	298.64	23.828		
9,100.00	7,256.29	7,201.71	7,256.29	64.12	249.69	-90.31	-3,202.87	-7,656.15	7,036.50	6,736.33	300.18	23.441		
9,200.00	7,255.87	7,202.13	7,255.87	66.56	249.70	-90.31	-3,202.87	-7,656.15	6,957.49	6,655.71	301.78	23.055		
9,300.00	7,255.45	7,202.55	7,255.45	69.02	249.72	-90.30	-3,202.87	-7,656.15	6,879.03	6,575.58	303.45	22.669		
9,400.00	7,255.03	7,202.97	7,255.03	71.52	249.73	-90.30	-3,202.87	-7,656.15	6,801.13	6,495.93	305.20	22.284		
9,500.00	7,254.61	7,203.39	7,254.61	74.04	249.75	-90.29	-3,202.87	-7,656.15	6,723.81	6,416.80	307.01	21.901		
9,600.00	7,254.19	7,203.81	7,254.19	76.58	249.76	-90.29	-3,202.87	-7,656.15	6,647.10	6,338.21	308.90	21.519		
9,700.00	7,253.77	7,204.23	7,253.77	79.15	249.78	-90.28	-3,202.87	-7,656.15	6,571.02	6,260.17	310.85	21.139		
9,800.00	7,253.35	7,204.66	7,253.35	81.74	249.79	-90.27	-3,202.87	-7,656.15	6,495.58	6,182.71	312.87	20.761		
9,900.00	7,252.92	7,205.08	7,252.92	84.34	249.81	-90.27	-3,202.87	-7,656.15	6,420.82	6,105.86	314.96	20.386		
10,000.00	7,252.50	7,205.50	7,252.50	86.96	249.82	-90.26	-3,202.87	-7,656.15	6,346.75	6,029.63	317.12	20.014		
10,100.00	7,252.08	7,205.92	7,252.08	89.59	249.84	-90.26	-3,202.87	-7,656.15	6,273.40	5,954.05	319.35	19.644		
10,200.00	7,251.66	7,206.34	7,251.66	92.24	249.85	-90.25	-3,202.87	-7,656.15	6,200.79	5,879.15	321.65	19.278		
10,300.00	7,251.24	7,206.76	7,251.24	94.90	249.86	-90.25	-3,202.87	-7,656.15	6,128.96	5,804.95	324.01	18.916		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,250.82	7,207.18	7,250.82	97.57	249.88	-90.24	-3,202.87	-7,656.15	6,057.93	5,731.49	326.44	18.557		
10,500.00	7,250.40	7,207.60	7,250.40	100.25	249.89	-90.23	-3,202.87	-7,656.15	5,987.72	5,658.78	328.94	18.203		
10,600.00	7,249.98	7,208.02	7,249.98	102.93	249.91	-90.23	-3,202.87	-7,656.15	5,918.37	5,586.86	331.51	17.853		
10,700.00	7,249.56	7,191.56	7,249.56	105.63	249.33	-90.22	-3,202.87	-7,656.15	5,849.91	5,516.36	333.55	17.538		
10,800.00	7,249.14	7,191.14	7,249.14	108.34	249.32	-90.22	-3,202.87	-7,656.15	5,782.36	5,446.14	336.22	17.198		
10,900.00	7,248.72	7,190.72	7,248.72	111.05	249.30	-90.21	-3,202.87	-7,656.15	5,715.77	5,376.82	338.95	16.863		
11,000.00	7,248.30	7,190.30	7,248.30	113.77	249.29	-90.21	-3,202.87	-7,656.15	5,650.16	5,308.41	341.75	16.533		
11,100.00	7,247.88	7,189.88	7,247.88	116.50	249.28	-90.20	-3,202.87	-7,656.15	5,585.58	5,240.96	344.62	16.208		
11,200.00	7,247.46	7,189.46	7,247.46	119.23	249.26	-90.20	-3,202.87	-7,656.15	5,522.04	5,174.50	347.55	15.889		
11,300.00	7,247.04	7,189.04	7,247.04	121.97	249.25	-90.19	-3,202.87	-7,656.15	5,459.60	5,109.06	350.54	15.575		
11,400.00	7,246.62	7,188.62	7,246.62	124.72	249.23	-90.18	-3,202.87	-7,656.15	5,398.29	5,044.70	353.59	15.267		
11,500.00	7,246.20	7,188.20	7,246.20	127.46	249.22	-90.18	-3,202.87	-7,656.15	5,338.15	4,981.45	356.70	14.965		
11,600.00	7,245.78	7,187.78	7,245.78	130.22	249.20	-90.17	-3,202.87	-7,656.15	5,279.22	4,919.35	359.87	14.670		
11,700.00	7,245.36	7,187.36	7,245.36	132.98	249.19	-90.17	-3,202.87	-7,656.15	5,221.54	4,858.44	363.10	14.380		
11,800.00	7,244.94	7,186.94	7,244.94	135.74	249.17	-90.16	-3,202.87	-7,656.15	5,165.15	4,798.77	366.38	14.098		
11,900.00	7,244.52	7,186.52	7,244.52	138.50	249.16	-90.16	-3,202.87	-7,656.15	5,110.10	4,740.38	369.72	13.822		
12,000.00	7,244.10	7,186.10	7,244.10	141.27	249.14	-90.15	-3,202.87	-7,656.15	5,056.42	4,683.32	373.10	13.552		
12,100.00	7,243.68	7,185.68	7,243.68	144.04	249.13	-90.14	-3,202.87	-7,656.15	5,004.17	4,627.64	376.53	13.290		
12,200.00	7,243.26	7,185.26	7,243.26	146.82	249.11	-90.14	-3,202.87	-7,656.15	4,953.39	4,573.38	380.01	13.035		
12,300.00	7,242.84	7,184.84	7,242.84	149.60	249.10	-90.13	-3,202.87	-7,656.15	4,904.11	4,520.59	383.52	12.787		
12,400.00	7,242.42	7,184.42	7,242.42	152.38	249.08	-90.13	-3,202.87	-7,656.15	4,856.40	4,469.33	387.07	12.546		
12,500.00	7,242.00	7,184.00	7,242.00	155.16	249.07	-90.12	-3,202.87	-7,656.15	4,810.30	4,419.64	390.66	12.313		
12,600.00	7,241.58	7,183.58	7,241.58	157.95	249.06	-90.12	-3,202.87	-7,656.15	4,765.84	4,371.57	394.27	12.088		
12,700.00	7,241.16	7,183.16	7,241.16	160.74	249.04	-90.11	-3,202.87	-7,656.15	4,723.09	4,325.18	397.90	11.870		
12,800.00	7,240.74	7,182.74	7,240.74	163.53	249.03	-90.11	-3,202.87	-7,656.15	4,682.08	4,280.52	401.56	11.660		
12,900.00	7,240.32	7,182.32	7,240.32	166.32	249.01	-90.10	-3,202.87	-7,656.15	4,642.86	4,237.64	405.22	11.458		
13,000.00	7,239.89	7,181.89	7,239.89	169.12	249.00	-90.09	-3,202.87	-7,656.15	4,605.48	4,196.59	408.89	11.263		
13,100.00	7,239.47	7,181.47	7,239.47	171.92	248.98	-90.09	-3,202.87	-7,656.15	4,569.98	4,157.42	412.56	11.077		
13,200.00	7,239.05	7,181.05	7,239.05	174.72	248.97	-90.08	-3,202.87	-7,656.15	4,536.41	4,120.19	416.23	10.899		
13,300.00	7,238.63	7,180.63	7,238.63	177.52	248.95	-90.08	-3,202.87	-7,656.15	4,504.82	4,084.94	419.88	10.729		
13,400.00	7,238.21	7,180.21	7,238.21	180.32	248.94	-90.07	-3,202.87	-7,656.15	4,475.23	4,051.72	423.51	10.567		
13,500.00	7,237.79	7,179.79	7,237.79	183.13	248.92	-90.07	-3,202.87	-7,656.15	4,447.69	4,020.58	427.11	10.413		
13,600.00	7,237.37	7,179.37	7,237.37	185.93	248.91	-90.06	-3,202.87	-7,656.15	4,422.25	3,991.57	430.68	10.268		
13,700.00	7,236.95	7,178.95	7,236.95	188.74	248.89	-90.05	-3,202.87	-7,656.15	4,398.93	3,964.73	434.20	10.131		
13,800.00	7,236.53	7,178.53	7,236.53	191.55	248.88	-90.05	-3,202.87	-7,656.15	4,377.77	3,940.09	437.68	10.002		
13,900.00	7,236.11	7,178.11	7,236.11	194.36	248.86	-90.04	-3,202.87	-7,656.15	4,358.80	3,917.71	441.10	9.882		
14,000.00	7,235.69	7,177.69	7,235.69	197.17	248.85	-90.04	-3,202.87	-7,656.15	4,342.06	3,897.61	444.45	9.770		
14,100.00	7,235.27	7,177.27	7,235.27	199.98	248.84	-90.03	-3,202.87	-7,656.15	4,327.56	3,879.83	447.73	9.666		
14,200.00	7,234.85	7,176.85	7,234.85	202.80	248.82	-90.03	-3,202.87	-7,656.15	4,315.33	3,864.40	450.93	9.570		
14,300.00	7,234.43	7,176.43	7,234.43	205.61	248.81	-90.02	-3,202.87	-7,656.15	4,305.39	3,851.34	454.05	9.482		
14,400.00	7,234.01	7,176.01	7,234.01	208.43	248.79	-90.02	-3,202.87	-7,656.15	4,297.75	3,840.68	457.07	9.403		
14,500.00	7,233.59	7,175.59	7,233.59	211.25	248.78	-90.01	-3,202.87	-7,656.15	4,292.43	3,832.43	460.00	9.331		
14,600.00	7,233.17	7,175.17	7,233.17	214.06	248.76	-90.00	-3,202.87	-7,656.15	4,289.43	3,826.62	462.82	9.268		
14,678.52	7,232.84	7,174.84	7,232.84	216.28	248.75	-90.00	-3,202.87	-7,656.15	4,288.72	3,823.76	464.96	9.224 CC		
14,700.00	7,232.75	7,174.75	7,232.75	216.88	248.75	-90.00	-3,202.87	-7,656.15	4,288.77	3,823.24	465.53	9.213		
14,800.00	7,232.33	7,174.33	7,232.33	219.70	248.73	-89.99	-3,202.87	-7,656.15	4,290.44	3,822.31	468.13	9.165 ES		
14,900.00	7,231.91	7,173.91	7,231.91	222.52	248.72	-89.99	-3,202.87	-7,656.15	4,294.43	3,823.82	470.61	9.125		
15,000.00	7,231.49	7,173.49	7,231.49	225.35	248.70	-89.98	-3,202.87	-7,656.15	4,300.75	3,827.78	472.96	9.093		
15,100.00	7,231.07	7,173.07	7,231.07	228.17	248.69	-89.98	-3,202.87	-7,656.15	4,309.38	3,834.18	475.20	9.069		
15,116.21	7,231.00	7,173.00	7,231.00	228.63	248.69	-89.98	-3,202.87	-7,656.15	4,310.99	3,835.45	475.54	9.065 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	45.00	0.00	3.28	-104.70	-1,711.00	-6,520.53	6,741.43					
100.00	100.00	55.00	100.00	0.18	3.42	-104.70	-1,711.00	-6,520.53	6,741.28	6,737.68	3.59	1,876.148		
200.00	200.00	155.00	200.00	0.61	4.92	-104.70	-1,711.00	-6,520.53	6,741.28	6,735.75	5.53	1,218.357		
300.00	300.00	255.00	300.00	1.05	7.87	-104.70	-1,711.00	-6,520.53	6,741.28	6,732.35	8.93	755.287		
400.00	400.00	355.00	400.00	1.49	11.14	-104.70	-1,711.00	-6,520.53	6,741.28	6,728.64	12.63	533.618		
500.00	500.00	455.00	500.00	1.93	14.51	-104.70	-1,711.00	-6,520.53	6,741.28	6,724.83	16.44	409.938		
600.00	599.98	554.98	599.98	2.37	17.93	-96.97	-1,711.00	-6,520.53	6,741.49	6,721.19	20.30	332.095		
700.00	699.84	654.84	699.84	2.81	21.37	-97.00	-1,711.00	-6,520.53	6,742.13	6,717.95	24.17	278.904		
800.00	799.45	754.45	799.45	3.26	24.81	-97.05	-1,711.00	-6,520.53	6,743.20	6,715.14	28.05	240.368		
900.00	898.70	853.70	898.70	3.70	28.25	-97.12	-1,711.00	-6,520.53	6,744.71	6,712.78	31.93	211.219		
1,000.00	997.47	952.47	997.47	4.15	31.68	-97.21	-1,711.00	-6,520.53	6,746.69	6,710.88	35.80	188.429		
1,100.00	1,095.78	1,050.78	1,095.78	4.60	35.09	-97.35	-1,711.00	-6,520.53	6,749.04	6,709.37	39.67	170.123		
1,200.00	1,194.05	1,149.05	1,194.05	5.05	38.51	-97.50	-1,711.00	-6,520.53	6,751.47	6,707.93	43.55	155.043		
1,300.00	1,292.33	1,247.33	1,292.33	5.50	41.93	-97.66	-1,711.00	-6,520.53	6,753.95	6,706.53	47.43	142.412		
1,400.00	1,390.61	1,345.61	1,390.61	5.96	45.35	-97.81	-1,711.00	-6,520.53	6,756.48	6,705.17	51.31	131.680		
1,500.00	1,488.89	1,443.89	1,488.89	6.43	48.77	-97.96	-1,711.00	-6,520.53	6,759.06	6,703.86	55.20	122.452		
1,600.00	1,587.16	1,542.16	1,587.16	6.89	52.19	-98.11	-1,711.00	-6,520.53	6,761.69	6,702.60	59.09	114.433		
1,700.00	1,685.44	1,640.44	1,685.44	7.36	55.62	-98.27	-1,711.00	-6,520.53	6,764.37	6,701.39	62.98	107.403		
1,800.00	1,783.72	1,738.72	1,783.72	7.83	59.04	-98.42	-1,711.00	-6,520.53	6,767.09	6,700.22	66.88	101.189		
1,900.00	1,882.00	1,837.00	1,882.00	8.30	62.47	-98.57	-1,711.00	-6,520.53	6,769.87	6,699.10	70.77	95.657		
2,000.00	1,980.27	1,935.27	1,980.27	8.77	65.90	-98.72	-1,711.00	-6,520.53	6,772.70	6,698.03	74.67	90.702		
2,100.00	2,078.55	2,033.55	2,078.55	9.25	69.32	-98.87	-1,711.00	-6,520.53	6,775.57	6,697.00	78.57	86.238		
2,200.00	2,176.83	2,131.83	2,176.83	9.72	72.75	-99.03	-1,711.00	-6,520.53	6,778.50	6,696.03	82.47	82.195		
2,300.00	2,275.11	2,230.11	2,275.11	10.19	76.18	-99.18	-1,711.00	-6,520.53	6,781.47	6,695.10	86.37	78.518		
2,400.00	2,373.38	2,328.38	2,373.38	10.66	79.61	-99.33	-1,711.00	-6,520.53	6,784.49	6,694.22	90.27	75.158		
2,500.00	2,471.66	2,426.66	2,471.66	11.14	83.03	-99.48	-1,711.00	-6,520.53	6,787.56	6,693.39	94.17	72.077		
2,600.00	2,569.94	2,524.94	2,569.94	11.61	86.46	-99.63	-1,711.00	-6,520.53	6,790.68	6,692.61	98.07	69.241		
2,700.00	2,668.22	2,623.22	2,668.22	12.09	89.89	-99.78	-1,711.00	-6,520.53	6,793.85	6,691.88	101.98	66.622		
2,800.00	2,766.49	2,721.49	2,766.49	12.56	93.32	-99.93	-1,711.00	-6,520.53	6,797.07	6,691.19	105.88	64.196		
2,900.00	2,864.77	2,819.77	2,864.77	13.04	96.75	-100.08	-1,711.00	-6,520.53	6,800.34	6,690.55	109.78	61.943		
3,000.00	2,963.05	2,918.05	2,963.05	13.51	100.18	-100.23	-1,711.00	-6,520.53	6,803.65	6,689.96	113.69	59.846		
3,100.00	3,061.33	3,016.33	3,061.33	13.99	103.61	-100.39	-1,711.00	-6,520.53	6,807.01	6,689.42	117.59	57.887		
3,200.00	3,159.60	3,114.60	3,159.60	14.46	107.04	-100.54	-1,711.00	-6,520.53	6,810.43	6,688.93	121.50	56.055		
3,300.00	3,257.88	3,212.88	3,257.88	14.94	110.47	-100.69	-1,711.00	-6,520.53	6,813.89	6,688.49	125.40	54.337		
3,400.00	3,356.16	3,311.16	3,356.16	15.41	113.89	-100.84	-1,711.00	-6,520.53	6,817.40	6,688.09	129.30	52.724		
3,500.00	3,454.43	3,409.43	3,454.43	15.89	117.32	-100.99	-1,711.00	-6,520.53	6,820.95	6,687.74	133.21	51.205		
3,600.00	3,552.71	3,507.71	3,552.71	16.36	120.75	-101.14	-1,711.00	-6,520.53	6,824.56	6,687.44	137.11	49.773		
3,700.00	3,650.99	3,605.99	3,650.99	16.84	124.18	-101.29	-1,711.00	-6,520.53	6,828.21	6,687.19	141.02	48.420		
3,800.00	3,749.27	3,704.27	3,749.27	17.32	127.61	-101.43	-1,711.00	-6,520.53	6,831.91	6,686.99	144.93	47.141		
3,900.00	3,847.54	3,802.54	3,847.54	17.79	131.04	-101.58	-1,711.00	-6,520.53	6,835.66	6,686.83	148.83	45.929		
4,000.00	3,945.82	3,900.82	3,945.82	18.27	134.47	-101.73	-1,711.00	-6,520.53	6,839.46	6,686.72	152.74	44.779		
4,100.00	4,044.10	4,000.90	4,044.10	18.75	137.97	-101.88	-1,711.00	-6,520.53	6,843.31	6,686.60	156.70	43.670		
4,200.00	4,142.38	4,102.62	4,142.38	19.22	141.52	-102.03	-1,711.00	-6,520.53	6,847.20	6,686.47	160.73	42.600		
4,300.00	4,240.65	4,204.35	4,240.65	19.70	145.07	-102.18	-1,711.00	-6,520.53	6,851.14	6,686.38	164.76	41.583		
4,400.00	4,338.93	4,306.07	4,338.93	20.18	148.62	-102.33	-1,711.00	-6,520.53	6,855.13	6,686.34	168.78	40.615		
4,500.00	4,437.21	4,407.79	4,437.21	20.65	152.17	-102.48	-1,711.00	-6,520.53	6,859.16	6,686.35	172.81	39.692		
4,600.00	4,535.49	4,509.51	4,535.49	21.13	155.72	-102.62	-1,711.00	-6,520.53	6,863.25	6,686.41	176.84	38.811		
4,700.00	4,633.76	4,608.76	4,633.76	21.61	159.27	-102.77	-1,711.00	-6,520.53	6,867.38	6,687.30	180.08	38.136		
4,800.00	4,732.04	4,687.04	4,732.04	22.08	161.91	-102.92	-1,711.00	-6,520.53	6,871.55	6,687.57	183.98	37.349		
4,900.00	4,830.32	4,785.32	4,830.32	22.56	165.34	-103.07	-1,711.00	-6,520.53	6,875.78	6,687.89	187.89	36.595		
5,000.00	4,928.60	4,883.60	4,928.60	23.04	168.77	-103.22	-1,711.00	-6,520.53	6,880.05	6,688.25	191.80	35.872		
5,100.00	5,026.87	4,981.87	5,026.87	23.51	172.20	-103.36	-1,711.00	-6,520.53	6,884.37	6,688.67	195.70	35.178		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,080.15	5,125.15	23.99	175.63	-103.51	-1,711.00	-6,520.53	6,888.73	6,689.12	199.61	34.511		
5,300.00	5,223.43	5,178.43	5,223.43	24.47	179.06	-103.66	-1,711.00	-6,520.53	6,893.15	6,689.63	203.52	33.870		
5,400.00	5,321.71	5,276.71	5,321.71	24.94	182.49	-103.80	-1,711.00	-6,520.53	6,897.61	6,690.18	207.42	33.254		
5,500.00	5,419.98	5,374.98	5,419.98	25.42	185.92	-103.95	-1,711.00	-6,520.53	6,902.11	6,690.78	211.33	32.661		
5,600.00	5,518.26	5,473.26	5,518.26	25.90	189.35	-104.10	-1,711.00	-6,520.53	6,906.66	6,691.43	215.23	32.089		
5,700.00	5,616.54	5,571.54	5,616.54	26.38	192.79	-104.24	-1,711.00	-6,520.53	6,911.26	6,692.12	219.14	31.538		
5,800.00	5,714.82	5,669.82	5,714.82	26.85	196.22	-104.39	-1,711.00	-6,520.53	6,915.91	6,692.86	223.05	31.007		
5,900.00	5,813.09	5,768.09	5,813.09	27.33	199.65	-104.53	-1,711.00	-6,520.53	6,920.60	6,693.64	226.95	30.493		
6,000.00	5,911.37	5,866.37	5,911.37	27.81	203.08	-104.68	-1,711.00	-6,520.53	6,925.33	6,694.47	230.86	29.998		
6,100.00	6,009.65	5,964.65	6,009.65	28.28	206.51	-104.83	-1,711.00	-6,520.53	6,930.12	6,695.35	234.77	29.519		
6,200.00	6,107.93	6,062.93	6,107.93	28.76	209.94	-104.97	-1,711.00	-6,520.53	6,934.95	6,696.27	238.67	29.056		
6,300.00	6,206.20	6,161.20	6,206.20	29.24	213.37	-105.12	-1,711.00	-6,520.53	6,939.82	6,697.24	242.58	28.609		
6,400.00	6,304.48	6,259.48	6,304.48	29.72	216.80	-105.26	-1,711.00	-6,520.53	6,944.74	6,698.26	246.48	28.175		
6,500.00	6,402.76	6,357.76	6,402.76	30.19	220.23	-105.41	-1,711.00	-6,520.53	6,949.71	6,699.32	250.39	27.755		
6,600.00	6,501.04	6,456.04	6,501.04	30.67	223.66	-105.55	-1,711.00	-6,520.53	6,954.72	6,700.42	254.30	27.349		
6,700.00	6,599.31	6,554.31	6,599.31	31.15	227.09	-105.69	-1,711.00	-6,520.53	6,959.78	6,701.58	258.20	26.955		
6,800.00	6,697.50	6,652.50	6,697.50	31.63	230.52	-84.86	-1,711.00	-6,520.53	6,963.18	6,701.07	262.11	26.566		
6,900.00	6,794.18	6,749.18	6,794.18	32.10	233.89	-59.54	-1,711.00	-6,520.53	6,954.09	6,688.13	265.96	26.147		
7,000.00	6,886.96	6,841.96	6,886.96	32.55	237.13	-49.13	-1,711.00	-6,520.53	6,930.87	6,661.21	269.66	25.702		
7,100.00	6,973.57	6,928.57	6,973.57	32.99	240.15	-45.04	-1,711.00	-6,520.53	6,894.15	6,621.02	273.13	25.241		
7,200.00	7,051.87	7,006.87	7,051.87	33.41	242.89	-44.30	-1,711.00	-6,520.53	6,844.90	6,568.60	276.29	24.774		
7,300.00	7,119.93	7,074.93	7,119.93	33.85	245.26	-46.03	-1,711.00	-6,520.53	6,784.39	6,505.30	279.09	24.309		
7,400.00	7,176.09	7,131.09	7,176.09	34.39	247.22	-50.21	-1,711.00	-6,520.53	6,714.16	6,432.69	281.47	23.854		
7,500.00	7,218.95	7,173.95	7,218.95	35.09	248.72	-57.32	-1,711.00	-6,520.53	6,635.99	6,352.61	283.39	23.417		
7,600.00	7,247.46	7,202.46	7,247.46	35.98	249.71	-68.20	-1,711.00	-6,520.53	6,551.82	6,267.01	284.81	23.004		
7,700.00	7,260.92	7,215.92	7,260.92	37.04	250.18	-83.37	-1,711.00	-6,520.53	6,463.72	6,178.00	285.72	22.622		
7,800.00	7,261.75	7,216.75	7,261.75	38.23	250.21	-90.49	-1,711.00	-6,520.53	6,373.98	6,087.78	286.20	22.271		
7,900.00	7,261.33	7,216.33	7,261.33	39.59	250.20	-90.48	-1,711.00	-6,520.53	6,284.43	5,997.73	286.69	21.920		
8,000.00	7,260.91	7,215.91	7,260.91	41.10	250.18	-90.47	-1,711.00	-6,520.53	6,195.19	5,907.94	287.25	21.568		
8,100.00	7,260.49	7,215.49	7,260.49	42.75	250.17	-90.46	-1,711.00	-6,520.53	6,106.29	5,818.43	287.86	21.213		
8,200.00	7,260.07	7,215.07	7,260.07	44.53	250.15	-90.45	-1,711.00	-6,520.53	6,017.73	5,729.19	288.54	20.856		
8,300.00	7,259.65	7,214.65	7,259.65	46.41	250.14	-90.45	-1,711.00	-6,520.53	5,929.54	5,640.26	289.28	20.497		
8,400.00	7,259.23	7,214.23	7,259.23	48.39	250.13	-90.44	-1,711.00	-6,520.53	5,841.73	5,551.63	290.10	20.137		
8,500.00	7,258.81	7,213.81	7,258.81	50.45	250.11	-90.43	-1,711.00	-6,520.53	5,754.32	5,463.33	290.98	19.775		
8,600.00	7,258.39	7,213.39	7,258.39	52.59	250.10	-90.42	-1,711.00	-6,520.53	5,667.32	5,375.38	291.94	19.412		
8,700.00	7,257.97	7,212.97	7,257.97	54.79	250.08	-90.41	-1,711.00	-6,520.53	5,580.76	5,287.78	292.98	19.049		
8,800.00	7,257.55	7,212.55	7,257.55	57.05	250.07	-90.40	-1,711.00	-6,520.53	5,494.65	5,200.57	294.09	18.684		
8,900.00	7,257.13	7,212.13	7,257.13	59.36	250.05	-90.39	-1,711.00	-6,520.53	5,409.03	5,113.76	295.27	18.319		
9,000.00	7,256.71	7,211.71	7,256.71	61.72	250.04	-90.39	-1,711.00	-6,520.53	5,323.90	5,027.36	296.54	17.953		
9,100.00	7,256.29	7,211.29	7,256.29	64.12	250.02	-90.38	-1,711.00	-6,520.53	5,239.30	4,941.42	297.89	17.588		
9,200.00	7,255.87	7,210.87	7,255.87	66.56	250.01	-90.37	-1,711.00	-6,520.53	5,155.25	4,855.94	299.32	17.223		
9,300.00	7,255.45	7,210.45	7,255.45	69.02	249.99	-90.36	-1,711.00	-6,520.53	5,071.78	4,770.95	300.83	16.859		
9,400.00	7,255.03	7,210.03	7,255.03	71.52	249.98	-90.35	-1,711.00	-6,520.53	4,988.92	4,686.49	302.43	16.496		
9,500.00	7,254.61	7,209.61	7,254.61	74.04	249.96	-90.34	-1,711.00	-6,520.53	4,906.70	4,602.58	304.12	16.134		
9,600.00	7,254.19	7,209.19	7,254.19	76.58	249.95	-90.34	-1,711.00	-6,520.53	4,825.15	4,519.25	305.90	15.774		
9,700.00	7,253.77	7,208.77	7,253.77	79.15	249.93	-90.33	-1,711.00	-6,520.53	4,744.30	4,436.54	307.77	15.415		
9,800.00	7,253.35	7,208.35	7,253.35	81.74	249.92	-90.32	-1,711.00	-6,520.53	4,664.20	4,354.47	309.73	15.059		
9,900.00	7,252.92	7,207.92	7,252.92	84.34	249.91	-90.31	-1,711.00	-6,520.53	4,584.88	4,273.10	311.78	14.705		
10,000.00	7,252.50	7,207.50	7,252.50	86.96	249.89	-90.30	-1,711.00	-6,520.53	4,506.38	4,192.45	313.93	14.355		
10,100.00	7,252.08	7,207.08	7,252.08	89.59	249.88	-90.29	-1,711.00	-6,520.53	4,428.75	4,112.57	316.18	14.007		
10,200.00	7,251.66	7,206.66	7,251.66	92.24	249.86	-90.28	-1,711.00	-6,520.53	4,352.03	4,033.51	318.52	13.663		
10,300.00	7,251.24	7,206.24	7,251.24	94.90	249.85	-90.28	-1,711.00	-6,520.53	4,276.28	3,955.31	320.96	13.323		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,250.82	7,205.82	7,250.82	97.57	249.83	-90.27	-1,711.00	-6,520.53	4,201.53	3,878.02	323.51	12.987		
10,500.00	7,250.40	7,205.40	7,250.40	100.25	249.82	-90.26	-1,711.00	-6,520.53	4,127.86	3,801.71	326.15	12.656		
10,600.00	7,249.98	7,204.98	7,249.98	102.93	249.80	-90.25	-1,711.00	-6,520.53	4,055.31	3,726.41	328.90	12.330		
10,700.00	7,249.56	7,204.56	7,249.56	105.63	249.79	-90.24	-1,711.00	-6,520.53	3,983.96	3,652.21	331.75	12.009		
10,800.00	7,249.14	7,204.14	7,249.14	108.34	249.77	-90.23	-1,711.00	-6,520.53	3,913.86	3,579.15	334.70	11.693		
10,900.00	7,248.72	7,203.72	7,248.72	111.05	249.76	-90.22	-1,711.00	-6,520.53	3,845.08	3,507.32	337.76	11.384		
11,000.00	7,248.30	7,203.30	7,248.30	113.77	249.74	-90.22	-1,711.00	-6,520.53	3,777.69	3,436.78	340.92	11.081		
11,100.00	7,247.88	7,202.88	7,247.88	116.50	249.73	-90.21	-1,711.00	-6,520.53	3,711.78	3,367.60	344.18	10.784		
11,200.00	7,247.46	7,202.46	7,247.46	119.23	249.71	-90.20	-1,711.00	-6,520.53	3,647.42	3,299.88	347.54	10.495		
11,300.00	7,247.04	7,202.04	7,247.04	121.97	249.70	-90.19	-1,711.00	-6,520.53	3,584.69	3,233.70	350.99	10.213		
11,400.00	7,246.62	7,201.62	7,246.62	124.72	249.69	-90.18	-1,711.00	-6,520.53	3,523.69	3,169.15	354.54	9.939		
11,500.00	7,246.20	7,201.20	7,246.20	127.46	249.67	-90.17	-1,711.00	-6,520.53	3,464.49	3,106.32	358.18	9.673		
11,600.00	7,245.78	7,200.78	7,245.78	130.22	249.66	-90.16	-1,711.00	-6,520.53	3,407.21	3,045.31	361.90	9.415		
11,700.00	7,245.36	7,200.36	7,245.36	132.98	249.64	-90.16	-1,711.00	-6,520.53	3,351.93	2,986.23	365.70	9.166		
11,800.00	7,244.94	7,200.06	7,244.94	135.74	249.63	-90.15	-1,711.00	-6,520.53	3,298.75	2,929.18	369.57	8.926		
11,900.00	7,244.52	7,200.48	7,244.52	138.50	249.65	-90.14	-1,711.00	-6,520.53	3,247.78	2,874.26	373.53	8.695		
12,000.00	7,244.10	7,200.90	7,244.10	141.27	249.66	-90.13	-1,711.00	-6,520.53	3,199.13	2,821.60	377.53	8.474		
12,100.00	7,243.68	7,201.32	7,243.68	144.04	249.67	-90.12	-1,711.00	-6,520.53	3,152.90	2,771.32	381.58	8.263		
12,200.00	7,243.26	7,201.74	7,243.26	146.82	249.69	-90.11	-1,711.00	-6,520.53	3,109.20	2,723.55	385.65	8.062		
12,300.00	7,242.84	7,202.16	7,242.84	149.60	249.70	-90.10	-1,711.00	-6,520.53	3,068.14	2,678.40	389.74	7.872		
12,400.00	7,242.42	7,202.58	7,242.42	152.38	249.72	-90.10	-1,711.00	-6,520.53	3,029.82	2,636.01	393.81	7.694		
12,500.00	7,242.00	7,203.00	7,242.00	155.16	249.73	-90.09	-1,711.00	-6,520.53	2,994.35	2,596.48	397.87	7.526		
12,600.00	7,241.58	7,203.42	7,241.58	157.95	249.75	-90.08	-1,711.00	-6,520.53	2,961.84	2,559.96	401.88	7.370		
12,700.00	7,241.16	7,203.84	7,241.16	160.74	249.76	-90.07	-1,711.00	-6,520.53	2,932.38	2,526.54	405.84	7.225		
12,800.00	7,240.74	7,204.26	7,240.74	163.53	249.78	-90.06	-1,711.00	-6,520.53	2,906.06	2,496.35	409.71	7.093		
12,900.00	7,240.32	7,204.69	7,240.32	166.32	249.79	-90.05	-1,711.00	-6,520.53	2,882.97	2,469.48	413.49	6.972		
13,000.00	7,239.89	7,205.11	7,239.89	169.12	249.81	-90.04	-1,711.00	-6,520.53	2,863.19	2,446.05	417.14	6.864		
13,100.00	7,239.47	7,205.53	7,239.47	171.92	249.82	-90.04	-1,711.00	-6,520.53	2,846.79	2,426.13	420.66	6.767		
13,200.00	7,239.05	7,205.95	7,239.05	174.72	249.84	-90.03	-1,711.00	-6,520.53	2,833.82	2,409.81	424.01	6.683		
13,300.00	7,238.63	7,206.37	7,238.63	177.52	249.85	-90.02	-1,711.00	-6,520.53	2,824.34	2,397.15	427.19	6.611		
13,400.00	7,238.21	7,206.79	7,238.21	180.32	249.87	-90.01	-1,711.00	-6,520.53	2,818.37	2,388.20	430.18	6.552		
13,500.00	7,237.79	7,207.21	7,237.79	183.13	249.88	-90.00	-1,711.00	-6,520.53	2,815.95	2,383.00	432.95	6.504		
13,518.30	7,237.72	7,207.28	7,237.72	183.64	249.88	-90.00	-1,711.00	-6,520.53	2,815.89	2,382.45	433.44	6.497 CC		
13,600.00	7,237.37	7,207.63	7,237.37	185.93	249.89	-89.99	-1,711.00	-6,520.53	2,817.08	2,381.56	435.51	6.468 ES		
13,700.00	7,236.95	7,208.05	7,236.95	188.74	249.91	-89.98	-1,711.00	-6,520.53	2,821.75	2,383.90	437.84	6.445		
13,800.00	7,236.53	7,208.47	7,236.53	191.55	249.92	-89.98	-1,711.00	-6,520.53	2,829.95	2,390.01	439.94	6.433		
13,900.00	7,236.11	7,208.89	7,236.11	194.36	249.94	-89.97	-1,711.00	-6,520.53	2,841.64	2,399.85	441.79	6.432 SF		
14,000.00	7,235.69	7,209.31	7,235.69	197.17	249.95	-89.96	-1,711.00	-6,520.53	2,856.79	2,413.39	443.41	6.443		
14,100.00	7,235.27	7,209.73	7,235.27	199.98	249.97	-89.95	-1,711.00	-6,520.53	2,875.34	2,430.56	444.78	6.465		
14,200.00	7,234.85	7,189.85	7,234.85	202.80	249.27	-89.94	-1,711.00	-6,520.53	2,897.23	2,452.01	445.22	6.507		
14,300.00	7,234.43	7,189.43	7,234.43	205.61	249.26	-89.93	-1,711.00	-6,520.53	2,922.38	2,476.28	446.10	6.551		
14,400.00	7,234.01	7,189.01	7,234.01	208.43	249.24	-89.92	-1,711.00	-6,520.53	2,950.70	2,503.93	446.76	6.605		
14,500.00	7,233.59	7,188.59	7,233.59	211.25	249.23	-89.92	-1,711.00	-6,520.53	2,982.11	2,534.89	447.22	6.668		
14,600.00	7,233.17	7,188.17	7,233.17	214.06	249.22	-89.91	-1,711.00	-6,520.53	3,016.50	2,569.03	447.47	6.741		
14,700.00	7,232.75	7,187.75	7,232.75	216.88	249.20	-89.90	-1,711.00	-6,520.53	3,053.79	2,606.25	447.54	6.824		
14,800.00	7,232.33	7,187.33	7,232.33	219.70	249.19	-89.89	-1,711.00	-6,520.53	3,093.86	2,646.43	447.43	6.915		
14,900.00	7,231.91	7,186.91	7,231.91	222.52	249.17	-89.88	-1,711.00	-6,520.53	3,136.61	2,689.45	447.16	7.015		
15,000.00	7,231.49	7,186.49	7,231.49	225.35	249.16	-89.87	-1,711.00	-6,520.53	3,181.92	2,735.18	446.75	7.122		
15,100.00	7,231.07	7,186.07	7,231.07	228.17	249.14	-89.86	-1,711.00	-6,520.53	3,229.70	2,783.50	446.20	7.238		
15,116.21	7,231.00	7,186.00	7,231.00	228.63	249.14	-89.86	-1,711.00	-6,520.53	3,237.67	2,791.57	446.10	7.258		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	40.00	0.00	3.28	-94.29	-574.41	-7,659.23	7,680.84					
100.00	100.00	100.00	126.85	0.18	3.29	-94.29	-574.12	-7,658.94	7,680.48	7,677.01	3.46	2,217.026		
200.00	200.00	181.72	221.72	0.61	3.33	-94.28	-573.52	-7,658.54	7,680.01	7,676.07	3.94	1,947.651		
280.11	280.11	240.12	280.11	0.97	3.38	-94.28	-573.14	-7,658.49	7,679.90	7,675.56	4.35	1,767.149		
300.00	300.00	254.71	294.70	1.05	3.40	-94.28	-573.07	-7,658.50	7,679.91	7,675.46	4.45	1,726.297		
400.00	400.00	329.46	369.46	1.49	3.49	-94.28	-572.87	-7,658.69	7,680.15	7,675.16	4.98	1,540.983		
500.00	500.00	409.58	449.58	1.93	3.62	-94.28	-572.93	-7,659.13	7,680.69	7,675.14	5.55	1,382.813		
600.00	599.98	518.51	558.50	2.37	3.85	-86.54	-573.20	-7,659.74	7,681.16	7,674.95	6.21	1,236.340		
700.00	699.84	607.70	647.69	2.81	4.06	-86.57	-573.84	-7,660.23	7,681.45	7,674.59	6.86	1,119.423		
800.00	799.45	695.81	735.79	3.26	4.29	-86.63	-574.72	-7,660.83	7,681.69	7,674.16	7.53	1,019.776		
900.00	898.70	796.52	836.49	3.70	4.58	-86.73	-575.74	-7,661.58	7,681.81	7,673.55	8.26	929.674		
1,000.00	997.47	900.08	940.04	4.15	4.90	-86.85	-576.76	-7,662.31	7,681.71	7,672.68	9.03	850.889		
1,100.00	1,095.78	1,003.79	1,043.75	4.60	5.24	-87.00	-577.64	-7,662.98	7,681.44	7,671.62	9.82	782.474		
1,200.00	1,194.05	1,104.56	1,144.52	5.05	5.58	-87.15	-578.21	-7,663.60	7,681.15	7,670.54	10.62	723.524		
1,300.00	1,292.33	1,199.50	1,239.46	5.50	5.91	-87.28	-578.56	-7,664.21	7,680.92	7,669.51	11.41	673.158		
1,400.00	1,390.61	1,312.93	1,352.88	5.96	6.32	-87.44	-578.84	-7,664.86	7,680.65	7,668.37	12.28	625.297		
1,500.00	1,488.89	1,399.40	1,439.35	6.43	6.64	-87.56	-579.10	-7,665.35	7,680.43	7,667.36	13.07	587.731		
1,600.00	1,587.16	1,498.33	1,538.28	6.89	7.02	-87.70	-579.49	-7,665.95	7,680.30	7,666.40	13.91	552.280		
1,681.99	1,667.74	1,573.34	1,613.29	7.28	7.30	-87.80	-579.76	-7,666.43	7,680.26	7,665.68	14.58	526.904		
1,700.00	1,685.44	1,589.79	1,629.74	7.36	7.37	-87.82	-579.82	-7,666.54	7,680.26	7,665.54	14.72	521.630		
1,800.00	1,783.72	1,695.68	1,735.62	7.83	7.77	-87.97	-580.03	-7,667.25	7,680.27	7,664.67	15.60	492.261		
1,841.67	1,824.67	1,735.85	1,775.79	8.03	7.93	-88.03	-580.06	-7,667.50	7,680.26	7,664.31	15.95	481.384		
1,900.00	1,882.00	1,791.38	1,831.31	8.30	8.15	-88.10	-580.13	-7,667.85	7,680.28	7,663.83	16.45	466.992		
2,000.00	1,980.27	1,892.59	1,932.53	8.77	8.55	-88.24	-580.33	-7,668.49	7,680.33	7,663.02	17.32	443.526		
2,100.00	2,078.55	1,982.93	2,022.86	9.25	8.91	-88.37	-580.54	-7,669.07	7,680.46	7,662.31	18.15	423.227		
2,200.00	2,176.83	2,119.38	2,159.32	9.72	9.45	-88.56	-580.62	-7,669.72	7,680.44	7,661.28	19.17	400.732		
2,300.00	2,275.11	2,221.35	2,261.28	10.19	9.86	-88.70	-580.96	-7,669.91	7,680.22	7,660.17	20.05	383.069		
2,400.00	2,373.38	2,322.34	2,372.27	10.66	10.31	-88.86	-581.65	-7,669.91	7,679.88	7,658.91	20.97	366.225		
2,500.00	2,471.66	2,427.82	2,467.75	11.14	10.70	-88.99	-582.14	-7,669.89	7,679.57	7,657.74	21.83	351.771		
2,600.00	2,569.94	2,539.81	2,579.74	11.61	11.16	-89.15	-582.58	-7,669.84	7,679.28	7,656.52	22.76	337.395		
2,700.00	2,668.22	2,669.52	2,709.44	12.09	11.68	-89.33	-582.84	-7,669.35	7,678.67	7,654.90	23.76	323.144		
2,800.00	2,766.49	2,771.38	2,811.30	12.56	12.10	-89.47	-582.68	-7,668.76	7,677.87	7,653.21	24.65	311.441		
2,900.00	2,864.77	2,838.18	2,878.11	13.04	12.37	-89.56	-582.38	-7,668.49	7,677.27	7,651.87	25.40	302.227		
2,953.26	2,917.12	2,867.32	2,907.24	13.29	12.49	-89.60	-582.16	-7,668.51	7,677.18	7,651.41	25.78	297.849		
3,000.00	2,963.05	2,900.01	2,939.93	13.51	12.63	-89.64	-581.87	-7,668.65	7,677.26	7,651.12	26.13	293.787		
3,100.00	3,061.33	2,952.00	2,991.92	13.99	12.84	-89.71	-581.31	-7,669.08	7,677.81	7,650.98	26.82	286.251		
3,200.00	3,159.60	3,017.78	3,057.68	14.46	13.11	-89.80	-580.54	-7,669.96	7,678.89	7,651.32	27.57	278.534		
3,300.00	3,257.88	3,100.01	3,139.89	14.94	13.46	-89.90	-579.41	-7,671.25	7,680.25	7,651.87	28.39	270.570		
3,400.00	3,356.16	3,160.94	3,200.80	15.41	13.71	-89.98	-578.47	-7,672.44	7,682.01	7,652.89	29.11	263.871		
3,500.00	3,454.43	3,222.54	3,262.38	15.89	13.97	-90.05	-577.42	-7,674.02	7,684.34	7,654.49	29.84	257.496		
3,600.00	3,552.71	3,300.01	3,339.80	16.36	14.29	-90.14	-575.97	-7,676.31	7,687.07	7,656.43	30.64	250.883		
3,700.00	3,650.99	3,403.82	3,443.53	16.84	14.73	-90.27	-573.61	-7,679.55	7,689.95	7,658.40	31.55	243.727		
3,800.00	3,749.27	3,536.67	3,576.28	17.32	15.29	-90.42	-569.99	-7,683.38	7,692.56	7,659.97	32.59	236.051		
3,900.00	3,847.54	3,646.10	3,685.63	17.79	15.75	-90.55	-567.19	-7,686.16	7,694.89	7,661.36	33.53	229.524		
4,000.00	3,945.82	3,744.57	3,784.06	18.27	16.16	-90.66	-565.03	-7,688.59	7,697.24	7,662.82	34.42	223.655		
4,100.00	4,044.10	3,844.75	3,884.19	18.75	16.58	-90.79	-563.07	-7,691.00	7,699.59	7,664.28	35.31	218.037		
4,200.00	4,142.38	3,943.83	3,983.22	19.22	17.00	-90.91	-561.37	-7,693.35	7,701.98	7,665.78	36.21	212.723		
4,300.00	4,240.65	4,055.53	4,094.88	19.70	17.47	-91.05	-559.84	-7,695.87	7,704.36	7,667.21	37.15	207.361		
4,400.00	4,338.93	4,157.55	4,196.87	20.18	17.90	-91.17	-558.30	-7,697.99	7,706.57	7,668.51	38.06	202.480		
4,500.00	4,437.21	4,254.48	4,293.77	20.65	18.30	-91.30	-557.13	-7,700.02	7,708.88	7,669.94	38.95	197.938		
4,600.00	4,535.49	4,356.14	4,395.40	21.13	18.73	-91.43	-556.16	-7,702.06	7,711.19	7,671.34	39.85	193.497		
4,700.00	4,633.76	4,463.61	4,502.86	21.61	19.19	-91.57	-555.54	-7,704.11	7,713.49	7,672.71	40.78	189.136		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
4,800.00	4,732.04	4,611.39	4,650.62	22.08	19.81	-91.76	-554.96	-7,706.33	7,715.51	7,673.62	41.89	184.198		
4,900.00	4,830.32	4,703.92	4,743.14	22.56	20.20	-91.89	-554.69	-7,707.44	7,717.25	7,674.50	42.75	180.501		
5,000.00	4,928.60	4,796.46	4,835.67	23.04	20.59	-92.01	-554.41	-7,708.59	7,719.08	7,675.46	43.62	176.951		
5,100.00	5,026.87	4,909.18	4,948.38	23.51	21.07	-92.16	-554.04	-7,709.93	7,720.90	7,676.32	44.58	173.203		
5,200.00	5,125.15	5,007.74	5,046.93	23.99	21.48	-92.29	-553.64	-7,711.03	7,722.67	7,677.20	45.47	169.836		
5,300.00	5,223.43	5,116.20	5,155.39	24.47	21.94	-92.43	-553.15	-7,712.14	7,724.39	7,677.98	46.41	166.444		
5,400.00	5,321.71	5,209.91	5,249.10	24.94	22.34	-92.56	-552.81	-7,713.08	7,726.14	7,678.86	47.28	163.406		
5,500.00	5,419.98	5,338.19	5,377.37	25.42	22.88	-92.73	-552.41	-7,714.26	7,727.90	7,679.60	48.30	159.985		
5,600.00	5,518.26	5,492.02	5,531.20	25.90	23.53	-92.93	-551.41	-7,714.57	7,728.85	7,679.42	49.43	156.355		
5,700.00	5,616.54	5,563.40	5,602.58	26.38	23.84	-93.03	-550.96	-7,714.64	7,729.82	7,679.61	50.21	153.949		
5,800.00	5,714.82	5,647.67	5,686.84	26.85	24.19	-93.14	-550.70	-7,714.98	7,731.16	7,680.12	51.04	151.461		
5,900.00	5,813.09	5,743.80	5,782.97	27.33	24.60	-93.27	-550.39	-7,715.38	7,732.57	7,680.64	51.93	148.907		
6,000.00	5,911.37	5,835.58	5,874.74	27.81	24.99	-93.39	-550.02	-7,715.87	7,734.11	7,681.32	52.79	146.493		
6,100.00	6,009.65	5,924.75	5,963.92	28.28	25.37	-93.51	-549.64	-7,716.40	7,735.75	7,682.10	53.65	144.189		
6,200.00	6,107.93	6,000.01	6,039.18	28.76	25.69	-93.61	-549.41	-7,717.03	7,737.68	7,683.24	54.45	142.118		
6,300.00	6,206.20	6,112.91	6,152.07	29.24	26.17	-93.76	-549.23	-7,718.00	7,739.72	7,684.32	55.40	139.697		
6,400.00	6,304.48	6,175.96	6,215.11	29.72	26.44	-93.85	-549.16	-7,718.64	7,741.95	7,685.80	56.15	137.890		
6,500.00	6,402.76	6,260.47	6,299.62	30.19	26.80	-93.96	-549.16	-7,719.76	7,744.53	7,687.55	56.98	135.914		
6,600.00	6,501.04	6,356.30	6,395.44	30.67	27.20	-94.09	-549.37	-7,721.04	7,747.22	7,689.36	57.87	133.883		
6,700.00	6,599.31	6,469.61	6,508.74	31.15	27.69	-94.24	-549.68	-7,722.48	7,749.92	7,691.10	58.83	131.741		
6,800.00	6,697.50	6,582.34	6,621.47	31.63	28.17	-73.45	-550.24	-7,723.58	7,750.60	7,690.82	59.79	129.640		
6,900.00	6,794.18	6,665.03	6,704.15	32.10	28.52	-47.99	-550.80	-7,724.34	7,738.01	7,677.40	60.61	127.669		
7,000.00	6,886.96	6,737.44	6,776.55	32.55	28.83	-37.15	-551.67	-7,725.10	7,710.67	7,649.30	61.37	125.643		
7,100.00	6,973.57	6,804.19	6,843.29	32.99	29.11	-32.33	-552.59	-7,725.97	7,669.28	7,607.20	62.08	123.542		
7,200.00	7,051.87	6,879.64	6,918.73	33.41	29.43	-30.58	-553.57	-7,727.08	7,614.74	7,551.94	62.79	121.265		
7,300.00	7,119.93	6,933.07	6,972.14	33.85	29.66	-30.88	-554.13	-7,727.95	7,548.34	7,484.96	63.38	119.096		
7,400.00	7,176.09	6,973.06	7,012.12	34.39	29.83	-33.26	-554.50	-7,728.71	7,471.77	7,407.90	63.87	116.980		
7,500.00	7,218.95	7,006.23	7,045.29	35.09	29.97	-38.58	-554.76	-7,729.43	7,386.85	7,322.55	64.30	114.884		
7,600.00	7,247.46	7,037.82	7,076.87	35.98	30.11	-49.45	-554.97	-7,730.14	7,295.56	7,230.88	64.68	112.790		
7,700.00	7,260.92	7,054.02	7,093.06	37.04	30.17	-71.60	-555.06	-7,730.51	7,200.10	7,135.13	64.97	110.827		
7,800.00	7,261.75	7,057.23	7,096.27	38.23	30.19	-85.24	-555.08	-7,730.58	7,102.88	7,037.71	65.17	108.985		
7,900.00	7,261.33	7,059.15	7,098.19	39.59	30.20	-85.31	-555.09	-7,730.62	7,005.64	6,940.26	65.39	107.141		
8,000.00	7,260.91	7,061.08	7,100.12	41.10	30.20	-85.38	-555.10	-7,730.67	6,908.48	6,842.86	65.62	105.277		
8,100.00	7,260.49	7,063.01	7,102.05	42.75	30.21	-85.45	-555.11	-7,730.71	6,811.40	6,745.52	65.88	103.394		
8,200.00	7,260.07	7,064.94	7,103.98	44.53	30.22	-85.51	-555.12	-7,730.76	6,714.40	6,648.25	66.16	101.492		
8,300.00	7,259.65	7,066.88	7,105.91	46.41	30.23	-85.58	-555.13	-7,730.80	6,617.50	6,551.04	66.46	99.571		
8,400.00	7,259.23	7,068.81	7,107.85	48.39	30.24	-85.65	-555.14	-7,730.84	6,520.68	6,453.89	66.79	97.632		
8,500.00	7,258.81	7,070.75	7,109.79	50.45	30.25	-85.71	-555.14	-7,730.89	6,423.97	6,356.82	67.14	95.676		
8,600.00	7,258.39	7,072.69	7,111.73	52.59	30.25	-85.78	-555.15	-7,730.93	6,327.35	6,259.83	67.53	93.703		
8,700.00	7,257.97	7,074.63	7,113.67	54.79	30.26	-85.85	-555.16	-7,730.98	6,230.84	6,162.90	67.94	91.714		
8,800.00	7,257.55	7,076.58	7,115.61	57.05	30.27	-85.92	-555.17	-7,731.02	6,134.44	6,066.06	68.38	89.710		
8,900.00	7,257.13	7,078.53	7,117.56	59.36	30.28	-85.98	-555.18	-7,731.07	6,038.16	5,969.31	68.86	87.692		
9,000.00	7,256.71	7,080.48	7,119.51	61.72	30.29	-86.05	-555.19	-7,731.11	5,942.00	5,872.64	69.37	85.661		
9,100.00	7,256.29	7,082.43	7,121.46	64.12	30.30	-86.12	-555.19	-7,731.16	5,845.97	5,776.06	69.91	83.619		
9,200.00	7,255.87	7,084.39	7,123.42	66.56	30.30	-86.19	-555.20	-7,731.20	5,750.08	5,679.58	70.50	81.566		
9,300.00	7,255.45	7,086.34	7,125.38	69.02	30.31	-86.26	-555.21	-7,731.25	5,654.32	5,583.20	71.12	79.504		
9,400.00	7,255.03	7,088.30	7,127.33	71.52	30.32	-86.32	-555.22	-7,731.29	5,558.72	5,486.93	71.78	77.436		
9,500.00	7,254.61	7,090.26	7,129.30	74.04	30.33	-86.39	-555.22	-7,731.34	5,463.27	5,390.77	72.49	75.362		
9,600.00	7,254.19	7,092.23	7,131.26	76.58	30.34	-86.46	-555.23	-7,731.38	5,367.98	5,294.73	73.25	73.284		
9,700.00	7,253.77	7,094.20	7,133.23	79.15	30.35	-86.53	-555.24	-7,731.43	5,272.87	5,198.82	74.05	71.205		
9,800.00	7,253.35	7,096.17	7,135.20	81.74	30.35	-86.60	-555.25	-7,731.47	5,177.94	5,103.04	74.91	69.126		
9,900.00	7,252.92	7,098.14	7,137.17	84.34	30.36	-86.67	-555.25	-7,731.52	5,083.21	5,007.40	75.81	67.049		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,000.00	7,252.50	7,100.12	7,139.14	86.96	30.37	-86.74	-555.26	-7,731.56	4,988.68	4,911.91	76.78	64.976		
10,100.00	7,252.08	7,102.16	7,141.19	89.59	30.38	-86.81	-555.26	-7,731.61	4,894.37	4,816.57	77.80	62.910		
10,200.00	7,251.66	7,104.19	7,143.22	92.24	30.39	-86.88	-555.27	-7,731.66	4,800.29	4,721.41	78.88	60.853		
10,300.00	7,251.24	7,106.20	7,145.23	94.90	30.40	-86.95	-555.28	-7,731.70	4,706.45	4,626.42	80.03	58.806		
10,400.00	7,250.82	7,108.21	7,147.23	97.57	30.41	-87.02	-555.29	-7,731.75	4,612.87	4,531.62	81.25	56.773		
10,500.00	7,250.40	7,110.19	7,149.22	100.25	30.41	-87.09	-555.29	-7,731.79	4,519.57	4,437.03	82.54	54.756		
10,600.00	7,249.98	7,112.16	7,151.19	102.93	30.42	-87.15	-555.30	-7,731.84	4,426.55	4,342.65	83.90	52.757		
10,700.00	7,249.56	7,114.12	7,153.15	105.63	30.43	-87.22	-555.31	-7,731.88	4,333.85	4,248.50	85.35	50.778		
10,800.00	7,249.14	7,116.07	7,155.09	108.34	30.44	-87.29	-555.32	-7,731.92	4,241.47	4,154.60	86.88	48.822		
10,900.00	7,248.72	7,118.00	7,157.02	111.05	30.45	-87.36	-555.32	-7,731.97	4,149.45	4,060.96	88.49	46.890		
11,000.00	7,248.30	7,119.91	7,158.94	113.77	30.46	-87.43	-555.33	-7,732.01	4,057.81	3,967.60	90.20	44.986		
11,100.00	7,247.88	7,121.82	7,160.84	116.50	30.46	-87.49	-555.34	-7,732.05	3,966.56	3,874.56	92.01	43.110		
11,200.00	7,247.46	7,123.71	7,162.73	119.23	30.47	-87.56	-555.35	-7,732.10	3,875.75	3,781.83	93.92	41.267		
11,300.00	7,247.04	7,125.59	7,164.61	121.97	30.48	-87.62	-555.36	-7,732.14	3,785.41	3,689.47	95.94	39.456		
11,400.00	7,246.62	7,127.45	7,166.47	124.72	30.49	-87.69	-555.36	-7,732.18	3,695.55	3,597.48	98.07	37.681		
11,500.00	7,246.20	7,129.30	7,168.32	127.46	30.50	-87.75	-555.37	-7,732.22	3,606.24	3,505.91	100.33	35.944		
11,600.00	7,245.78	7,131.14	7,170.16	130.22	30.50	-87.82	-555.38	-7,732.26	3,517.49	3,414.78	102.72	34.245		
11,700.00	7,245.36	7,132.97	7,171.99	132.98	30.51	-87.88	-555.39	-7,732.30	3,429.37	3,324.13	105.24	32.588		
11,800.00	7,244.94	7,134.78	7,173.80	135.74	30.52	-87.94	-555.40	-7,732.34	3,341.91	3,234.01	107.90	30.973		
11,900.00	7,244.52	7,136.58	7,175.60	138.50	30.53	-88.01	-555.41	-7,732.38	3,255.17	3,144.46	110.71	29.402		
12,000.00	7,244.10	7,138.37	7,177.39	141.27	30.53	-88.07	-555.42	-7,732.42	3,169.21	3,055.53	113.69	27.877		
12,100.00	7,243.68	7,140.15	7,179.16	144.04	30.54	-88.13	-555.43	-7,732.46	3,084.10	2,967.28	116.83	26.399		
12,200.00	7,243.26	7,141.91	7,180.93	146.82	30.55	-88.19	-555.43	-7,732.49	2,999.91	2,879.77	120.15	24.969		
12,300.00	7,242.84	7,143.66	7,182.68	149.60	30.56	-88.25	-555.44	-7,732.53	2,916.72	2,793.07	123.65	23.589		
12,400.00	7,242.42	7,145.40	7,184.42	152.38	30.56	-88.31	-555.45	-7,732.57	2,834.61	2,707.26	127.35	22.259		
12,500.00	7,242.00	7,147.13	7,186.15	155.16	30.57	-88.37	-555.46	-7,732.61	2,753.68	2,622.43	131.25	20.981		
12,600.00	7,241.58	7,148.85	7,187.87	157.95	30.58	-88.43	-555.47	-7,732.64	2,674.04	2,538.68	135.36	19.755		
12,700.00	7,241.16	7,150.56	7,189.57	160.74	30.59	-88.49	-555.48	-7,732.68	2,595.81	2,456.12	139.69	18.583		
12,800.00	7,240.74	7,152.25	7,191.27	163.53	30.59	-88.55	-555.49	-7,732.72	2,519.12	2,374.87	144.25	17.464		
12,900.00	7,240.32	7,153.94	7,192.95	166.32	30.60	-88.61	-555.50	-7,732.75	2,444.11	2,295.08	149.03	16.400		
13,000.00	7,239.89	7,155.61	7,194.63	169.12	30.61	-88.67	-555.51	-7,732.79	2,370.95	2,216.90	154.06	15.390		
13,100.00	7,239.47	7,157.27	7,196.29	171.92	30.61	-88.73	-555.52	-7,732.82	2,299.81	2,140.50	159.31	14.436		
13,200.00	7,239.05	7,158.92	7,197.94	174.72	30.62	-88.79	-555.53	-7,732.86	2,230.88	2,066.09	164.79	13.538		
13,300.00	7,238.63	7,160.56	7,199.58	177.52	30.63	-88.84	-555.54	-7,732.89	2,164.38	1,993.89	170.49	12.695		
13,400.00	7,238.21	7,162.19	7,201.21	180.32	30.64	-88.90	-555.55	-7,732.92	2,100.54	1,924.14	176.39	11.908		
13,500.00	7,237.79	7,163.81	7,202.83	183.13	30.64	-88.96	-555.56	-7,732.96	2,039.59	1,857.12	182.48	11.177		
13,600.00	7,237.37	7,165.42	7,204.44	185.93	30.65	-89.01	-555.57	-7,732.99	1,981.83	1,793.12	188.71	10.502		
13,700.00	7,236.95	7,167.02	7,206.03	188.74	30.66	-89.07	-555.58	-7,733.02	1,927.52	1,732.47	195.04	9.882		
13,800.00	7,236.53	7,168.61	7,207.62	191.55	30.66	-89.12	-555.59	-7,733.06	1,876.97	1,675.53	201.43	9.318		
13,900.00	7,236.11	7,170.19	7,209.20	194.36	30.67	-89.18	-555.60	-7,733.09	1,830.49	1,622.68	207.81	8.809		
14,000.00	7,235.69	7,171.76	7,210.77	197.17	30.68	-89.23	-555.61	-7,733.12	1,788.39	1,574.30	214.09	8.354		
14,100.00	7,235.27	7,173.31	7,212.32	199.98	30.68	-89.29	-555.62	-7,733.15	1,751.00	1,530.82	220.19	7.952		
14,200.00	7,234.85	7,174.86	7,213.87	202.80	30.69	-89.34	-555.63	-7,733.19	1,718.62	1,492.62	226.01	7.604		
14,300.00	7,234.43	7,176.40	7,215.41	205.61	30.70	-89.40	-555.64	-7,733.22	1,691.54	1,460.10	231.45	7.309		
14,400.00	7,234.01	7,177.93	7,216.94	208.43	30.70	-89.45	-555.65	-7,733.25	1,670.02	1,433.62	236.41	7.064		
14,500.00	7,233.59	7,179.45	7,218.46	211.25	30.71	-89.50	-555.66	-7,733.28	1,654.27	1,413.49	240.78	6.870		
14,600.00	7,233.17	7,180.96	7,219.97	214.06	30.72	-89.56	-555.67	-7,733.31	1,644.46	1,399.97	244.49	6.726		
14,700.00	7,232.75	7,182.46	7,221.47	216.88	30.72	-89.61	-555.68	-7,733.34	1,640.70	1,393.23	247.47	6.630		
14,711.84	7,232.70	7,182.64	7,221.64	217.22	30.72	-89.61	-555.68	-7,733.34	1,640.65	1,392.88	247.77	6.622 CC, ES		
14,800.00	7,232.33	7,183.95	7,222.96	219.70	30.73	-89.66	-555.69	-7,733.37	1,643.02	1,393.35	249.67	6.581		
14,900.00	7,231.91	7,185.43	7,224.44	222.52	30.74	-89.71	-555.70	-7,733.40	1,651.41	1,400.33	251.08	6.577 SF		
15,000.00	7,231.49	7,186.90	7,225.91	225.35	30.74	-89.76	-555.71	-7,733.43	1,665.76	1,414.06	251.70	6.618		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,100.00	7,231.07	7,212.70	7,226.33	228.17	30.85	-89.78	-555.71	-7,733.44	1,685.93	1,434.26	251.67	6.699	
15,116.21	7,231.00	7,212.45	7,226.58	228.63	30.85	-89.79	-555.72	-7,733.45	1,689.74	1,438.16	251.58	6.717	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	63.00	0.00	3.28	-115.01	-1,665.34	-3,569.01	3,938.93					
100.00	100.00	37.00	100.00	0.18	3.34	-115.01	-1,665.34	-3,569.01	3,938.42	3,934.91	3.52	1,119.342		
200.00	200.00	137.00	200.00	0.61	4.47	-115.01	-1,665.34	-3,569.01	3,938.42	3,933.34	5.08	774.595		
300.00	300.00	237.00	300.00	1.05	7.31	-115.01	-1,665.34	-3,569.01	3,938.42	3,930.07	8.36	471.165		
400.00	400.00	337.00	400.00	1.49	10.54	-115.01	-1,665.34	-3,569.01	3,938.42	3,926.39	12.03	327.268		
500.00	500.00	437.00	500.00	1.93	13.90	-115.01	-1,665.34	-3,569.01	3,938.42	3,922.59	15.83	248.744		
600.00	599.98	536.98	599.98	2.37	17.31	-107.28	-1,665.34	-3,569.01	3,938.94	3,919.26	19.68	200.122		
700.00	699.84	636.84	699.84	2.81	20.75	-107.32	-1,665.34	-3,569.01	3,940.50	3,916.95	23.55	167.298		
800.00	799.45	736.45	799.45	3.26	24.19	-107.40	-1,665.34	-3,569.01	3,943.11	3,915.68	27.43	143.739		
900.00	898.70	835.70	898.70	3.70	27.62	-107.49	-1,665.34	-3,569.01	3,946.79	3,915.48	31.31	126.052		
1,000.00	997.47	934.47	997.47	4.15	31.05	-107.62	-1,665.34	-3,569.01	3,951.56	3,916.38	35.18	112.314		
1,100.00	1,095.78	1,032.78	1,095.78	4.60	34.47	-107.83	-1,665.34	-3,569.01	3,957.22	3,918.17	39.05	101.338		
1,200.00	1,194.05	1,131.05	1,194.05	5.05	37.88	-108.08	-1,665.34	-3,569.01	3,963.00	3,920.08	42.92	92.329		
1,300.00	1,292.33	1,229.33	1,292.33	5.50	41.30	-108.33	-1,665.34	-3,569.01	3,968.87	3,922.07	46.80	84.803		
1,400.00	1,390.61	1,327.61	1,390.61	5.96	44.72	-108.58	-1,665.34	-3,569.01	3,974.81	3,924.13	50.68	78.423		
1,500.00	1,488.89	1,425.89	1,488.89	6.43	48.14	-108.83	-1,665.34	-3,569.01	3,980.83	3,926.26	54.57	72.948		
1,600.00	1,587.16	1,524.16	1,587.16	6.89	51.57	-109.07	-1,665.34	-3,569.01	3,986.92	3,928.46	58.46	68.199		
1,700.00	1,685.44	1,622.44	1,685.44	7.36	54.99	-109.32	-1,665.34	-3,569.01	3,993.10	3,930.74	62.35	64.041		
1,800.00	1,783.72	1,720.72	1,783.72	7.83	58.42	-109.57	-1,665.34	-3,569.01	3,999.34	3,933.10	66.25	60.371		
1,900.00	1,882.00	1,819.00	1,882.00	8.30	61.84	-109.81	-1,665.34	-3,569.01	4,005.67	3,935.53	70.14	57.109		
2,000.00	1,980.27	1,917.27	1,980.27	8.77	65.27	-110.06	-1,665.34	-3,569.01	4,012.07	3,938.03	74.04	54.190		
2,100.00	2,078.55	2,015.55	2,078.55	9.25	68.70	-110.30	-1,665.34	-3,569.01	4,018.54	3,940.61	77.93	51.563		
2,200.00	2,176.83	2,113.83	2,176.83	9.72	72.12	-110.54	-1,665.34	-3,569.01	4,025.09	3,943.26	81.83	49.187		
2,300.00	2,275.11	2,212.11	2,275.11	10.19	75.55	-110.79	-1,665.34	-3,569.01	4,031.71	3,945.98	85.73	47.028		
2,400.00	2,373.38	2,310.38	2,373.38	10.66	78.98	-111.03	-1,665.34	-3,569.01	4,038.40	3,948.77	89.63	45.056		
2,500.00	2,471.66	2,408.66	2,471.66	11.14	82.41	-111.27	-1,665.34	-3,569.01	4,045.17	3,951.64	93.53	43.250		
2,600.00	2,569.94	2,506.94	2,569.94	11.61	85.83	-111.51	-1,665.34	-3,569.01	4,052.01	3,954.58	97.43	41.589		
2,700.00	2,668.22	2,605.22	2,668.22	12.09	89.26	-111.75	-1,665.34	-3,569.01	4,058.93	3,957.60	101.33	40.056		
2,800.00	2,766.49	2,703.49	2,766.49	12.56	92.69	-111.99	-1,665.34	-3,569.01	4,065.92	3,960.68	105.23	38.637		
2,900.00	2,864.77	2,801.77	2,864.77	13.04	96.12	-112.22	-1,665.34	-3,569.01	4,072.97	3,963.84	109.13	37.321		
3,000.00	2,963.05	2,900.05	2,963.05	13.51	99.55	-112.46	-1,665.34	-3,569.01	4,080.10	3,967.07	113.04	36.096		
3,100.00	3,061.33	3,001.67	3,061.33	13.99	103.10	-112.70	-1,665.34	-3,569.01	4,087.31	3,970.25	117.05	34.918		
3,200.00	3,159.60	3,103.40	3,159.60	14.46	106.64	-112.93	-1,665.34	-3,569.01	4,094.58	3,973.50	121.08	33.818		
3,300.00	3,257.88	3,205.12	3,257.88	14.94	110.19	-113.17	-1,665.34	-3,569.01	4,101.92	3,976.82	125.10	32.789		
3,400.00	3,356.16	3,306.84	3,356.16	15.41	113.74	-113.40	-1,665.34	-3,569.01	4,109.33	3,980.21	129.12	31.825		
3,500.00	3,454.43	3,408.57	3,454.43	15.89	117.29	-113.63	-1,665.34	-3,569.01	4,116.81	3,983.67	133.14	30.920		
3,600.00	3,552.71	3,489.71	3,552.71	16.36	120.13	-113.86	-1,665.34	-3,569.01	4,124.37	3,987.92	136.45	30.226		
3,700.00	3,650.99	3,587.99	3,650.99	16.84	123.56	-114.09	-1,665.34	-3,569.01	4,131.99	3,991.63	140.35	29.440		
3,800.00	3,749.27	3,686.27	3,749.27	17.32	126.98	-114.32	-1,665.34	-3,569.01	4,139.67	3,995.42	144.25	28.697		
3,900.00	3,847.54	3,784.54	3,847.54	17.79	130.41	-114.55	-1,665.34	-3,569.01	4,147.43	3,999.27	148.16	27.993		
4,000.00	3,945.82	3,882.82	3,945.82	18.27	133.84	-114.78	-1,665.34	-3,569.01	4,155.25	4,003.19	152.06	27.326		
4,100.00	4,044.10	3,981.10	4,044.10	18.75	137.27	-115.01	-1,665.34	-3,569.01	4,163.15	4,007.18	155.96	26.693		
4,200.00	4,142.38	4,079.38	4,142.38	19.22	140.70	-115.24	-1,665.34	-3,569.01	4,171.11	4,011.24	159.87	26.091		
4,300.00	4,240.65	4,177.65	4,240.65	19.70	144.13	-115.46	-1,665.34	-3,569.01	4,179.13	4,015.36	163.77	25.519		
4,400.00	4,338.93	4,275.93	4,338.93	20.18	147.56	-115.69	-1,665.34	-3,569.01	4,187.22	4,019.55	167.67	24.973		
4,500.00	4,437.21	4,374.21	4,437.21	20.65	150.99	-115.91	-1,665.34	-3,569.01	4,195.38	4,023.80	171.57	24.452		
4,600.00	4,535.49	4,472.49	4,535.49	21.13	154.42	-116.14	-1,665.34	-3,569.01	4,203.60	4,028.12	175.48	23.955		
4,700.00	4,633.76	4,570.76	4,633.76	21.61	157.85	-116.36	-1,665.34	-3,569.01	4,211.89	4,032.51	179.38	23.480		
4,800.00	4,732.04	4,669.04	4,732.04	22.08	161.28	-116.58	-1,665.34	-3,569.01	4,220.24	4,036.96	183.28	23.026		
4,900.00	4,830.32	4,767.32	4,830.32	22.56	164.71	-116.80	-1,665.34	-3,569.01	4,228.66	4,041.47	187.19	22.591		
5,000.00	4,928.60	4,865.60	4,928.60	23.04	168.14	-117.02	-1,665.34	-3,569.01	4,237.14	4,046.05	191.09	22.174		
5,100.00	5,026.87	4,963.87	5,026.87	23.51	171.58	-117.24	-1,665.34	-3,569.01	4,245.68	4,050.69	194.99	21.774		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,062.15	5,125.15	23.99	175.01	-117.46	-1,665.34	-3,569.01	4,254.29	4,055.40	198.89	21.390		
5,300.00	5,223.43	5,160.43	5,223.43	24.47	178.44	-117.68	-1,665.34	-3,569.01	4,262.96	4,060.16	202.80	21.021		
5,400.00	5,321.71	5,258.71	5,321.71	24.94	181.87	-117.89	-1,665.34	-3,569.01	4,271.69	4,064.99	206.70	20.666		
5,500.00	5,419.98	5,356.98	5,419.98	25.42	185.30	-118.11	-1,665.34	-3,569.01	4,280.49	4,069.88	210.60	20.325		
5,600.00	5,518.26	5,455.26	5,518.26	25.90	188.73	-118.32	-1,665.34	-3,569.01	4,289.34	4,074.84	214.50	19.997		
5,700.00	5,616.54	5,553.54	5,616.54	26.38	192.16	-118.54	-1,665.34	-3,569.01	4,298.26	4,079.85	218.41	19.680		
5,800.00	5,714.82	5,651.82	5,714.82	26.85	195.59	-118.75	-1,665.34	-3,569.01	4,307.24	4,084.93	222.31	19.375		
5,900.00	5,813.09	5,750.09	5,813.09	27.33	199.02	-118.96	-1,665.34	-3,569.01	4,316.27	4,090.06	226.21	19.081		
6,000.00	5,911.37	5,848.37	5,911.37	27.81	202.45	-119.17	-1,665.34	-3,569.01	4,325.37	4,095.26	230.11	18.797		
6,100.00	6,009.65	5,946.65	6,009.65	28.28	205.88	-119.38	-1,665.34	-3,569.01	4,334.53	4,100.52	234.01	18.522		
6,200.00	6,107.93	6,044.93	6,107.93	28.76	209.31	-119.59	-1,665.34	-3,569.01	4,343.75	4,105.83	237.92	18.257		
6,300.00	6,206.20	6,143.20	6,206.20	29.24	212.74	-119.80	-1,665.34	-3,569.01	4,353.02	4,111.21	241.82	18.001		
6,400.00	6,304.48	6,241.48	6,304.48	29.72	216.17	-120.01	-1,665.34	-3,569.01	4,362.36	4,116.64	245.72	17.753		
6,500.00	6,402.76	6,339.76	6,402.76	30.19	219.60	-120.22	-1,665.34	-3,569.01	4,371.75	4,122.13	249.62	17.513		
6,600.00	6,501.04	6,438.04	6,501.04	30.67	223.03	-120.42	-1,665.34	-3,569.01	4,381.20	4,127.68	253.52	17.281		
6,700.00	6,599.31	6,536.31	6,599.31	31.15	226.46	-120.63	-1,665.34	-3,569.01	4,390.71	4,133.29	257.43	17.056		
6,800.00	6,697.59	6,634.59	6,697.59	31.63	229.89	-99.71	-1,665.34	-3,569.01	4,398.82	4,137.49	261.33	16.833		
6,900.00	6,794.18	6,731.18	6,794.18	32.10	233.26	-74.34	-1,665.34	-3,569.01	4,396.22	4,131.05	265.18	16.579		
7,000.00	6,886.96	6,823.96	6,886.96	32.55	236.50	-64.10	-1,665.34	-3,569.01	4,381.50	4,112.62	268.89	16.295		
7,100.00	6,973.57	6,910.57	6,973.57	32.99	239.53	-60.32	-1,665.34	-3,569.01	4,355.22	4,082.84	272.38	15.990		
7,200.00	7,051.87	6,988.87	7,051.87	33.41	242.26	-59.95	-1,665.34	-3,569.01	4,318.24	4,042.66	275.59	15.669		
7,300.00	7,119.93	7,056.93	7,119.93	33.85	244.63	-61.90	-1,665.34	-3,569.01	4,271.73	3,993.26	278.46	15.340		
7,400.00	7,176.09	7,113.09	7,176.09	34.39	246.59	-65.77	-1,665.34	-3,569.01	4,217.06	3,936.08	280.98	15.009		
7,500.00	7,218.95	7,155.95	7,218.95	35.09	248.09	-71.35	-1,665.34	-3,569.01	4,155.80	3,872.70	283.10	14.680		
7,600.00	7,247.46	7,184.46	7,247.46	35.98	249.09	-78.45	-1,665.34	-3,569.01	4,089.62	3,804.81	284.81	14.359		
7,700.00	7,260.92	7,202.08	7,260.92	37.04	249.70	-86.71	-1,665.34	-3,569.01	4,020.26	3,734.05	286.22	14.046		
7,800.00	7,261.75	7,201.25	7,261.75	38.23	249.67	-90.24	-1,665.34	-3,569.01	3,949.77	3,662.70	287.07	13.759		
7,900.00	7,261.33	7,201.67	7,261.33	39.59	249.69	-90.23	-1,665.34	-3,569.01	3,880.39	3,592.29	288.10	13.469		
8,000.00	7,260.91	7,202.09	7,260.91	41.10	249.70	-90.22	-1,665.34	-3,569.01	3,812.37	3,523.11	289.26	13.180		
8,100.00	7,260.49	7,202.51	7,260.49	42.75	249.72	-90.21	-1,665.34	-3,569.01	3,745.78	3,455.22	290.56	12.892		
8,200.00	7,260.07	7,202.93	7,260.07	44.53	249.73	-90.20	-1,665.34	-3,569.01	3,680.71	3,388.71	292.00	12.605		
8,300.00	7,259.65	7,203.35	7,259.65	46.41	249.75	-90.19	-1,665.34	-3,569.01	3,617.23	3,323.65	293.58	12.321		
8,400.00	7,259.23	7,203.77	7,259.23	48.39	249.76	-90.19	-1,665.34	-3,569.01	3,555.43	3,260.13	295.29	12.040		
8,500.00	7,258.81	7,204.19	7,258.81	50.45	249.77	-90.18	-1,665.34	-3,569.01	3,495.40	3,198.25	297.14	11.763		
8,600.00	7,258.39	7,204.61	7,258.39	52.59	249.79	-90.17	-1,665.34	-3,569.01	3,437.22	3,138.10	299.12	11.491		
8,700.00	7,257.97	7,205.03	7,257.97	54.79	249.80	-90.16	-1,665.34	-3,569.01	3,381.01	3,079.79	301.22	11.224		
8,800.00	7,257.55	7,205.45	7,257.55	57.05	249.82	-90.15	-1,665.34	-3,569.01	3,326.85	3,023.41	303.45	10.964		
8,900.00	7,257.13	7,205.87	7,257.13	59.36	249.83	-90.14	-1,665.34	-3,569.01	3,274.86	2,969.07	305.79	10.710		
9,000.00	7,256.71	7,206.29	7,256.71	61.72	249.85	-90.13	-1,665.34	-3,569.01	3,225.12	2,916.89	308.23	10.463		
9,100.00	7,256.29	7,206.71	7,256.29	64.12	249.86	-90.13	-1,665.34	-3,569.01	3,177.76	2,866.98	310.77	10.225		
9,200.00	7,255.87	7,207.13	7,255.87	66.56	249.88	-90.12	-1,665.34	-3,569.01	3,132.87	2,819.46	313.41	9.996		
9,300.00	7,255.45	7,207.55	7,255.45	69.02	249.89	-90.11	-1,665.34	-3,569.01	3,090.56	2,774.44	316.12	9.777		
9,400.00	7,255.03	7,207.97	7,255.03	71.52	249.91	-90.10	-1,665.34	-3,569.01	3,050.95	2,732.05	318.90	9.567		
9,500.00	7,254.61	7,208.39	7,254.61	74.04	249.92	-90.09	-1,665.34	-3,569.01	3,014.14	2,692.39	321.74	9.368		
9,600.00	7,254.19	7,208.81	7,254.19	76.58	249.94	-90.08	-1,665.34	-3,569.01	2,980.23	2,655.60	324.63	9.180		
9,700.00	7,253.77	7,209.23	7,253.77	79.15	249.95	-90.07	-1,665.34	-3,569.01	2,949.32	2,621.77	327.55	9.004		
9,800.00	7,253.35	7,209.66	7,253.35	81.74	249.97	-90.07	-1,665.34	-3,569.01	2,921.51	2,591.02	330.48	8.840		
9,900.00	7,252.92	7,209.92	7,252.92	84.34	249.98	-90.06	-1,665.34	-3,569.01	2,896.88	2,564.17	332.71	8.707		
10,000.00	7,252.50	7,209.50	7,252.50	86.96	249.96	-90.05	-1,665.34	-3,569.01	2,875.52	2,539.91	335.61	8.568		
10,100.00	7,252.08	7,209.08	7,252.08	89.59	249.95	-90.04	-1,665.34	-3,569.01	2,857.51	2,519.03	338.48	8.442		
10,200.00	7,251.66	7,208.66	7,251.66	92.24	249.93	-90.03	-1,665.34	-3,569.01	2,842.90	2,501.59	341.30	8.329		
10,300.00	7,251.24	7,208.24	7,251.24	94.90	249.92	-90.02	-1,665.34	-3,569.01	2,831.75	2,487.67	344.07	8.230		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,250.82	7,187.82	7,250.82	97.57	249.20	-90.01	-1,665.34	-3,569.01	2,824.10	2,477.33	346.77	8.144		
10,500.00	7,250.40	7,187.40	7,250.40	100.25	249.19	-90.01	-1,665.34	-3,569.01	2,819.97	2,470.59	349.38	8.071		
10,566.41	7,250.12	7,187.12	7,250.12	102.03	249.18	-90.00	-1,665.34	-3,569.01	2,819.19	2,468.13	351.06	8.031	CC	
10,600.00	7,249.98	7,186.98	7,249.98	102.93	249.17	-90.00	-1,665.34	-3,569.01	2,819.39	2,467.50	351.89	8.012	ES	
10,700.00	7,249.56	7,186.56	7,249.56	105.63	249.16	-89.99	-1,665.34	-3,569.01	2,822.35	2,468.06	354.29	7.966		
10,800.00	7,249.14	7,186.14	7,249.14	108.34	249.14	-89.98	-1,665.34	-3,569.01	2,828.85	2,472.27	356.58	7.933		
10,900.00	7,248.72	7,185.72	7,248.72	111.05	249.13	-89.97	-1,665.34	-3,569.01	2,838.86	2,480.12	358.73	7.914		
11,000.00	7,248.30	7,185.30	7,248.30	113.77	249.12	-89.96	-1,665.34	-3,569.01	2,852.34	2,491.58	360.76	7.907	SF	
11,100.00	7,247.88	7,184.88	7,247.88	116.50	249.10	-89.95	-1,665.34	-3,569.01	2,869.24	2,506.60	362.64	7.912		
11,200.00	7,247.46	7,184.46	7,247.46	119.23	249.09	-89.95	-1,665.34	-3,569.01	2,889.51	2,525.13	364.38	7.930		
11,300.00	7,247.04	7,184.04	7,247.04	121.97	249.07	-89.94	-1,665.34	-3,569.01	2,913.07	2,547.09	365.98	7.960		
11,400.00	7,246.62	7,183.62	7,246.62	124.72	249.06	-89.93	-1,665.34	-3,569.01	2,939.85	2,572.40	367.44	8.001		
11,500.00	7,246.20	7,183.20	7,246.20	127.46	249.04	-89.92	-1,665.34	-3,569.01	2,969.75	2,600.99	368.76	8.053		
11,600.00	7,245.78	7,182.78	7,245.78	130.22	249.03	-89.91	-1,665.34	-3,569.01	3,002.69	2,632.74	369.94	8.117		
11,700.00	7,245.36	7,182.36	7,245.36	132.98	249.01	-89.90	-1,665.34	-3,569.01	3,038.56	2,667.57	370.99	8.190		
11,800.00	7,244.94	7,181.94	7,244.94	135.74	249.00	-89.89	-1,665.34	-3,569.01	3,077.26	2,705.35	371.91	8.274		
11,900.00	7,244.52	7,181.52	7,244.52	138.50	248.98	-89.89	-1,665.34	-3,569.01	3,118.70	2,745.99	372.71	8.368		
12,000.00	7,244.10	7,181.10	7,244.10	141.27	248.97	-89.88	-1,665.34	-3,569.01	3,162.75	2,789.36	373.39	8.470		
12,100.00	7,243.68	7,180.68	7,243.68	144.04	248.95	-89.87	-1,665.34	-3,569.01	3,209.31	2,835.35	373.97	8.582		
12,200.00	7,243.26	7,180.26	7,243.26	146.82	248.94	-89.86	-1,665.34	-3,569.01	3,258.28	2,883.84	374.44	8.702		
12,300.00	7,242.84	7,179.84	7,242.84	149.60	248.92	-89.85	-1,665.34	-3,569.01	3,309.55	2,934.73	374.82	8.830		
12,400.00	7,242.42	7,179.42	7,242.42	152.38	248.91	-89.84	-1,665.34	-3,569.01	3,363.01	2,987.90	375.11	8.965		
12,500.00	7,242.00	7,179.00	7,242.00	155.16	248.90	-89.83	-1,665.34	-3,569.01	3,418.56	3,043.24	375.32	9.108		
12,600.00	7,241.58	7,178.58	7,241.58	157.95	248.88	-89.83	-1,665.34	-3,569.01	3,476.10	3,100.64	375.46	9.258		
12,700.00	7,241.16	7,178.16	7,241.16	160.74	248.87	-89.82	-1,665.34	-3,569.01	3,535.53	3,160.00	375.53	9.415		
12,800.00	7,240.74	7,177.74	7,240.74	163.53	248.85	-89.81	-1,665.34	-3,569.01	3,596.76	3,221.22	375.54	9.578		
12,900.00	7,240.32	7,177.32	7,240.32	166.32	248.84	-89.80	-1,665.34	-3,569.01	3,659.70	3,284.20	375.50	9.746		
13,000.00	7,239.89	7,176.89	7,239.89	169.12	248.82	-89.79	-1,665.34	-3,569.01	3,724.26	3,348.85	375.41	9.921		
13,100.00	7,239.47	7,176.47	7,239.47	171.92	248.81	-89.78	-1,665.34	-3,569.01	3,790.36	3,415.09	375.27	10.100		
13,200.00	7,239.05	7,176.05	7,239.05	174.72	248.79	-89.78	-1,665.34	-3,569.01	3,857.92	3,482.82	375.10	10.285		
13,300.00	7,238.63	7,175.63	7,238.63	177.52	248.78	-89.77	-1,665.34	-3,569.01	3,926.86	3,551.97	374.89	10.475		
13,400.00	7,238.21	7,175.21	7,238.21	180.32	248.76	-89.76	-1,665.34	-3,569.01	3,997.12	3,622.47	374.65	10.669		
13,500.00	7,237.79	7,174.79	7,237.79	183.13	248.75	-89.75	-1,665.34	-3,569.01	4,068.62	3,694.24	374.38	10.868		
13,600.00	7,237.37	7,174.37	7,237.37	185.93	248.73	-89.74	-1,665.34	-3,569.01	4,141.30	3,767.21	374.09	11.070		
13,700.00	7,236.95	7,173.95	7,236.95	188.74	248.72	-89.73	-1,665.34	-3,569.01	4,215.10	3,841.32	373.78	11.277		
13,800.00	7,236.53	7,173.53	7,236.53	191.55	248.70	-89.72	-1,665.34	-3,569.01	4,289.96	3,916.50	373.46	11.487		
13,900.00	7,236.11	7,173.11	7,236.11	194.36	248.69	-89.72	-1,665.34	-3,569.01	4,365.83	3,992.71	373.12	11.701		
14,000.00	7,235.69	7,172.69	7,235.69	197.17	248.68	-89.71	-1,665.34	-3,569.01	4,442.65	4,069.89	372.76	11.918		
14,100.00	7,235.27	7,172.27	7,235.27	199.98	248.66	-89.70	-1,665.34	-3,569.01	4,520.39	4,147.98	372.40	12.138		
14,200.00	7,234.85	7,171.85	7,234.85	202.80	248.65	-89.69	-1,665.34	-3,569.01	4,598.98	4,226.95	372.03	12.362		
14,300.00	7,234.43	7,171.43	7,234.43	205.61	248.63	-89.68	-1,665.34	-3,569.01	4,678.39	4,306.73	371.65	12.588		
14,400.00	7,234.01	7,171.01	7,234.01	208.43	248.62	-89.67	-1,665.34	-3,569.01	4,758.57	4,387.30	371.27	12.817		
14,500.00	7,233.59	7,170.59	7,233.59	211.25	248.60	-89.66	-1,665.34	-3,569.01	4,839.49	4,468.61	370.89	13.048		
14,600.00	7,233.17	7,170.17	7,233.17	214.06	248.59	-89.66	-1,665.34	-3,569.01	4,921.12	4,550.62	370.50	13.282		
14,700.00	7,232.75	7,169.75	7,232.75	216.88	248.57	-89.65	-1,665.34	-3,569.01	5,003.41	4,633.30	370.11	13.519		
14,800.00	7,232.33	7,169.33	7,232.33	219.70	248.56	-89.64	-1,665.34	-3,569.01	5,086.34	4,716.62	369.72	13.757		
14,900.00	7,231.91	7,168.91	7,231.91	222.52	248.54	-89.63	-1,665.34	-3,569.01	5,169.87	4,800.54	369.33	13.998		
15,000.00	7,231.49	7,168.49	7,231.49	225.35	248.53	-89.62	-1,665.34	-3,569.01	5,253.97	4,885.03	368.94	14.241		
15,100.00	7,231.07	7,168.07	7,231.07	228.17	248.51	-89.61	-1,665.34	-3,569.01	5,338.63	4,970.07	368.56	14.485		
15,116.21	7,231.00	7,168.00	7,231.00	228.63	248.51	-89.61	-1,665.34	-3,569.01	5,352.40	4,983.90	368.50	14.525		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	60.80	0.00	3.28	-92.84	-453.80	-9,145.92	9,157.37					
100.00	100.00	185.34	212.32	0.18	3.34	-92.83	-452.35	-9,144.35	9,156.22	9,152.69	3.53	2,592.081		
200.00	200.00	288.80	315.77	0.61	3.45	-92.83	-451.85	-9,143.03	9,154.92	9,150.86	4.07	2,249.811		
300.00	300.00	368.35	395.31	1.05	3.57	-92.83	-451.67	-9,142.13	9,153.78	9,149.15	4.63	1,978.282		
400.00	400.00	464.46	491.42	1.49	3.76	-92.83	-451.44	-9,141.16	9,152.76	9,147.51	5.25	1,742.817		
500.00	500.00	547.00	573.96	1.93	3.95	-92.83	-451.21	-9,140.41	9,151.84	9,145.96	5.88	1,556.967		
600.00	599.98	623.21	650.16	2.37	4.14	-85.10	-451.33	-9,139.87	9,151.00	9,144.49	6.51	1,405.926		
700.00	699.84	737.67	764.62	2.81	4.46	-85.16	-451.49	-9,139.30	9,150.08	9,142.82	7.27	1,259.167		
800.00	799.45	848.58	875.53	3.26	4.81	-85.25	-451.34	-9,138.46	9,148.58	9,140.53	8.05	1,136.891		
900.00	898.70	929.34	956.28	3.70	5.07	-85.35	-451.21	-9,137.86	9,146.83	9,138.08	8.75	1,045.279		
1,000.00	997.47	984.00	1,010.95	4.15	5.26	-85.44	-451.27	-9,137.56	9,145.07	9,135.69	9.38	974.954		
1,100.00	1,095.78	984.00	1,010.95	4.60	5.26	-85.45	-451.27	-9,137.56	9,143.99	9,134.16	9.83	930.078		
1,200.00	1,194.05	1,048.29	1,075.24	5.05	5.47	-85.52	-451.27	-9,137.82	9,143.19	9,132.69	10.50	870.740		
1,218.47	1,212.21	1,053.46	1,080.40	5.13	5.49	-85.53	-451.26	-9,137.89	9,143.18	9,132.58	10.60	862.334		
1,300.00	1,292.33	1,112.00	1,138.93	5.50	5.68	-85.59	-451.04	-9,139.23	9,143.69	9,132.51	11.18	818.171		
1,400.00	1,390.61	1,112.00	1,138.93	5.96	5.68	-85.59	-451.04	-9,139.23	9,144.50	9,132.86	11.64	785.679		
1,500.00	1,488.89	1,112.00	1,138.93	6.43	5.68	-85.59	-451.04	-9,139.23	9,146.40	9,134.30	12.10	755.661		
1,600.00	1,587.16	1,112.00	1,138.93	6.89	5.68	-85.59	-451.04	-9,139.23	9,149.40	9,136.83	12.57	727.897		
1,700.00	1,685.44	1,178.78	1,205.64	7.36	5.91	-85.67	-450.72	-9,142.02	9,152.50	9,139.25	13.26	690.301		
1,800.00	1,783.72	1,241.00	1,267.74	7.83	6.12	-85.74	-450.52	-9,145.94	9,157.14	9,143.21	13.94	657.022		
1,900.00	1,882.00	1,241.00	1,267.74	8.30	6.12	-85.74	-450.52	-9,145.94	9,162.02	9,147.62	14.40	636.112		
2,000.00	1,980.27	1,241.00	1,267.74	8.77	6.12	-85.74	-450.52	-9,145.94	9,167.99	9,153.13	14.87	616.620		
2,100.00	2,078.55	1,241.00	1,267.74	9.25	6.12	-85.74	-450.52	-9,145.94	9,175.05	9,159.72	15.33	598.426		
2,200.00	2,176.83	1,297.89	1,324.44	9.72	6.32	-85.80	-450.38	-9,150.68	9,182.44	9,166.44	16.00	574.020		
2,300.00	2,275.11	1,320.99	1,347.42	10.19	6.40	-85.82	-450.32	-9,152.93	9,190.93	9,174.39	16.54	555.645		
2,400.00	2,373.38	1,369.00	1,395.14	10.66	6.58	-85.88	-450.20	-9,158.20	9,200.40	9,183.22	17.18	535.683		
2,500.00	2,471.66	1,369.00	1,395.14	11.14	6.58	-85.88	-450.20	-9,158.20	9,210.41	9,192.77	17.63	522.341		
2,600.00	2,569.94	1,369.00	1,395.14	11.61	6.58	-85.88	-450.20	-9,158.20	9,221.49	9,203.40	18.09	509.798		
2,700.00	2,668.22	1,416.87	1,442.63	12.09	6.76	-85.93	-450.20	-9,164.22	9,233.16	9,214.44	18.72	493.193		
2,800.00	2,766.49	1,441.75	1,467.27	12.56	6.85	-85.96	-450.30	-9,167.63	9,245.74	9,226.47	19.27	479.875		
2,900.00	2,864.77	1,498.00	1,522.90	13.04	7.07	-86.02	-450.76	-9,176.02	9,259.33	9,239.40	19.93	464.493		
3,000.00	2,963.05	1,498.00	1,522.90	13.51	7.07	-86.02	-450.76	-9,176.02	9,273.32	9,252.93	20.38	455.002		
3,100.00	3,061.33	1,498.00	1,522.90	13.99	7.07	-86.02	-450.76	-9,176.02	9,288.35	9,267.53	20.82	446.035		
3,200.00	3,159.60	1,498.00	1,522.90	14.46	7.07	-86.02	-450.76	-9,176.02	9,304.44	9,283.18	21.26	437.559		
3,300.00	3,257.88	1,561.50	1,585.48	14.94	7.33	-86.09	-451.54	-9,186.71	9,320.67	9,298.71	21.96	424.495		
3,400.00	3,356.16	1,626.00	1,648.80	15.41	7.60	-86.17	-452.44	-9,198.95	9,338.45	9,315.79	22.66	412.174		
3,500.00	3,454.43	1,626.00	1,648.80	15.89	7.60	-86.17	-452.44	-9,198.95	9,356.33	9,333.24	23.09	405.233		
3,600.00	3,552.71	1,626.00	1,648.80	16.36	7.60	-86.17	-452.44	-9,198.95	9,375.25	9,351.73	23.52	398.655		
3,700.00	3,650.99	1,626.00	1,648.80	16.84	7.60	-86.17	-452.44	-9,198.95	9,395.19	9,371.25	23.94	392.418		
3,800.00	3,749.27	1,673.64	1,695.38	17.32	7.82	-86.22	-453.23	-9,208.91	9,415.61	9,391.05	24.57	383.274		
3,900.00	3,847.54	1,695.09	1,716.30	17.79	7.92	-86.24	-453.63	-9,213.65	9,436.99	9,411.92	25.08	376.319		
4,000.00	3,945.82	1,754.00	1,773.54	18.27	8.19	-86.31	-454.86	-9,227.53	9,459.50	9,433.75	25.75	367.350		
4,100.00	4,044.10	1,754.00	1,773.54	18.75	8.19	-86.31	-454.86	-9,227.53	9,482.19	9,456.03	26.16	362.441		
4,200.00	4,142.38	1,754.00	1,773.54	19.22	8.19	-86.31	-454.86	-9,227.53	9,505.87	9,479.30	26.57	357.779		
4,300.00	4,240.65	1,754.00	1,773.54	19.70	8.19	-86.31	-454.86	-9,227.53	9,530.55	9,503.58	26.97	353.353		
4,400.00	4,338.93	1,816.42	1,833.90	20.18	8.51	-86.38	-456.15	-9,243.38	9,555.51	9,527.85	27.66	345.489		
4,500.00	4,437.21	1,883.00	1,897.99	20.65	8.86	-86.45	-457.26	-9,261.37	9,581.66	9,553.29	28.36	337.801		
4,600.00	4,535.49	1,883.00	1,897.99	21.13	8.86	-86.45	-457.26	-9,261.37	9,607.99	9,579.23	28.76	334.101		
4,700.00	4,633.76	1,883.00	1,897.99	21.61	8.86	-86.45	-457.26	-9,261.37	9,635.28	9,606.13	29.15	330.586		
4,800.00	4,732.04	1,931.85	1,944.83	22.08	9.14	-86.50	-457.99	-9,275.23	9,663.15	9,633.38	29.77	324.619		
4,900.00	4,830.32	1,962.20	1,973.85	22.56	9.31	-86.54	-458.47	-9,284.09	9,691.72	9,661.42	30.30	319.883		
5,000.00	4,928.60	2,011.00	2,020.39	23.04	9.60	-86.59	-459.27	-9,298.74	9,721.00	9,690.09	30.92	314.417		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,026.87	2,011.00	2,020.39	23.51	9.60	-86.59	-459.27	-9,298.74	9,750.84	9,719.55	31.29	311.616		
5,200.00	5,125.15	2,070.66	2,077.13	23.99	9.97	-86.65	-460.28	-9,317.15	9,781.22	9,749.25	31.97	305.985		
5,300.00	5,223.43	2,140.00	2,142.90	24.47	10.41	-86.72	-461.44	-9,339.08	9,812.22	9,779.52	32.69	300.131		
5,400.00	5,321.71	2,400.00	2,390.54	24.94	32.89	-86.98	-465.02	-9,418.47	9,841.93	9,793.34	48.59	202.542		
5,500.00	5,419.98	2,468.36	2,455.72	25.42	12.62	-87.05	-466.11	-9,438.77	9,871.26	9,836.07	35.18	280.560		
5,600.00	5,518.26	2,525.00	2,509.67	25.90	13.01	-87.11	-466.87	-9,455.99	9,901.14	9,865.28	35.86	276.098		
5,700.00	5,616.54	2,571.83	2,554.21	26.38	13.35	-87.16	-467.34	-9,470.45	9,931.44	9,894.95	36.49	272.200		
5,800.00	5,714.82	2,631.80	2,611.18	26.85	13.78	-87.21	-467.67	-9,489.17	9,962.10	9,924.91	37.18	267.918		
5,900.00	5,813.09	2,653.00	2,631.30	27.33	13.94	-87.23	-467.71	-9,495.85	9,993.22	9,955.55	37.66	265.343		
7,400.00	7,176.09	6,989.00	6,841.95	34.39	39.56	-26.84	-492.67	-10,305.69	9,988.85	9,923.82	65.03	153.613		
7,500.00	7,218.95	7,026.47	6,879.39	35.09	39.70	-30.61	-493.61	-10,306.82	9,902.78	9,837.35	65.44	151.331		
7,600.00	7,247.46	7,072.69	6,925.59	35.98	39.87	-39.51	-494.68	-10,308.21	9,810.20	9,744.38	65.83	149.029		
7,700.00	7,260.92	7,096.82	6,949.70	37.04	39.95	-62.31	-495.15	-10,308.92	9,713.38	9,647.30	66.08	146.987		
7,800.00	7,261.75	7,102.38	6,955.26	38.23	39.97	-80.16	-495.25	-10,309.08	9,614.79	9,548.56	66.23	145.167		
7,900.00	7,261.33	7,106.09	6,958.97	39.59	39.99	-80.30	-495.31	-10,309.19	9,516.13	9,449.75	66.38	143.360		
8,000.00	7,260.91	7,109.79	6,962.66	41.10	40.00	-80.43	-495.37	-10,309.30	9,417.50	9,350.96	66.54	141.541		
8,100.00	7,260.49	7,113.46	6,966.33	42.75	40.01	-80.56	-495.43	-10,309.41	9,318.89	9,252.19	66.70	139.709		
8,200.00	7,260.07	7,117.11	6,969.98	44.53	40.03	-80.70	-495.49	-10,309.51	9,220.32	9,153.44	66.88	137.863		
8,300.00	7,259.65	7,120.75	6,973.61	46.41	40.04	-80.83	-495.55	-10,309.62	9,121.77	9,054.70	67.07	136.005		
8,400.00	7,259.23	7,124.37	6,977.23	48.39	40.05	-80.96	-495.61	-10,309.72	9,023.25	8,955.98	67.27	134.135		
8,500.00	7,258.81	7,127.97	6,980.83	50.45	40.07	-81.09	-495.66	-10,309.83	8,924.77	8,857.29	67.48	132.252		
8,600.00	7,258.39	7,131.55	6,984.41	52.59	40.08	-81.22	-495.72	-10,309.93	8,826.32	8,758.61	67.71	130.356		
8,700.00	7,257.97	7,135.11	6,987.97	54.79	40.09	-81.35	-495.77	-10,310.03	8,727.90	8,659.95	67.95	128.449		
8,800.00	7,257.55	7,138.66	6,991.51	57.05	40.10	-81.48	-495.82	-10,310.13	8,629.52	8,561.32	68.20	126.530		
8,900.00	7,257.13	7,142.19	6,995.04	59.36	40.12	-81.61	-495.87	-10,310.24	8,531.18	8,462.71	68.47	124.600		
9,000.00	7,256.71	7,145.70	6,998.55	61.72	40.13	-81.74	-495.92	-10,310.34	8,432.87	8,364.12	68.75	122.658		
9,100.00	7,256.29	7,150.31	7,003.15	64.12	40.15	-81.91	-495.98	-10,310.47	8,334.60	8,265.55	69.05	120.699		
9,200.00	7,255.87	7,155.47	7,008.31	66.56	40.16	-82.10	-496.04	-10,310.61	8,236.38	8,167.01	69.37	118.726		
9,300.00	7,255.45	7,160.50	7,013.35	69.02	40.18	-82.28	-496.11	-10,310.75	8,138.19	8,068.48	69.71	116.745		
9,400.00	7,255.03	7,165.42	7,018.26	71.52	40.20	-82.46	-496.17	-10,310.89	8,040.05	7,969.99	70.06	114.755		
9,500.00	7,254.61	7,170.21	7,023.05	74.04	40.22	-82.64	-496.23	-10,311.02	7,941.95	7,871.52	70.43	112.757		
9,600.00	7,254.19	7,174.89	7,027.73	76.58	40.23	-82.81	-496.29	-10,311.15	7,843.90	7,773.08	70.82	110.752		
9,700.00	7,253.77	7,179.46	7,032.30	79.15	40.25	-82.98	-496.34	-10,311.27	7,745.90	7,674.67	71.23	108.740		
9,800.00	7,253.35	7,183.93	7,036.76	81.74	40.27	-83.14	-496.39	-10,311.39	7,647.95	7,576.29	71.66	106.722		
9,900.00	7,252.92	7,188.30	7,041.13	84.34	40.28	-83.30	-496.45	-10,311.50	7,550.05	7,477.94	72.11	104.698		
10,000.00	7,252.50	7,192.56	7,045.39	86.96	40.30	-83.46	-496.50	-10,311.61	7,452.21	7,379.62	72.58	102.669		
10,100.00	7,252.08	7,196.73	7,049.56	89.59	40.31	-83.61	-496.54	-10,311.72	7,354.42	7,281.34	73.08	100.636		
10,200.00	7,251.66	7,200.81	7,053.64	92.24	40.33	-83.76	-496.59	-10,311.82	7,256.69	7,183.09	73.60	98.599		
10,300.00	7,251.24	7,204.80	7,057.62	94.90	40.34	-83.91	-496.63	-10,311.92	7,159.02	7,084.88	74.14	96.559		
10,400.00	7,250.82	7,208.70	7,061.53	97.57	40.36	-84.05	-496.68	-10,312.02	7,061.42	6,986.71	74.71	94.518		
10,500.00	7,250.40	7,212.52	7,065.34	100.25	40.37	-84.19	-496.72	-10,312.12	6,963.88	6,888.58	75.31	92.475		
10,600.00	7,249.98	7,216.26	7,069.08	102.93	40.38	-84.33	-496.76	-10,312.21	6,866.42	6,790.49	75.93	90.431		
10,700.00	7,249.56	7,219.92	7,072.74	105.63	40.40	-84.47	-496.80	-10,312.30	6,769.02	6,692.44	76.58	88.389		
10,800.00	7,249.14	7,223.50	7,076.32	108.34	40.41	-84.60	-496.83	-10,312.38	6,671.71	6,594.44	77.27	86.348		
10,900.00	7,248.72	7,227.01	7,079.83	111.05	40.42	-84.73	-496.87	-10,312.47	6,574.47	6,496.49	77.98	84.310		
11,000.00	7,248.30	7,230.45	7,083.27	113.77	40.43	-84.85	-496.91	-10,312.55	6,477.31	6,398.58	78.73	82.275		
11,100.00	7,247.88	7,233.82	7,086.64	116.50	40.45	-84.98	-496.94	-10,312.63	6,380.24	6,300.73	79.51	80.245		
11,200.00	7,247.46	7,237.13	7,089.94	119.23	40.46	-85.10	-496.97	-10,312.71	6,283.27	6,202.94	80.33	78.220		
11,300.00	7,247.04	7,240.37	7,093.18	121.97	40.47	-85.22	-497.00	-10,312.78	6,186.38	6,105.20	81.18	76.203		
11,400.00	7,246.62	7,243.54	7,096.35	124.72	40.48	-85.34	-497.03	-10,312.86	6,089.60	6,007.52	82.08	74.193		
11,500.00	7,246.20	7,246.65	7,099.46	127.46	40.49	-85.45	-497.06	-10,312.93	5,992.92	5,909.91	83.01	72.192		
11,600.00	7,245.78	7,249.71	7,102.52	130.22	40.50	-85.57	-497.09	-10,313.00	5,896.35	5,812.36	83.99	70.202		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 78-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
11,700.00	7,245.36	7,252.70	7,105.51	132.98	40.51	-85.68	-497.12	-10,313.06	5,799.90	5,714.89	85.01	68.222	
11,800.00	7,244.94	7,255.64	7,108.45	135.74	40.52	-85.79	-497.15	-10,313.13	5,703.57	5,617.49	86.08	66.255	
11,900.00	7,244.52	7,258.53	7,111.34	138.50	40.54	-85.89	-497.18	-10,313.19	5,607.37	5,520.16	87.20	64.302	
12,000.00	7,244.10	7,261.36	7,114.17	141.27	40.55	-86.00	-497.20	-10,313.26	5,511.30	5,422.92	88.37	62.364	
12,100.00	7,243.68	7,264.14	7,116.95	144.04	40.56	-86.10	-497.23	-10,313.32	5,415.37	5,325.77	89.60	60.441	
12,200.00	7,243.26	7,266.87	7,119.67	146.82	40.57	-86.20	-497.25	-10,313.37	5,319.59	5,228.71	90.88	58.536	
12,300.00	7,242.84	7,269.55	7,122.35	149.60	40.57	-86.30	-497.27	-10,313.43	5,223.97	5,131.75	92.22	56.649	
12,400.00	7,242.42	7,272.18	7,124.99	152.38	40.58	-86.40	-497.30	-10,313.49	5,128.51	5,034.89	93.62	54.781	
12,500.00	7,242.00	7,274.77	7,127.57	155.16	40.59	-86.50	-497.32	-10,313.54	5,033.23	4,938.15	95.08	52.934	
12,600.00	7,241.58	7,277.31	7,130.11	157.95	40.60	-86.59	-497.34	-10,313.60	4,938.14	4,841.52	96.62	51.109	
12,700.00	7,241.16	7,279.81	7,132.61	160.74	40.61	-86.68	-497.36	-10,313.65	4,843.24	4,745.01	98.23	49.306	
12,800.00	7,240.74	7,282.26	7,135.06	163.53	40.62	-86.77	-497.38	-10,313.70	4,748.55	4,648.64	99.91	47.528	
12,900.00	7,240.32	7,284.68	7,137.48	166.32	40.63	-86.86	-497.40	-10,313.75	4,654.08	4,552.41	101.67	45.774	
13,000.00	7,239.89	7,287.05	7,139.85	169.12	40.64	-86.95	-497.42	-10,313.80	4,559.85	4,456.33	103.52	44.047	
13,100.00	7,239.47	7,289.38	7,142.18	171.92	40.65	-87.04	-497.44	-10,313.85	4,465.87	4,360.41	105.46	42.347	
13,200.00	7,239.05	7,291.67	7,144.47	174.72	40.65	-87.12	-497.46	-10,313.89	4,372.15	4,264.66	107.49	40.675	
13,300.00	7,238.63	7,293.93	7,146.73	177.52	40.66	-87.21	-497.48	-10,313.94	4,278.72	4,169.09	109.62	39.032	
13,400.00	7,238.21	7,296.15	7,148.95	180.32	40.67	-87.29	-497.49	-10,313.98	4,185.58	4,073.73	111.86	37.419	
13,500.00	7,237.79	7,298.33	7,151.13	183.13	40.68	-87.37	-497.51	-10,314.02	4,092.78	3,978.57	114.20	35.838	
13,600.00	7,237.37	7,300.48	7,153.28	185.93	40.69	-87.45	-497.53	-10,314.07	4,000.32	3,883.65	116.67	34.288	
13,700.00	7,236.95	7,302.59	7,155.39	188.74	40.69	-87.53	-497.54	-10,314.11	3,908.22	3,788.97	119.26	32.771	
13,800.00	7,236.53	7,302.89	7,155.68	191.55	40.69	-87.54	-497.56	-10,314.11	3,816.54	3,694.56	121.97	31.290	
13,900.00	7,236.11	7,304.82	7,157.62	194.36	40.70	-87.61	-497.57	-10,314.15	3,725.27	3,600.44	124.83	29.842	
14,000.00	7,235.69	7,306.73	7,159.52	197.17	40.71	-87.68	-497.59	-10,314.19	3,634.46	3,506.62	127.84	28.429	
14,100.00	7,235.27	7,308.60	7,161.40	199.98	40.71	-87.75	-497.60	-10,314.22	3,544.15	3,413.14	131.01	27.053	
14,200.00	7,234.85	7,310.46	7,163.25	202.80	40.72	-87.82	-497.62	-10,314.26	3,454.37	3,320.02	134.34	25.713	
14,300.00	7,234.43	7,312.28	7,165.07	205.61	40.73	-87.89	-497.64	-10,314.29	3,365.16	3,227.31	137.86	24.410	
14,400.00	7,234.01	7,314.08	7,166.87	208.43	40.73	-87.95	-497.65	-10,314.33	3,276.58	3,135.02	141.56	23.146	
14,500.00	7,233.59	7,315.85	7,168.64	211.25	40.74	-88.02	-497.66	-10,314.36	3,188.67	3,043.21	145.46	21.921	
14,600.00	7,233.17	7,317.60	7,170.39	214.06	40.74	-88.09	-497.68	-10,314.39	3,101.50	2,951.92	149.58	20.735	
14,700.00	7,232.75	7,319.32	7,172.12	216.88	40.75	-88.15	-497.69	-10,314.43	3,015.12	2,861.20	153.92	19.589	
14,800.00	7,232.33	7,321.02	7,173.82	219.70	40.76	-88.21	-497.71	-10,314.46	2,929.60	2,771.11	158.49	18.484	
14,900.00	7,231.91	7,322.70	7,175.49	222.52	40.76	-88.28	-497.72	-10,314.49	2,845.03	2,681.71	163.32	17.419	
15,000.00	7,231.49	7,324.35	7,177.15	225.35	40.77	-88.34	-497.74	-10,314.52	2,761.49	2,593.07	168.42	16.396	
15,100.00	7,231.07	7,325.99	7,178.78	228.17	40.77	-88.40	-497.75	-10,314.55	2,679.08	2,505.28	173.80	15.415	
15,116.21	7,231.00	7,326.25	7,179.04	228.63	40.77	-88.41	-497.75	-10,314.55	2,665.83	2,491.13	174.70	15.260	CC, ES, SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	40.00	0.00	3.28	-92.50	-399.40	-9,148.89	9,157.70					
100.00	100.00	60.00	100.00	0.18	3.44	-92.50	-399.40	-9,148.89	9,157.61	9,153.99	3.62	2,530.647		
200.00	200.00	160.00	200.00	0.61	5.05	-92.50	-399.40	-9,148.89	9,157.61	9,151.94	5.66	1,616.664		
300.00	300.00	260.00	300.00	1.05	8.03	-92.50	-399.40	-9,148.89	9,157.61	9,148.52	9.08	1,008.052		
400.00	400.00	360.00	400.00	1.49	11.31	-92.50	-399.40	-9,148.89	9,157.61	9,144.81	12.80	715.434		
500.00	500.00	460.00	500.00	1.93	14.68	-92.50	-399.40	-9,148.89	9,157.61	9,140.99	16.61	551.174		
600.00	599.98	559.98	599.98	2.37	18.10	-84.77	-399.40	-9,148.89	9,157.45	9,136.98	20.47	447.328		
700.00	699.84	659.84	699.84	2.81	21.54	-84.81	-399.40	-9,148.89	9,156.97	9,132.63	24.35	376.121		
800.00	799.45	759.45	799.45	3.26	24.98	-84.88	-399.40	-9,148.89	9,156.19	9,127.96	28.23	324.390		
900.00	898.70	858.70	898.70	3.70	28.42	-84.98	-399.40	-9,148.89	9,155.10	9,123.00	32.10	285.166		
1,000.00	997.47	957.47	997.47	4.15	31.85	-85.10	-399.40	-9,148.89	9,153.73	9,117.75	35.98	254.435		
1,100.00	1,095.78	1,055.78	1,095.78	4.60	35.26	-85.22	-399.40	-9,148.89	9,152.16	9,112.32	39.84	229.706		
1,200.00	1,194.05	1,154.05	1,194.05	5.05	38.68	-85.33	-399.40	-9,148.89	9,150.61	9,106.90	43.72	209.317		
1,300.00	1,292.33	1,252.33	1,292.33	5.50	42.10	-85.45	-399.40	-9,148.89	9,149.10	9,101.51	47.60	192.224		
1,400.00	1,390.61	1,350.61	1,390.61	5.96	45.52	-85.56	-399.40	-9,148.89	9,147.63	9,096.15	51.48	177.693		
1,500.00	1,488.89	1,448.89	1,488.89	6.43	48.95	-85.68	-399.40	-9,148.89	9,146.19	9,090.83	55.37	165.191		
1,600.00	1,587.16	1,547.16	1,587.16	6.89	52.37	-85.79	-399.40	-9,148.89	9,144.79	9,085.54	59.26	154.322		
1,700.00	1,685.44	1,645.44	1,685.44	7.36	55.79	-85.90	-399.40	-9,148.89	9,143.43	9,080.28	63.15	144.788		
1,800.00	1,783.72	1,743.72	1,783.72	7.83	59.22	-86.02	-399.40	-9,148.89	9,142.11	9,075.06	67.04	136.358		
1,900.00	1,882.00	1,842.00	1,882.00	8.30	62.64	-86.13	-399.40	-9,148.89	9,140.82	9,069.88	70.94	128.851		
2,000.00	1,980.27	1,940.27	1,980.27	8.77	66.07	-86.24	-399.40	-9,148.89	9,139.57	9,064.73	74.84	122.124		
2,100.00	2,078.55	2,038.55	2,078.55	9.25	69.50	-86.36	-399.40	-9,148.89	9,138.35	9,059.62	78.74	116.062		
2,200.00	2,176.83	2,136.83	2,176.83	9.72	72.93	-86.47	-399.40	-9,148.89	9,137.18	9,054.54	82.64	110.571		
2,300.00	2,275.11	2,235.11	2,275.11	10.19	76.35	-86.58	-399.40	-9,148.89	9,136.04	9,049.50	86.54	105.574		
2,400.00	2,373.38	2,333.38	2,373.38	10.66	79.78	-86.70	-399.40	-9,148.89	9,134.94	9,044.50	90.44	101.008		
2,500.00	2,471.66	2,431.66	2,471.66	11.14	83.21	-86.81	-399.40	-9,148.89	9,133.87	9,039.53	94.34	96.819		
2,600.00	2,569.94	2,529.94	2,569.94	11.61	86.64	-86.92	-399.40	-9,148.89	9,132.84	9,034.60	98.24	92.963		
2,700.00	2,668.22	2,628.22	2,668.22	12.09	90.07	-87.04	-399.40	-9,148.89	9,131.85	9,029.71	102.14	89.401		
2,800.00	2,766.49	2,726.49	2,766.49	12.56	93.49	-87.15	-399.40	-9,148.89	9,130.90	9,024.85	106.05	86.102		
2,900.00	2,864.77	2,824.77	2,864.77	13.04	96.92	-87.27	-399.40	-9,148.89	9,129.99	9,020.03	109.95	83.036		
3,000.00	2,963.05	2,923.05	2,963.05	13.51	100.35	-87.38	-399.40	-9,148.89	9,129.11	9,015.25	113.86	80.181		
3,100.00	3,061.33	3,021.33	3,061.33	13.99	103.78	-87.49	-399.40	-9,148.89	9,128.27	9,010.51	117.76	77.516		
3,200.00	3,159.60	3,119.60	3,159.60	14.46	107.21	-87.61	-399.40	-9,148.89	9,127.46	9,005.80	121.66	75.021		
3,300.00	3,257.88	3,217.88	3,257.88	14.94	110.64	-87.72	-399.40	-9,148.89	9,126.70	9,001.13	125.57	72.682		
3,400.00	3,356.16	3,316.16	3,356.16	15.41	114.07	-87.84	-399.40	-9,148.89	9,125.97	8,996.49	129.47	70.485		
3,500.00	3,454.43	3,414.43	3,454.43	15.89	117.50	-87.95	-399.40	-9,148.89	9,125.28	8,991.90	133.38	68.416		
3,600.00	3,552.71	3,512.71	3,552.71	16.36	120.93	-88.06	-399.40	-9,148.89	9,124.62	8,987.34	137.29	66.464		
3,700.00	3,650.99	3,610.99	3,650.99	16.84	124.36	-88.18	-399.40	-9,148.89	9,124.01	8,982.82	141.19	64.622		
3,800.00	3,749.27	3,709.27	3,749.27	17.32	127.79	-88.29	-399.40	-9,148.89	9,123.43	8,978.33	145.10	62.878		
3,900.00	3,847.54	3,807.54	3,847.54	17.79	131.22	-88.41	-399.40	-9,148.89	9,122.89	8,973.88	149.00	61.226		
4,000.00	3,945.82	3,905.82	3,945.82	18.27	134.65	-88.52	-399.40	-9,148.89	9,122.38	8,969.47	152.91	59.659		
4,100.00	4,044.10	4,004.10	4,044.10	18.75	138.08	-88.63	-399.40	-9,148.89	9,121.91	8,965.10	156.82	58.170		
4,200.00	4,142.38	4,102.38	4,142.38	19.22	141.51	-88.75	-399.40	-9,148.89	9,121.48	8,960.76	160.72	56.753		
4,300.00	4,240.65	4,200.65	4,240.65	19.70	144.94	-88.86	-399.40	-9,148.89	9,121.09	8,956.46	164.63	55.404		
4,400.00	4,338.93	4,301.07	4,338.93	20.18	148.44	-88.98	-399.40	-9,148.89	9,120.74	8,952.13	168.61	54.094		
4,500.00	4,437.21	4,402.79	4,437.21	20.65	151.99	-89.09	-399.40	-9,148.89	9,120.42	8,947.78	172.64	52.830		
4,600.00	4,535.49	4,504.51	4,535.49	21.13	155.54	-89.20	-399.40	-9,148.89	9,120.14	8,943.48	176.66	51.624		
4,700.00	4,633.76	4,606.24	4,633.76	21.61	159.09	-89.32	-399.40	-9,148.89	9,119.90	8,939.21	180.69	50.472		
4,800.00	4,732.04	4,707.96	4,732.04	22.08	162.64	-89.43	-399.40	-9,148.89	9,119.69	8,934.97	184.72	49.371		
4,900.00	4,830.32	4,809.68	4,830.32	22.56	166.19	-89.55	-399.40	-9,148.89	9,119.53	8,930.78	188.75	48.316		
5,000.00	4,928.60	4,888.60	4,928.60	23.04	168.95	-89.66	-399.40	-9,148.89	9,119.40	8,927.42	191.98	47.502		
5,100.00	5,026.87	4,986.87	5,026.87	23.51	172.38	-89.77	-399.40	-9,148.89	9,119.30	8,923.42	195.89	46.554		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,125.15	5,085.15	5,125.15	23.99	175.81	-89.89	-399.40	-9,148.89	9,119.25	8,919.46	199.79	45.643		
5,297.25	5,220.73	5,180.73	5,220.73	24.45	179.14	-90.00	-399.40	-9,148.89	9,119.23	8,915.64	203.59	44.791		
5,300.00	5,223.43	5,183.43	5,223.43	24.47	179.24	-90.00	-399.40	-9,148.89	9,119.23	8,915.53	203.70	44.768		
5,400.00	5,321.71	5,281.71	5,321.71	24.94	182.67	-90.12	-399.40	-9,148.89	9,119.25	8,911.64	207.61	43.925		
5,500.00	5,419.98	5,379.98	5,419.98	25.42	186.10	-90.23	-399.40	-9,148.89	9,119.31	8,907.79	211.52	43.114		
5,600.00	5,518.26	5,478.26	5,518.26	25.90	189.53	-90.35	-399.40	-9,148.89	9,119.40	8,903.98	215.42	42.333		
5,700.00	5,616.54	5,576.54	5,616.54	26.38	192.96	-90.46	-399.40	-9,148.89	9,119.53	8,900.20	219.33	41.579		
5,800.00	5,714.82	5,674.82	5,714.82	26.85	196.39	-90.57	-399.40	-9,148.89	9,119.70	8,896.47	223.24	40.852		
5,900.00	5,813.09	5,773.09	5,813.09	27.33	199.82	-90.69	-399.40	-9,148.89	9,119.91	8,892.76	227.15	40.150		
6,000.00	5,911.37	5,871.37	5,911.37	27.81	203.25	-90.80	-399.40	-9,148.89	9,120.16	8,889.10	231.05	39.472		
6,100.00	6,009.65	5,969.65	6,009.65	28.28	206.68	-90.92	-399.40	-9,148.89	9,120.44	8,885.48	234.96	38.817		
6,200.00	6,107.93	6,067.93	6,107.93	28.76	210.11	-91.03	-399.40	-9,148.89	9,120.76	8,881.89	238.87	38.183		
6,300.00	6,206.20	6,166.20	6,206.20	29.24	213.54	-91.14	-399.40	-9,148.89	9,121.11	8,878.34	242.78	37.570		
6,400.00	6,304.48	6,264.48	6,304.48	29.72	216.97	-91.26	-399.40	-9,148.89	9,121.51	8,874.82	246.69	36.976		
6,500.00	6,402.76	6,362.76	6,402.76	30.19	220.40	-91.37	-399.40	-9,148.89	9,121.94	8,871.35	250.59	36.401		
6,600.00	6,501.04	6,461.04	6,501.04	30.67	223.83	-91.49	-399.40	-9,148.89	9,122.41	8,867.91	254.50	35.844		
6,700.00	6,599.31	6,559.31	6,599.31	31.15	227.26	-91.60	-399.40	-9,148.89	9,122.91	8,864.51	258.41	35.304		
6,800.00	6,697.50	6,657.50	6,697.50	31.63	230.69	-70.78	-399.40	-9,148.89	9,121.64	8,859.32	262.31	34.774		
6,900.00	6,794.18	6,754.18	6,794.18	32.10	234.07	-45.28	-399.40	-9,148.89	9,107.00	8,840.83	266.16	34.216		
7,000.00	6,886.96	6,846.96	6,886.96	32.55	237.30	-34.36	-399.40	-9,148.89	9,077.30	8,807.45	269.85	33.638		
7,100.00	6,973.57	6,933.57	6,973.57	32.99	240.33	-29.39	-399.40	-9,148.89	9,033.30	8,760.00	273.29	33.053		
7,200.00	7,051.87	7,011.87	7,051.87	33.41	243.06	-27.37	-399.40	-9,148.89	8,976.07	8,699.66	276.41	32.474		
7,300.00	7,119.93	7,079.93	7,119.93	33.85	245.44	-27.35	-399.40	-9,148.89	8,907.03	8,627.91	279.13	31.910		
7,400.00	7,176.09	7,136.09	7,176.09	34.39	247.40	-29.33	-399.40	-9,148.89	8,827.89	8,546.50	281.38	31.373		
7,500.00	7,218.95	7,178.95	7,218.95	35.09	248.89	-34.27	-399.40	-9,148.89	8,740.58	8,457.45	283.13	30.871		
7,600.00	7,247.46	7,207.46	7,247.46	35.98	249.89	-45.39	-399.40	-9,148.89	8,647.24	8,362.91	284.33	30.413		
7,700.00	7,260.92	7,220.92	7,260.92	37.04	250.36	-72.65	-399.40	-9,148.89	8,550.16	8,265.20	284.96	30.005		
7,800.00	7,261.75	7,221.75	7,261.75	38.23	250.39	-91.37	-399.40	-9,148.89	8,451.71	8,166.59	285.13	29.642		
7,900.00	7,261.33	7,221.33	7,261.33	39.59	250.37	-91.36	-399.40	-9,148.89	8,353.24	8,067.99	285.25	29.284		
8,000.00	7,260.91	7,220.91	7,260.91	41.10	250.36	-91.34	-399.40	-9,148.89	8,254.80	7,969.41	285.39	28.925		
8,100.00	7,260.49	7,220.49	7,260.49	42.75	250.34	-91.32	-399.40	-9,148.89	8,156.40	7,870.86	285.54	28.565		
8,200.00	7,260.07	7,220.07	7,260.07	44.53	250.33	-91.31	-399.40	-9,148.89	8,058.03	7,772.33	285.70	28.204		
8,300.00	7,259.65	7,219.65	7,259.65	46.41	250.31	-91.29	-399.40	-9,148.89	7,959.71	7,673.83	285.88	27.843		
8,400.00	7,259.23	7,219.23	7,259.23	48.39	250.30	-91.27	-399.40	-9,148.89	7,861.43	7,575.36	286.07	27.481		
8,500.00	7,258.81	7,218.81	7,258.81	50.45	250.29	-91.26	-399.40	-9,148.89	7,763.20	7,476.92	286.28	27.118		
8,600.00	7,258.39	7,218.39	7,258.39	52.59	250.27	-91.24	-399.40	-9,148.89	7,665.01	7,378.51	286.50	26.754		
8,700.00	7,257.97	7,217.97	7,257.97	54.79	250.26	-91.22	-399.40	-9,148.89	7,566.87	7,280.13	286.74	26.389		
8,800.00	7,257.55	7,217.55	7,257.55	57.05	250.24	-91.21	-399.40	-9,148.89	7,468.77	7,181.78	287.00	26.024		
8,900.00	7,257.13	7,217.13	7,257.13	59.36	250.23	-91.19	-399.40	-9,148.89	7,370.73	7,083.46	287.27	25.658		
9,000.00	7,256.71	7,216.71	7,256.71	61.72	250.21	-91.17	-399.40	-9,148.89	7,272.74	6,985.18	287.56	25.291		
9,100.00	7,256.29	7,216.29	7,256.29	64.12	250.20	-91.16	-399.40	-9,148.89	7,174.81	6,886.94	287.87	24.923		
9,200.00	7,255.87	7,215.87	7,255.87	66.56	250.18	-91.14	-399.40	-9,148.89	7,076.94	6,788.73	288.21	24.555		
9,300.00	7,255.45	7,215.45	7,255.45	69.02	250.17	-91.12	-399.40	-9,148.89	6,979.12	6,690.56	288.56	24.186		
9,400.00	7,255.03	7,215.03	7,255.03	71.52	250.15	-91.11	-399.40	-9,148.89	6,881.37	6,592.43	288.94	23.816		
9,500.00	7,254.61	7,214.61	7,254.61	74.04	250.14	-91.09	-399.40	-9,148.89	6,783.68	6,494.34	289.34	23.445		
9,600.00	7,254.19	7,214.19	7,254.19	76.58	250.12	-91.08	-399.40	-9,148.89	6,686.06	6,396.30	289.76	23.074		
9,700.00	7,253.77	7,213.77	7,253.77	79.15	250.11	-91.06	-399.40	-9,148.89	6,588.52	6,298.30	290.22	22.702		
9,800.00	7,253.35	7,213.35	7,253.35	81.74	250.09	-91.04	-399.40	-9,148.89	6,491.05	6,200.35	290.69	22.329		
9,900.00	7,252.92	7,212.92	7,252.92	84.34	250.08	-91.03	-399.40	-9,148.89	6,393.65	6,102.45	291.20	21.956		
10,000.00	7,252.50	7,212.50	7,252.50	86.96	250.07	-91.01	-399.40	-9,148.89	6,296.34	6,004.60	291.74	21.582		
10,100.00	7,252.08	7,212.08	7,252.08	89.59	250.05	-90.99	-399.40	-9,148.89	6,199.11	5,906.81	292.30	21.208		
10,200.00	7,251.66	7,211.66	7,251.66	92.24	250.04	-90.98	-399.40	-9,148.89	6,101.98	5,809.07	292.90	20.833		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,251.24	7,211.24	7,251.24	94.90	250.02	-90.96	-399.40	-9,148.89	6,004.93	5,711.40	293.54	20.457		
10,400.00	7,250.82	7,210.82	7,250.82	97.57	250.01	-90.94	-399.40	-9,148.89	5,907.99	5,613.78	294.21	20.081		
10,500.00	7,250.40	7,210.40	7,250.40	100.25	249.99	-90.93	-399.40	-9,148.89	5,811.15	5,516.23	294.91	19.705		
10,600.00	7,249.98	7,209.98	7,249.98	102.93	249.98	-90.91	-399.40	-9,148.89	5,714.41	5,418.76	295.66	19.328		
10,700.00	7,249.56	7,209.56	7,249.56	105.63	249.96	-90.89	-399.40	-9,148.89	5,617.80	5,321.35	296.44	18.951		
10,800.00	7,249.14	7,209.14	7,249.14	108.34	249.95	-90.88	-399.40	-9,148.89	5,521.30	5,224.03	297.27	18.573		
10,900.00	7,248.72	7,208.72	7,248.72	111.05	249.93	-90.86	-399.40	-9,148.89	5,424.93	5,126.78	298.15	18.195		
11,000.00	7,248.30	7,208.30	7,248.30	113.77	249.92	-90.84	-399.40	-9,148.89	5,328.69	5,029.62	299.07	17.818		
11,100.00	7,247.88	7,207.88	7,247.88	116.50	249.90	-90.83	-399.40	-9,148.89	5,232.59	4,932.55	300.04	17.440		
11,200.00	7,247.46	7,207.46	7,247.46	119.23	249.89	-90.81	-399.40	-9,148.89	5,136.65	4,835.58	301.07	17.062		
11,300.00	7,247.04	7,207.04	7,247.04	121.97	249.87	-90.80	-399.40	-9,148.89	5,040.86	4,738.71	302.14	16.684		
11,400.00	7,246.62	7,206.62	7,246.62	124.72	249.86	-90.78	-399.40	-9,148.89	4,945.24	4,641.95	303.28	16.306		
11,500.00	7,246.20	7,206.20	7,246.20	127.46	249.84	-90.76	-399.40	-9,148.89	4,849.79	4,545.31	304.48	15.928		
11,600.00	7,245.78	7,205.78	7,245.78	130.22	249.83	-90.75	-399.40	-9,148.89	4,754.53	4,448.79	305.74	15.551		
11,700.00	7,245.36	7,205.36	7,245.36	132.98	249.82	-90.73	-399.40	-9,148.89	4,659.47	4,352.40	307.07	15.174		
11,800.00	7,244.94	7,204.94	7,244.94	135.74	249.80	-90.71	-399.40	-9,148.89	4,564.62	4,256.15	308.47	14.798		
11,900.00	7,244.52	7,204.52	7,244.52	138.50	249.79	-90.70	-399.40	-9,148.89	4,470.00	4,160.05	309.95	14.422		
12,000.00	7,244.10	7,204.10	7,244.10	141.27	249.77	-90.68	-399.40	-9,148.89	4,375.61	4,064.11	311.50	14.047		
12,100.00	7,243.68	7,203.68	7,243.68	144.04	249.76	-90.66	-399.40	-9,148.89	4,281.48	3,968.33	313.14	13.673		
12,200.00	7,243.26	7,203.26	7,243.26	146.82	249.74	-90.65	-399.40	-9,148.89	4,187.62	3,872.75	314.87	13.299		
12,300.00	7,242.84	7,202.84	7,242.84	149.60	249.73	-90.63	-399.40	-9,148.89	4,094.05	3,777.36	316.70	12.927		
12,400.00	7,242.42	7,202.42	7,242.42	152.38	249.71	-90.61	-399.40	-9,148.89	4,000.79	3,682.18	318.62	12.557		
12,500.00	7,242.00	7,202.00	7,242.00	155.16	249.70	-90.60	-399.40	-9,148.89	3,907.87	3,587.22	320.65	12.188		
12,600.00	7,241.58	7,201.58	7,241.58	157.95	249.68	-90.58	-399.40	-9,148.89	3,815.30	3,492.52	322.79	11.820		
12,700.00	7,241.16	7,201.16	7,241.16	160.74	249.67	-90.56	-399.40	-9,148.89	3,723.12	3,398.08	325.04	11.454		
12,800.00	7,240.74	7,200.74	7,240.74	163.53	249.65	-90.55	-399.40	-9,148.89	3,631.36	3,303.93	327.43	11.090		
12,900.00	7,240.32	7,200.32	7,240.32	166.32	249.64	-90.53	-399.40	-9,148.89	3,540.03	3,210.08	329.95	10.729		
13,000.00	7,239.89	7,200.11	7,239.89	169.12	249.63	-90.52	-399.40	-9,148.89	3,449.19	3,116.57	332.62	10.370		
13,100.00	7,239.47	7,200.53	7,239.47	171.92	249.65	-90.50	-399.40	-9,148.89	3,358.87	3,023.41	335.46	10.013		
13,200.00	7,239.05	7,200.95	7,239.05	174.72	249.66	-90.48	-399.40	-9,148.89	3,269.12	2,930.65	338.47	9.659		
13,300.00	7,238.63	7,201.37	7,238.63	177.52	249.68	-90.47	-399.40	-9,148.89	3,179.97	2,838.33	341.64	9.308		
13,400.00	7,238.21	7,201.79	7,238.21	180.32	249.69	-90.45	-399.40	-9,148.89	3,091.49	2,746.49	345.00	8.961		
13,500.00	7,237.79	7,202.21	7,237.79	183.13	249.71	-90.43	-399.40	-9,148.89	3,003.73	2,655.18	348.56	8.618		
13,600.00	7,237.37	7,202.63	7,237.37	185.93	249.72	-90.42	-399.40	-9,148.89	2,916.76	2,564.45	352.32	8.279		
13,700.00	7,236.95	7,203.05	7,236.95	188.74	249.73	-90.40	-399.40	-9,148.89	2,830.65	2,474.36	356.30	7.945		
13,800.00	7,236.53	7,203.47	7,236.53	191.55	249.75	-90.38	-399.40	-9,148.89	2,745.49	2,384.98	360.51	7.616		
13,900.00	7,236.11	7,203.89	7,236.11	194.36	249.76	-90.37	-399.40	-9,148.89	2,661.35	2,296.38	364.97	7.292		
14,000.00	7,235.69	7,204.31	7,235.69	197.17	249.78	-90.35	-399.40	-9,148.89	2,578.35	2,208.66	369.69	6.974		
14,100.00	7,235.27	7,204.73	7,235.27	199.98	249.79	-90.33	-399.40	-9,148.89	2,496.59	2,121.91	374.68	6.663		
14,200.00	7,234.85	7,205.15	7,234.85	202.80	249.81	-90.32	-399.40	-9,148.89	2,416.21	2,036.25	379.96	6.359		
14,300.00	7,234.43	7,205.57	7,234.43	205.61	249.82	-90.30	-399.40	-9,148.89	2,337.34	1,951.81	385.53	6.063		
14,400.00	7,234.01	7,205.99	7,234.01	208.43	249.84	-90.28	-399.40	-9,148.89	2,260.14	1,868.73	391.42	5.774		
14,500.00	7,233.59	7,206.41	7,233.59	211.25	249.85	-90.27	-399.40	-9,148.89	2,184.80	1,787.18	397.61	5.495		
14,600.00	7,233.17	7,206.83	7,233.17	214.06	249.87	-90.25	-399.40	-9,148.89	2,111.50	1,707.37	404.13	5.225		
14,700.00	7,232.75	7,207.25	7,232.75	216.88	249.88	-90.23	-399.40	-9,148.89	2,040.47	1,629.52	410.95	4.965		
14,800.00	7,232.33	7,207.67	7,232.33	219.70	249.90	-90.22	-399.40	-9,148.89	1,971.96	1,553.88	418.08	4.717		
14,900.00	7,231.91	7,208.09	7,231.91	222.52	249.91	-90.20	-399.40	-9,148.89	1,906.23	1,480.74	425.49	4.480		
15,000.00	7,231.49	7,208.51	7,231.49	225.35	249.93	-90.19	-399.40	-9,148.89	1,843.58	1,410.44	433.14	4.256		
15,100.00	7,231.07	7,208.93	7,231.07	228.17	249.94	-90.17	-399.40	-9,148.89	1,784.34	1,343.34	441.00	4.046		
15,116.21	7,231.00	7,209.00	7,231.00	228.63	249.94	-90.17	-399.40	-9,148.89	1,775.08	1,332.80	442.29	4.013	CC, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	27.00	0.00	3.28	-92.68	-428.54	-9,146.12	9,156.20					
100.00	100.00	109.52	136.52	0.18	3.29	-92.68	-428.82	-9,145.77	9,155.89	9,152.42	3.47	2,638.870		
200.00	200.00	184.78	211.78	0.61	3.33	-92.68	-428.74	-9,145.57	9,155.62	9,151.67	3.95	2,318.439		
244.61	244.61	217.61	244.61	0.81	3.36	-92.68	-428.69	-9,145.55	9,155.59	9,151.42	4.17	2,194.230		
300.00	300.00	258.45	285.45	1.05	3.40	-92.68	-428.69	-9,145.59	9,155.64	9,151.18	4.46	2,053.810		
400.00	400.00	345.37	372.37	1.49	3.52	-92.68	-428.78	-9,145.78	9,155.87	9,150.86	5.01	1,826.027		
500.00	500.00	433.73	460.73	1.93	3.68	-92.68	-428.90	-9,146.10	9,156.24	9,150.63	5.61	1,632.444		
600.00	599.98	604.05	631.05	2.37	4.06	-84.96	-429.36	-9,146.43	9,156.41	9,149.97	6.43	1,423.849		
700.00	699.84	677.64	704.64	2.81	4.26	-85.00	-429.73	-9,146.22	9,155.70	9,148.63	7.06	1,296.447		
800.00	799.45	727.00	753.99	3.26	4.40	-85.04	-429.97	-9,146.26	9,155.10	9,147.46	7.64	1,198.543		
900.00	898.70	766.96	793.96	3.70	4.51	-85.07	-430.02	-9,146.54	9,154.82	9,146.63	8.20	1,117.014		
911.67	910.25	770.78	797.77	3.76	4.52	-85.08	-430.01	-9,146.58	9,154.82	9,146.56	8.26	1,108.446		
1,000.00	997.47	799.64	826.63	4.15	4.61	-85.10	-429.85	-9,147.04	9,154.99	9,146.25	8.74	1,047.537		
1,100.00	1,095.78	856.00	882.96	4.60	4.78	-85.16	-429.13	-9,148.48	9,155.76	9,146.40	9.36	977.742		
1,200.00	1,194.05	856.00	882.96	5.05	4.78	-85.16	-429.13	-9,148.48	9,157.09	9,147.27	9.82	932.286		
1,300.00	1,292.33	856.00	882.96	5.50	4.78	-85.16	-429.13	-9,148.48	9,159.50	9,149.22	10.28	890.690		
1,400.00	1,390.61	912.13	939.04	5.96	4.96	-85.22	-427.89	-9,150.81	9,162.33	9,151.40	10.92	838.766		
1,500.00	1,488.89	936.88	963.73	6.43	5.04	-85.24	-427.20	-9,152.17	9,166.18	9,154.72	11.47	799.277		
1,600.00	1,587.16	984.00	1,010.72	6.89	5.20	-85.28	-425.62	-9,155.33	9,170.97	9,158.89	12.09	758.659		
1,700.00	1,685.44	984.00	1,010.72	7.36	5.20	-85.28	-425.62	-9,155.33	9,176.37	9,163.81	12.55	730.944		
1,800.00	1,783.72	984.00	1,010.72	7.83	5.20	-85.28	-425.62	-9,155.33	9,182.85	9,169.83	13.02	705.305		
1,900.00	1,882.00	1,044.21	1,070.65	8.30	5.41	-85.33	-422.85	-9,160.36	9,189.73	9,176.04	13.69	671.224		
2,000.00	1,980.27	1,112.00	1,137.95	8.77	5.65	-85.38	-418.47	-9,167.26	9,197.86	9,183.47	14.39	639.010		
2,100.00	2,078.55	1,112.00	1,137.95	9.25	5.65	-85.38	-418.47	-9,167.26	9,206.21	9,191.35	14.86	619.647		
2,200.00	2,176.83	1,112.00	1,137.95	9.72	5.65	-85.38	-418.47	-9,167.26	9,215.64	9,200.32	15.32	601.582		
2,300.00	2,275.11	1,182.53	1,207.75	10.19	5.92	-85.42	-412.57	-9,175.51	9,225.52	9,209.47	16.04	575.099		
2,400.00	2,373.38	1,241.00	1,265.44	10.66	6.15	-85.45	-406.70	-9,182.94	9,236.13	9,219.41	16.72	552.237		
2,500.00	2,471.66	1,296.68	1,320.23	11.14	6.39	-85.47	-400.07	-9,190.33	9,247.20	9,229.79	17.41	531.204		
2,600.00	2,569.94	1,369.00	1,391.11	11.61	6.70	-85.48	-389.62	-9,200.11	9,258.47	9,240.31	18.16	509.717		
2,700.00	2,668.22	1,423.76	1,444.56	12.09	6.95	-85.49	-380.54	-9,207.79	9,270.14	9,251.28	18.86	491.445		
2,800.00	2,766.49	1,498.00	1,516.73	12.56	7.31	-85.48	-367.05	-9,218.86	9,282.47	9,262.82	19.65	472.299		
2,900.00	2,864.77	1,498.00	1,516.73	13.04	7.31	-85.48	-367.05	-9,218.86	9,295.23	9,275.13	20.11	462.329		
3,000.00	2,963.05	1,557.29	1,574.10	13.51	7.61	-85.48	-355.43	-9,228.25	9,308.61	9,287.76	20.85	446.537		
3,100.00	3,061.33	1,626.00	1,640.33	13.99	7.98	-85.46	-341.25	-9,239.81	9,322.71	9,301.08	21.64	430.866		
3,200.00	3,159.60	1,626.00	1,640.33	14.46	7.98	-85.46	-341.25	-9,239.81	9,337.28	9,315.19	22.08	422.846		
3,300.00	3,257.88	1,695.23	1,706.70	14.94	8.38	-85.44	-325.86	-9,252.09	9,352.38	9,329.48	22.90	408.375		
3,400.00	3,356.16	1,754.00	1,762.70	15.41	8.72	-85.41	-311.70	-9,262.94	9,368.05	9,344.38	23.67	395.841		
3,500.00	3,454.43	1,754.00	1,762.70	15.89	8.72	-85.41	-311.70	-9,262.94	9,384.39	9,360.28	24.10	389.337		
3,600.00	3,552.71	1,809.19	1,814.97	16.36	9.08	-85.38	-297.66	-9,273.68	9,401.24	9,376.36	24.87	377.997		
3,700.00	3,650.99	1,839.07	1,843.15	16.84	9.27	-85.37	-289.82	-9,279.81	9,418.91	9,393.43	25.48	369.588		
3,800.00	3,749.27	1,883.00	1,884.40	17.32	9.56	-85.34	-278.00	-9,289.21	9,437.34	9,411.16	26.18	360.432		
3,900.00	3,847.54	2,039.37	2,030.94	17.79	10.67	-85.23	-234.78	-9,322.52	9,455.88	9,428.24	27.64	342.087		
4,000.00	3,945.82	2,140.24	2,125.74	18.27	11.40	-85.17	-207.47	-9,343.53	9,473.89	9,445.13	28.75	329.493		
4,100.00	4,044.10	2,208.47	2,190.03	18.75	11.90	-85.13	-189.60	-9,357.81	9,492.04	9,462.39	29.65	320.185		
4,200.00	4,142.38	2,285.50	2,262.71	19.22	12.47	-85.09	-169.98	-9,374.16	9,510.49	9,479.89	30.60	310.806		
4,300.00	4,240.65	2,421.88	2,391.78	19.70	13.49	-85.03	-136.61	-9,402.87	9,528.83	9,496.86	31.96	298.111		
4,400.00	4,338.93	2,476.00	2,442.90	20.18	13.90	-85.00	-123.05	-9,414.36	9,547.28	9,514.51	32.77	291.339		
4,500.00	4,437.21	2,560.10	2,522.09	20.65	14.55	-84.95	-101.27	-9,432.44	9,566.01	9,532.22	33.79	283.081		
4,600.00	4,535.49	4,600.00	2,620.91	21.13	30.89	-84.89	-73.67	-9,454.90	9,584.64	9,536.20	48.45	197.846		
4,700.00	4,633.76	2,711.82	2,664.72	21.61	15.75	-84.86	-61.09	-9,465.01	9,603.57	9,567.82	35.75	268.640		
4,800.00	4,732.04	2,782.00	2,730.29	22.08	16.32	-84.82	-41.61	-9,480.72	9,623.12	9,586.43	36.69	262.257		
4,900.00	4,830.32	2,866.18	2,808.87	22.56	17.02	-84.76	-18.18	-9,499.74	9,642.92	9,605.17	37.75	255.421		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,928.60	5,000.00	2,971.02	23.04	34.54	-84.66	27.74	-9,537.33	9,661.82	9,608.33	53.49	180.622		
5,100.00	5,026.87	3,111.63	3,039.48	23.51	19.02	-84.62	46.88	-9,552.94	9,680.64	9,640.19	40.45	239.323		
5,200.00	5,125.15	3,167.00	3,091.36	23.99	19.48	-84.58	61.83	-9,565.22	9,700.07	9,658.78	41.28	234.955		
5,300.00	5,223.43	5,300.00	3,289.74	24.47	36.73	-84.47	115.91	-9,611.04	9,719.21	9,662.39	56.83	171.032		
5,400.00	5,321.71	3,511.27	3,416.09	24.94	22.26	-84.41	149.29	-9,638.78	9,737.26	9,692.55	44.71	217.780		
5,500.00	5,419.98	3,586.11	3,486.98	25.42	22.85	-84.38	167.47	-9,654.41	9,755.51	9,709.83	45.68	213.540		
5,600.00	5,518.26	5,612.53	5,459.63	25.90	33.92	-85.00	420.55	-9,879.01	9,769.81	9,713.11	56.70	172.294		
5,700.00	5,616.54	5,745.94	5,593.04	26.38	34.30	-85.15	419.85	-9,879.54	9,768.63	9,711.02	57.61	169.573		
5,800.00	5,714.82	5,851.10	5,698.19	26.85	34.60	-85.27	418.50	-9,879.70	9,767.28	9,708.86	58.42	167.185		
5,900.00	5,813.09	5,962.88	5,809.95	27.33	34.91	-85.40	416.43	-9,879.71	9,765.85	9,706.60	59.25	164.813		
6,000.00	5,911.37	6,115.09	5,962.13	27.81	35.34	-85.59	413.52	-9,879.23	9,764.18	9,703.98	60.20	162.200		
6,100.00	6,009.65	6,232.10	6,079.12	28.28	35.67	-85.73	411.20	-9,878.37	9,762.12	9,701.08	61.05	159.909		
6,200.00	6,107.93	6,326.17	6,173.17	28.76	35.94	-85.84	409.60	-9,877.61	9,760.02	9,698.19	61.84	157.832		
6,300.00	6,206.20	6,454.71	6,301.69	29.24	36.31	-85.99	407.64	-9,876.53	9,757.95	9,695.22	62.73	155.558		
6,400.00	6,304.48	6,568.11	6,415.07	29.72	36.65	-86.12	406.36	-9,875.16	9,755.49	9,691.91	63.58	153.433		
6,500.00	6,402.76	6,652.90	6,499.86	30.19	36.91	-86.21	405.79	-9,874.21	9,753.14	9,688.79	64.36	151.552		
6,600.00	6,501.04	6,727.44	6,574.39	30.67	37.13	-86.30	405.31	-9,873.52	9,751.02	9,685.92	65.10	149.781		
6,700.00	6,599.31	6,812.71	6,659.66	31.15	37.40	-86.39	404.69	-9,872.92	9,749.15	9,683.27	65.88	147.979		
6,800.00	6,697.50	6,903.65	6,750.59	31.63	37.68	-86.55	404.29	-9,872.35	9,745.54	9,678.86	66.68	146.151		
6,900.00	6,794.18	6,977.22	6,824.16	32.10	37.92	-86.90	404.15	-9,872.02	9,728.63	9,661.21	67.42	144.292		
7,000.00	6,886.96	7,195.74	7,042.67	32.55	38.61	-82.87	403.72	-9,869.88	9,696.09	9,627.51	68.58	141.387		
7,100.00	6,973.57	7,268.01	7,114.92	32.99	38.84	-23.45	402.88	-9,868.70	9,648.76	9,579.51	69.25	139.331		
7,200.00	7,051.87	7,324.18	7,171.07	33.41	39.02	-20.71	401.97	-9,867.86	9,588.45	9,518.63	69.83	137.316		
7,300.00	7,119.93	7,371.92	7,218.80	33.85	39.17	-19.60	401.19	-9,867.25	9,516.66	9,446.33	70.32	135.327		
7,400.00	7,176.09	7,420.29	7,267.17	34.39	39.32	-19.90	400.41	-9,866.72	9,435.05	9,364.29	70.76	133.340		
7,500.00	7,218.95	7,486.61	7,333.47	35.09	39.53	-22.30	399.39	-9,865.91	9,345.47	9,274.29	71.18	131.291		
7,600.00	7,247.46	7,529.48	7,376.34	35.98	39.67	-29.54	398.77	-9,865.29	9,250.12	9,178.65	71.47	129.431		
7,700.00	7,260.92	7,548.21	7,395.07	37.04	39.72	-62.48	398.50	-9,865.00	9,151.42	9,079.79	71.62	127.773		
7,800.00	7,261.75	7,547.05	7,393.91	38.23	39.72	-104.64	398.52	-9,865.01	9,051.71	8,980.03	71.68	126.285		
7,900.00	7,261.33	7,543.97	7,390.83	39.59	39.71	-104.39	398.56	-9,865.06	8,951.99	8,880.26	71.72	124.811		
8,000.00	7,260.91	7,540.93	7,387.78	41.10	39.70	-104.14	398.60	-9,865.11	8,852.27	8,780.50	71.78	123.332		
8,100.00	7,260.49	7,537.92	7,384.78	42.75	39.69	-103.89	398.65	-9,865.16	8,752.56	8,680.73	71.83	121.850		
8,200.00	7,260.07	7,534.95	7,381.80	44.53	39.68	-103.64	398.69	-9,865.20	8,652.86	8,580.97	71.89	120.363		
8,300.00	7,259.65	7,532.01	7,378.87	46.41	39.67	-103.40	398.73	-9,865.25	8,553.17	8,481.21	71.95	118.872		
8,400.00	7,259.23	7,529.11	7,375.96	48.39	39.66	-103.16	398.77	-9,865.29	8,453.47	8,381.45	72.02	117.376		
8,500.00	7,258.81	7,526.24	7,373.09	50.45	39.65	-102.92	398.81	-9,865.34	8,353.79	8,281.70	72.09	115.877		
8,600.00	7,258.39	7,523.40	7,370.26	52.59	39.65	-102.68	398.85	-9,865.38	8,254.12	8,181.95	72.17	114.373		
8,700.00	7,257.97	7,520.60	7,367.45	54.79	39.64	-102.45	398.89	-9,865.42	8,154.45	8,082.20	72.25	112.866		
8,800.00	7,257.55	7,517.82	7,364.68	57.05	39.63	-102.21	398.93	-9,865.46	8,054.78	7,982.45	72.33	111.354		
8,900.00	7,257.13	7,515.08	7,361.94	59.36	39.62	-101.98	398.97	-9,865.50	7,955.13	7,882.70	72.43	109.839		
9,000.00	7,256.71	7,512.37	7,359.23	61.72	39.61	-101.76	399.01	-9,865.54	7,855.48	7,782.96	72.52	108.319		
9,100.00	7,256.29	7,509.69	7,356.55	64.12	39.60	-101.53	399.05	-9,865.58	7,755.85	7,683.22	72.62	106.796		
9,200.00	7,255.87	7,507.04	7,353.91	66.56	39.59	-101.31	399.09	-9,865.62	7,656.22	7,583.49	72.73	105.269		
9,300.00	7,255.45	7,504.42	7,351.29	69.02	39.59	-101.09	399.13	-9,865.66	7,556.60	7,483.76	72.84	103.738		
9,400.00	7,255.03	7,501.83	7,348.69	71.52	39.58	-100.87	399.17	-9,865.69	7,456.99	7,384.03	72.96	102.203		
9,500.00	7,254.61	7,499.27	7,346.13	74.04	39.57	-100.65	399.20	-9,865.73	7,357.39	7,284.30	73.09	100.664		
9,600.00	7,254.19	7,496.73	7,343.60	76.58	39.56	-100.43	399.24	-9,865.77	7,257.80	7,184.58	73.22	99.122		
9,700.00	7,253.77	7,494.23	7,341.09	79.15	39.55	-100.22	399.28	-9,865.80	7,158.22	7,084.86	73.36	97.576		
9,800.00	7,253.35	7,491.74	7,338.61	81.74	39.55	-100.01	399.32	-9,865.84	7,058.66	6,985.15	73.51	96.027		
9,900.00	7,252.92	7,489.29	7,336.16	84.34	39.54	-99.80	399.35	-9,865.87	6,959.10	6,885.44	73.66	94.474		
10,000.00	7,252.50	7,486.86	7,333.73	86.96	39.53	-99.59	399.39	-9,865.90	6,859.56	6,785.73	73.82	92.918		
10,100.00	7,252.08	7,484.46	7,331.33	89.59	39.52	-99.39	399.42	-9,865.93	6,760.03	6,686.03	73.99	91.358		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,251.66	7,482.08	7,328.95	92.24	39.51	-99.19	399.46	-9,865.97	6,660.51	6,586.34	74.17	89.795		
10,300.00	7,251.24	7,479.73	7,326.60	94.90	39.51	-98.98	399.50	-9,866.00	6,561.01	6,486.64	74.36	88.228		
10,400.00	7,250.82	7,477.41	7,324.27	97.57	39.50	-98.78	399.53	-9,866.03	6,461.52	6,386.96	74.56	86.658		
10,500.00	7,250.40	7,475.10	7,321.97	100.25	39.49	-98.59	399.57	-9,866.06	6,362.05	6,287.28	74.77	85.085		
10,600.00	7,249.98	7,472.82	7,319.69	102.93	39.49	-98.39	399.60	-9,866.09	6,262.59	6,187.60	74.99	83.509		
10,700.00	7,249.56	7,470.57	7,317.44	105.63	39.48	-98.20	399.63	-9,866.12	6,163.15	6,087.93	75.22	81.930		
10,800.00	7,249.14	7,468.34	7,315.20	108.34	39.47	-98.00	399.67	-9,866.15	6,063.73	5,988.26	75.47	80.348		
10,900.00	7,248.72	7,466.13	7,313.00	111.05	39.46	-97.81	399.70	-9,866.18	5,964.33	5,888.60	75.73	78.763		
11,000.00	7,248.30	7,463.94	7,310.81	113.77	39.46	-97.62	399.73	-9,866.20	5,864.94	5,788.95	76.00	77.175		
11,100.00	7,247.88	7,461.77	7,308.64	116.50	39.45	-97.44	399.77	-9,866.23	5,765.58	5,689.30	76.28	75.585		
11,200.00	7,247.46	7,459.63	7,306.50	119.23	39.44	-97.25	399.80	-9,866.26	5,666.24	5,589.66	76.58	73.992		
11,300.00	7,247.04	7,457.51	7,304.38	121.97	39.44	-97.07	399.83	-9,866.28	5,566.92	5,490.03	76.90	72.396		
11,400.00	7,246.62	7,455.40	7,302.28	124.72	39.43	-96.89	399.87	-9,866.31	5,467.63	5,390.40	77.23	70.798		
11,500.00	7,246.20	7,453.32	7,300.20	127.46	39.42	-96.71	399.90	-9,866.34	5,368.36	5,290.78	77.58	69.198		
11,600.00	7,245.78	7,451.26	7,298.14	130.22	39.42	-96.53	399.93	-9,866.36	5,269.12	5,191.17	77.95	67.596		
11,700.00	7,245.36	7,449.22	7,296.10	132.98	39.41	-96.35	399.96	-9,866.39	5,169.91	5,091.57	78.34	65.992		
11,800.00	7,244.94	7,447.20	7,294.08	135.74	39.40	-96.17	399.99	-9,866.41	5,070.73	4,991.97	78.75	64.387		
11,900.00	7,244.52	7,445.20	7,292.08	138.50	39.40	-96.00	400.02	-9,866.43	4,971.58	4,892.39	79.19	62.780		
12,000.00	7,244.10	7,443.22	7,290.10	141.27	39.39	-95.83	400.05	-9,866.46	4,872.46	4,792.81	79.65	61.172		
12,100.00	7,243.68	7,441.26	7,288.14	144.04	39.39	-95.66	400.08	-9,866.48	4,773.38	4,693.24	80.14	59.563		
12,200.00	7,243.26	7,439.32	7,286.19	146.82	39.38	-95.49	400.11	-9,866.50	4,674.34	4,593.69	80.66	57.953		
12,300.00	7,242.84	7,437.39	7,284.27	149.60	39.37	-95.32	400.14	-9,866.53	4,575.34	4,494.14	81.20	56.344		
12,400.00	7,242.42	7,435.49	7,282.36	152.38	39.37	-95.15	400.17	-9,866.55	4,476.39	4,394.60	81.78	54.734		
12,500.00	7,242.00	7,433.60	7,280.47	155.16	39.36	-94.99	400.20	-9,866.57	4,377.48	4,295.08	82.40	53.125		
12,600.00	7,241.58	7,431.73	7,278.60	157.95	39.35	-94.82	400.23	-9,866.59	4,278.62	4,195.56	83.05	51.516		
12,700.00	7,241.16	7,429.87	7,276.75	160.74	39.35	-94.66	400.26	-9,866.61	4,179.81	4,096.06	83.75	49.909		
12,800.00	7,240.74	7,428.04	7,274.91	163.53	39.34	-94.50	400.29	-9,866.63	4,081.06	3,996.58	84.49	48.304		
12,900.00	7,240.32	7,426.22	7,273.09	166.32	39.34	-94.34	400.32	-9,866.66	3,982.38	3,897.10	85.27	46.701		
13,000.00	7,239.89	7,424.41	7,271.29	169.12	39.33	-94.18	400.35	-9,866.68	3,883.76	3,797.65	86.11	45.101		
13,100.00	7,239.47	7,422.63	7,269.51	171.92	39.33	-94.03	400.38	-9,866.70	3,785.21	3,698.20	87.01	43.505		
13,200.00	7,239.05	7,420.86	7,267.74	174.72	39.32	-93.87	400.41	-9,866.71	3,686.74	3,598.78	87.96	41.914		
13,300.00	7,238.63	7,419.10	7,265.98	177.52	39.31	-93.72	400.43	-9,866.73	3,588.35	3,499.37	88.98	40.328		
13,400.00	7,238.21	7,417.36	7,264.24	180.32	39.31	-93.56	400.46	-9,866.75	3,490.06	3,399.99	90.07	38.748		
13,500.00	7,237.79	7,415.64	7,262.52	183.13	39.30	-93.41	400.49	-9,866.77	3,391.86	3,300.62	91.24	37.175		
13,600.00	7,237.37	7,413.94	7,260.82	185.93	39.30	-93.26	400.52	-9,866.79	3,293.77	3,201.28	92.49	35.610		
13,700.00	7,236.95	7,412.24	7,259.12	188.74	39.29	-93.11	400.54	-9,866.81	3,195.80	3,101.96	93.84	34.055		
13,800.00	7,236.53	7,410.57	7,257.45	191.55	39.29	-92.97	400.57	-9,866.83	3,097.96	3,002.66	95.29	32.510		
13,900.00	7,236.11	7,408.90	7,255.79	194.36	39.28	-92.82	400.60	-9,866.84	3,000.26	2,903.40	96.85	30.977		
14,000.00	7,235.69	7,407.26	7,254.14	197.17	39.28	-92.68	400.62	-9,866.86	2,902.71	2,804.17	98.54	29.458		
14,100.00	7,235.27	7,405.62	7,252.51	199.98	39.27	-92.53	400.65	-9,866.88	2,805.34	2,704.98	100.36	27.953		
14,200.00	7,234.85	7,404.01	7,250.89	202.80	39.27	-92.39	400.68	-9,866.90	2,708.15	2,605.82	102.33	26.465		
14,300.00	7,234.43	7,402.71	7,249.59	205.61	39.26	-92.28	400.70	-9,866.91	2,611.18	2,506.71	104.47	24.995		
14,400.00	7,234.01	7,401.40	7,248.29	208.43	39.26	-92.16	400.72	-9,866.92	2,514.45	2,407.66	106.79	23.545		
14,500.00	7,233.59	7,400.09	7,246.97	211.25	39.25	-92.04	400.74	-9,866.94	2,417.98	2,308.66	109.32	22.118		
14,600.00	7,233.17	7,398.76	7,245.65	214.06	39.25	-91.93	400.76	-9,866.95	2,321.81	2,209.72	112.08	20.715		
14,700.00	7,232.75	7,397.43	7,244.31	216.88	39.25	-91.81	400.78	-9,866.96	2,225.97	2,110.87	115.10	19.339		
14,800.00	7,232.33	7,396.08	7,242.96	219.70	39.24	-91.69	400.80	-9,866.98	2,130.52	2,012.11	118.41	17.992		
14,900.00	7,231.91	7,394.72	7,241.61	222.52	39.24	-91.57	400.83	-9,866.99	2,035.50	1,913.45	122.05	16.678		
15,000.00	7,231.49	7,393.36	7,240.24	225.35	39.23	-91.45	400.85	-9,867.01	1,940.98	1,814.93	126.06	15.398		
15,100.00	7,231.07	7,391.98	7,238.86	228.17	39.23	-91.33	400.87	-9,867.02	1,847.04	1,716.56	130.49	14.155		
15,116.21	7,231.00	7,391.75	7,238.64	228.63	39.23	-91.31	400.87	-9,867.03	1,831.87	1,700.62	131.25	13.957 CC, ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 4822.00ft

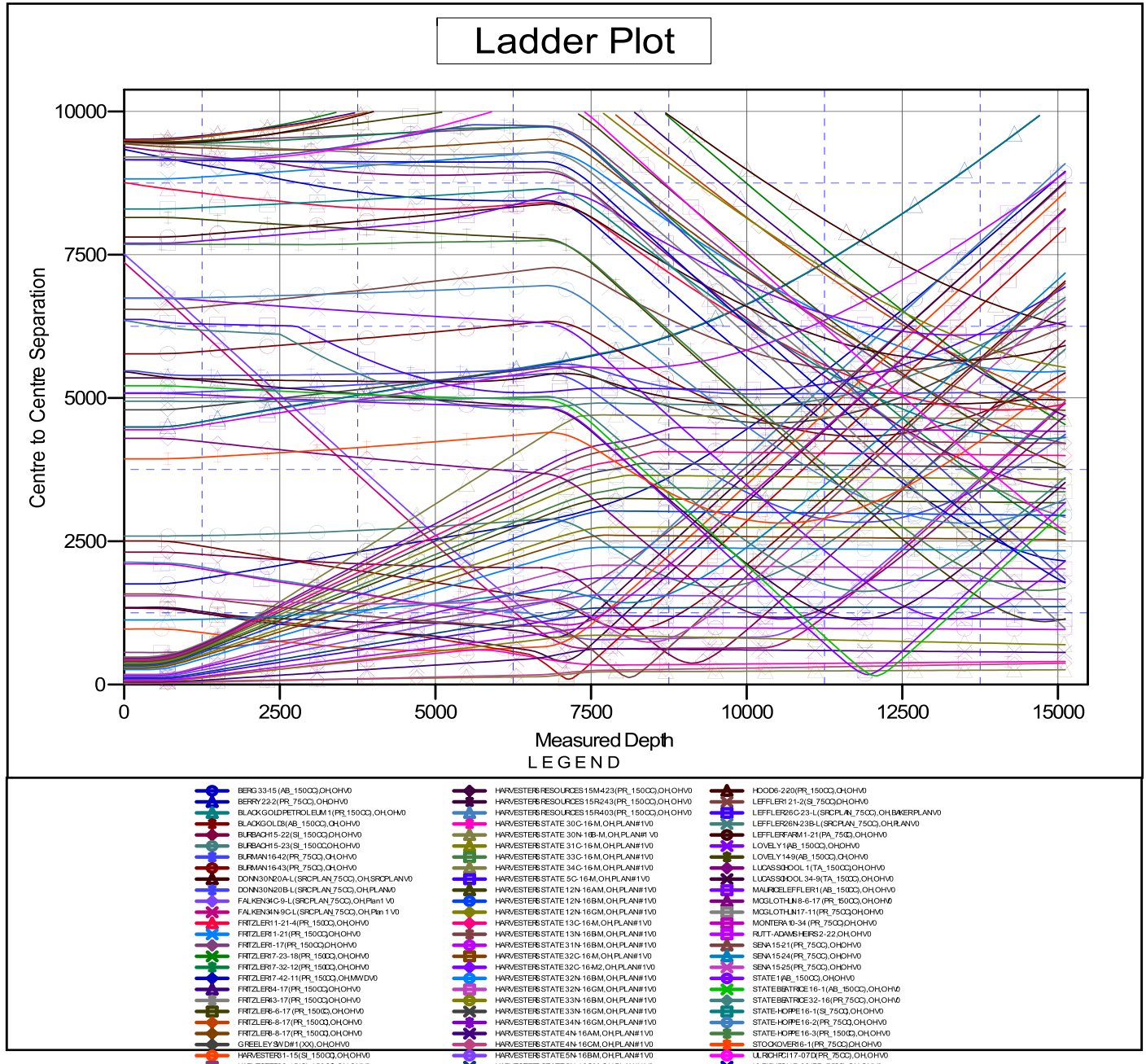
Offset Depths are relative to Offset Datum

Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 4C-16-M

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 4C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 4C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 4822.00ft

Offset Depths are relative to Offset Datum

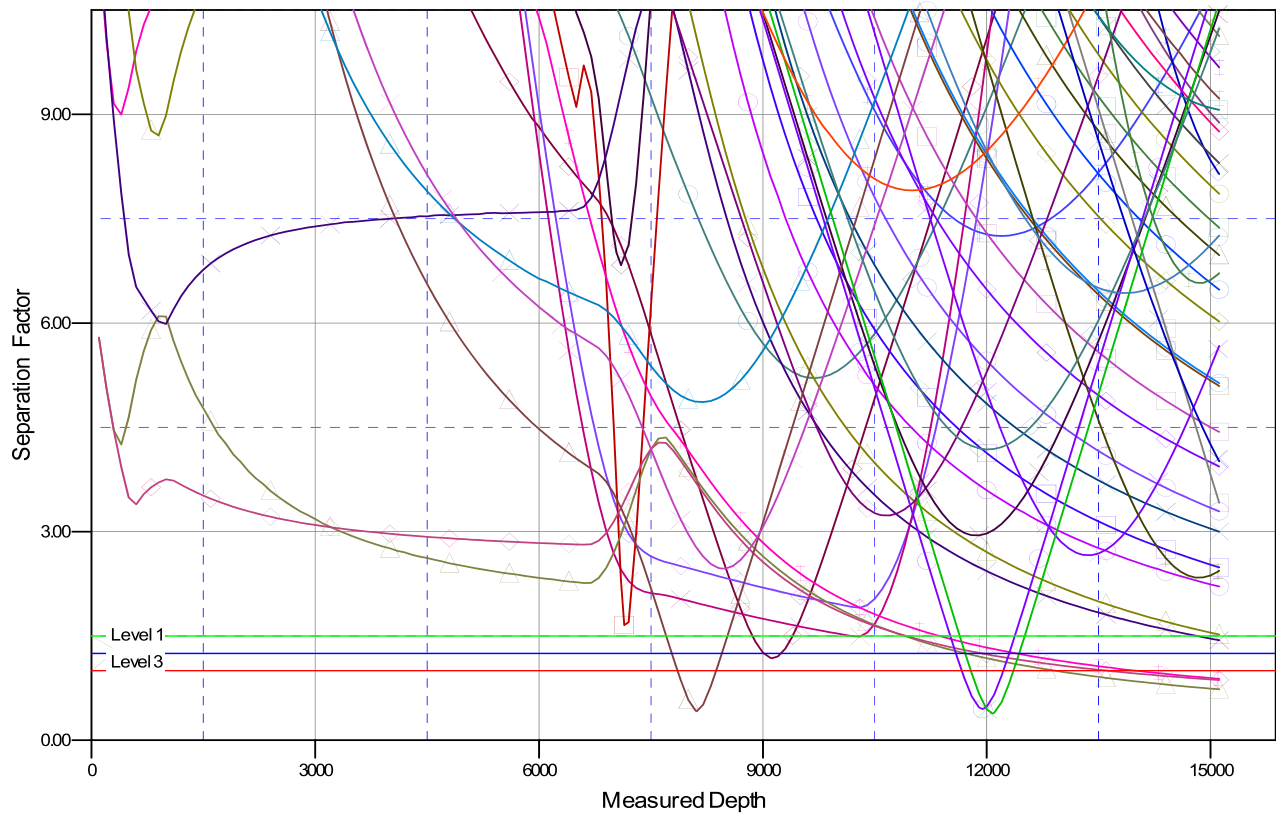
Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 4C-16-M

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°

Separation Factor Plot



LEGEND

BERG 33-45 (AB, 1500Q, OH, OHV0)	HARVESTERS RESOURCES 15M423 (PR, 1500Q, OH, OHV0)	H006-220 (PR, 1500Q, OH, OHV0)
BERR 22-21 (PR, 750Q, OH, OHV0)	HARVESTERS RESOURCES 15M43 (PR, 1500Q, OH, OHV0)	LEFFLER 21-21 (SL, 750Q, OH, OHV0)
BLACK GOLD PETROLEUM 1 (PR, 1500Q, OH, OHV0)	HARVESTERS RESOURCES 15M403 (PR, 1500Q, OH, OHV0)	LEFFLER 26-23 (L, SRC PLAN, 750Q, OH, BAKER PLANV0)
BURBACH 15-22 (SL, 1500Q, OH, OHV0)	HARVESTERS STATE 30C-16M, OH, PLAN#1 V0	LEFFLER 26-23B (L, SRC PLAN, 750Q, OH, PLANV0)
BURBACH 15-23 (SL, 1500Q, OH, OHV0)	HARVESTERS STATE 30N-16M, OH, PLAN#1 V0	LOVELY 149 (AB, 1500Q, OH, OHV0)
BURMAN 16-42 (PR, 750Q, OH, OHV0)	HARVESTERS STATE 31C-16M, OH, PLAN#1 V0	LOVELY 149 (AB, 1500Q, OH, OHV0)
BURMAN 16-43 (PR, 750Q, OH, OHV0)	HARVESTERS STATE 33C-16M, OH, PLAN#1 V0	LUCAS SCHOOL 1 (TA, 1500Q, OH, OHV0)
DOHN 01020-4 (L, SRC PLAN, 750Q, OH, SRC PLANV0)	HARVESTERS STATE 34C-16M, OH, PLAN#1 V0	LUCAS SCHOOL 34-9 (TA, 1500Q, OH, OHV0)
DOHN 01020-4 (L, SRC PLAN, 750Q, OH, PLANV0)	HARVESTERS STATE 12N-16AM, OH, PLAN#1 V0	MAURICE LEFFLER 1 (AB, 1500Q, OH, OHV0)
FALKEN 31G-9 (L, SRC PLAN, 750Q, OH, Plan 1 V0)	HARVESTERS STATE 12N-16BM, OH, PLAN#1 V0	MOGLOTHUN 6-17 (PR, 600Q, OH, OHV0)
FALKEN 31N-9C (L, SRC PLAN, 750Q, OH, Plan 1 V0)	HARVESTERS STATE 12N-16GM, OH, PLAN#1 V0	MOGLOTHUN 17-11 (PR, 750Q, OH, OHV0)
FRTZLER 11-21 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 13C-16M, OH, PLAN#1 V0	MONTEWA 10-34 (PR, 750Q, OH, OHV0)
FRTZLER 11-21 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 13N-16BM, OH, PLAN#1 V0	RUTT-ADAMS HERS 2-22 (OH, OHV0)
FRTZLER 16-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 31N-16BM, OH, PLAN#1 V0	SENA 15-21 (PR, 750Q, OH, OHV0)
FRTZLER 17-23 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 32C-16AM, OH, PLAN#1 V0	SENA 15-24 (PR, 750Q, OH, OHV0)
FRTZLER 17-32 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 32C-16M2, OH, PLAN#1 V0	SENA 15-25 (PR, 750Q, OH, OHV0)
FRTZLER 17-42 (PR, 1500Q, OH, MW DV0)	HARVESTERS STATE 32N-16BM, OH, PLAN#1 V0	STATE 1 (AB, 1500Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 32N-16GM, OH, PLAN#1 V0	STATEBATRICE 16-11 (AB, 1500Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 33N-16BM, OH, PLAN#1 V0	STATEBATRICE 32-16 (PR, 750Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 33N-16GM, OH, PLAN#1 V0	STATE HOPE 16-11 (SL, 750Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 34N-16GM, OH, PLAN#1 V0	STATE HOPE 16-21 (PR, 750Q, OH, OHV0)
FRTZLER 18-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 4N-16AM, OH, PLAN#1 V0	STATE HOPE 16-31 (PR, 1500Q, OH, OHV0)
GRIFFIN 30V01 (XX, OH, OHV0)	HARVESTERS STATE 4N-16GM, OH, PLAN#1 V0	STOCKOVER 6-11 (PR, 750Q, OH, OHV0)
HARVESTERS 11-15 (SL, 1500Q, OH, OHV0)	HARVESTERS STATE 5N-16BM, OH, PLAN#1 V0	ULRICH 11-07 (PR, 750Q, OH, OHV0)