

BONANZA CREEK ENERGY

WELD COUNTY

SEC 3-T4N-R62W

STATE SEVENTY HOLES Y-E-10HNXRL

OWB

PROPOSAL 1

Anticollision Report

21 March, 2023

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	3/21/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	18,919.53	PROPOSAL 1 (OWB)	MWD OWSG	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SEC 3-T4N-R62W						
ABND VERT STATE #1 - OWB - Design #1	3,284.16	2,710.97	2,099.32	2,013.31	24.407	CC
ABND VERT STATE #1 - OWB - Design #1	3,400.00	2,781.44	2,101.33	2,012.07	23.541	ES
ABND VERT STATE #1 - OWB - Design #1	4,900.00	3,705.99	2,460.03	2,335.44	19.745	SF
EXIST HZ ANSCHUTZ STATE 4-62-2-1721BH2 - OWB -	4,392.26	3,511.43	1,447.64	1,385.96	23.472	CC
EXIST HZ ANSCHUTZ STATE 4-62-2-1721BH2 - OWB -	4,400.00	3,515.81	1,447.65	1,385.85	23.423	ES
EXIST HZ ANSCHUTZ STATE 4-62-2-1721BH2 - OWB -	4,800.00	3,736.06	1,486.16	1,418.95	22.111	SF
EXIST HZ ANSCHUTZ STATE 4-62-2-1721CH2 - OWB -	4,604.43	3,645.30	1,296.71	1,230.83	19.682	CC, ES
EXIST HZ ANSCHUTZ STATE 4-62-2-1721CH2 - OWB -	5,000.00	3,883.65	1,332.08	1,261.21	18.794	SF
EXIST HZ ANSCHUTZ STATE 4-62-2-3228BH2 - OWB -	4,885.15	3,880.53	1,213.41	1,143.15	17.269	CC
EXIST HZ ANSCHUTZ STATE 4-62-2-3228BH2 - OWB -	4,900.00	3,889.20	1,213.47	1,142.99	17.218	ES
EXIST HZ ANSCHUTZ STATE 4-62-2-3228BH2 - OWB -	5,200.00	4,089.81	1,236.38	1,162.61	16.760	SF
EXIST HZ ANSCHUTZ STATE 4-62-2-3228CH2 - OWB -	5,232.85	4,169.78	1,061.71	982.68	13.435	CC, ES
EXIST HZ ANSCHUTZ STATE 4-62-2-3228CH2 - OWB -	5,400.00	4,288.56	1,067.96	987.41	13.259	SF
EXIST HZ ANSCHUTZ WINDMILL 10-34H - OWB - FINA	2,280.01	2,300.99	2,484.00	2,460.63	106.269	CC
EXIST HZ ANSCHUTZ WINDMILL 10-34H - OWB - FINA	2,400.00	2,399.13	2,485.33	2,460.00	98.149	ES
EXIST HZ ANSCHUTZ WINDMILL 10-34H - OWB - FINA	12,700.00	5,629.00	6,781.86	6,631.53	45.111	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-02-4841CN - OW	6,187.61	4,718.96	14.22	-89.83	0.137	Level 1, CC, ES, SF
EXIST HZ RSU ANSCHUTZ FED 4-62-02-4841CS - OW	6,660.50	4,920.41	155.37	48.14	1.449	Level 3, CC, ES, SF
EXIST HZ RSU ANSCHUTZ FED 4-62-02-4956C - OWB	7,253.48	5,175.86	411.13	296.83	3.597	CC, ES
EXIST HZ RSU ANSCHUTZ FED 4-62-02-4956C - OWB	7,300.00	5,204.60	412.77	297.83	3.591	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-02-6457C - OWB	8,785.62	6,145.10	277.57	206.09	3.883	CC
EXIST HZ RSU ANSCHUTZ FED 4-62-02-6457C - OWB	8,900.00	6,062.71	283.32	204.09	3.576	ES
EXIST HZ RSU ANSCHUTZ FED 4-62-02-6457C - OWB	9,100.00	5,968.08	328.56	221.18	3.060	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-11-0108C - OWB	8,800.00	6,145.62	270.46	186.38	3.217	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-11-0108C - OWB	8,887.66	6,092.69	257.14	182.45	3.443	CC, ES
EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CN - OW	8,700.00	6,236.28	818.25	731.94	9.480	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CN - OW	8,900.00	6,120.17	769.94	691.60	9.828	ES
EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CN - OW	8,921.08	6,106.32	769.50	691.96	9.923	CC
EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - OW	8,700.00	6,437.57	1,369.22	1,282.19	15.732	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - OW	8,964.93	6,273.61	1,309.83	1,228.99	16.202	CC, ES
EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - STK	8,700.00	6,437.57	1,369.22	1,282.19	15.732	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - STK	8,964.93	6,273.61	1,309.83	1,228.99	16.202	CC, ES
EXIST HZ RSU ANSCHUTZ FED 4-62-11-1724C - OWB	8,600.00	6,691.50	1,956.17	1,873.86	23.764	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-11-1724C - OWB	8,916.58	6,552.49	1,876.52	1,800.09	24.551	CC, ES
EXIST HZ RSU ANSCHUTZ FED 4-62-11-3225C - OWB	8,700.00	6,254.23	2,435.39	2,347.43	27.689	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-11-3225C - OWB	9,000.00	6,110.09	2,366.32	2,283.53	28.582	ES

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
SEC 3-T4N-R62W						
EXIST HZ RSU ANSCHUTZ FED 4-62-11-3225C - OWB	9,000.85	6,109.81	2,366.32	2,283.55	28.587	CC
EXIST HZ RSU ANSCHUTZ FED 4-62-11-3340C - OWB	8,400.00	8,400.00	3,102.88	2,993.06	28.255	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-11-3340C - OWB	9,000.00	6,030.50	2,849.20	2,767.25	34.769	ES
EXIST HZ RSU ANSCHUTZ FED 4-62-11-3340C - OWB	9,011.70	6,030.50	2,849.16	2,767.45	34.869	CC
EXIST HZ RSU ANSCHUTZ FED 4-62-11-4841CN - OW	8,400.00	8,400.00	3,665.02	3,553.76	32.943	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-11-4841CN - OW	9,000.00	5,980.50	3,417.16	3,336.09	42.151	ES
EXIST HZ RSU ANSCHUTZ FED 4-62-11-4841CN - OW	9,006.96	5,980.50	3,417.15	3,336.19	42.210	CC
EXIST HZ RSU ANSCHUTZ FED 4-62-2-0108C - OWB -	3,553.20	3,090.54	1,735.90	1,679.32	30.680	CC
EXIST HZ RSU ANSCHUTZ FED 4-62-2-0108C - OWB -	3,600.00	3,094.54	1,736.53	1,679.16	30.272	ES
EXIST HZ RSU ANSCHUTZ FED 4-62-2-0108C - OWB -	4,300.00	4,300.00	1,888.89	1,812.66	24.776	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CN - OWB	3,620.59	3,284.23	1,505.01	1,445.96	25.487	CC, ES
EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CN - OWB	4,000.00	3,402.74	1,549.30	1,484.29	23.832	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CS - OWB	3,904.50	3,425.47	1,261.46	1,200.24	20.605	CC, ES
EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CS - OWB	4,200.00	3,541.93	1,289.83	1,223.72	19.510	SF
EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - OWB -	5,587.90	4,525.38	458.81	374.31	5.430	CC, ES, SF
EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - STK 1	5,587.90	4,525.38	458.81	374.31	5.430	CC, ES, SF
EXIST HZ STATE SEVENTY HOLES 11-14-3HNB - OWB	13,317.34	10,828.00	487.84	323.73	2.973	CC
EXIST HZ STATE SEVENTY HOLES 11-14-3HNB - OWB	13,400.00	10,828.00	494.79	320.67	2.842	ES
EXIST HZ STATE SEVENTY HOLES 11-14-3HNB - OWB	13,500.00	10,828.00	520.92	333.79	2.784	SF
EXIST HZ STATE SEVENTY HOLES A11-E14-3HNC - O	13,639.93	10,925.00	512.94	343.73	3.031	CC
EXIST HZ STATE SEVENTY HOLES A11-E14-3HNC - O	13,700.00	10,925.00	516.45	342.10	2.962	ES
EXIST HZ STATE SEVENTY HOLES A11-E14-3HNC - O	13,800.00	10,925.00	537.34	352.22	2.903	SF
EXIST HZ STATE SEVENTY HOLES A-E-3HNB - OWB	13,966.83	10,870.00	490.17	309.36	2.711	CC
EXIST HZ STATE SEVENTY HOLES A-E-3HNB - OWB	14,000.00	10,870.00	491.29	308.44	2.687	ES
EXIST HZ STATE SEVENTY HOLES A-E-3HNB - OWB	14,100.00	10,870.00	507.94	315.81	2.644	SF
EXIST HZ STATE SEVENTY HOLES F11-J14-3HNC - O	12,959.37	10,897.00	512.96	357.01	3.289	CC
EXIST HZ STATE SEVENTY HOLES F11-J14-3HNC - O	13,000.00	10,897.00	514.56	353.77	3.200	ES
EXIST HZ STATE SEVENTY HOLES F11-J14-3HNC - O	13,200.00	10,897.00	566.59	380.71	3.048	SF
EXIST HZ STATE SEVENTY HOLES F-J-3HNB - OWB -	12,639.45	10,837.00	487.72	334.58	3.185	CC
EXIST HZ STATE SEVENTY HOLES F-J-3HNB - OWB -	12,700.00	10,837.00	491.47	328.64	3.018	ES
EXIST HZ STATE SEVENTY HOLES F-J-3HNB - OWB -	12,800.00	10,837.00	513.47	334.83	2.874	SF
EXIST HZ STATE SEVENTY HOLES K-O-3HNB - OWB	759.86	742.12	204.05	198.84	39.160	CC
EXIST HZ STATE SEVENTY HOLES K-O-3HNB - OWB	800.00	781.08	204.27	198.72	36.800	ES
EXIST HZ STATE SEVENTY HOLES K-O-3HNB - OWB	11,600.00	10,836.00	556.26	392.88	3.405	SF
STATE SEVENTY HOLES 21-24-3HN - OWB - PROPOS	100.00	100.00	61.32	61.05	228.085	CC, ES
STATE SEVENTY HOLES 21-24-3HN - OWB - PROPOS	12,200.00	10,919.17	507.16	346.20	3.151	SF
STATE SEVENTY HOLES P31-T34-3HN - OWB - PROP	265.19	266.92	46.80	45.35	32.252	CC
STATE SEVENTY HOLES P31-T34-3HN - OWB - PROP	300.00	301.91	46.93	45.23	27.600	ES
STATE SEVENTY HOLES P31-T34-3HN - OWB - PROP	10,700.00	10,867.43	521.29	363.35	3.301	SF
STATE SEVENTY HOLES P41-T44-3HN - OWB - PROP	321.83	323.57	28.68	26.82	15.450	CC, ES
STATE SEVENTY HOLES P41-T44-3HN - OWB - PROP	9,900.00	11,021.32	559.12	384.94	3.210	SF
STATE SEVENTY HOLES P41-T44-4HN - OWB - PROP	100.00	100.00	75.26	74.99	279.923	CC, ES
STATE SEVENTY HOLES P41-T44-4HN - OWB - PROP	14,629.86	11,999.42	459.68	206.31	1.814	SF
STATE SEVENTY HOLES U-Y-10HNXRL - OWB - PROP	271.35	272.09	15.51	14.02	10.420	CC
STATE SEVENTY HOLES U-Y-10HNXRL - OWB - PROP	8,800.00	11,907.83	36.35	-106.70	0.254	Level 1, ES, SF

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SEC 4-T4N-R62W						
EXIST HZ STATE SEVENTY HOLES 21-24-4HNB - OW	17,284.59	11,015.00	494.12	231.86	1.884	CC
EXIST HZ STATE SEVENTY HOLES 21-24-4HNB - OW	17,300.00	11,015.00	494.36	230.61	1.874	ES
EXIST HZ STATE SEVENTY HOLES 21-24-4HNB - OW	17,400.00	11,015.00	507.42	235.21	1.864	SF
EXIST HZ STATE SEVENTY HOLES F21-J24-4HNB - O	17,613.22	10,965.00	497.33	230.50	1.864	CC, ES
EXIST HZ STATE SEVENTY HOLES F21-J24-4HNB - O	17,700.00	10,965.00	504.85	231.40	1.846	SF
EXIST HZ STATE SEVENTY HOLES F-J-4HC - OWB - F	18,160.73	6,755.00	4,874.38	4,585.36	16.866	CC
EXIST HZ STATE SEVENTY HOLES F-J-4HC - OWB - F	18,300.00	6,755.00	4,876.36	4,583.57	16.654	ES
EXIST HZ STATE SEVENTY HOLES F-J-4HC - OWB - F	18,919.70	6,755.00	4,933.11	4,626.05	16.066	SF
EXIST HZ STATE SEVENTY HOLES F-J-4HC - STK 1 -	17,981.98	10,961.00	743.95	479.19	2.810	CC
EXIST HZ STATE SEVENTY HOLES F-J-4HC - STK 1 -	18,000.00	10,961.00	744.17	478.73	2.804	ES
EXIST HZ STATE SEVENTY HOLES F-J-4HC - STK 1 -	18,100.00	10,961.00	753.26	483.97	2.797	SF
EXIST HZ STATE SEVENTY HOLES F-J-4HNB - OWB -	17,942.75	10,922.00	494.36	219.31	1.797	CC
EXIST HZ STATE SEVENTY HOLES F-J-4HNB - OWB -	18,000.00	10,922.00	497.67	219.15	1.787	ES, SF
EXIST HZ STATE SEVENTY HOLES K21-O24-4HNB - O	16,954.95	11,078.00	491.17	233.04	1.903	CC
EXIST HZ STATE SEVENTY HOLES K21-O24-4HNB - O	17,000.00	11,078.00	493.23	230.06	1.874	ES, SF
EXIST HZ STATE SEVENTY HOLES P-T-4HNB - OWB	15,286.57	10,835.00	491.21	280.20	2.328	CC
EXIST HZ STATE SEVENTY HOLES P-T-4HNB - OWB	15,300.00	10,835.00	491.39	279.22	2.316	ES
EXIST HZ STATE SEVENTY HOLES P-T-4HNB - OWB	15,400.00	10,835.00	504.13	281.99	2.269	SF
SEC 5-T4N-R62W						
STATE SEVENTY HOLES 34-32-34XRLN - OWB - FINA	4,365.83	17,347.70	3,728.99	3,485.41	15.309	CC
STATE SEVENTY HOLES 34-32-34XRLN - OWB - FINA	4,800.00	17,750.18	3,745.59	3,466.36	13.414	ES
STATE SEVENTY HOLES 34-32-34XRLN - OWB - FINA	18,500.00	18,500.00	5,490.44	4,873.81	8.904	SF
SEC 9-T4N-R62W						
ANSCHUTZ EQUUS FARMS 4-62-9-0108CH2 - OWB - F	12,183.93	13,033.22	672.11	388.70	2.371	CC
ANSCHUTZ EQUUS FARMS 4-62-9-0108CH2 - OWB - F	18,919.70	6,182.95	674.51	369.22	2.209	ES, SF

Offset Design SEC 3-T4N-R62W - ABND VERT STATE #1 - OWB - Design #1												Offset Site Error:	0.00 usft
Survey Program: 0-INC												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Minimum Separation (usft)	Separation Factor
0.00	0.00	2.00	-2.00	0.00	0.02	95.92	-270.18	2,604.25	2,618.23				
100.00	100.00	102.00	98.00	0.13	1.24	95.92	-270.18	2,604.25	2,618.23	2,616.85		1.38	1,899.409
200.00	199.98	202.02	197.98	0.48	3.53	-53.35	-270.18	2,604.25	2,617.18	2,613.17		4.01	652.121
300.00	299.84	302.16	297.84	0.85	5.61	-53.49	-270.18	2,604.25	2,614.06	2,607.61		6.45	405.044
400.00	399.45	402.55	397.45	1.22	7.66	-53.73	-270.18	2,604.25	2,608.88	2,600.00		8.88	293.842
500.00	498.70	503.30	496.70	1.62	9.70	-54.06	-270.18	2,604.25	2,601.66	2,590.35		11.31	229.948
600.00	597.47	604.53	595.47	2.05	11.75	-54.49	-270.18	2,604.25	2,592.45	2,578.68		13.77	188.218
700.00	695.62	706.38	693.62	2.51	13.81	-55.01	-270.18	2,604.25	2,581.30	2,565.04		16.27	158.688
800.00	793.06	808.94	791.06	3.01	15.88	-55.64	-270.18	2,604.25	2,568.28	2,549.48		18.80	136.606
900.00	889.64	887.64	887.64	3.56	17.46	-56.35	-270.18	2,604.25	2,553.46	2,532.57		20.89	122.260
1,000.00	985.27	983.27	983.27	4.14	19.39	-57.17	-270.18	2,604.25	2,536.93	2,513.58		23.35	108.657
1,100.00	1,079.82	1,077.82	1,077.82	4.78	21.29	-58.08	-270.18	2,604.25	2,518.79	2,492.97		25.83	97.515
1,200.00	1,173.17	1,171.17	1,171.17	5.46	23.17	-59.08	-270.18	2,604.25	2,499.17	2,470.84		28.33	88.209
1,300.00	1,265.21	1,263.21	1,263.21	6.20	25.03	-60.18	-270.18	2,604.25	2,478.19	2,447.33		30.86	80.309
1,400.00	1,355.84	1,353.84	1,353.84	6.99	26.85	-61.38	-270.18	2,604.25	2,455.99	2,422.59		33.41	73.515
1,500.00	1,444.94	1,442.94	1,442.94	7.84	28.64	-62.66	-270.18	2,604.25	2,432.74	2,396.76		35.98	67.605

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												SEC 3-T4N-R62W - ABND VERT STATE #1 - OWB - Design #1		Offset Site Error: 0.00 usft	
Survey Program: 0-INC												Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
1,600.00	1,532.39	1,530.39	1,530.39	8.75	30.40	-64.03	-270.18	2,604.25	2,408.61	2,370.02	38.59	62.417			
1,700.00	1,618.11	1,616.11	1,616.11	9.71	32.13	-65.48	-270.18	2,604.25	2,383.78	2,342.56	41.22	57.828			
1,800.00	1,701.97	1,700.03	1,699.97	10.74	33.82	-67.00	-270.18	2,604.25	2,358.47	2,314.59	43.89	53.740			
1,900.00	1,783.88	1,781.88	1,781.88	11.82	35.47	-68.59	-270.18	2,604.25	2,332.89	2,286.31	46.58	50.083			
2,000.00	1,863.74	1,861.74	1,861.74	12.96	37.07	-70.24	-270.18	2,604.25	2,307.28	2,257.97	49.31	46.794			
2,100.00	1,941.45	1,939.45	1,939.45	14.16	38.64	-71.93	-270.18	2,604.25	2,281.89	2,229.83	52.07	43.828			
2,200.00	2,016.92	2,014.92	2,014.92	15.41	40.15	-73.65	-270.18	2,604.25	2,256.99	2,202.13	54.85	41.145			
2,300.00	2,090.05	2,088.05	2,088.05	16.73	41.62	-75.39	-270.18	2,604.25	2,232.85	2,175.17	57.67	38.716			
2,400.00	2,160.76	2,158.76	2,158.76	18.10	43.05	-77.14	-270.18	2,604.25	2,209.76	2,149.25	60.52	36.515			
2,500.00	2,228.95	2,226.95	2,226.95	19.53	44.42	-78.88	-270.18	2,604.25	2,188.03	2,124.65	63.38	34.520			
2,600.00	2,294.55	2,307.45	2,292.55	21.01	46.04	-80.59	-270.18	2,604.25	2,167.97	2,101.40	66.57	32.568			
2,700.00	2,357.48	2,355.48	2,355.48	22.55	47.00	-82.26	-270.18	2,604.25	2,149.89	2,080.72	69.16	31.084			
2,800.00	2,418.42	2,416.42	2,416.42	24.13	48.23	-83.65	-270.18	2,604.25	2,134.20	2,062.13	72.06	29.616			
2,900.00	2,479.25	2,477.25	2,477.25	25.71	49.45	-84.95	-270.18	2,604.25	2,121.35	2,046.38	74.97	28.296			
3,000.00	2,540.09	2,538.09	2,538.09	27.31	50.68	-86.26	-270.18	2,604.25	2,111.40	2,033.53	77.87	27.115			
3,100.00	2,600.93	2,601.07	2,598.93	28.90	51.94	-87.57	-270.18	2,604.25	2,104.40	2,023.60	80.80	26.045			
3,200.00	2,661.77	2,659.77	2,659.77	30.51	53.13	-88.89	-270.18	2,604.25	2,100.38	2,016.76	83.62	25.117			
3,284.16	2,712.97	2,710.97	2,710.97	31.86	54.15	-90.00	-270.18	2,604.25	2,099.32	2,013.31	86.01	24.407	CC		
3,300.00	2,722.61	2,720.61	2,720.61	32.11	54.35	-90.21	-270.18	2,604.25	2,099.36	2,012.90	86.46	24.281			
3,400.00	2,783.44	2,781.44	2,781.44	33.72	55.57	-91.53	-270.18	2,604.25	2,101.33	2,012.07	89.26	23.541	ES		
3,500.00	2,844.28	2,842.28	2,842.28	35.34	56.80	-92.84	-270.18	2,604.25	2,106.30	2,014.28	92.02	22.890			
3,600.00	2,905.12	2,903.12	2,903.12	36.95	58.02	-94.15	-270.18	2,604.25	2,114.23	2,019.51	94.73	22.319			
3,700.00	2,965.96	2,963.96	2,963.96	38.57	59.24	-95.46	-270.18	2,604.25	2,125.11	2,027.72	97.38	21.823			
3,800.00	3,026.79	3,024.79	3,024.79	40.19	60.47	-96.77	-270.18	2,604.25	2,138.87	2,038.89	99.98	21.394			
3,900.00	3,087.63	3,085.63	3,085.63	41.81	61.69	-98.06	-270.18	2,604.25	2,155.47	2,052.96	102.51	21.027			
4,000.00	3,148.47	3,146.47	3,146.47	43.43	62.91	-99.35	-270.18	2,604.25	2,174.84	2,069.86	104.98	20.717			
4,100.00	3,209.31	3,207.31	3,207.31	45.05	64.14	-100.63	-270.18	2,604.25	2,196.91	2,089.52	107.38	20.458			
4,200.00	3,270.14	3,268.14	3,268.14	46.68	65.36	-101.89	-270.18	2,604.25	2,221.59	2,111.87	109.72	20.247			
4,300.00	3,330.98	3,328.98	3,328.98	48.31	66.59	-103.15	-270.18	2,604.25	2,248.81	2,136.81	112.00	20.079			
4,400.00	3,391.82	3,389.82	3,389.82	49.93	67.81	-104.39	-270.18	2,604.25	2,278.47	2,164.26	114.20	19.951			
4,500.00	3,452.66	3,450.66	3,450.66	51.56	69.03	-105.62	-270.18	2,604.25	2,310.47	2,194.12	116.35	19.858			
4,600.00	3,513.49	3,511.49	3,511.49	53.19	70.26	-106.84	-270.18	2,604.25	2,344.73	2,226.29	118.43	19.798			
4,700.00	3,574.33	3,572.33	3,572.33	54.82	71.48	-108.04	-270.18	2,604.25	2,381.14	2,260.68	120.46	19.767			
4,800.00	3,635.17	3,633.17	3,633.17	56.45	72.70	-109.22	-270.18	2,604.25	2,419.60	2,297.17	122.43	19.763			
4,900.00	3,696.01	3,705.99	3,694.01	58.08	74.17	-110.39	-270.18	2,604.25	2,460.03	2,335.44	124.59	19.745	SF		
5,000.00	3,756.84	3,754.84	3,754.84	59.71	75.15	-111.54	-270.18	2,604.25	2,502.32	2,376.10	126.22	19.826			
5,100.00	3,817.68	3,815.68	3,815.68	61.34	76.37	-112.67	-270.18	2,604.25	2,546.38	2,418.34	128.04	19.888			
5,200.00	3,878.52	3,876.52	3,876.52	62.97	77.60	-113.78	-270.18	2,604.25	2,592.12	2,462.31	129.81	19.968			
5,300.00	3,939.36	3,937.36	3,937.36	64.61	78.82	-114.87	-270.18	2,604.25	2,639.46	2,507.91	131.55	20.064			
5,400.00	4,000.19	4,001.81	3,998.19	66.24	80.12	-115.95	-270.18	2,604.25	2,688.30	2,554.98	133.33	20.163			
5,500.00	4,061.03	4,059.03	4,059.03	67.87	81.27	-117.01	-270.18	2,604.25	2,738.58	2,603.66	134.92	20.298			
5,600.00	4,121.87	4,119.87	4,119.87	69.51	82.49	-118.04	-270.18	2,604.25	2,790.21	2,653.65	136.56	20.433			
5,700.00	4,182.71	4,180.71	4,180.71	71.14	83.71	-119.06	-270.18	2,604.25	2,843.12	2,704.95	138.17	20.578			
5,800.00	4,243.54	4,241.54	4,241.54	72.77	84.94	-120.06	-270.18	2,604.25	2,897.23	2,757.48	139.75	20.732			
5,900.00	4,304.38	4,302.38	4,302.38	74.41	86.16	-121.03	-270.18	2,604.25	2,952.49	2,811.18	141.31	20.894			
6,000.00	4,365.22	4,363.22	4,363.22	76.04	87.39	-121.99	-270.18	2,604.25	3,008.82	2,865.97	142.85	21.063			
6,100.00	4,426.06	4,424.06	4,424.06	77.68	88.61	-122.93	-270.18	2,604.25	3,066.18	2,921.81	144.37	21.239			
6,200.00	4,486.90	4,484.90	4,484.90	79.31	89.83	-123.85	-270.18	2,604.25	3,124.49	2,978.62	145.87	21.420			
6,300.00	4,547.73	4,545.73	4,545.73	80.95	91.06	-124.75	-270.18	2,604.25	3,183.72	3,036.36	147.36	21.605			
6,400.00	4,608.57	4,606.57	4,606.57	82.58	92.28	-125.63	-270.18	2,604.25	3,243.81	3,094.98	148.83	21.795			
6,500.00	4,669.41	4,667.41	4,667.41	84.22	93.50	-126.49	-270.18	2,604.25	3,304.71	3,154.41	150.30	21.988			

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 0-INC												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
6,600.00	4,730.25	4,728.25	4,728.25	85.86	94.73	-127.33	-270.18	2,604.25	3,366.38	3,214.63	151.75	22.183	
6,700.00	4,791.08	4,789.08	4,789.08	87.49	95.95	-128.15	-270.18	2,604.25	3,428.78	3,275.59	153.20	22.382	
6,800.00	4,851.92	4,849.92	4,849.92	89.13	97.17	-128.96	-270.18	2,604.25	3,491.87	3,337.24	154.63	22.582	
6,900.00	4,912.76	4,910.76	4,910.76	90.76	98.40	-129.75	-270.18	2,604.25	3,555.61	3,399.55	156.06	22.783	
7,000.00	4,973.60	4,971.60	4,971.60	92.40	99.62	-130.52	-270.18	2,604.25	3,619.97	3,462.48	157.49	22.986	
7,100.00	5,034.43	5,032.43	5,032.43	94.04	100.84	-131.27	-270.18	2,604.25	3,684.91	3,526.01	158.91	23.189	
7,200.00	5,095.27	5,106.73	5,093.27	95.67	102.34	-132.01	-270.18	2,604.25	3,750.41	3,589.82	160.59	23.353	
7,300.00	5,156.11	5,154.11	5,154.11	97.31	103.29	-132.73	-270.18	2,604.25	3,816.44	3,654.70	161.74	23.597	
7,400.00	5,216.95	5,214.95	5,214.95	98.95	104.51	-133.43	-270.18	2,604.25	3,882.96	3,719.82	163.15	23.801	
7,500.00	5,277.78	5,275.78	5,275.78	100.59	105.74	-134.12	-270.18	2,604.25	3,949.96	3,785.41	164.55	24.004	
7,600.00	5,338.62	5,336.62	5,336.62	102.22	106.96	-134.79	-270.18	2,604.25	4,017.41	3,851.45	165.96	24.207	
7,700.00	5,399.46	5,402.54	5,397.46	103.86	108.29	-135.44	-270.18	2,604.25	4,085.29	3,917.82	167.47	24.395	
7,800.00	5,460.30	5,458.30	5,458.30	105.50	109.41	-136.09	-270.18	2,604.25	4,153.57	3,984.80	168.77	24.611	
7,900.00	5,521.24	5,519.24	5,519.24	107.13	110.63	-140.22	-270.18	2,604.25	4,222.36	4,052.19	170.17	24.812	
8,000.00	5,584.83	5,582.83	5,582.83	108.61	111.91	-158.62	-270.18	2,604.25	4,294.32	4,122.70	171.62	25.022	
8,100.00	5,650.69	5,648.69	5,648.69	109.85	113.24	-178.58	-270.18	2,604.25	4,368.73	4,195.60	173.13	25.233	
8,200.00	5,716.83	5,714.83	5,714.83	110.82	114.57	161.67	-270.18	2,604.25	4,443.19	4,268.48	174.71	25.431	
8,300.00	5,781.24	5,779.24	5,779.24	111.52	115.86	143.77	-270.18	2,604.25	4,515.54	4,339.17	176.37	25.603	
8,400.00	5,841.96	5,839.96	5,839.96	111.98	117.08	128.62	-270.18	2,604.25	4,583.83	4,405.72	178.11	25.736	
8,500.00	5,897.14	5,904.86	5,895.14	112.25	118.39	116.45	-270.18	2,604.25	4,646.39	4,466.25	180.14	25.793	
8,600.00	5,945.12	5,943.12	5,943.12	112.37	119.16	107.02	-270.18	2,604.25	4,701.81	4,519.95	181.86	25.854	
8,700.00	5,984.42	5,982.42	5,982.42	112.39	119.95	99.99	-270.18	2,604.25	4,748.92	4,565.06	183.86	25.829	
8,800.00	6,013.86	6,011.86	6,011.86	112.35	120.54	94.99	-270.18	2,604.25	4,786.77	4,600.87	185.90	25.749	
8,900.00	6,032.54	6,030.54	6,030.54	112.30	120.92	91.76	-270.18	2,604.25	4,814.64	4,626.70	187.94	25.618	
9,000.00	6,039.89	6,037.89	6,037.89	112.24	121.06	90.11	-270.18	2,604.25	4,831.98	4,642.05	189.93	25.441	
9,100.00	6,040.00	6,038.00	6,038.00	112.19	121.07	90.00	-270.18	2,604.25	4,843.29	4,651.41	191.87	25.242	
9,200.00	6,040.00	6,038.00	6,038.00	112.16	121.07	90.00	-270.18	2,604.25	4,856.50	4,662.65	193.86	25.052	
9,300.00	6,040.00	6,038.00	6,038.00	112.15	121.07	90.00	-270.18	2,604.25	4,871.74	4,675.86	195.87	24.872	
9,400.00	6,040.00	6,038.00	6,038.00	112.15	121.07	90.00	-270.18	2,604.25	4,888.97	4,691.06	197.92	24.702	
9,500.00	6,040.00	6,038.00	6,038.00	112.16	121.07	90.00	-270.18	2,604.25	4,908.18	4,708.21	199.98	24.544	
9,600.00	6,040.00	6,038.00	6,038.00	112.19	121.07	90.00	-270.18	2,604.25	4,929.35	4,727.30	202.04	24.397	
9,700.00	6,040.00	6,038.00	6,038.00	112.24	121.07	90.00	-270.18	2,604.25	4,952.44	4,748.33	204.11	24.263	
9,800.00	6,040.00	6,038.00	6,038.00	112.31	121.07	90.00	-270.18	2,604.25	4,977.44	4,771.26	206.18	24.142	
9,900.00	6,040.00	6,038.00	6,038.00	112.39	121.07	90.00	-270.18	2,604.25	5,004.31	4,796.08	208.23	24.033	
10,000.00	6,040.00	6,038.00	6,038.00	112.49	121.07	90.00	-270.18	2,604.25	5,033.02	4,822.75	210.27	23.936	
10,100.00	6,040.00	6,038.00	6,038.00	112.62	121.07	90.00	-270.18	2,604.25	5,063.55	4,851.26	212.29	23.852	
10,200.00	6,040.00	6,038.00	6,038.00	112.77	121.07	90.00	-270.18	2,604.25	5,095.85	4,881.57	214.28	23.781	
10,300.00	6,040.00	6,038.00	6,038.00	112.94	121.07	90.00	-270.18	2,604.25	5,129.91	4,913.66	216.25	23.723	
10,400.00	6,040.00	6,038.00	6,038.00	113.14	121.07	90.00	-270.18	2,604.25	5,165.67	4,947.49	218.18	23.676	
10,500.00	6,040.00	6,038.00	6,038.00	113.36	121.07	90.00	-270.18	2,604.25	5,203.11	4,983.03	220.08	23.642	
10,600.00	6,040.00	6,038.00	6,038.00	113.62	121.07	90.00	-270.18	2,604.25	5,242.19	5,020.25	221.94	23.619	
10,700.00	6,040.00	6,038.00	6,038.00	113.91	121.07	90.00	-270.18	2,604.25	5,282.88	5,059.10	223.77	23.608	
10,800.00	6,040.00	6,038.00	6,038.00	114.24	121.07	90.00	-270.18	2,604.25	5,325.13	5,099.57	225.56	23.609	
10,900.00	6,040.00	6,038.00	6,038.00	114.61	121.07	90.00	-270.18	2,604.25	5,368.91	5,141.60	227.31	23.620	
11,000.00	6,040.00	6,038.00	6,038.00	115.02	121.07	90.00	-270.18	2,604.25	5,414.19	5,185.18	229.01	23.642	
11,100.00	6,040.00	6,038.00	6,038.00	115.49	121.07	90.00	-270.18	2,604.25	5,460.92	5,230.24	230.67	23.674	
11,200.00	6,040.00	6,038.00	6,038.00	116.00	121.07	90.00	-270.18	2,604.25	5,509.07	5,276.78	232.29	23.716	
11,300.00	6,040.00	6,038.00	6,038.00	116.58	121.07	90.00	-270.18	2,604.25	5,558.60	5,324.73	233.87	23.768	
11,400.00	6,040.00	6,038.00	6,038.00	117.22	121.07	90.00	-270.18	2,604.25	5,609.48	5,374.08	235.40	23.830	
11,500.00	6,040.00	6,038.00	6,038.00	117.92	121.07	90.00	-270.18	2,604.25	5,661.66	5,424.78	236.89	23.900	
11,600.00	6,040.00	6,038.00	6,038.00	118.70	121.07	90.00	-270.18	2,604.25	5,715.13	5,476.79	238.33	23.980	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 0-INC												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,700.00	6,040.00	6,038.00	6,038.00	119.56	121.07	90.00	-270.18	2,604.25	5,769.82	5,530.09	239.74	24.067	
11,800.00	6,040.00	6,038.00	6,038.00	120.51	121.07	90.00	-270.18	2,604.25	5,825.73	5,584.63	241.10	24.164	
11,900.00	6,040.00	6,038.00	6,038.00	121.54	121.07	90.00	-270.18	2,604.25	5,882.80	5,640.38	242.41	24.267	
12,000.00	6,040.00	6,038.00	6,038.00	122.66	121.07	90.00	-270.18	2,604.25	5,941.00	5,697.31	243.69	24.379	
12,100.00	6,040.00	6,038.00	6,038.00	123.87	121.07	90.00	-270.18	2,604.25	6,000.31	5,755.38	244.93	24.498	
12,200.00	6,040.00	6,038.00	6,038.00	125.17	121.07	90.00	-270.18	2,604.25	6,060.69	5,814.56	246.13	24.624	
12,300.00	6,040.00	6,038.00	6,038.00	126.57	121.07	90.00	-270.18	2,604.25	6,122.10	5,874.82	247.29	24.757	
12,400.00	6,040.00	6,038.00	6,038.00	128.06	121.07	90.00	-270.18	2,604.25	6,184.52	5,936.12	248.41	24.897	
12,500.00	6,040.00	6,038.00	6,038.00	129.63	121.07	90.00	-270.18	2,604.25	6,247.92	5,998.43	249.49	25.043	
12,600.00	6,040.00	6,038.00	6,038.00	131.29	121.07	90.00	-270.18	2,604.25	6,312.27	6,061.73	250.54	25.195	
12,700.00	6,040.00	6,038.00	6,038.00	133.03	121.07	90.00	-270.18	2,604.25	6,377.54	6,125.99	251.55	25.353	
12,800.00	6,040.00	6,038.00	6,038.00	134.84	121.07	90.00	-270.18	2,604.25	6,443.69	6,191.16	252.53	25.517	
12,900.00	6,040.00	6,038.00	6,038.00	136.71	121.07	90.00	-270.18	2,604.25	6,510.71	6,257.24	253.47	25.686	
13,000.00	6,040.00	6,038.00	6,038.00	138.66	121.07	90.00	-270.18	2,604.25	6,578.57	6,324.19	254.39	25.861	
13,100.00	6,040.00	6,038.00	6,038.00	140.66	121.07	90.00	-270.18	2,604.25	6,647.24	6,391.97	255.27	26.040	
13,200.00	6,040.00	6,038.00	6,038.00	142.71	121.07	90.00	-270.18	2,604.25	6,716.70	6,460.58	256.12	26.225	
13,300.00	6,040.00	6,038.00	6,038.00	144.81	121.07	90.00	-270.18	2,604.25	6,786.92	6,529.98	256.94	26.414	
13,400.00	6,040.00	6,038.00	6,038.00	146.96	121.07	90.00	-270.18	2,604.25	6,857.87	6,600.14	257.73	26.608	
13,500.00	6,040.00	6,038.00	6,038.00	149.14	121.07	90.00	-270.18	2,604.25	6,929.55	6,671.05	258.50	26.807	
13,600.00	6,040.00	6,038.00	6,038.00	151.36	121.07	90.00	-270.18	2,604.25	7,001.92	6,742.68	259.24	27.009	
13,700.00	6,040.00	6,038.00	6,038.00	153.62	121.07	90.00	-270.18	2,604.25	7,074.96	6,815.01	259.95	27.216	
13,800.00	6,040.00	6,038.00	6,038.00	155.91	121.07	90.00	-270.18	2,604.25	7,148.65	6,888.01	260.64	27.427	
13,900.00	6,040.00	6,038.00	6,038.00	158.22	121.07	90.00	-270.18	2,604.25	7,222.98	6,961.67	261.31	27.642	
14,000.00	6,040.00	6,038.00	6,038.00	160.56	121.07	90.00	-270.18	2,604.25	7,297.92	7,035.97	261.95	27.860	
14,100.00	6,040.00	6,038.00	6,038.00	162.92	121.07	90.00	-270.18	2,604.25	7,373.46	7,110.89	262.57	28.082	
14,200.00	6,040.00	6,038.00	6,038.00	165.30	121.07	90.00	-270.18	2,604.25	7,449.57	7,186.40	263.17	28.307	
14,300.00	6,040.00	6,038.00	6,038.00	167.70	121.07	90.00	-270.18	2,604.25	7,526.24	7,262.50	263.75	28.536	
14,400.00	6,040.00	6,038.00	6,038.00	170.12	121.07	90.00	-270.18	2,604.25	7,603.45	7,339.15	264.30	28.768	
14,500.00	6,040.00	6,038.00	6,038.00	172.55	121.07	90.00	-270.18	2,604.25	7,681.19	7,416.35	264.84	29.003	
14,600.00	6,040.00	6,038.00	6,038.00	175.00	121.07	90.00	-270.18	2,604.25	7,759.44	7,494.08	265.36	29.241	
14,700.00	6,040.00	6,038.00	6,038.00	177.46	121.07	90.00	-270.18	2,604.25	7,838.19	7,572.32	265.87	29.482	
14,800.00	6,040.00	6,038.00	6,038.00	179.94	121.07	90.00	-270.18	2,604.25	7,917.41	7,651.06	266.35	29.726	
14,900.00	6,040.00	6,038.00	6,038.00	182.43	121.07	90.00	-270.18	2,604.25	7,997.10	7,730.28	266.82	29.972	
15,000.00	6,040.00	6,038.00	6,038.00	184.92	121.07	90.00	-270.18	2,604.25	8,077.24	7,809.97	267.27	30.221	
15,100.00	6,040.00	6,038.00	6,038.00	187.43	121.07	90.00	-270.18	2,604.25	8,157.82	7,890.11	267.71	30.473	
15,200.00	6,040.00	6,038.00	6,038.00	189.95	121.07	90.00	-270.18	2,604.25	8,238.82	7,970.69	268.13	30.727	
15,300.00	6,040.00	6,038.00	6,038.00	192.48	121.07	90.00	-270.18	2,604.25	8,320.24	8,051.70	268.54	30.983	
15,400.00	6,040.00	6,038.00	6,038.00	195.01	121.07	90.00	-270.18	2,604.25	8,402.06	8,133.13	268.93	31.242	
15,500.00	6,040.00	6,038.00	6,038.00	197.55	121.07	90.00	-270.18	2,604.25	8,484.27	8,214.95	269.32	31.503	
15,600.00	6,040.00	6,038.00	6,038.00	200.10	121.07	90.00	-270.18	2,604.25	8,566.86	8,297.17	269.68	31.766	
15,700.00	6,040.00	6,038.00	6,038.00	202.65	121.07	90.00	-270.18	2,604.25	8,649.81	8,379.77	270.04	32.031	
15,800.00	6,040.00	6,038.00	6,038.00	205.22	121.07	90.00	-270.18	2,604.25	8,733.12	8,462.74	270.39	32.299	
15,900.00	6,040.00	6,038.00	6,038.00	207.78	121.07	90.00	-270.18	2,604.25	8,816.78	8,546.06	270.72	32.568	
16,000.00	6,040.00	6,038.00	6,038.00	210.36	121.07	90.00	-270.18	2,604.25	8,900.78	8,629.74	271.04	32.839	
16,100.00	6,040.00	6,038.00	6,038.00	212.93	121.07	90.00	-270.18	2,604.25	8,985.10	8,713.75	271.35	33.112	
16,200.00	6,040.00	6,038.00	6,038.00	215.52	121.07	90.00	-270.18	2,604.25	9,069.75	8,798.09	271.66	33.387	
16,300.00	6,040.00	6,038.00	6,038.00	218.11	121.07	90.00	-270.18	2,604.25	9,154.70	8,882.75	271.95	33.663	
16,400.00	6,040.00	6,038.00	6,038.00	220.70	121.07	90.00	-270.18	2,604.25	9,239.95	8,967.72	272.23	33.942	
16,500.00	6,040.00	6,038.00	6,038.00	223.29	121.07	90.00	-270.18	2,604.25	9,325.50	9,052.99	272.50	34.221	
16,600.00	6,040.00	6,038.00	6,038.00	225.89	121.07	90.00	-270.18	2,604.25	9,411.33	9,138.56	272.77	34.503	
16,700.00	6,040.00	6,038.00	6,038.00	228.50	121.07	90.00	-270.18	2,604.25	9,497.44	9,224.41	273.03	34.786	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 0-INC												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,800.00	6,040.00	6,038.00	6,038.00	231.11	121.07	90.00	-270.18	2,604.25	9,583.82	9,310.54	273.27	35.070	
16,900.00	6,040.00	6,038.00	6,038.00	233.72	121.07	90.00	-270.18	2,604.25	9,670.46	9,396.94	273.52	35.356	
17,000.00	6,040.00	6,038.00	6,038.00	236.33	121.07	90.00	-270.18	2,604.25	9,757.35	9,483.61	273.75	35.643	
17,100.00	6,040.00	6,038.00	6,038.00	238.95	121.07	90.00	-270.18	2,604.25	9,844.50	9,570.52	273.98	35.932	
17,200.00	6,040.00	6,038.00	6,038.00	241.57	121.07	90.00	-270.18	2,604.25	9,931.89	9,657.69	274.19	36.222	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-1721BH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	116.10	-1,259.64	2,570.90	2,862.92				
100.00	100.00	100.60	100.60	0.13	0.14	116.11	-1,259.99	2,570.56	2,862.77	2,862.49	0.28	N/A	
200.00	199.98	177.35	177.35	0.48	0.41	-33.13	-1,260.43	2,570.44	2,861.42	2,860.52	0.90	3,194.996	
300.00	299.84	319.06	319.05	0.85	0.90	-33.27	-1,260.26	2,570.55	2,857.15	2,855.40	1.75	1,632.433	
400.00	399.45	391.27	391.27	1.22	1.16	-33.42	-1,260.36	2,570.33	2,849.58	2,847.21	2.37	1,201.697	
500.00	498.70	468.91	468.91	1.62	1.43	-33.63	-1,260.85	2,570.42	2,839.77	2,836.75	3.02	939.342	
600.00	597.47	591.06	591.05	2.05	1.85	-33.99	-1,261.07	2,571.15	2,827.40	2,823.56	3.84	735.810	
700.00	695.62	696.40	696.38	2.51	2.22	-34.41	-1,260.84	2,570.99	2,811.30	2,806.68	4.62	609.134	
800.00	793.06	781.02	781.00	3.01	2.52	-34.84	-1,261.46	2,570.60	2,792.53	2,787.20	5.33	523.485	
900.00	889.64	863.61	863.60	3.56	2.81	-35.34	-1,261.86	2,570.78	2,771.51	2,765.44	6.07	456.867	
1,000.00	985.27	958.19	958.17	4.14	3.14	-35.96	-1,262.09	2,571.39	2,748.08	2,741.22	6.86	400.447	
1,100.00	1,079.82	1,053.83	1,053.81	4.78	3.48	-36.68	-1,262.24	2,572.04	2,722.01	2,714.32	7.69	354.054	
1,200.00	1,173.17	1,142.25	1,142.23	5.46	3.79	-37.47	-1,262.47	2,572.67	2,693.47	2,684.95	8.52	316.203	
1,300.00	1,265.21	1,240.04	1,240.02	6.20	4.14	-38.39	-1,262.95	2,573.27	2,662.46	2,653.05	9.41	282.841	
1,400.00	1,355.84	1,332.75	1,332.72	6.99	4.47	-39.40	-1,263.45	2,573.68	2,628.94	2,618.62	10.33	254.603	
1,500.00	1,444.94	1,426.19	1,426.15	7.84	4.80	-40.52	-1,264.03	2,573.94	2,593.05	2,581.77	11.28	229.924	
1,600.00	1,532.39	1,524.05	1,524.02	8.75	5.15	-41.81	-1,264.69	2,573.91	2,554.75	2,542.46	12.28	207.974	
1,700.00	1,618.11	1,610.87	1,610.83	9.71	5.45	-43.13	-1,265.51	2,573.60	2,514.24	2,500.94	13.30	189.079	
1,800.00	1,701.97	1,687.26	1,687.22	10.74	5.72	-44.49	-1,266.41	2,573.38	2,471.93	2,457.60	14.33	172.518	
1,900.00	1,783.88	1,767.81	1,767.76	11.82	6.01	-46.01	-1,267.44	2,573.29	2,428.02	2,412.59	15.43	157.374	
2,000.00	1,863.74	1,927.40	1,927.30	12.96	6.56	-48.67	-1,267.73	2,570.40	2,380.69	2,363.88	16.81	141.645	
2,100.00	1,941.45	1,999.86	1,999.73	14.16	6.81	-50.49	-1,267.51	2,568.26	2,331.28	2,313.28	17.99	129.555	
2,200.00	2,016.92	2,135.20	2,134.99	15.41	7.28	-53.44	-1,267.02	2,563.48	2,280.75	2,261.34	19.41	117.503	
2,300.00	2,090.05	2,217.24	2,216.87	16.73	7.56	-55.83	-1,266.31	2,558.44	2,226.93	2,206.17	20.76	107.258	
2,400.00	2,160.76	2,368.56	2,367.70	18.10	8.09	-59.77	-1,265.06	2,546.61	2,171.61	2,149.28	22.33	97.253	
2,500.00	2,228.95	2,446.16	2,444.87	19.53	8.37	-62.58	-1,264.97	2,538.48	2,114.24	2,090.41	23.82	88.749	
2,600.00	2,294.55	2,498.76	2,497.16	21.01	8.56	-65.00	-1,265.72	2,532.79	2,056.84	2,031.47	25.37	81.078	
2,700.00	2,357.48	2,556.63	2,554.66	22.55	8.77	-67.62	-1,267.45	2,526.49	1,999.83	1,972.81	27.02	74.013	
2,800.00	2,418.42	2,617.29	2,614.90	24.13	8.99	-69.46	-1,269.81	2,519.78	1,943.63	1,914.86	28.77	67.562	
2,900.00	2,479.25	2,669.67	2,666.92	25.71	9.18	-70.80	-1,271.86	2,514.02	1,889.24	1,858.65	30.59	61.769	
3,000.00	2,540.09	2,719.94	2,716.90	27.31	9.37	-72.12	-1,273.25	2,508.75	1,837.06	1,804.58	32.48	56.558	
3,100.00	2,600.93	2,769.53	2,766.23	28.90	9.55	-73.47	-1,274.21	2,503.80	1,787.35	1,752.89	34.45	51.879	
3,200.00	2,661.77	2,818.82	2,815.29	30.51	9.74	-74.84	-1,274.95	2,499.11	1,740.31	1,703.82	36.49	47.688	
3,300.00	2,722.61	2,866.34	2,862.61	32.11	9.91	-76.19	-1,275.54	2,494.84	1,696.23	1,657.64	38.60	43.947	
3,400.00	2,783.44	2,914.74	2,910.84	33.72	10.09	-77.60	-1,276.09	2,490.79	1,655.35	1,614.60	40.75	40.618	
3,500.00	2,844.28	2,970.85	2,966.76	35.34	10.30	-79.25	-1,276.57	2,486.25	1,617.74	1,574.78	42.96	37.656	
3,600.00	2,905.12	3,031.24	3,026.95	36.95	10.52	-81.07	-1,276.88	2,481.38	1,583.48	1,538.28	45.20	35.032	
3,700.00	2,965.96	3,100.16	3,095.63	38.57	10.77	-83.17	-1,277.65	2,475.54	1,552.45	1,505.00	47.45	32.714	
3,800.00	3,026.79	3,159.56	3,154.79	40.19	11.00	-85.00	-1,278.50	2,470.30	1,524.91	1,475.21	49.70	30.685	
3,900.00	3,087.63	3,216.96	3,211.96	41.81	11.21	-86.80	-1,279.19	2,465.16	1,501.25	1,449.35	51.91	28.921	
4,000.00	3,148.47	3,271.60	3,266.37	43.43	11.41	-88.54	-1,279.65	2,460.28	1,481.82	1,427.74	54.07	27.404	
4,100.00	3,209.31	3,330.90	3,325.43	45.05	11.64	-90.44	-1,279.94	2,454.95	1,466.75	1,410.58	56.17	26.114	
4,200.00	3,270.14	3,392.58	3,386.84	46.68	11.87	-92.43	-1,280.09	2,449.15	1,456.00	1,397.83	58.17	25.030	
4,300.00	3,330.98	3,456.50	3,450.45	48.31	12.11	-94.51	-1,280.34	2,442.90	1,449.61	1,389.56	60.06	24.137	
4,392.26	3,387.11	3,511.43	3,505.10	49.81	12.32	-96.30	-1,280.71	2,437.38	1,447.64	1,385.96	61.68	23.472 CC	
4,400.00	3,391.82	3,515.81	3,509.45	49.93	12.33	-96.44	-1,280.74	2,436.94	1,447.65	1,385.85	61.81	23.423 ES	
4,500.00	3,452.66	3,572.28	3,565.64	51.56	12.55	-98.28	-1,281.12	2,431.24	1,450.36	1,386.95	63.40	22.875	
4,600.00	3,513.49	3,628.31	3,621.39	53.19	12.76	-100.09	-1,281.62	2,425.74	1,457.73	1,392.89	64.84	22.482	
4,700.00	3,574.33	3,684.07	3,676.91	54.82	12.97	-101.88	-1,282.43	2,420.58	1,469.67	1,403.56	66.11	22.230	
4,800.00	3,635.17	3,736.06	3,728.69	56.45	13.17	-103.53	-1,283.14	2,415.95	1,486.16	1,418.95	67.22	22.111 SF	
4,900.00	3,696.01	3,786.44	3,778.88	58.08	13.36	-105.12	-1,283.66	2,411.59	1,507.14	1,438.99	68.15	22.115	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-1721BH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	3,756.84	3,834.81	3,827.08	59.71	13.54	-106.64	-1,283.99	2,407.63	1,532.52	1,463.60	68.92	22.236	
5,100.00	3,817.68	3,891.59	3,883.69	61.34	13.75	-108.39	-1,284.19	2,403.22	1,562.03	1,492.46	69.57	22.453	
5,200.00	3,878.52	3,957.79	3,949.68	62.97	14.00	-110.40	-1,284.64	2,397.93	1,594.95	1,524.84	70.11	22.749	
5,300.00	3,939.36	4,019.22	4,010.92	64.61	14.23	-112.23	-1,285.36	2,393.10	1,631.09	1,560.56	70.53	23.126	
5,400.00	4,000.19	4,077.81	4,069.33	66.24	14.45	-113.93	-1,286.31	2,388.79	1,670.29	1,599.44	70.85	23.574	
5,500.00	4,061.03	4,132.17	4,123.55	67.87	14.66	-115.48	-1,287.13	2,384.91	1,712.52	1,641.45	71.07	24.095	
5,600.00	4,121.87	4,182.68	4,173.94	69.51	14.85	-116.88	-1,287.76	2,381.42	1,757.67	1,686.46	71.21	24.684	
5,700.00	4,182.71	4,231.87	4,223.03	71.14	15.03	-118.23	-1,288.16	2,378.21	1,805.62	1,734.34	71.28	25.333	
5,800.00	4,243.54	4,285.61	4,276.66	72.77	15.23	-119.66	-1,288.43	2,374.89	1,856.11	1,784.80	71.31	26.027	
5,900.00	4,304.38	4,340.79	4,331.74	74.41	15.43	-121.09	-1,288.61	2,371.57	1,908.83	1,837.51	71.32	26.763	
6,000.00	4,365.22	4,401.49	4,392.33	76.04	15.66	-122.62	-1,288.84	2,368.06	1,963.50	1,892.16	71.34	27.524	
6,100.00	4,426.06	4,466.86	4,457.61	77.68	15.90	-124.22	-1,289.24	2,364.45	2,019.83	1,948.47	71.36	28.305	
6,200.00	4,486.90	4,536.89	4,527.53	79.31	16.15	-125.86	-1,290.06	2,360.86	2,077.49	2,006.09	71.40	29.096	
6,300.00	4,547.73	4,610.36	4,600.95	80.95	16.42	-127.49	-1,291.58	2,358.49	2,136.27	2,064.78	71.49	29.883	
6,400.00	4,608.57	4,676.40	4,666.96	82.58	16.65	-128.86	-1,293.42	2,357.55	2,196.05	2,124.49	71.56	30.689	
6,500.00	4,669.41	4,731.06	4,721.59	84.22	16.84	-129.96	-1,295.00	2,356.99	2,256.94	2,185.37	71.56	31.538	
6,600.00	4,730.25	4,770.68	4,761.20	85.86	16.98	-130.74	-1,295.82	2,356.53	2,319.36	2,247.89	71.47	32.453	
6,700.00	4,791.08	4,809.56	4,800.07	87.49	17.12	-131.49	-1,296.24	2,356.01	2,383.33	2,311.97	71.36	33.397	
6,800.00	4,851.92	4,872.09	4,862.59	89.13	17.34	-132.66	-1,296.65	2,355.04	2,448.46	2,377.03	71.43	34.280	
6,900.00	4,912.76	4,931.13	4,921.63	90.76	17.55	-133.74	-1,297.05	2,354.02	2,514.39	2,442.91	71.47	35.180	
7,000.00	4,973.60	4,986.65	4,977.14	92.40	17.75	-134.71	-1,297.34	2,353.23	2,581.18	2,509.67	71.51	36.096	
7,100.00	5,034.43	5,043.54	5,034.03	94.04	17.95	-135.67	-1,297.54	2,352.62	2,648.79	2,577.22	71.57	37.010	
7,200.00	5,095.27	5,101.35	5,091.83	95.67	18.15	-136.61	-1,297.67	2,352.17	2,717.11	2,645.46	71.65	37.920	
7,300.00	5,156.11	5,162.73	5,153.21	97.31	18.37	-137.58	-1,297.78	2,351.85	2,786.05	2,714.27	71.78	38.812	
7,400.00	5,216.95	5,220.46	5,210.95	98.95	18.57	-138.45	-1,297.88	2,351.68	2,855.54	2,783.64	71.90	39.717	
7,500.00	5,277.78	5,275.24	5,265.72	100.59	18.75	-139.24	-1,297.86	2,351.60	2,925.64	2,853.64	72.00	40.634	
7,600.00	5,338.62	5,328.95	5,319.43	102.22	18.94	-140.00	-1,297.72	2,351.61	2,996.34	2,924.24	72.10	41.556	
7,700.00	5,399.46	5,382.86	5,373.34	103.86	19.12	-140.73	-1,297.45	2,351.74	3,067.61	2,995.39	72.22	42.473	
7,800.00	5,460.30	5,442.08	5,432.56	105.50	19.31	-141.51	-1,297.07	2,351.91	3,139.36	3,066.96	72.40	43.361	
7,900.00	5,521.24	5,501.09	5,491.57	107.13	19.51	-146.03	-1,296.67	2,352.04	3,211.58	3,138.99	72.59	44.244	
8,000.00	5,584.83	5,562.35	5,552.82	108.61	19.71	-146.49	-1,296.22	2,352.23	3,286.04	3,213.17	72.86	45.098	
8,100.00	5,650.69	5,568.00	5,558.48	109.85	19.73	174.11	-1,296.18	2,352.25	3,362.03	3,289.24	72.79	46.190	
8,200.00	5,716.83	5,615.48	5,605.93	110.82	19.88	154.40	-1,295.18	2,353.25	3,437.01	3,363.76	73.25	46.924	
8,300.00	5,781.24	5,663.00	5,653.32	111.52	20.04	137.07	-1,292.94	2,355.87	3,509.71	3,435.75	73.96	47.456	
8,400.00	5,841.96	5,663.00	5,653.32	111.98	20.04	122.00	-1,292.94	2,355.87	3,577.34	3,502.89	74.45	48.052	
8,500.00	5,897.14	5,663.00	5,653.32	112.25	20.04	109.88	-1,292.94	2,355.87	3,638.99	3,563.76	75.23	48.371	
8,600.00	5,945.12	5,676.94	5,667.17	112.37	20.08	100.76	-1,291.98	2,357.17	3,693.00	3,616.51	76.49	48.281	
8,700.00	5,984.42	5,681.67	5,671.84	112.39	20.09	93.90	-1,291.60	2,357.75	3,738.24	3,660.25	77.99	47.930	
8,800.00	6,013.86	5,694.00	5,683.99	112.35	20.13	89.25	-1,290.47	2,359.55	3,773.75	3,693.83	79.92	47.217	
8,900.00	6,032.54	5,694.00	5,683.99	112.30	20.13	86.21	-1,290.47	2,359.55	3,798.62	3,716.61	82.01	46.321	
9,000.00	6,039.89	5,694.00	5,683.99	112.24	20.13	84.82	-1,290.47	2,359.55	3,812.40	3,728.07	84.33	45.210	
9,100.00	6,040.00	5,694.00	5,683.99	112.19	20.13	84.75	-1,290.47	2,359.55	3,820.03	3,733.26	86.78	44.022	
9,200.00	6,040.00	5,679.87	5,670.07	112.16	20.09	84.54	-1,291.75	2,357.52	3,829.95	3,740.84	89.10	42.983	
9,300.00	6,040.00	5,678.20	5,668.42	112.15	20.08	84.52	-1,291.88	2,357.32	3,842.57	3,750.98	91.59	41.955	
9,400.00	6,040.00	5,676.66	5,666.89	112.15	20.08	84.49	-1,292.00	2,357.14	3,857.74	3,763.66	94.08	41.005	
9,500.00	6,040.00	5,663.00	5,653.32	112.16	20.04	84.29	-1,292.94	2,355.87	3,875.58	3,779.13	96.45	40.183	
9,600.00	6,040.00	5,663.00	5,653.32	112.19	20.04	84.29	-1,292.94	2,355.87	3,895.72	3,796.79	98.93	39.377	
9,700.00	6,040.00	5,663.00	5,653.32	112.24	20.04	84.29	-1,292.94	2,355.87	3,918.31	3,816.92	101.39	38.646	
9,800.00	6,040.00	5,663.00	5,653.32	112.31	20.04	84.29	-1,292.94	2,355.87	3,943.31	3,839.50	103.81	37.986	
9,900.00	6,040.00	5,663.00	5,653.32	112.39	20.04	84.29	-1,292.94	2,355.87	3,970.67	3,864.48	106.19	37.393	
10,000.00	6,040.00	5,663.00	5,653.32	112.49	20.04	84.29	-1,292.94	2,355.87	4,000.34	3,891.83	108.51	36.865	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-1721BH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	6,040.00	5,663.00	5,653.32	112.62	20.04	84.29	-1,292.94	2,355.87	4,032.28	3,921.49	110.79	36.396	
10,200.00	6,040.00	5,663.00	5,653.32	112.77	20.04	84.29	-1,292.94	2,355.87	4,066.42	3,953.42	113.00	35.985	
10,300.00	6,040.00	5,663.00	5,653.32	112.94	20.04	84.29	-1,292.94	2,355.87	4,102.72	3,987.57	115.16	35.627	
10,400.00	6,040.00	5,663.00	5,653.32	113.14	20.04	84.29	-1,292.94	2,355.87	4,141.12	4,023.87	117.24	35.320	
10,500.00	6,040.00	5,663.00	5,653.32	113.36	20.04	84.29	-1,292.94	2,355.87	4,181.55	4,062.29	119.27	35.061	
10,600.00	6,040.00	5,663.00	5,653.32	113.62	20.04	84.29	-1,292.94	2,355.87	4,223.97	4,102.75	121.22	34.845	
10,700.00	6,040.00	5,663.00	5,653.32	113.91	20.04	84.29	-1,292.94	2,355.87	4,268.31	4,145.20	123.11	34.672	
10,800.00	6,040.00	5,663.00	5,653.32	114.24	20.04	84.29	-1,292.94	2,355.87	4,314.51	4,189.59	124.92	34.537	
10,900.00	6,040.00	5,663.00	5,653.32	114.61	20.04	84.29	-1,292.94	2,355.87	4,362.51	4,235.84	126.67	34.440	
11,000.00	6,040.00	5,663.00	5,653.32	115.02	20.04	84.29	-1,292.94	2,355.87	4,412.26	4,283.91	128.35	34.377	
11,100.00	6,040.00	5,663.00	5,653.32	115.49	20.04	84.29	-1,292.94	2,355.87	4,463.69	4,333.73	129.96	34.346	
11,200.00	6,040.00	5,663.00	5,653.32	116.00	20.04	84.29	-1,292.94	2,355.87	4,516.76	4,385.25	131.51	34.346	
11,300.00	6,040.00	5,663.00	5,653.32	116.58	20.04	84.29	-1,292.94	2,355.87	4,571.39	4,438.41	132.99	34.375	
11,400.00	6,040.00	5,663.00	5,653.32	117.22	20.04	84.29	-1,292.94	2,355.87	4,627.54	4,493.14	134.40	34.430	
11,500.00	6,040.00	5,663.00	5,653.32	117.92	20.04	84.29	-1,292.94	2,355.87	4,685.16	4,549.40	135.76	34.511	
11,600.00	6,040.00	5,663.00	5,653.32	118.70	20.04	84.29	-1,292.94	2,355.87	4,744.18	4,607.12	137.05	34.616	
11,700.00	6,040.00	5,663.00	5,653.32	119.56	20.04	84.29	-1,292.94	2,355.87	4,804.55	4,666.27	138.29	34.743	
11,800.00	6,040.00	5,663.00	5,653.32	120.51	20.04	84.29	-1,292.94	2,355.87	4,866.24	4,726.77	139.47	34.892	
11,900.00	6,040.00	5,663.00	5,653.32	121.54	20.04	84.29	-1,292.94	2,355.87	4,929.18	4,788.59	140.59	35.060	
12,000.00	6,040.00	5,663.00	5,653.32	122.66	20.04	84.29	-1,292.94	2,355.87	4,993.33	4,851.66	141.66	35.247	
12,100.00	6,040.00	5,663.00	5,653.32	123.87	20.04	84.29	-1,292.94	2,355.87	5,058.64	4,915.95	142.69	35.453	
12,200.00	6,040.00	5,663.00	5,653.32	125.17	20.04	84.29	-1,292.94	2,355.87	5,125.07	4,981.41	143.66	35.675	
12,300.00	6,040.00	5,663.00	5,653.32	126.57	20.04	84.29	-1,292.94	2,355.87	5,192.58	5,047.99	144.59	35.913	
12,400.00	6,040.00	5,663.00	5,653.32	128.06	20.04	84.29	-1,292.94	2,355.87	5,261.13	5,115.65	145.47	36.166	
12,500.00	6,040.00	5,663.00	5,653.32	129.63	20.04	84.29	-1,292.94	2,355.87	5,330.66	5,184.35	146.31	36.434	
12,600.00	6,040.00	5,663.00	5,653.32	131.29	20.04	84.29	-1,292.94	2,355.87	5,401.16	5,254.05	147.11	36.715	
12,700.00	6,040.00	5,663.00	5,653.32	133.03	20.04	84.29	-1,292.94	2,355.87	5,472.57	5,324.70	147.87	37.009	
12,800.00	6,040.00	5,663.00	5,653.32	134.84	20.04	84.29	-1,292.94	2,355.87	5,544.87	5,396.27	148.60	37.315	
12,900.00	6,040.00	5,663.00	5,653.32	136.71	20.04	84.29	-1,292.94	2,355.87	5,618.01	5,468.73	149.29	37.633	
13,000.00	6,040.00	5,663.00	5,653.32	138.66	20.04	84.29	-1,292.94	2,355.87	5,691.98	5,542.04	149.94	37.961	
13,100.00	6,040.00	5,663.00	5,653.32	140.66	20.04	84.29	-1,292.94	2,355.87	5,766.73	5,616.16	150.56	38.301	
13,200.00	6,040.00	5,663.00	5,653.32	142.71	20.04	84.29	-1,292.94	2,355.87	5,842.23	5,691.07	151.16	38.650	
13,300.00	6,040.00	5,663.00	5,653.32	144.81	20.04	84.29	-1,292.94	2,355.87	5,918.46	5,766.74	151.72	39.009	
13,400.00	6,040.00	5,663.00	5,653.32	146.96	20.04	84.29	-1,292.94	2,355.87	5,995.39	5,843.14	152.26	39.377	
13,500.00	6,040.00	5,663.00	5,653.32	149.14	20.04	84.29	-1,292.94	2,355.87	6,072.99	5,920.23	152.77	39.753	
13,600.00	6,040.00	5,663.00	5,653.32	151.36	20.04	84.29	-1,292.94	2,355.87	6,151.24	5,997.99	153.25	40.138	
13,700.00	6,040.00	5,663.00	5,653.32	153.62	20.04	84.29	-1,292.94	2,355.87	6,230.11	6,076.40	153.71	40.531	
13,800.00	6,040.00	5,663.00	5,653.32	155.91	20.04	84.29	-1,292.94	2,355.87	6,309.58	6,155.43	154.15	40.931	
13,900.00	6,040.00	5,663.00	5,653.32	158.22	20.04	84.29	-1,292.94	2,355.87	6,389.63	6,235.06	154.57	41.338	
14,000.00	6,040.00	5,663.00	5,653.32	160.56	20.04	84.29	-1,292.94	2,355.87	6,470.23	6,315.26	154.97	41.752	
14,100.00	6,040.00	5,663.00	5,653.32	162.92	20.04	84.29	-1,292.94	2,355.87	6,551.37	6,396.02	155.35	42.173	
14,200.00	6,040.00	5,663.00	5,653.32	165.30	20.04	84.29	-1,292.94	2,355.87	6,633.02	6,477.32	155.71	42.600	
14,300.00	6,040.00	5,663.00	5,653.32	167.70	20.04	84.29	-1,292.94	2,355.87	6,715.17	6,559.12	156.05	43.033	
14,400.00	6,040.00	5,663.00	5,653.32	170.12	20.04	84.29	-1,292.94	2,355.87	6,797.80	6,641.42	156.37	43.472	
14,500.00	6,040.00	5,663.00	5,653.32	172.55	20.04	84.29	-1,292.94	2,355.87	6,880.88	6,724.20	156.68	43.916	
14,600.00	6,040.00	5,663.00	5,653.32	175.00	20.04	84.29	-1,292.94	2,355.87	6,964.42	6,807.44	156.98	44.365	
14,700.00	6,040.00	5,663.00	5,653.32	177.46	20.04	84.29	-1,292.94	2,355.87	7,048.38	6,891.12	157.26	44.820	
14,800.00	6,040.00	5,663.00	5,653.32	179.94	20.04	84.29	-1,292.94	2,355.87	7,132.75	6,975.22	157.53	45.280	
14,900.00	6,040.00	5,663.00	5,653.32	182.43	20.04	84.29	-1,292.94	2,355.87	7,217.53	7,059.74	157.78	45.744	
15,000.00	6,040.00	5,663.00	5,653.32	184.92	20.04	84.29	-1,292.94	2,355.87	7,302.68	7,144.66	158.02	46.213	
15,100.00	6,040.00	5,622.61	5,613.05	187.43	19.90	83.68	-1,294.93	2,353.54	7,387.37	7,229.29	158.08	46.732	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-1721BH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,200.00	6,040.00	5,622.05	5,612.49	189.95	19.90	83.68	-1,294.95	2,353.52	7,473.24	7,314.94	158.30	47.210	
15,300.00	6,040.00	5,621.49	5,611.94	192.48	19.90	83.67	-1,294.97	2,353.49	7,559.45	7,400.95	158.51	47.692	
15,400.00	6,040.00	5,620.95	5,611.40	195.01	19.90	83.66	-1,294.99	2,353.47	7,646.00	7,487.30	158.71	48.177	
15,500.00	6,040.00	5,620.42	5,610.86	197.55	19.90	83.65	-1,295.01	2,353.45	7,732.88	7,573.98	158.89	48.667	
15,600.00	6,040.00	5,619.90	5,610.34	200.10	19.90	83.64	-1,295.03	2,353.42	7,820.07	7,660.99	159.07	49.160	
15,700.00	6,040.00	5,619.38	5,609.83	202.65	19.89	83.64	-1,295.05	2,353.40	7,907.56	7,748.31	159.25	49.656	
15,800.00	6,040.00	5,618.88	5,609.33	205.22	19.89	83.63	-1,295.06	2,353.38	7,995.34	7,835.93	159.41	50.156	
15,900.00	6,040.00	5,618.38	5,608.83	207.78	19.89	83.62	-1,295.08	2,353.36	8,083.41	7,923.84	159.57	50.658	
16,000.00	6,040.00	5,617.90	5,608.35	210.36	19.89	83.61	-1,295.10	2,353.34	8,171.75	8,012.04	159.72	51.164	
16,100.00	6,040.00	5,617.42	5,607.87	212.93	19.89	83.61	-1,295.12	2,353.32	8,260.36	8,100.50	159.86	51.673	
16,200.00	6,040.00	5,616.95	5,607.40	215.52	19.89	83.60	-1,295.13	2,353.31	8,349.23	8,189.23	159.99	52.185	
16,300.00	6,040.00	5,616.49	5,606.94	218.11	19.89	83.59	-1,295.15	2,353.29	8,438.34	8,278.22	160.12	52.699	
16,400.00	6,040.00	5,616.03	5,606.48	220.70	19.88	83.58	-1,295.16	2,353.27	8,527.70	8,367.45	160.25	53.216	
16,500.00	6,040.00	5,615.58	5,606.04	223.29	19.88	83.58	-1,295.18	2,353.25	8,617.28	8,456.92	160.36	53.736	
16,600.00	6,040.00	5,615.15	5,605.60	225.89	19.88	83.57	-1,295.19	2,353.24	8,707.10	8,546.62	160.48	54.258	
16,700.00	6,040.00	5,614.71	5,605.17	228.50	19.88	83.57	-1,295.21	2,353.22	8,797.14	8,636.55	160.58	54.783	
16,800.00	6,040.00	5,614.29	5,604.74	231.11	19.88	83.56	-1,295.22	2,353.20	8,887.38	8,726.70	160.68	55.310	
16,900.00	6,040.00	5,613.87	5,604.32	233.72	19.88	83.55	-1,295.24	2,353.19	8,977.84	8,817.06	160.78	55.839	
17,000.00	6,040.00	5,613.46	5,603.91	236.33	19.88	83.55	-1,295.25	2,353.17	9,068.49	8,907.62	160.87	56.370	
17,100.00	6,040.00	5,613.05	5,603.51	238.95	19.87	83.54	-1,295.26	2,353.16	9,159.34	8,998.38	160.96	56.903	
17,200.00	6,040.00	5,612.65	5,603.11	241.57	19.87	83.53	-1,295.28	2,353.14	9,250.38	9,089.33	161.05	57.439	
17,300.00	6,040.00	5,612.26	5,602.72	244.19	19.87	83.53	-1,295.29	2,353.13	9,341.60	9,180.47	161.13	57.976	
17,400.00	6,040.00	5,611.88	5,602.33	246.82	19.87	83.52	-1,295.30	2,353.12	9,433.00	9,271.79	161.21	58.515	
17,500.00	6,040.00	5,611.50	5,601.95	249.45	19.87	83.52	-1,295.31	2,353.10	9,524.57	9,363.29	161.28	59.056	
17,600.00	6,040.00	5,611.12	5,601.58	252.08	19.87	83.51	-1,295.33	2,353.09	9,616.31	9,454.96	161.35	59.599	
17,700.00	6,040.00	5,610.75	5,601.21	254.71	19.87	83.51	-1,295.34	2,353.08	9,708.21	9,546.79	161.42	60.143	
17,800.00	6,040.00	5,610.39	5,600.85	257.35	19.87	83.50	-1,295.35	2,353.06	9,800.27	9,638.79	161.48	60.689	
17,900.00	6,040.00	5,610.03	5,600.49	259.99	19.86	83.50	-1,295.36	2,353.05	9,892.49	9,730.94	161.54	61.237	
18,000.00	6,040.00	5,609.68	5,600.14	262.63	19.86	83.49	-1,295.37	2,353.04	9,984.85	9,823.25	161.60	61.786	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-1721CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	116.37	-1,274.94	2,571.74	2,870.43				
100.00	100.00	111.55	111.55	0.13	0.18	116.38	-1,275.08	2,571.09	2,869.97	2,869.65	0.32	9,059.705	
200.00	199.98	180.53	180.52	0.48	0.43	-32.86	-1,275.69	2,570.68	2,868.36	2,867.45	0.91	3,152.342	
300.00	299.84	256.36	256.34	0.85	0.69	-32.92	-1,276.97	2,570.78	2,864.82	2,863.28	1.54	1,864.021	
400.00	399.45	362.78	362.74	1.22	1.07	-33.07	-1,278.67	2,571.57	2,858.89	2,856.61	2.28	1,252.958	
500.00	498.70	475.46	475.42	1.62	1.47	-33.32	-1,279.20	2,572.13	2,849.31	2,846.25	3.06	931.239	
600.00	597.47	575.29	575.25	2.05	1.82	-33.62	-1,279.89	2,572.36	2,836.72	2,832.92	3.80	746.112	
700.00	695.62	681.28	681.24	2.51	2.18	-34.04	-1,279.66	2,572.94	2,821.17	2,816.60	4.58	616.616	
800.00	793.06	774.88	774.83	3.01	2.51	-34.50	-1,279.60	2,573.29	2,802.75	2,797.42	5.32	526.398	
900.00	889.64	896.95	896.90	3.56	2.94	-35.11	-1,280.56	2,573.11	2,781.52	2,775.32	6.20	448.945	
1,000.00	985.27	1,046.07	1,045.72	4.14	3.47	-35.78	-1,287.09	2,567.00	2,755.36	2,748.18	7.18	383.683	
1,100.00	1,079.82	1,154.52	1,153.69	4.78	3.86	-36.39	-1,294.72	2,560.18	2,725.87	2,717.82	8.06	338.404	
1,200.00	1,173.17	1,253.79	1,252.53	5.46	4.23	-37.08	-1,301.38	2,553.75	2,693.46	2,684.54	8.92	301.791	
1,300.00	1,265.21	1,351.22	1,349.57	6.20	4.59	-37.89	-1,307.31	2,547.41	2,658.24	2,648.42	9.82	270.766	
1,400.00	1,355.84	1,442.71	1,440.75	6.99	4.93	-38.80	-1,312.20	2,541.76	2,620.54	2,609.81	10.72	244.401	
1,500.00	1,444.94	1,534.53	1,532.00	7.84	5.28	-39.77	-1,319.64	2,534.79	2,580.29	2,568.62	11.67	221.170	
1,600.00	1,532.39	1,599.00	1,595.99	8.75	5.53	-40.69	-1,325.64	2,529.72	2,537.99	2,525.43	12.56	202.066	
1,700.00	1,618.11	1,657.67	1,654.21	9.71	5.76	-41.65	-1,331.60	2,525.56	2,494.39	2,480.91	13.48	185.048	
1,800.00	1,701.97	1,715.12	1,711.18	10.74	5.99	-42.68	-1,338.21	2,522.19	2,449.91	2,435.47	14.44	169.642	
1,900.00	1,783.88	1,786.26	1,781.73	11.82	6.28	-43.91	-1,346.56	2,518.52	2,404.05	2,388.55	15.50	155.098	
2,000.00	1,863.74	1,860.79	1,855.67	12.96	6.57	-45.28	-1,355.19	2,515.10	2,356.65	2,340.03	16.62	141.773	
2,100.00	1,941.45	1,932.44	1,926.80	14.16	6.86	-46.78	-1,363.39	2,512.17	2,307.78	2,289.99	17.79	129.701	
2,200.00	2,016.92	2,073.89	2,067.24	15.41	7.42	-49.25	-1,378.72	2,505.37	2,256.72	2,237.49	19.23	117.361	
2,300.00	2,090.05	2,172.46	2,165.13	16.73	7.82	-51.53	-1,388.36	2,499.02	2,202.66	2,182.06	20.59	106.970	
2,400.00	2,160.76	2,281.10	2,273.00	18.10	8.26	-54.26	-1,397.65	2,490.17	2,145.72	2,123.69	22.04	97.368	
2,500.00	2,228.95	2,343.74	2,335.24	19.53	8.51	-56.51	-1,402.58	2,485.06	2,087.90	2,064.45	23.45	89.035	
2,600.00	2,294.55	2,406.82	2,397.92	21.01	8.76	-58.93	-1,407.61	2,480.07	2,029.63	2,004.67	24.95	81.342	
2,700.00	2,357.48	2,469.14	2,459.85	22.55	9.01	-61.50	-1,412.66	2,475.23	1,971.09	1,944.55	26.55	74.252	
2,800.00	2,418.42	2,529.88	2,520.23	24.13	9.25	-63.24	-1,417.42	2,470.61	1,912.91	1,884.68	28.23	67.760	
2,900.00	2,479.25	2,589.59	2,579.60	25.71	9.49	-64.67	-1,421.99	2,466.18	1,856.21	1,826.22	29.99	61.892	
3,000.00	2,540.09	2,651.97	2,641.63	27.31	9.73	-66.22	-1,426.70	2,461.63	1,801.18	1,769.34	31.83	56.583	
3,100.00	2,600.93	2,716.43	2,705.73	28.90	9.99	-67.87	-1,431.60	2,456.89	1,747.83	1,714.08	33.75	51.785	
3,200.00	2,661.77	2,774.14	2,763.13	30.51	10.22	-69.40	-1,435.93	2,452.71	1,696.46	1,660.72	35.74	47.467	
3,300.00	2,722.61	2,832.21	2,820.90	32.11	10.45	-70.98	-1,440.16	2,448.67	1,647.35	1,609.55	37.80	43.579	
3,400.00	2,783.44	2,889.63	2,878.07	33.72	10.67	-72.61	-1,443.98	2,444.85	1,600.72	1,560.78	39.93	40.085	
3,500.00	2,844.28	2,955.77	2,943.91	35.34	10.94	-74.53	-1,448.44	2,440.53	1,556.68	1,514.55	42.13	36.945	
3,600.00	2,905.12	3,021.97	3,009.74	36.95	11.20	-76.48	-1,453.89	2,436.02	1,515.14	1,470.76	44.38	34.140	
3,700.00	2,965.96	3,083.31	3,070.71	38.57	11.45	-78.32	-1,459.11	2,431.87	1,476.51	1,429.84	46.67	31.640	
3,800.00	3,026.79	3,145.67	3,132.71	40.19	11.70	-80.25	-1,464.35	2,427.72	1,441.05	1,392.08	48.98	29.423	
3,900.00	3,087.63	3,208.78	3,195.47	41.81	11.95	-82.24	-1,469.50	2,423.54	1,408.99	1,357.70	51.30	27.467	
4,000.00	3,148.47	3,273.56	3,259.89	43.43	12.21	-84.32	-1,474.78	2,419.20	1,380.49	1,326.89	53.60	25.753	
4,100.00	3,209.31	3,339.03	3,324.99	45.05	12.47	-86.46	-1,480.16	2,414.75	1,355.73	1,299.86	55.88	24.263	
4,200.00	3,270.14	3,403.07	3,388.66	46.68	12.73	-88.59	-1,485.44	2,410.30	1,334.92	1,276.83	58.09	22.982	
4,300.00	3,330.98	3,465.34	3,450.55	48.31	12.98	-90.68	-1,490.64	2,406.03	1,318.35	1,258.15	60.21	21.896	
4,400.00	3,391.82	3,521.55	3,506.45	49.93	13.20	-92.58	-1,495.37	2,402.38	1,306.35	1,244.13	62.22	20.996	
4,500.00	3,452.66	3,578.91	3,563.51	51.56	13.43	-94.52	-1,500.20	2,399.06	1,299.20	1,235.10	64.09	20.271	
4,600.00	3,513.49	3,642.48	3,626.75	53.19	13.69	-96.68	-1,505.58	2,395.54	1,296.71	1,230.90	65.81	19.704	
4,604.43	3,516.19	3,645.30	3,629.56	53.26	13.70	-96.77	-1,505.82	2,395.39	1,296.71	1,230.83	65.88	19.682 CC, ES	
4,700.00	3,574.33	3,707.82	3,691.75	54.82	13.95	-98.89	-1,511.19	2,391.98	1,298.76	1,231.41	67.36	19.282	
4,800.00	3,635.17	3,772.40	3,755.99	56.45	14.20	-101.07	-1,516.90	2,388.50	1,305.23	1,236.51	68.72	18.993	
4,900.00	3,696.01	3,830.75	3,814.04	58.08	14.44	-103.03	-1,521.86	2,385.37	1,316.30	1,246.41	69.90	18.832	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-1721CH2 - OWB - FINAL SURVEY													Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	3,756.84	3,883.65	3,866.71	59.71	14.64	-104.80	-1,526.07	2,382.66	1,332.08	1,261.21	70.88	18.794	SF	
5,100.00	3,817.68	3,933.97	3,916.83	61.34	14.84	-106.45	-1,529.94	2,380.71	1,352.68	1,281.01	71.67	18.874		
5,200.00	3,878.52	3,993.06	3,975.74	62.97	15.07	-108.36	-1,534.32	2,378.97	1,377.73	1,305.42	72.32	19.051		
5,300.00	3,939.36	4,054.90	4,037.39	64.61	15.30	-110.33	-1,538.73	2,377.09	1,406.63	1,333.81	72.82	19.316		
5,400.00	4,000.19	4,116.12	4,098.44	66.24	15.54	-112.25	-1,542.90	2,375.16	1,439.15	1,365.97	73.19	19.663		
5,500.00	4,061.03	4,175.80	4,157.96	67.87	15.76	-114.09	-1,546.79	2,373.24	1,475.12	1,401.68	73.44	20.087		
5,600.00	4,121.87	4,234.56	4,216.58	69.51	15.99	-115.86	-1,550.44	2,371.40	1,514.35	1,440.77	73.58	20.581		
5,700.00	4,182.71	4,291.59	4,273.49	71.14	16.20	-117.53	-1,553.79	2,369.71	1,556.66	1,483.02	73.64	21.139		
5,800.00	4,243.54	4,349.58	4,331.37	72.77	16.42	-119.19	-1,556.99	2,368.11	1,601.83	1,528.20	73.63	21.754		
5,900.00	4,304.38	4,409.25	4,390.93	74.41	16.64	-120.85	-1,560.14	2,366.53	1,649.56	1,575.97	73.59	22.415		
6,000.00	4,365.22	4,468.97	4,450.56	76.04	16.86	-122.47	-1,563.18	2,365.00	1,699.61	1,626.10	73.51	23.121		
6,100.00	4,426.06	4,528.61	4,510.11	77.68	17.08	-124.03	-1,566.11	2,363.57	1,751.79	1,678.39	73.41	23.864		
6,200.00	4,486.90	4,587.78	4,569.19	79.31	17.30	-125.53	-1,568.91	2,362.21	1,805.93	1,732.64	73.29	24.642		
6,300.00	4,547.73	4,639.21	4,620.56	80.95	17.48	-126.79	-1,571.19	2,361.08	1,861.94	1,788.83	73.11	25.467		
6,400.00	4,608.57	4,684.48	4,665.79	82.58	17.65	-127.87	-1,572.82	2,360.22	1,919.99	1,847.10	72.89	26.341		
6,500.00	4,669.41	4,736.37	4,717.65	84.22	17.83	-129.07	-1,574.28	2,359.39	1,979.93	1,907.22	72.71	27.229		
6,600.00	4,730.25	4,796.04	4,777.29	85.86	18.04	-130.41	-1,575.83	2,358.46	2,041.26	1,968.66	72.60	28.116		
6,700.00	4,791.08	4,838.19	4,819.44	87.49	18.19	-131.32	-1,576.75	2,357.87	2,104.03	2,031.66	72.37	29.073		
6,800.00	4,851.92	4,877.40	4,858.64	89.13	18.33	-132.15	-1,577.19	2,357.46	2,168.46	2,096.34	72.12	30.066		
6,900.00	4,912.76	4,927.39	4,908.62	90.76	18.50	-133.17	-1,577.30	2,357.11	2,234.38	2,162.40	71.98	31.042		
7,000.00	4,973.60	4,989.11	4,970.35	92.40	18.70	-134.38	-1,577.41	2,356.77	2,301.20	2,229.25	71.95	31.983		
7,100.00	5,034.43	5,064.54	5,045.78	94.04	18.96	-135.79	-1,577.78	2,356.34	2,368.62	2,296.56	72.06	32.871		
7,200.00	5,095.27	5,131.42	5,112.65	95.67	19.19	-136.99	-1,578.45	2,355.90	2,436.44	2,364.32	72.11	33.786		
7,300.00	5,156.11	5,194.39	5,175.61	97.31	19.41	-138.08	-1,579.13	2,355.55	2,504.86	2,432.70	72.16	34.712		
7,400.00	5,216.95	5,257.51	5,238.73	98.95	19.62	-139.12	-1,579.85	2,355.29	2,573.85	2,501.62	72.23	35.634		
7,500.00	5,277.78	5,319.47	5,300.68	100.59	19.83	-140.09	-1,580.57	2,355.34	2,643.36	2,571.05	72.31	36.556		
7,600.00	5,338.62	5,380.81	5,362.02	102.22	20.03	-140.99	-1,581.23	2,356.26	2,713.36	2,640.94	72.42	37.465		
7,700.00	5,399.46	5,437.65	5,418.84	103.86	20.22	-141.80	-1,581.76	2,357.35	2,783.88	2,711.37	72.51	38.391		
7,800.00	5,460.30	5,492.61	5,473.80	105.50	20.39	-142.54	-1,582.15	2,358.34	2,854.94	2,782.33	72.60	39.323		
7,900.00	5,521.24	5,545.79	5,526.96	107.13	20.56	-147.00	-1,582.38	2,359.32	2,926.63	2,853.94	72.69	40.260		
8,000.00	5,584.83	5,605.99	5,587.15	108.61	20.75	-166.30	-1,582.49	2,360.39	3,000.55	2,927.61	72.94	41.137		
8,100.00	5,650.69	5,664.16	5,645.31	109.85	20.93	173.67	-1,582.55	2,361.23	3,075.38	3,002.06	73.32	41.945		
8,200.00	5,716.83	5,707.71	5,688.83	110.82	21.06	154.54	-1,582.23	2,362.88	3,149.10	3,075.32	73.78	42.682		
8,300.00	5,781.24	5,846.00	5,823.58	111.52	21.44	139.27	-1,580.30	2,391.32	3,218.65	3,142.79	75.86	42.428		
8,400.00	5,841.96	5,846.00	5,823.58	111.98	21.44	124.59	-1,580.30	2,391.32	3,283.52	3,207.11	76.42	42.968		
8,500.00	5,897.14	5,868.63	5,844.61	112.25	21.48	113.06	-1,579.78	2,399.66	3,342.65	3,265.00	77.65	43.050		
8,600.00	5,945.12	5,872.27	5,847.97	112.37	21.49	103.76	-1,579.65	2,401.07	3,395.07	3,316.16	78.91	43.026		
8,700.00	5,984.42	5,872.97	5,848.61	112.39	21.49	96.74	-1,579.62	2,401.34	3,439.43	3,358.96	80.47	42.742		
8,800.00	6,013.86	5,871.06	5,846.85	112.35	21.49	91.73	-1,579.69	2,400.60	3,474.71	3,392.38	82.33	42.205		
8,900.00	6,032.54	5,866.86	5,842.97	112.30	21.48	88.50	-1,579.84	2,398.98	3,500.12	3,415.66	84.46	41.443		
9,000.00	6,039.89	5,846.00	5,823.58	112.24	21.44	86.67	-1,580.30	2,391.32	3,515.22	3,428.65	86.57	40.607		
9,100.00	6,040.00	5,846.00	5,823.58	112.19	21.44	86.59	-1,580.30	2,391.32	3,524.30	3,435.18	89.13	39.542		
9,200.00	6,040.00	5,846.00	5,823.58	112.16	21.44	86.59	-1,580.30	2,391.32	3,536.07	3,444.36	91.71	38.556		
9,300.00	6,040.00	5,833.53	5,811.86	112.15	21.40	86.40	-1,580.43	2,387.09	3,550.56	3,456.43	94.12	37.722		
9,400.00	6,040.00	5,821.10	5,800.06	112.15	21.37	86.21	-1,580.55	2,383.16	3,567.67	3,471.13	96.54	36.956		
9,500.00	6,040.00	5,799.00	5,778.86	112.16	21.32	85.86	-1,580.73	2,376.93	3,587.44	3,488.62	98.82	36.302		
9,600.00	6,040.00	5,799.00	5,778.86	112.19	21.32	85.86	-1,580.73	2,376.93	3,609.69	3,508.33	101.36	35.611		
9,700.00	6,040.00	5,799.00	5,778.86	112.24	21.32	85.86	-1,580.73	2,376.93	3,634.56	3,530.70	103.86	34.994		
9,800.00	6,040.00	5,780.46	5,760.85	112.31	21.27	85.57	-1,580.92	2,372.52	3,661.88	3,555.78	106.10	34.513		
9,900.00	6,040.00	5,772.56	5,753.12	112.39	21.25	85.44	-1,581.04	2,370.90	3,691.68	3,583.27	108.41	34.052		
10,000.00	6,040.00	5,752.00	5,732.87	112.49	21.19	85.11	-1,581.44	2,367.41	3,723.97	3,613.42	110.55	33.687		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-1721CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	6,040.00	5,752.00	5,732.87	112.62	21.19	85.11	-1,581.44	2,367.41	3,758.48	3,645.66	112.82	33.314	
10,200.00	6,040.00	5,752.00	5,732.87	112.77	21.19	85.11	-1,581.44	2,367.41	3,795.32	3,680.30	115.02	32.996	
10,300.00	6,040.00	5,752.00	5,732.87	112.94	21.19	85.11	-1,581.44	2,367.41	3,834.41	3,717.26	117.15	32.730	
10,400.00	6,040.00	5,752.00	5,732.87	113.14	21.19	85.11	-1,581.44	2,367.41	3,875.69	3,756.49	119.20	32.513	
10,500.00	6,040.00	5,752.00	5,732.87	113.36	21.19	85.11	-1,581.44	2,367.41	3,919.09	3,797.91	121.18	32.341	
10,600.00	6,040.00	5,752.00	5,732.87	113.62	21.19	85.11	-1,581.44	2,367.41	3,964.54	3,841.46	123.08	32.212	
10,700.00	6,040.00	5,752.00	5,732.87	113.91	21.19	85.11	-1,581.44	2,367.41	4,011.96	3,887.06	124.89	32.123	
10,800.00	6,040.00	5,752.00	5,732.87	114.24	21.19	85.11	-1,581.44	2,367.41	4,061.29	3,934.65	126.64	32.070	
10,900.00	6,040.00	5,752.00	5,732.87	114.61	21.19	85.11	-1,581.44	2,367.41	4,112.46	3,984.16	128.30	32.053	
11,000.00	6,040.00	5,752.00	5,732.87	115.02	21.19	85.11	-1,581.44	2,367.41	4,165.41	4,035.52	129.89	32.068	
11,100.00	6,040.00	5,752.00	5,732.87	115.49	21.19	85.11	-1,581.44	2,367.41	4,220.06	4,088.65	131.41	32.114	
11,200.00	6,040.00	5,731.50	5,712.54	116.00	21.13	84.78	-1,581.86	2,364.85	4,276.03	4,143.32	132.71	32.221	
11,300.00	6,040.00	5,729.91	5,710.96	116.58	21.13	84.76	-1,581.89	2,364.68	4,333.84	4,199.77	134.08	32.323	
11,400.00	6,040.00	5,728.41	5,709.46	117.22	21.12	84.73	-1,581.92	2,364.53	4,393.17	4,257.79	135.38	32.451	
11,500.00	6,040.00	5,726.99	5,708.05	117.92	21.12	84.71	-1,581.94	2,364.39	4,453.94	4,317.32	136.62	32.601	
11,600.00	6,040.00	5,725.65	5,706.71	118.70	21.11	84.69	-1,581.97	2,364.26	4,516.11	4,378.31	137.80	32.774	
11,700.00	6,040.00	5,724.37	5,705.44	119.56	21.11	84.67	-1,581.99	2,364.15	4,579.61	4,440.70	138.91	32.967	
11,800.00	6,040.00	5,704.00	5,685.13	120.51	21.05	84.34	-1,582.28	2,362.68	4,644.70	4,504.85	139.85	33.211	
11,900.00	6,040.00	5,704.00	5,685.13	121.54	21.05	84.34	-1,582.28	2,362.68	4,710.69	4,569.82	140.87	33.440	
12,000.00	6,040.00	5,704.00	5,685.13	122.66	21.05	84.34	-1,582.28	2,362.68	4,777.85	4,636.02	141.83	33.686	
12,100.00	6,040.00	5,704.00	5,685.13	123.87	21.05	84.34	-1,582.28	2,362.68	4,846.15	4,703.41	142.75	33.949	
12,200.00	6,040.00	5,704.00	5,685.13	125.17	21.05	84.34	-1,582.28	2,362.68	4,915.54	4,771.93	143.61	34.228	
12,300.00	6,040.00	5,704.00	5,685.13	126.57	21.05	84.34	-1,582.28	2,362.68	4,985.97	4,841.54	144.43	34.522	
12,400.00	6,040.00	5,704.00	5,685.13	128.06	21.05	84.34	-1,582.28	2,362.68	5,057.39	4,912.18	145.21	34.829	
12,500.00	6,040.00	5,704.00	5,685.13	129.63	21.05	84.34	-1,582.28	2,362.68	5,129.77	4,983.83	145.94	35.150	
12,600.00	6,040.00	5,704.00	5,685.13	131.29	21.05	84.34	-1,582.28	2,362.68	5,203.06	5,056.42	146.63	35.483	
12,700.00	6,040.00	5,704.00	5,685.13	133.03	21.05	84.34	-1,582.28	2,362.68	5,277.23	5,129.94	147.29	35.828	
12,800.00	6,040.00	5,704.00	5,685.13	134.84	21.05	84.34	-1,582.28	2,362.68	5,352.24	5,204.32	147.92	36.184	
12,900.00	6,040.00	5,704.00	5,685.13	136.71	21.05	84.34	-1,582.28	2,362.68	5,428.06	5,279.55	148.50	36.551	
13,000.00	6,040.00	5,704.00	5,685.13	138.66	21.05	84.34	-1,582.28	2,362.68	5,504.64	5,355.58	149.06	36.929	
13,100.00	6,040.00	5,704.00	5,685.13	140.66	21.05	84.34	-1,582.28	2,362.68	5,581.97	5,432.38	149.59	37.315	
13,200.00	6,040.00	5,704.00	5,685.13	142.71	21.05	84.34	-1,582.28	2,362.68	5,660.01	5,509.92	150.09	37.711	
13,300.00	6,040.00	5,704.00	5,685.13	144.81	21.05	84.34	-1,582.28	2,362.68	5,738.73	5,588.17	150.56	38.116	
13,400.00	6,040.00	5,704.00	5,685.13	146.96	21.05	84.34	-1,582.28	2,362.68	5,818.11	5,667.10	151.01	38.528	
13,500.00	6,040.00	5,704.00	5,685.13	149.14	21.05	84.34	-1,582.28	2,362.68	5,898.11	5,746.68	151.43	38.949	
13,600.00	6,040.00	5,704.00	5,685.13	151.36	21.05	84.34	-1,582.28	2,362.68	5,978.72	5,826.88	151.83	39.377	
13,700.00	6,040.00	5,704.00	5,685.13	153.62	21.05	84.34	-1,582.28	2,362.68	6,059.90	5,907.69	152.21	39.813	
13,800.00	6,040.00	5,704.00	5,685.13	155.91	21.05	84.34	-1,582.28	2,362.68	6,141.63	5,989.07	152.57	40.255	
13,900.00	6,040.00	5,704.00	5,685.13	158.22	21.05	84.34	-1,582.28	2,362.68	6,223.91	6,071.00	152.91	40.703	
14,000.00	6,040.00	5,704.00	5,685.13	160.56	21.05	84.34	-1,582.28	2,362.68	6,306.69	6,153.46	153.23	41.158	
14,100.00	6,040.00	5,704.00	5,685.13	162.92	21.05	84.34	-1,582.28	2,362.68	6,389.96	6,236.43	153.53	41.619	
14,200.00	6,040.00	5,704.00	5,685.13	165.30	21.05	84.34	-1,582.28	2,362.68	6,473.71	6,319.89	153.82	42.086	
14,300.00	6,040.00	5,704.00	5,685.13	167.70	21.05	84.34	-1,582.28	2,362.68	6,557.92	6,403.82	154.09	42.558	
14,400.00	6,040.00	5,704.00	5,685.13	170.12	21.05	84.34	-1,582.28	2,362.68	6,642.56	6,488.21	154.35	43.035	
14,500.00	6,040.00	5,704.00	5,685.13	172.55	21.05	84.34	-1,582.28	2,362.68	6,727.62	6,573.03	154.60	43.517	
14,600.00	6,040.00	5,704.00	5,685.13	175.00	21.05	84.34	-1,582.28	2,362.68	6,813.09	6,658.26	154.83	44.004	
14,700.00	6,040.00	5,704.00	5,685.13	177.46	21.05	84.34	-1,582.28	2,362.68	6,898.95	6,743.91	155.05	44.495	
14,800.00	6,040.00	5,704.00	5,685.13	179.94	21.05	84.34	-1,582.28	2,362.68	6,985.19	6,829.93	155.26	44.991	
14,900.00	6,040.00	5,704.00	5,685.13	182.43	21.05	84.34	-1,582.28	2,362.68	7,071.79	6,916.34	155.45	45.491	
15,000.00	6,040.00	5,704.00	5,685.13	184.92	21.05	84.34	-1,582.28	2,362.68	7,158.74	7,003.10	155.64	45.996	
15,100.00	6,040.00	5,704.00	5,685.13	187.43	21.05	84.34	-1,582.28	2,362.68	7,246.02	7,090.21	155.82	46.504	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-1721CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,704.00	5,685.13	189.95	21.05	84.34	-1,582.28	2,362.68	7,333.63	7,177.65	155.98	47.015	
15,300.00	6,040.00	5,704.00	5,685.13	192.48	21.05	84.34	-1,582.28	2,362.68	7,421.56	7,265.41	156.14	47.531	
15,400.00	6,040.00	5,704.00	5,685.13	195.01	21.05	84.34	-1,582.28	2,362.68	7,509.78	7,353.49	156.29	48.050	
15,500.00	6,040.00	5,704.00	5,685.13	197.55	21.05	84.34	-1,582.28	2,362.68	7,598.30	7,441.86	156.43	48.572	
15,600.00	6,040.00	5,704.00	5,685.13	200.10	21.05	84.34	-1,582.28	2,362.68	7,687.10	7,530.53	156.57	49.097	
15,700.00	6,040.00	5,704.00	5,685.13	202.65	21.05	84.34	-1,582.28	2,362.68	7,776.17	7,619.47	156.70	49.625	
15,800.00	6,040.00	5,704.00	5,685.13	205.22	21.05	84.34	-1,582.28	2,362.68	7,865.50	7,708.68	156.82	50.157	
15,900.00	6,040.00	5,704.00	5,685.13	207.78	21.05	84.34	-1,582.28	2,362.68	7,955.09	7,798.15	156.93	50.691	
16,000.00	6,040.00	5,704.00	5,685.13	210.36	21.05	84.34	-1,582.28	2,362.68	8,044.92	7,887.88	157.04	51.228	
16,100.00	6,040.00	5,704.00	5,685.13	212.93	21.05	84.34	-1,582.28	2,362.68	8,134.99	7,977.84	157.15	51.767	
16,200.00	6,040.00	5,704.00	5,685.13	215.52	21.05	84.34	-1,582.28	2,362.68	8,225.29	8,068.05	157.24	52.309	
16,300.00	6,040.00	5,704.00	5,685.13	218.11	21.05	84.34	-1,582.28	2,362.68	8,315.81	8,158.47	157.34	52.854	
16,400.00	6,040.00	5,704.00	5,685.13	220.70	21.05	84.34	-1,582.28	2,362.68	8,406.55	8,249.12	157.42	53.400	
16,500.00	6,040.00	5,704.00	5,685.13	223.29	21.05	84.34	-1,582.28	2,362.68	8,497.49	8,339.98	157.51	53.950	
16,600.00	6,040.00	5,704.00	5,685.13	225.89	21.05	84.34	-1,582.28	2,362.68	8,588.64	8,431.05	157.59	54.501	
16,700.00	6,040.00	5,704.00	5,685.13	228.50	21.05	84.34	-1,582.28	2,362.68	8,679.98	8,522.31	157.66	55.054	
16,800.00	6,040.00	5,704.00	5,685.13	231.11	21.05	84.34	-1,582.28	2,362.68	8,771.51	8,613.77	157.73	55.610	
16,900.00	6,040.00	5,704.00	5,685.13	233.72	21.05	84.34	-1,582.28	2,362.68	8,863.22	8,705.42	157.80	56.167	
17,000.00	6,040.00	5,704.00	5,685.13	236.33	21.05	84.34	-1,582.28	2,362.68	8,955.11	8,797.24	157.86	56.727	
17,100.00	6,040.00	5,704.00	5,685.13	238.95	21.05	84.34	-1,582.28	2,362.68	9,047.17	8,889.25	157.92	57.288	
17,200.00	6,040.00	5,704.00	5,685.13	241.57	21.05	84.34	-1,582.28	2,362.68	9,139.40	8,981.42	157.98	57.851	
17,300.00	6,040.00	5,704.00	5,685.13	244.19	21.05	84.34	-1,582.28	2,362.68	9,231.79	9,073.75	158.04	58.415	
17,400.00	6,040.00	5,704.00	5,685.13	246.82	21.05	84.34	-1,582.28	2,362.68	9,324.34	9,166.25	158.09	58.982	
17,500.00	6,040.00	5,704.00	5,685.13	249.45	21.05	84.34	-1,582.28	2,362.68	9,417.04	9,258.90	158.14	59.550	
17,600.00	6,040.00	5,704.00	5,685.13	252.08	21.05	84.34	-1,582.28	2,362.68	9,509.88	9,351.70	158.18	60.119	
17,700.00	6,040.00	5,704.00	5,685.13	254.71	21.05	84.34	-1,582.28	2,362.68	9,602.88	9,444.65	158.23	60.690	
17,800.00	6,040.00	5,704.00	5,685.13	257.35	21.05	84.34	-1,582.28	2,362.68	9,696.01	9,537.74	158.27	61.263	
17,900.00	6,040.00	5,704.00	5,685.13	259.99	21.05	84.34	-1,582.28	2,362.68	9,789.27	9,630.96	158.31	61.837	
18,000.00	6,040.00	5,704.00	5,685.13	262.63	21.05	84.34	-1,582.28	2,362.68	9,882.67	9,724.32	158.35	62.412	
18,100.00	6,040.00	5,704.00	5,685.13	265.27	21.05	84.34	-1,582.28	2,362.68	9,976.20	9,817.81	158.38	62.988	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-3228BH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 864-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	116.62	-1,289.15	2,571.74	2,876.77				
100.00	100.00	91.49	91.48	0.13	0.16	116.62	-1,289.11	2,571.77	2,876.77	2,876.48	0.29	9,777.668	
200.00	199.98	190.90	190.90	0.48	0.33	-32.64	-1,289.00	2,571.85	2,875.33	2,874.51	0.82	3,516.422	
300.00	299.84	290.20	290.20	0.85	0.51	-32.75	-1,288.81	2,572.00	2,870.97	2,869.62	1.35	2,124.109	
400.00	399.45	389.24	389.24	1.22	0.68	-32.93	-1,288.54	2,572.21	2,863.70	2,861.81	1.90	1,511.058	
500.00	498.70	487.90	487.90	1.62	0.85	-33.18	-1,288.20	2,572.48	2,853.55	2,851.11	2.45	1,165.829	
600.00	597.47	586.07	586.06	2.05	1.02	-33.51	-1,287.78	2,572.80	2,840.55	2,837.54	3.01	943.476	
700.00	695.62	683.61	683.60	2.51	1.19	-33.91	-1,287.28	2,573.19	2,824.71	2,821.13	3.59	787.598	
800.00	793.06	780.40	780.39	3.01	1.36	-34.39	-1,286.72	2,573.63	2,806.10	2,801.92	4.18	671.747	
900.00	889.64	876.33	876.32	3.56	1.53	-34.95	-1,286.08	2,574.12	2,784.75	2,779.97	4.79	581.894	
1,000.00	985.27	961.91	961.90	4.14	1.85	-35.54	-1,286.19	2,574.45	2,760.92	2,755.35	5.56	496.143	
1,100.00	1,079.82	1,046.78	1,046.73	4.78	2.13	-36.16	-1,288.36	2,574.13	2,734.77	2,728.43	6.34	431.631	
1,200.00	1,173.17	1,119.44	1,119.26	5.46	2.38	-36.76	-1,292.63	2,573.24	2,706.55	2,699.45	7.10	381.344	
1,300.00	1,265.21	1,193.26	1,192.78	6.20	2.64	-37.39	-1,299.17	2,571.97	2,676.49	2,668.59	7.90	338.832	
1,400.00	1,355.84	1,289.79	1,288.57	6.99	2.99	-38.12	-1,310.73	2,569.53	2,644.37	2,635.55	8.82	299.776	
1,500.00	1,444.94	1,439.92	1,436.16	7.84	3.58	-38.96	-1,336.40	2,559.99	2,608.34	2,598.35	9.99	261.003	
1,600.00	1,532.39	1,525.44	1,519.96	8.75	3.95	-39.73	-1,352.02	2,553.21	2,568.99	2,558.01	10.99	233.833	
1,700.00	1,618.11	1,600.01	1,593.13	9.71	4.27	-40.58	-1,365.38	2,547.81	2,527.66	2,515.68	11.98	210.932	
1,800.00	1,701.97	1,683.77	1,675.41	10.74	4.64	-41.59	-1,380.06	2,542.24	2,484.38	2,471.32	13.06	190.222	
1,900.00	1,783.88	1,759.78	1,750.14	11.82	4.98	-42.68	-1,393.14	2,537.54	2,439.15	2,425.00	14.15	172.321	
2,000.00	1,863.74	1,895.92	1,884.18	12.96	5.58	-44.35	-1,415.13	2,528.61	2,391.21	2,375.70	15.51	154.189	
2,100.00	1,941.45	1,974.61	1,961.69	14.16	5.93	-45.82	-1,427.42	2,522.74	2,340.41	2,323.71	16.71	140.093	
2,200.00	2,016.92	2,047.34	2,033.35	15.41	6.26	-47.39	-1,438.69	2,517.55	2,288.03	2,270.09	17.94	127.535	
2,300.00	2,090.05	2,118.55	2,103.60	16.73	6.58	-49.11	-1,449.37	2,512.84	2,234.28	2,215.05	19.23	116.190	
2,400.00	2,160.76	2,190.94	2,175.12	18.10	6.89	-51.04	-1,459.65	2,508.50	2,179.30	2,158.71	20.59	105.853	
2,500.00	2,228.95	2,264.70	2,248.07	19.53	7.21	-53.18	-1,469.71	2,504.24	2,123.11	2,101.08	22.02	96.412	
2,600.00	2,294.55	2,330.40	2,313.11	21.01	7.50	-55.39	-1,478.29	2,500.67	2,066.01	2,042.50	23.51	87.872	
2,700.00	2,357.48	2,397.00	2,379.02	22.55	7.79	-57.80	-1,487.14	2,497.17	2,008.32	1,983.22	25.10	80.020	
2,800.00	2,418.42	2,462.15	2,443.25	24.13	8.08	-59.37	-1,497.39	2,493.34	1,950.52	1,923.76	26.76	72.887	
2,900.00	2,479.25	2,520.45	2,500.67	25.71	8.34	-60.54	-1,506.92	2,490.07	1,893.99	1,865.50	28.48	66.493	
3,000.00	2,540.09	2,588.51	2,567.76	27.31	8.65	-61.95	-1,517.83	2,486.56	1,838.84	1,808.55	30.30	60.695	
3,100.00	2,600.93	2,659.90	2,638.21	28.90	8.97	-63.52	-1,528.74	2,482.87	1,784.85	1,752.66	32.18	55.457	
3,200.00	2,661.77	2,729.67	2,707.10	30.51	9.29	-65.12	-1,539.13	2,479.23	1,732.18	1,698.04	34.14	50.739	
3,300.00	2,722.61	2,792.95	2,769.67	32.11	9.56	-66.64	-1,548.05	2,476.04	1,681.11	1,644.96	36.15	46.500	
3,400.00	2,783.44	2,866.56	2,842.54	33.72	9.89	-68.50	-1,557.83	2,472.49	1,631.87	1,593.62	38.26	42.658	
3,500.00	2,844.28	2,948.70	2,923.59	35.34	10.25	-70.60	-1,570.31	2,467.69	1,583.89	1,543.48	40.41	39.192	
3,600.00	2,905.12	3,020.37	2,994.33	36.95	10.57	-72.53	-1,580.83	2,463.15	1,537.59	1,494.96	42.63	36.068	
3,700.00	2,965.96	3,086.33	3,039.74	38.57	10.78	-73.80	-1,587.42	2,460.54	1,493.95	1,449.05	44.90	33.275	
3,800.00	3,026.79	3,116.16	3,088.98	40.19	11.00	-75.21	-1,594.80	2,458.38	1,453.63	1,406.42	47.21	30.791	
3,900.00	3,087.63	3,179.14	3,151.27	41.81	11.27	-77.04	-1,603.80	2,456.11	1,416.45	1,366.89	49.56	28.580	
4,000.00	3,148.47	3,256.71	3,228.09	43.43	11.61	-79.38	-1,614.15	2,453.26	1,382.22	1,330.28	51.94	26.612	
4,100.00	3,209.31	3,345.06	3,315.46	45.05	12.00	-82.12	-1,626.57	2,448.96	1,350.20	1,295.89	54.31	24.862	
4,200.00	3,270.14	3,428.30	3,397.43	46.68	12.38	-84.71	-1,640.25	2,444.16	1,320.45	1,263.81	56.64	23.312	
4,300.00	3,330.98	3,504.33	3,472.12	48.31	12.74	-87.11	-1,653.63	2,439.49	1,293.62	1,234.68	58.94	21.949	
4,400.00	3,391.82	3,583.98	3,550.28	49.93	13.13	-89.68	-1,668.04	2,434.15	1,269.82	1,208.67	61.15	20.764	
4,500.00	3,452.66	3,647.47	3,612.58	51.56	13.43	-91.77	-1,679.44	2,429.73	1,249.60	1,186.29	63.31	19.737	
4,600.00	3,513.49	3,711.00	3,675.00	53.19	13.73	-93.90	-1,690.43	2,425.44	1,233.64	1,168.29	65.35	18.878	
4,700.00	3,574.33	3,774.67	3,737.66	54.82	14.03	-96.07	-1,700.89	2,421.11	1,222.08	1,154.84	67.24	18.176	
4,800.00	3,635.17	3,832.04	3,794.21	56.45	14.29	-98.06	-1,709.73	2,417.27	1,215.25	1,146.30	68.96	17.623	
4,885.15	3,686.97	3,880.53	3,842.09	57.84	14.51	-99.75	-1,716.71	2,414.15	1,213.41	1,143.15	70.27	17.269 CC	
4,900.00	3,696.01	3,889.20	3,850.66	58.08	14.55	-100.05	-1,717.93	2,413.62	1,213.47	1,142.99	70.48	17.218 ES	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-3228BH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 864-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	3,756.84	3,948.02	3,908.79	59.71	14.81	-102.10	-1,726.24	2,410.34	1,216.70	1,144.91	71.79	16.949	
5,100.00	3,817.68	4,020.25	3,980.20	61.34	15.13	-104.59	-1,736.57	2,406.71	1,224.57	1,151.69	72.88	16.803	
5,200.00	3,878.52	4,089.81	4,048.90	62.97	15.44	-106.97	-1,746.80	2,402.97	1,236.38	1,162.61	73.77	16.760 SF	
5,300.00	3,939.36	4,151.01	4,109.36	64.61	15.72	-109.05	-1,755.69	2,399.88	1,252.63	1,178.16	74.47	16.821	
5,400.00	4,000.19	4,214.27	4,171.92	66.24	16.00	-111.16	-1,764.62	2,396.82	1,273.22	1,198.24	74.98	16.981	
5,500.00	4,061.03	4,273.37	4,230.40	67.87	16.25	-113.11	-1,772.64	2,393.92	1,297.94	1,222.63	75.32	17.233	
5,600.00	4,121.87	4,327.19	4,283.72	69.51	16.49	-114.86	-1,779.51	2,391.51	1,326.94	1,251.45	75.49	17.577	
5,700.00	4,182.71	4,383.98	4,340.06	71.14	16.72	-116.67	-1,786.30	2,389.24	1,359.98	1,284.44	75.54	18.003	
5,800.00	4,243.54	4,441.95	4,397.62	72.77	16.97	-118.48	-1,792.86	2,387.00	1,396.64	1,321.15	75.48	18.503	
5,900.00	4,304.38	4,500.55	4,455.83	74.41	17.20	-120.27	-1,799.18	2,384.86	1,436.63	1,361.29	75.34	19.068	
6,000.00	4,365.22	4,559.42	4,514.36	76.04	17.44	-122.01	-1,805.25	2,382.87	1,479.68	1,404.54	75.14	19.692	
6,100.00	4,426.06	4,618.83	4,573.44	77.68	17.68	-123.72	-1,811.13	2,380.97	1,525.50	1,450.61	74.90	20.368	
6,200.00	4,486.90	4,680.58	4,634.89	79.31	17.93	-125.44	-1,817.06	2,379.17	1,573.83	1,499.19	74.64	21.086	
6,300.00	4,547.73	4,740.28	4,694.30	80.95	18.16	-127.04	-1,822.71	2,377.71	1,624.35	1,549.99	74.36	21.844	
6,400.00	4,608.57	4,793.16	4,746.95	82.58	18.36	-128.40	-1,827.41	2,376.59	1,677.14	1,603.10	74.04	22.651	
6,500.00	4,669.41	4,849.55	4,803.15	84.22	18.58	-129.81	-1,832.03	2,375.55	1,732.07	1,658.32	73.75	23.486	
6,600.00	4,730.25	4,909.38	4,862.78	85.86	18.81	-131.25	-1,836.74	2,374.60	1,788.74	1,715.25	73.48	24.342	
6,700.00	4,791.08	4,968.86	4,922.08	87.49	19.03	-132.63	-1,841.25	2,373.80	1,846.98	1,773.74	73.24	25.219	
6,800.00	4,851.92	5,029.88	4,982.93	89.13	19.26	-133.98	-1,845.71	2,373.07	1,906.64	1,833.62	73.02	26.110	
6,900.00	4,912.76	5,093.06	5,045.94	90.76	19.49	-135.35	-1,850.19	2,371.51	1,967.50	1,894.68	72.82	27.018	
7,000.00	4,973.60	5,132.50	5,085.27	92.40	19.63	-136.19	-1,852.78	2,370.14	2,029.79	1,957.32	72.46	28.011	
7,100.00	5,034.43	5,166.28	5,118.99	94.04	19.76	-136.89	-1,854.50	2,369.04	2,093.95	2,021.87	72.08	29.052	
7,200.00	5,095.27	5,199.00	5,151.67	95.67	19.87	-137.56	-1,855.71	2,368.06	2,159.87	2,088.18	71.69	30.126	
7,300.00	5,156.11	5,243.27	5,195.91	97.31	20.02	-138.43	-1,856.88	2,366.74	2,227.26	2,155.84	71.42	31.185	
7,400.00	5,216.95	5,286.44	5,239.04	98.95	20.16	-139.25	-1,857.67	2,365.39	2,295.88	2,224.72	71.16	32.264	
7,500.00	5,277.78	5,324.34	5,276.93	100.59	20.27	-139.95	-1,858.04	2,364.43	2,365.68	2,294.80	70.88	33.378	
7,600.00	5,338.62	5,361.32	5,313.91	102.22	20.38	-140.59	-1,857.98	2,364.26	2,436.67	2,366.04	70.62	34.502	
7,700.00	5,399.46	5,403.93	5,356.51	103.86	20.50	-141.28	-1,857.42	2,364.98	2,508.72	2,438.25	70.47	35.599	
7,800.00	5,460.30	5,461.03	5,413.58	105.50	20.65	-142.15	-1,856.44	2,366.56	2,581.42	2,510.91	70.51	36.613	
7,900.00	5,521.24	5,524.10	5,476.60	107.13	20.82	-146.91	-1,855.26	2,368.69	2,654.62	2,583.98	70.64	37.578	
8,000.00	5,584.83	5,590.33	5,542.79	108.61	21.00	-166.71	-1,854.17	2,370.73	2,729.75	2,658.82	70.93	38.486	
8,100.00	5,650.69	6,020.74	5,932.78	109.85	21.93	177.78	-1,859.45	2,518.87	2,800.05	2,722.15	77.90	35.945	
8,200.00	5,716.83	6,046.00	5,951.12	110.82	21.96	160.45	-1,860.05	2,536.22	2,867.59	2,788.99	78.61	36.481	
8,300.00	5,781.24	6,065.59	5,964.97	111.52	21.97	144.13	-1,860.36	2,550.06	2,934.07	2,854.63	79.43	36.937	
8,400.00	5,841.96	6,072.78	5,969.87	111.98	21.98	129.52	-1,860.43	2,555.32	2,997.87	2,917.64	80.24	37.363	
8,500.00	5,897.14	6,071.59	5,969.07	112.25	21.98	117.17	-1,860.42	2,554.45	3,057.42	2,976.28	81.14	37.679	
8,600.00	5,945.12	6,064.47	5,964.20	112.37	21.97	107.21	-1,860.35	2,549.26	3,111.18	3,028.93	82.25	37.828	
8,700.00	5,984.42	6,046.00	5,951.12	112.39	21.96	99.41	-1,860.05	2,536.22	3,157.79	3,074.37	83.43	37.852	
8,800.00	6,013.86	6,035.52	5,943.52	112.35	21.94	93.88	-1,859.82	2,529.02	3,195.99	3,110.82	85.16	37.527	
8,900.00	6,032.54	6,008.56	5,923.93	112.30	21.91	89.99	-1,859.09	2,510.51	3,224.73	3,137.91	86.82	37.143	
9,000.00	6,039.89	5,971.89	5,897.07	112.24	21.87	87.72	-1,857.83	2,485.57	3,243.06	3,154.54	88.52	36.638	
9,100.00	6,040.00	5,933.91	5,868.37	112.19	21.81	87.09	-1,856.39	2,460.75	3,255.30	3,164.95	90.35	36.029	
9,200.00	6,040.00	5,904.00	5,843.97	112.16	21.76	86.66	-1,855.37	2,443.50	3,269.80	3,177.36	92.44	35.372	
9,300.00	6,040.00	5,879.30	5,822.62	112.15	21.71	86.28	-1,854.67	2,431.11	3,286.84	3,192.16	94.68	34.715	
9,400.00	6,040.00	5,856.00	5,801.63	112.15	21.66	85.91	-1,854.15	2,421.03	3,306.49	3,209.52	96.97	34.099	
9,500.00	6,040.00	5,842.91	5,789.56	112.16	21.63	85.70	-1,853.91	2,415.96	3,328.80	3,229.39	99.41	33.485	
9,600.00	6,040.00	5,828.13	5,775.80	112.19	21.60	85.46	-1,853.64	2,410.58	3,353.78	3,251.98	101.80	32.945	
9,700.00	6,040.00	5,809.00	5,757.78	112.24	21.56	85.14	-1,853.30	2,404.17	3,381.39	3,277.31	104.08	32.487	
9,800.00	6,040.00	5,809.00	5,757.78	112.31	21.56	85.14	-1,853.30	2,404.17	3,411.59	3,305.00	106.58	32.008	
9,900.00	6,040.00	5,786.61	5,736.45	112.39	21.51	84.77	-1,852.94	2,397.37	3,444.26	3,335.55	108.72	31.681	
10,000.00	6,040.00	5,773.59	5,723.96	112.49	21.47	84.55	-1,852.77	2,393.71	3,479.41	3,368.50	110.91	31.371	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-3228BH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 864-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	6,040.00	5,762.00	5,712.78	112.62	21.45	84.35	-1,852.64	2,390.65	3,516.96	3,403.90	113.05	31.109	
10,200.00	6,040.00	5,762.00	5,712.78	112.77	21.45	84.35	-1,852.64	2,390.65	3,556.88	3,441.62	115.25	30.861	
10,300.00	6,040.00	5,744.05	5,695.36	112.94	21.40	84.04	-1,852.49	2,386.29	3,599.01	3,481.84	117.17	30.717	
10,400.00	6,040.00	5,736.47	5,687.98	113.14	21.38	83.91	-1,852.44	2,384.60	3,643.37	3,524.26	119.12	30.586	
10,500.00	6,040.00	5,729.65	5,681.31	113.36	21.37	83.80	-1,852.41	2,383.16	3,689.88	3,568.88	121.00	30.496	
10,600.00	6,040.00	5,715.00	5,666.94	113.62	21.33	83.55	-1,852.39	2,380.32	3,738.48	3,615.76	122.71	30.465	
10,700.00	6,040.00	5,715.00	5,666.94	113.91	21.33	83.55	-1,852.39	2,380.32	3,789.00	3,664.51	124.49	30.436	
10,800.00	6,040.00	5,715.00	5,666.94	114.24	21.33	83.55	-1,852.39	2,380.32	3,841.46	3,715.28	126.18	30.444	
10,900.00	6,040.00	5,715.00	5,666.94	114.61	21.33	83.55	-1,852.39	2,380.32	3,895.79	3,768.00	127.79	30.486	
11,000.00	6,040.00	5,715.00	5,666.94	115.02	21.33	83.55	-1,852.39	2,380.32	3,951.90	3,822.58	129.32	30.560	
11,100.00	6,040.00	5,715.00	5,666.94	115.49	21.33	83.55	-1,852.39	2,380.32	4,009.71	3,878.95	130.77	30.663	
11,200.00	6,040.00	5,715.00	5,666.94	116.00	21.33	83.55	-1,852.39	2,380.32	4,069.17	3,937.03	132.14	30.795	
11,300.00	6,040.00	5,715.00	5,666.94	116.58	21.33	83.55	-1,852.39	2,380.32	4,130.19	3,996.75	133.44	30.953	
11,400.00	6,040.00	5,694.49	5,646.70	117.22	21.28	83.19	-1,852.46	2,377.05	4,192.42	4,057.91	134.51	31.168	
11,500.00	6,040.00	5,692.20	5,644.43	117.92	21.27	83.15	-1,852.48	2,376.75	4,256.29	4,120.63	135.66	31.375	
11,600.00	6,040.00	5,690.08	5,642.32	118.70	21.26	83.11	-1,852.50	2,376.47	4,321.52	4,184.78	136.74	31.603	
11,700.00	6,040.00	5,688.10	5,640.36	119.56	21.26	83.08	-1,852.52	2,376.23	4,388.06	4,250.29	137.77	31.850	
11,800.00	6,040.00	5,667.00	5,619.37	120.51	21.20	82.71	-1,852.82	2,374.15	4,456.12	4,317.51	138.61	32.149	
11,900.00	6,040.00	5,667.00	5,619.37	121.54	21.20	82.71	-1,852.82	2,374.15	4,525.05	4,385.51	139.54	32.428	
12,000.00	6,040.00	5,667.00	5,619.37	122.66	21.20	82.71	-1,852.82	2,374.15	4,595.13	4,454.71	140.42	32.725	
12,100.00	6,040.00	5,667.00	5,619.37	123.87	21.20	82.71	-1,852.82	2,374.15	4,666.29	4,525.05	141.24	33.037	
12,200.00	6,040.00	5,667.00	5,619.37	125.17	21.20	82.71	-1,852.82	2,374.15	4,738.50	4,596.48	142.02	33.364	
12,300.00	6,040.00	5,667.00	5,619.37	126.57	21.20	82.71	-1,852.82	2,374.15	4,811.70	4,668.94	142.76	33.705	
12,400.00	6,040.00	5,667.00	5,619.37	128.06	21.20	82.71	-1,852.82	2,374.15	4,885.85	4,742.40	143.45	34.060	
12,500.00	6,040.00	5,667.00	5,619.37	129.63	21.20	82.71	-1,852.82	2,374.15	4,960.91	4,816.81	144.10	34.426	
12,600.00	6,040.00	5,667.00	5,619.37	131.29	21.20	82.71	-1,852.82	2,374.15	5,036.84	4,892.12	144.72	34.805	
12,700.00	6,040.00	5,667.00	5,619.37	133.03	21.20	82.71	-1,852.82	2,374.15	5,113.59	4,968.30	145.29	35.195	
12,800.00	6,040.00	5,667.00	5,619.37	134.84	21.20	82.71	-1,852.82	2,374.15	5,191.14	5,045.30	145.84	35.595	
12,900.00	6,040.00	5,667.00	5,619.37	136.71	21.20	82.71	-1,852.82	2,374.15	5,269.44	5,123.09	146.35	36.005	
13,000.00	6,040.00	5,667.00	5,619.37	138.66	21.20	82.71	-1,852.82	2,374.15	5,348.46	5,201.63	146.83	36.425	
13,100.00	6,040.00	5,667.00	5,619.37	140.66	21.20	82.71	-1,852.82	2,374.15	5,428.18	5,280.89	147.29	36.854	
13,200.00	6,040.00	5,667.00	5,619.37	142.71	21.20	82.71	-1,852.82	2,374.15	5,508.56	5,360.84	147.72	37.291	
13,300.00	6,040.00	5,667.00	5,619.37	144.81	21.20	82.71	-1,852.82	2,374.15	5,589.57	5,441.45	148.12	37.736	
13,400.00	6,040.00	5,667.00	5,619.37	146.96	21.20	82.71	-1,852.82	2,374.15	5,671.19	5,522.69	148.50	38.189	
13,500.00	6,040.00	5,667.00	5,619.37	149.14	21.20	82.71	-1,852.82	2,374.15	5,753.39	5,604.53	148.86	38.650	
13,600.00	6,040.00	5,667.00	5,619.37	151.36	21.20	82.71	-1,852.82	2,374.15	5,836.14	5,686.95	149.20	39.117	
13,700.00	6,040.00	5,667.00	5,619.37	153.62	21.20	82.71	-1,852.82	2,374.15	5,919.43	5,769.92	149.51	39.591	
13,800.00	6,040.00	5,667.00	5,619.37	155.91	21.20	82.71	-1,852.82	2,374.15	6,003.23	5,853.41	149.81	40.071	
13,900.00	6,040.00	5,667.00	5,619.37	158.22	21.20	82.71	-1,852.82	2,374.15	6,087.51	5,937.42	150.10	40.558	
14,000.00	6,040.00	5,667.00	5,619.37	160.56	21.20	82.71	-1,852.82	2,374.15	6,172.27	6,021.91	150.36	41.050	
14,100.00	6,040.00	5,667.00	5,619.37	162.92	21.20	82.71	-1,852.82	2,374.15	6,257.47	6,106.86	150.61	41.547	
14,200.00	6,040.00	5,667.00	5,619.37	165.30	21.20	82.71	-1,852.82	2,374.15	6,343.11	6,192.27	150.85	42.050	
14,300.00	6,040.00	5,667.00	5,619.37	167.70	21.20	82.71	-1,852.82	2,374.15	6,429.16	6,278.10	151.07	42.558	
14,400.00	6,040.00	5,667.00	5,619.37	170.12	21.20	82.71	-1,852.82	2,374.15	6,515.62	6,364.34	151.28	43.070	
14,500.00	6,040.00	5,667.00	5,619.37	172.55	21.20	82.71	-1,852.82	2,374.15	6,602.45	6,450.97	151.48	43.587	
14,600.00	6,040.00	5,667.00	5,619.37	175.00	21.20	82.71	-1,852.82	2,374.15	6,689.65	6,537.99	151.66	44.109	
14,700.00	6,040.00	5,667.00	5,619.37	177.46	21.20	82.71	-1,852.82	2,374.15	6,777.20	6,625.37	151.84	44.635	
14,800.00	6,040.00	5,667.00	5,619.37	179.94	21.20	82.71	-1,852.82	2,374.15	6,865.10	6,713.10	152.00	45.164	
14,900.00	6,040.00	5,667.00	5,619.37	182.43	21.20	82.71	-1,852.82	2,374.15	6,953.32	6,801.16	152.16	45.698	
15,000.00	6,040.00	5,667.00	5,619.37	184.92	21.20	82.71	-1,852.82	2,374.15	7,041.86	6,889.55	152.30	46.235	
15,100.00	6,040.00	5,667.00	5,619.37	187.43	21.20	82.71	-1,852.82	2,374.15	7,130.70	6,978.25	152.44	46.776	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-3228BH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 864-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,667.00	5,619.37	189.95	21.20	82.71	-1,852.82	2,374.15	7,219.83	7,067.26	152.57	47.321	
15,300.00	6,040.00	5,667.00	5,619.37	192.48	21.20	82.71	-1,852.82	2,374.15	7,309.24	7,156.55	152.70	47.868	
15,400.00	6,040.00	5,646.89	5,599.30	195.01	21.15	82.36	-1,853.18	2,372.84	7,398.73	7,245.99	152.74	48.440	
15,500.00	6,040.00	5,646.09	5,598.51	197.55	21.15	82.35	-1,853.19	2,372.79	7,488.66	7,335.82	152.85	48.995	
15,600.00	6,040.00	5,645.32	5,597.73	200.10	21.15	82.33	-1,853.21	2,372.75	7,578.84	7,425.90	152.95	49.552	
15,700.00	6,040.00	5,644.56	5,596.98	202.65	21.14	82.32	-1,853.22	2,372.71	7,669.27	7,516.23	153.04	50.112	
15,800.00	6,040.00	5,643.83	5,596.25	205.22	21.14	82.31	-1,853.24	2,372.67	7,759.93	7,606.80	153.13	50.675	
15,900.00	6,040.00	5,643.11	5,595.53	207.78	21.14	82.30	-1,853.25	2,372.63	7,850.81	7,697.60	153.22	51.240	
16,000.00	6,040.00	5,642.41	5,594.83	210.36	21.14	82.28	-1,853.26	2,372.59	7,941.92	7,788.62	153.30	51.808	
16,100.00	6,040.00	5,641.72	5,594.15	212.93	21.14	82.27	-1,853.27	2,372.56	8,033.23	7,879.86	153.37	52.378	
16,200.00	6,040.00	5,641.06	5,593.48	215.52	21.13	82.26	-1,853.29	2,372.52	8,124.75	7,971.31	153.44	52.951	
16,300.00	6,040.00	5,640.40	5,592.83	218.11	21.13	82.25	-1,853.30	2,372.49	8,216.47	8,062.96	153.51	53.525	
16,400.00	6,040.00	5,620.00	5,572.44	220.70	21.08	81.89	-1,853.66	2,371.65	8,308.56	8,155.06	153.50	54.127	
16,500.00	6,040.00	5,620.00	5,572.44	223.29	21.08	81.89	-1,853.66	2,371.65	8,400.64	8,247.08	153.56	54.705	
16,600.00	6,040.00	5,620.00	5,572.44	225.89	21.08	81.89	-1,853.66	2,371.65	8,492.90	8,339.28	153.62	55.285	
16,700.00	6,040.00	5,620.00	5,572.44	228.50	21.08	81.89	-1,853.66	2,371.65	8,585.33	8,431.66	153.68	55.867	
16,800.00	6,040.00	5,620.00	5,572.44	231.11	21.08	81.89	-1,853.66	2,371.65	8,677.93	8,524.21	153.73	56.451	
16,900.00	6,040.00	5,620.00	5,572.44	233.72	21.08	81.89	-1,853.66	2,371.65	8,770.69	8,616.92	153.77	57.036	
17,000.00	6,040.00	5,620.00	5,572.44	236.33	21.08	81.89	-1,853.66	2,371.65	8,863.61	8,709.80	153.82	57.623	
17,100.00	6,040.00	5,620.00	5,572.44	238.95	21.08	81.89	-1,853.66	2,371.65	8,956.69	8,802.83	153.86	58.212	
17,200.00	6,040.00	5,620.00	5,572.44	241.57	21.08	81.89	-1,853.66	2,371.65	9,049.91	8,896.01	153.90	58.803	
17,300.00	6,040.00	5,620.00	5,572.44	244.19	21.08	81.89	-1,853.66	2,371.65	9,143.27	8,989.33	153.94	59.395	
17,400.00	6,040.00	5,620.00	5,572.44	246.82	21.08	81.89	-1,853.66	2,371.65	9,236.77	9,082.80	153.98	59.989	
17,500.00	6,040.00	5,620.00	5,572.44	249.45	21.08	81.89	-1,853.66	2,371.65	9,330.41	9,176.40	154.01	60.584	
17,600.00	6,040.00	5,620.00	5,572.44	252.08	21.08	81.89	-1,853.66	2,371.65	9,424.18	9,270.14	154.04	61.180	
17,700.00	6,040.00	5,620.00	5,572.44	254.71	21.08	81.89	-1,853.66	2,371.65	9,518.07	9,364.01	154.07	61.778	
17,800.00	6,040.00	5,620.00	5,572.44	257.35	21.08	81.89	-1,853.66	2,371.65	9,612.09	9,458.00	154.10	62.377	
17,900.00	6,040.00	5,620.00	5,572.44	259.99	21.08	81.89	-1,853.66	2,371.65	9,706.23	9,552.11	154.12	62.977	
18,000.00	6,040.00	5,620.00	5,572.44	262.63	21.08	81.89	-1,853.66	2,371.65	9,800.48	9,646.34	154.15	63.579	
18,100.00	6,040.00	5,620.00	5,572.44	265.27	21.08	81.89	-1,853.66	2,371.65	9,894.85	9,740.68	154.17	64.182	
18,200.00	6,040.00	5,620.00	5,572.44	267.91	21.08	81.89	-1,853.66	2,371.65	9,989.33	9,835.14	154.19	64.786	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-3228CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	116.89	-1,304.45	2,572.58	2,884.41				
100.00	100.00	124.02	124.02	0.13	0.23	116.90	-1,304.46	2,571.55	2,883.66	2,883.29	0.36	7,930.766	
200.00	199.98	207.93	207.92	0.48	0.53	-32.36	-1,304.78	2,570.60	2,881.35	2,880.34	1.01	2,847.397	
300.00	299.84	290.81	290.79	0.85	0.82	-32.44	-1,305.35	2,570.07	2,876.67	2,875.00	1.67	1,726.483	
400.00	399.45	377.10	377.09	1.22	1.12	-32.58	-1,305.91	2,570.05	2,869.59	2,867.25	2.34	1,228.505	
500.00	498.70	493.92	493.90	1.62	1.52	-32.85	-1,305.86	2,570.49	2,859.64	2,856.53	3.12	917.544	
600.00	597.47	624.25	624.23	2.05	1.97	-33.25	-1,304.74	2,569.83	2,845.60	2,841.64	3.96	718.271	
700.00	695.62	700.00	699.97	2.51	2.24	-33.59	-1,304.64	2,569.05	2,828.65	2,824.02	4.63	610.721	
800.00	793.06	776.69	776.66	3.01	2.51	-33.99	-1,305.04	2,568.81	2,809.75	2,804.43	5.32	528.026	
900.00	889.64	893.38	893.34	3.56	2.92	-34.59	-1,305.48	2,568.52	2,788.07	2,781.90	6.17	451.702	
1,000.00	985.27	958.19	958.14	4.14	3.15	-35.08	-1,306.77	2,568.15	2,764.01	2,757.15	6.86	402.706	
1,100.00	1,079.82	1,039.91	1,039.78	4.78	3.44	-35.65	-1,310.25	2,567.38	2,737.91	2,730.27	7.64	358.358	
1,200.00	1,173.17	1,114.06	1,113.72	5.46	3.71	-36.22	-1,315.60	2,566.11	2,709.70	2,701.28	8.42	321.806	
1,300.00	1,265.21	1,181.38	1,180.61	6.20	3.96	-36.78	-1,323.03	2,564.41	2,679.70	2,670.49	9.21	290.953	
1,400.00	1,355.84	1,244.84	1,243.37	6.99	4.20	-37.34	-1,332.18	2,562.63	2,648.15	2,638.13	10.02	264.231	
1,500.00	1,444.94	1,322.29	1,319.56	7.84	4.51	-37.96	-1,345.85	2,560.05	2,614.85	2,603.92	10.93	239.214	
1,600.00	1,532.39	1,403.01	1,398.59	8.75	4.84	-38.63	-1,362.00	2,557.01	2,579.52	2,567.62	11.90	216.772	
1,700.00	1,618.11	1,484.07	1,477.89	9.71	5.19	-39.39	-1,378.57	2,554.18	2,542.10	2,529.19	12.92	196.828	
1,800.00	1,701.97	1,566.67	1,558.83	10.74	5.55	-40.27	-1,394.87	2,551.91	2,502.62	2,488.64	13.98	178.977	
1,900.00	1,783.88	1,655.22	1,645.75	11.82	5.94	-41.32	-1,411.66	2,549.97	2,461.01	2,445.89	15.12	162.740	
2,000.00	1,863.74	1,748.67	1,737.13	12.96	6.37	-42.48	-1,431.03	2,547.06	2,417.02	2,400.69	16.33	147.990	
2,100.00	1,941.45	1,838.69	1,825.02	14.16	6.79	-43.76	-1,450.18	2,543.85	2,370.71	2,353.12	17.59	134.801	
2,200.00	2,016.92	1,929.54	1,913.38	15.41	7.23	-45.15	-1,470.94	2,539.87	2,322.23	2,303.33	18.90	122.859	
2,300.00	2,090.05	2,019.16	2,000.43	16.73	7.67	-46.70	-1,491.80	2,535.45	2,271.54	2,251.27	20.27	112.057	
2,400.00	2,160.76	2,102.11	2,081.01	18.10	8.09	-48.38	-1,511.01	2,531.26	2,218.94	2,197.26	21.68	102.360	
2,500.00	2,228.95	2,181.65	2,158.34	19.53	8.49	-50.21	-1,529.23	2,527.27	2,164.69	2,141.55	23.14	93.555	
2,600.00	2,294.55	2,262.67	2,237.12	21.01	8.90	-52.27	-1,547.68	2,523.14	2,108.90	2,084.23	24.67	85.474	
2,700.00	2,357.48	2,336.45	2,308.73	22.55	9.28	-54.42	-1,564.99	2,519.14	2,051.81	2,025.54	26.27	78.116	
2,800.00	2,418.42	2,409.89	2,379.77	24.13	9.67	-55.84	-1,583.12	2,514.89	1,994.11	1,966.18	27.93	71.393	
2,900.00	2,479.25	2,484.55	2,451.92	25.71	10.06	-57.03	-1,601.78	2,510.48	1,937.00	1,907.34	29.66	65.308	
3,000.00	2,540.09	2,560.64	2,525.41	27.31	10.47	-58.29	-1,620.97	2,505.84	1,880.52	1,849.07	31.45	59.795	
3,100.00	2,600.93	2,631.70	2,593.98	28.90	10.86	-59.51	-1,639.08	2,501.48	1,824.82	1,791.53	33.29	54.815	
3,200.00	2,661.77	2,704.10	2,663.81	30.51	11.26	-60.81	-1,657.72	2,497.06	1,770.02	1,734.82	35.20	50.289	
3,300.00	2,722.61	2,779.62	2,736.58	32.11	11.68	-62.23	-1,677.32	2,492.43	1,716.14	1,678.97	37.17	46.171	
3,400.00	2,783.44	2,857.29	2,811.46	33.72	12.11	-63.77	-1,697.38	2,487.52	1,663.10	1,623.89	39.21	42.419	
3,500.00	2,844.28	2,933.64	2,885.09	35.34	12.53	-65.36	-1,716.96	2,482.56	1,611.00	1,569.70	41.30	39.004	
3,600.00	2,905.12	3,010.38	2,959.14	36.95	12.96	-67.05	-1,736.44	2,477.45	1,559.97	1,516.51	43.46	35.892	
3,700.00	2,965.96	3,081.96	3,028.28	38.57	13.35	-68.70	-1,754.35	2,472.65	1,510.22	1,464.54	45.68	33.058	
3,800.00	3,026.79	3,155.20	3,099.10	40.19	13.75	-70.49	-1,772.39	2,467.86	1,462.07	1,414.11	47.97	30.480	
3,900.00	3,087.63	3,231.81	3,173.15	41.81	14.18	-72.44	-1,791.32	2,462.67	1,415.43	1,365.13	50.30	28.137	
4,000.00	3,148.47	3,305.05	3,243.94	43.43	14.58	-74.40	-1,809.39	2,457.63	1,370.53	1,317.84	52.69	26.009	
4,100.00	3,209.31	3,381.16	3,317.50	45.05	15.00	-76.51	-1,828.22	2,452.29	1,327.56	1,272.44	55.12	24.085	
4,200.00	3,270.14	3,457.39	3,391.08	46.68	15.43	-78.72	-1,847.36	2,446.77	1,286.60	1,229.03	57.57	22.349	
4,300.00	3,330.98	3,534.55	3,465.44	48.31	15.87	-81.02	-1,867.11	2,441.02	1,247.85	1,187.82	60.03	20.788	
4,400.00	3,391.82	3,609.94	3,538.02	49.93	16.30	-83.36	-1,886.67	2,435.16	1,211.42	1,148.94	62.48	19.389	
4,500.00	3,452.66	3,672.70	3,598.45	51.56	16.66	-85.37	-1,902.98	2,430.57	1,178.15	1,113.19	64.96	18.138	
4,600.00	3,513.49	3,731.81	3,655.46	53.19	16.99	-87.31	-1,918.12	2,426.80	1,148.68	1,081.29	67.39	17.045	
4,700.00	3,574.33	3,789.44	3,711.26	54.82	17.31	-89.27	-1,932.21	2,423.74	1,123.59	1,053.85	69.74	16.110	
4,800.00	3,635.17	3,860.79	3,780.52	56.45	17.69	-91.76	-1,948.99	2,420.26	1,102.70	1,030.78	71.92	15.333	
4,900.00	3,696.01	3,930.90	3,848.69	58.08	18.07	-94.28	-1,965.02	2,416.77	1,085.87	1,011.94	73.93	14.688	
5,000.00	3,756.84	4,000.23	3,916.19	59.71	18.44	-96.82	-1,980.44	2,413.31	1,073.39	997.65	75.74	14.172	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-3228CH2 - OWB - FINAL SURVEY													Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	3,817.68	4,069.84	3,983.99	61.34	18.80	-99.39	-1,995.87	2,410.03	1,065.45	988.12	77.33	13.778		
5,200.00	3,878.52	4,144.95	4,057.11	62.97	19.20	-102.17	-2,012.70	2,406.65	1,061.94	983.29	78.65	13.502		
5,232.85	3,898.51	4,169.78	4,081.27	63.51	19.33	-103.09	-2,018.33	2,405.53	1,061.71	982.68	79.03	13.435 CC, ES		
5,300.00	3,939.36	4,218.34	4,128.51	64.61	19.59	-104.88	-2,029.35	2,403.33	1,062.72	983.00	79.72	13.330		
5,400.00	4,000.19	4,288.56	4,196.85	66.24	19.96	-107.47	-2,045.15	2,400.09	1,067.96	987.41	80.54	13.259 SF		
5,500.00	4,061.03	4,355.02	4,261.63	67.87	20.31	-109.93	-2,059.69	2,397.01	1,077.90	996.78	81.12	13.288		
5,600.00	4,121.87	4,421.55	4,326.56	69.51	20.66	-112.36	-2,073.85	2,394.00	1,092.52	1,011.08	81.44	13.414		
5,700.00	4,182.71	4,489.12	4,392.58	71.14	21.00	-114.80	-2,087.94	2,391.08	1,111.64	1,030.08	81.55	13.631		
5,800.00	4,243.54	4,555.31	4,457.31	72.77	21.34	-117.14	-2,101.48	2,388.22	1,134.94	1,053.47	81.47	13.930		
5,900.00	4,304.38	4,609.28	4,510.21	74.41	21.60	-119.03	-2,111.91	2,385.94	1,162.75	1,081.51	81.24	14.313		
6,000.00	4,365.22	4,662.62	4,562.66	76.04	21.86	-120.86	-2,121.41	2,383.83	1,195.11	1,114.26	80.85	14.782		
6,100.00	4,426.06	4,716.05	4,615.32	77.68	22.11	-122.65	-2,130.26	2,382.02	1,231.71	1,151.36	80.35	15.329		
6,200.00	4,486.90	4,769.51	4,668.11	79.31	22.35	-124.39	-2,138.52	2,380.61	1,272.20	1,192.41	79.79	15.944		
6,300.00	4,547.73	4,823.07	4,721.10	80.95	22.58	-126.06	-2,146.27	2,379.74	1,316.22	1,237.03	79.19	16.621		
6,400.00	4,608.57	4,869.17	4,766.80	82.58	22.77	-127.45	-2,152.40	2,379.44	1,363.60	1,285.06	78.54	17.361		
6,500.00	4,669.41	4,913.41	4,810.73	84.22	22.95	-128.74	-2,157.57	2,379.52	1,414.29	1,336.42	77.87	18.162		
6,600.00	4,730.25	4,950.00	4,847.14	85.86	23.08	-129.77	-2,161.21	2,379.84	1,468.12	1,390.98	77.14	19.032		
6,700.00	4,791.08	4,982.62	4,879.65	87.49	23.19	-130.67	-2,163.72	2,380.23	1,525.14	1,448.77	76.37	19.971		
6,800.00	4,851.92	5,020.00	4,916.98	89.13	23.32	-131.67	-2,165.69	2,380.82	1,585.11	1,509.46	75.65	20.952		
6,900.00	4,912.76	5,051.22	4,948.18	90.76	23.41	-132.48	-2,166.74	2,381.28	1,647.61	1,572.72	74.89	22.000		
7,000.00	4,973.60	5,088.66	4,985.61	92.40	23.52	-133.44	-2,167.47	2,381.62	1,712.29	1,638.08	74.21	23.073		
7,100.00	5,034.43	5,130.32	5,027.27	94.04	23.63	-134.48	-2,167.66	2,381.75	1,778.94	1,705.33	73.61	24.167		
7,200.00	5,095.27	5,189.04	5,085.99	95.67	23.78	-135.89	-2,167.65	2,381.83	1,846.87	1,773.63	73.24	25.217		
7,300.00	5,156.11	5,250.64	5,147.59	97.31	23.93	-137.30	-2,167.60	2,381.95	1,915.73	1,842.77	72.95	26.260		
7,400.00	5,216.95	5,314.36	5,211.31	98.95	24.09	-138.67	-2,167.62	2,382.22	1,985.29	1,912.55	72.74	27.292		
7,500.00	5,277.78	5,364.72	5,261.67	100.59	24.22	-139.71	-2,167.52	2,382.38	2,055.69	1,983.27	72.43	28.383		
7,600.00	5,338.62	5,421.41	5,318.36	102.22	24.36	-140.83	-2,167.18	2,382.43	2,126.97	2,054.75	72.22	29.451		
7,700.00	5,399.46	5,490.85	5,387.79	103.86	24.53	-142.12	-2,166.88	2,382.91	2,198.70	2,126.49	72.21	30.448		
7,800.00	5,460.30	5,561.44	5,458.38	105.50	24.71	-143.34	-2,166.82	2,383.79	2,270.69	2,198.42	72.27	31.420		
7,900.00	5,521.24	5,635.22	5,532.15	107.13	24.91	-148.33	-2,167.09	2,384.81	2,342.92	2,270.51	72.41	32.357		
8,000.00	5,584.83	5,704.45	5,601.37	108.61	25.10	-167.86	-2,167.65	2,385.82	2,416.78	2,344.12	72.66	33.261		
8,100.00	5,650.69	5,768.55	5,665.46	109.85	25.28	172.29	-2,168.17	2,386.63	2,491.20	2,418.10	73.10	34.081		
8,200.00	5,716.83	5,817.72	5,714.59	110.82	25.41	153.59	-2,168.17	2,388.70	2,564.12	2,490.45	73.67	34.806		
8,300.00	5,781.24	5,858.00	5,754.71	111.52	25.51	137.02	-2,167.72	2,392.19	2,633.84	2,559.34	74.50	35.354		
8,400.00	5,841.96	5,875.26	5,771.83	111.98	25.55	122.74	-2,167.27	2,394.30	2,699.15	2,623.77	75.38	35.808		
8,500.00	5,897.14	5,887.10	5,783.53	112.25	25.57	111.11	-2,166.76	2,396.05	2,758.84	2,682.27	76.57	36.031		
8,600.00	5,945.12	5,905.00	5,801.12	112.37	25.61	102.22	-2,165.70	2,399.18	2,811.69	2,733.42	78.27	35.924		
8,700.00	5,984.42	5,905.00	5,801.12	112.39	25.61	95.25	-2,165.70	2,399.18	2,856.44	2,776.35	80.10	35.662		
8,800.00	6,013.86	5,905.00	5,801.12	112.35	25.61	90.29	-2,165.70	2,399.18	2,892.36	2,810.04	82.32	35.136		
8,900.00	6,032.54	5,905.00	5,801.12	112.30	25.61	87.12	-2,165.70	2,399.18	2,918.68	2,833.80	84.88	34.385		
9,000.00	6,039.89	5,905.00	5,801.12	112.24	25.61	85.56	-2,165.70	2,399.18	2,934.88	2,847.17	87.71	33.461		
9,100.00	6,040.00	5,905.00	5,801.12	112.19	25.61	85.47	-2,165.70	2,399.18	2,945.80	2,855.14	90.66	32.491		
9,200.00	6,040.00	5,905.00	5,801.12	112.16	25.61	85.47	-2,165.70	2,399.18	2,959.94	2,866.32	93.62	31.616		
9,300.00	6,040.00	5,905.00	5,801.12	112.15	25.61	85.47	-2,165.70	2,399.18	2,977.36	2,880.81	96.56	30.835		
9,400.00	6,040.00	5,905.00	5,801.12	112.15	25.61	85.47	-2,165.70	2,399.18	2,998.03	2,898.58	99.45	30.145		
9,500.00	6,040.00	5,884.36	5,780.83	112.16	25.57	85.07	-2,166.89	2,395.63	3,021.46	2,919.44	102.02	29.616		
9,600.00	6,040.00	5,881.73	5,778.23	112.19	25.56	85.02	-2,167.01	2,395.23	3,048.27	2,943.50	104.77	29.095		
9,700.00	6,040.00	5,879.25	5,775.78	112.24	25.56	84.97	-2,167.11	2,394.86	3,078.08	2,970.64	107.44	28.649		
9,800.00	6,040.00	5,858.00	5,754.71	112.31	25.51	84.56	-2,167.72	2,392.19	3,111.17	3,001.36	109.81	28.332		
9,900.00	6,040.00	5,858.00	5,754.71	112.39	25.51	84.56	-2,167.72	2,392.19	3,146.66	3,034.32	112.34	28.010		
10,000.00	6,040.00	5,858.00	5,754.71	112.49	25.51	84.56	-2,167.72	2,392.19	3,184.89	3,070.12	114.77	27.749		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-3228CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	6,040.00	5,858.00	5,754.71	112.62	25.51	84.56	-2,167.72	2,392.19	3,225.78	3,108.67	117.10	27.547	
10,200.00	6,040.00	5,858.00	5,754.71	112.77	25.51	84.56	-2,167.72	2,392.19	3,269.21	3,149.88	119.33	27.397	
10,300.00	6,040.00	5,858.00	5,754.71	112.94	25.51	84.56	-2,167.72	2,392.19	3,315.08	3,193.64	121.45	27.297	
10,400.00	6,040.00	5,858.00	5,754.71	113.14	25.51	84.56	-2,167.72	2,392.19	3,363.31	3,239.85	123.46	27.242	
10,500.00	6,040.00	5,858.00	5,754.71	113.36	25.51	84.56	-2,167.72	2,392.19	3,413.78	3,288.42	125.37	27.230	
10,600.00	6,040.00	5,858.00	5,754.71	113.62	25.51	84.56	-2,167.72	2,392.19	3,466.41	3,339.23	127.18	27.256	
10,700.00	6,040.00	5,858.00	5,754.71	113.91	25.51	84.56	-2,167.72	2,392.19	3,521.09	3,392.20	128.89	27.319	
10,800.00	6,040.00	5,858.00	5,754.71	114.24	25.51	84.56	-2,167.72	2,392.19	3,577.73	3,447.23	130.50	27.416	
10,900.00	6,040.00	5,858.00	5,754.71	114.61	25.51	84.56	-2,167.72	2,392.19	3,636.24	3,504.22	132.02	27.543	
11,000.00	6,040.00	5,858.00	5,754.71	115.02	25.51	84.56	-2,167.72	2,392.19	3,696.53	3,563.08	133.45	27.700	
11,100.00	6,040.00	5,858.00	5,754.71	115.49	25.51	84.56	-2,167.72	2,392.19	3,758.51	3,623.71	134.79	27.884	
11,200.00	6,040.00	5,858.00	5,754.71	116.00	25.51	84.56	-2,167.72	2,392.19	3,822.10	3,686.04	136.06	28.092	
11,300.00	6,040.00	5,858.00	5,754.71	116.58	25.51	84.56	-2,167.72	2,392.19	3,887.23	3,749.98	137.24	28.324	
11,400.00	6,040.00	5,858.00	5,754.71	117.22	25.51	84.56	-2,167.72	2,392.19	3,953.81	3,815.46	138.35	28.578	
11,500.00	6,040.00	5,858.00	5,754.71	117.92	25.51	84.56	-2,167.72	2,392.19	4,021.77	3,882.38	139.39	28.852	
11,600.00	6,040.00	5,858.00	5,754.71	118.70	25.51	84.56	-2,167.72	2,392.19	4,091.06	3,950.69	140.37	29.145	
11,700.00	6,040.00	5,858.00	5,754.71	119.56	25.51	84.56	-2,167.72	2,392.19	4,161.59	4,020.31	141.28	29.456	
11,800.00	6,040.00	5,858.00	5,754.71	120.51	25.51	84.56	-2,167.72	2,392.19	4,233.31	4,091.17	142.13	29.784	
11,900.00	6,040.00	5,858.00	5,754.71	121.54	25.51	84.56	-2,167.72	2,392.19	4,306.15	4,163.22	142.93	30.127	
12,000.00	6,040.00	5,858.00	5,754.71	122.66	25.51	84.56	-2,167.72	2,392.19	4,380.07	4,236.39	143.68	30.485	
12,100.00	6,040.00	5,858.00	5,754.71	123.87	25.51	84.56	-2,167.72	2,392.19	4,455.01	4,310.63	144.38	30.856	
12,200.00	6,040.00	5,858.00	5,754.71	125.17	25.51	84.56	-2,167.72	2,392.19	4,530.92	4,385.88	145.03	31.241	
12,300.00	6,040.00	5,858.00	5,754.71	126.57	25.51	84.56	-2,167.72	2,392.19	4,607.74	4,462.10	145.64	31.637	
12,400.00	6,040.00	5,858.00	5,754.71	128.06	25.51	84.56	-2,167.72	2,392.19	4,685.44	4,539.23	146.21	32.045	
12,500.00	6,040.00	5,858.00	5,754.71	129.63	25.51	84.56	-2,167.72	2,392.19	4,763.97	4,617.23	146.75	32.464	
12,600.00	6,040.00	5,858.00	5,754.71	131.29	25.51	84.56	-2,167.72	2,392.19	4,843.29	4,696.05	147.24	32.893	
12,700.00	6,040.00	5,858.00	5,754.71	133.03	25.51	84.56	-2,167.72	2,392.19	4,923.37	4,775.66	147.71	33.332	
12,800.00	6,040.00	5,858.00	5,754.71	134.84	25.51	84.56	-2,167.72	2,392.19	5,004.16	4,856.02	148.14	33.779	
12,900.00	6,040.00	5,858.00	5,754.71	136.71	25.51	84.56	-2,167.72	2,392.19	5,085.64	4,937.09	148.55	34.236	
13,000.00	6,040.00	5,858.00	5,754.71	138.66	25.51	84.56	-2,167.72	2,392.19	5,167.76	5,018.84	148.93	34.700	
13,100.00	6,040.00	5,819.50	5,716.36	140.66	25.41	83.81	-2,168.16	2,388.82	5,249.65	5,100.54	149.11	35.208	
13,200.00	6,040.00	5,818.40	5,715.26	142.71	25.41	83.79	-2,168.17	2,388.74	5,332.94	5,183.50	149.44	35.687	
13,300.00	6,040.00	5,817.33	5,714.20	144.81	25.41	83.77	-2,168.17	2,388.67	5,416.79	5,267.04	149.74	36.174	
13,400.00	6,040.00	5,816.30	5,713.17	146.96	25.40	83.75	-2,168.18	2,388.61	5,501.18	5,351.15	150.03	36.667	
13,500.00	6,040.00	5,815.30	5,712.17	149.14	25.40	83.73	-2,168.18	2,388.54	5,586.08	5,435.78	150.30	37.166	
13,600.00	6,040.00	5,814.33	5,711.20	151.36	25.40	83.71	-2,168.19	2,388.48	5,671.48	5,520.93	150.55	37.672	
13,700.00	6,040.00	5,813.39	5,710.26	153.62	25.40	83.69	-2,168.19	2,388.42	5,757.34	5,606.56	150.78	38.183	
13,800.00	6,040.00	5,812.47	5,709.35	155.91	25.39	83.68	-2,168.20	2,388.36	5,843.65	5,692.65	151.00	38.699	
13,900.00	6,040.00	5,811.59	5,708.46	158.22	25.39	83.66	-2,168.20	2,388.31	5,930.39	5,779.19	151.21	39.220	
14,000.00	6,040.00	5,810.73	5,707.60	160.56	25.39	83.64	-2,168.21	2,388.26	6,017.55	5,866.15	151.40	39.746	
14,100.00	6,040.00	5,809.89	5,706.77	162.92	25.39	83.63	-2,168.21	2,388.21	6,105.09	5,953.52	151.58	40.277	
14,200.00	6,040.00	5,809.08	5,705.96	165.30	25.38	83.61	-2,168.21	2,388.16	6,193.01	6,041.27	151.74	40.812	
14,300.00	6,040.00	5,808.28	5,705.17	167.70	25.38	83.59	-2,168.22	2,388.12	6,281.30	6,129.40	151.90	41.352	
14,400.00	6,040.00	5,807.51	5,704.40	170.12	25.38	83.58	-2,168.22	2,388.07	6,369.92	6,217.88	152.04	41.895	
14,500.00	6,040.00	5,806.76	5,703.65	172.55	25.38	83.57	-2,168.22	2,388.03	6,458.88	6,306.71	152.18	42.443	
14,600.00	6,040.00	5,806.03	5,702.92	175.00	25.38	83.55	-2,168.22	2,387.99	6,548.16	6,395.86	152.30	42.994	
14,700.00	6,040.00	5,805.32	5,702.21	177.46	25.37	83.54	-2,168.23	2,387.95	6,637.74	6,485.32	152.42	43.548	
14,800.00	6,040.00	5,804.63	5,701.52	179.94	25.37	83.52	-2,168.23	2,387.92	6,727.62	6,575.09	152.53	44.106	
14,900.00	6,040.00	5,803.96	5,700.85	182.43	25.37	83.51	-2,168.23	2,387.88	6,817.78	6,665.14	152.63	44.668	
15,000.00	6,040.00	5,763.00	5,659.91	184.92	25.27	82.72	-2,168.13	2,386.56	6,909.15	6,756.56	152.59	45.279	
15,100.00	6,040.00	5,763.00	5,659.91	187.43	25.27	82.72	-2,168.13	2,386.56	6,999.80	6,847.12	152.68	45.846	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ STATE 4-62-2-3228CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 100-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,763.00	5,659.91	189.95	25.27	82.72	-2,168.13	2,386.56	7,090.71	6,937.94	152.77	46.415	
15,300.00	6,040.00	5,763.00	5,659.91	192.48	25.27	82.72	-2,168.13	2,386.56	7,181.86	7,029.01	152.85	46.987	
15,400.00	6,040.00	5,763.00	5,659.91	195.01	25.27	82.72	-2,168.13	2,386.56	7,273.25	7,120.32	152.92	47.561	
15,500.00	6,040.00	5,763.00	5,659.91	197.55	25.27	82.72	-2,168.13	2,386.56	7,364.85	7,211.86	152.99	48.138	
15,600.00	6,040.00	5,763.00	5,659.91	200.10	25.27	82.72	-2,168.13	2,386.56	7,456.68	7,303.62	153.06	48.718	
15,700.00	6,040.00	5,763.00	5,659.91	202.65	25.27	82.72	-2,168.13	2,386.56	7,548.71	7,395.59	153.12	49.300	
15,800.00	6,040.00	5,763.00	5,659.91	205.22	25.27	82.72	-2,168.13	2,386.56	7,640.94	7,487.76	153.17	49.884	
15,900.00	6,040.00	5,763.00	5,659.91	207.78	25.27	82.72	-2,168.13	2,386.56	7,733.36	7,580.13	153.23	50.470	
16,000.00	6,040.00	5,763.00	5,659.91	210.36	25.27	82.72	-2,168.13	2,386.56	7,825.97	7,672.70	153.27	51.059	
16,100.00	6,040.00	5,763.00	5,659.91	212.93	25.27	82.72	-2,168.13	2,386.56	7,918.76	7,765.44	153.32	51.649	
16,200.00	6,040.00	5,763.00	5,659.91	215.52	25.27	82.72	-2,168.13	2,386.56	8,011.72	7,858.36	153.36	52.241	
16,300.00	6,040.00	5,763.00	5,659.91	218.11	25.27	82.72	-2,168.13	2,386.56	8,104.85	7,951.46	153.40	52.836	
16,400.00	6,040.00	5,763.00	5,659.91	220.70	25.27	82.72	-2,168.13	2,386.56	8,198.15	8,044.71	153.43	53.432	
16,500.00	6,040.00	5,763.00	5,659.91	223.29	25.27	82.72	-2,168.13	2,386.56	8,291.59	8,138.13	153.46	54.029	
16,600.00	6,040.00	5,763.00	5,659.91	225.89	25.27	82.72	-2,168.13	2,386.56	8,385.19	8,231.70	153.49	54.629	
16,700.00	6,040.00	5,763.00	5,659.91	228.50	25.27	82.72	-2,168.13	2,386.56	8,478.94	8,325.42	153.52	55.229	
16,800.00	6,040.00	5,763.00	5,659.91	231.11	25.27	82.72	-2,168.13	2,386.56	8,572.83	8,419.28	153.55	55.832	
16,900.00	6,040.00	5,763.00	5,659.91	233.72	25.27	82.72	-2,168.13	2,386.56	8,666.85	8,513.28	153.57	56.436	
17,000.00	6,040.00	5,763.00	5,659.91	236.33	25.27	82.72	-2,168.13	2,386.56	8,761.01	8,607.42	153.59	57.041	
17,100.00	6,040.00	5,763.00	5,659.91	238.95	25.27	82.72	-2,168.13	2,386.56	8,855.29	8,701.68	153.61	57.648	
17,200.00	6,040.00	5,763.00	5,659.91	241.57	25.27	82.72	-2,168.13	2,386.56	8,949.70	8,796.07	153.63	58.256	
17,300.00	6,040.00	5,763.00	5,659.91	244.19	25.27	82.72	-2,168.13	2,386.56	9,044.23	8,890.59	153.64	58.865	
17,400.00	6,040.00	5,763.00	5,659.91	246.82	25.27	82.72	-2,168.13	2,386.56	9,138.88	8,985.22	153.66	59.475	
17,500.00	6,040.00	5,763.00	5,659.91	249.45	25.27	82.72	-2,168.13	2,386.56	9,233.64	9,079.96	153.67	60.087	
17,600.00	6,040.00	5,763.00	5,659.91	252.08	25.27	82.72	-2,168.13	2,386.56	9,328.50	9,174.82	153.68	60.700	
17,700.00	6,040.00	5,763.00	5,659.91	254.71	25.27	82.72	-2,168.13	2,386.56	9,423.48	9,269.78	153.69	61.314	
17,800.00	6,040.00	5,763.00	5,659.91	257.35	25.27	82.72	-2,168.13	2,386.56	9,518.55	9,364.85	153.70	61.929	
17,900.00	6,040.00	5,763.00	5,659.91	259.99	25.27	82.72	-2,168.13	2,386.56	9,613.73	9,460.02	153.71	62.544	
18,000.00	6,040.00	5,763.00	5,659.91	262.63	25.27	82.72	-2,168.13	2,386.56	9,709.00	9,555.29	153.72	63.161	
18,100.00	6,040.00	5,763.00	5,659.91	265.27	25.27	82.72	-2,168.13	2,386.56	9,804.37	9,650.65	153.72	63.779	
18,200.00	6,040.00	5,763.00	5,659.91	267.91	25.27	82.72	-2,168.13	2,386.56	9,899.83	9,746.10	153.73	64.398	
18,300.00	6,040.00	5,763.00	5,659.91	270.56	25.27	82.72	-2,168.13	2,386.56	9,995.38	9,841.65	153.73	65.018	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ WINDMILL 10-34H - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 820-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	8.00	8.00	0.00	0.01	68.86	936.02	2,421.28	2,595.90				
100.00	100.00	108.00	108.00	0.13	0.19	68.86	936.02	2,421.28	2,595.90	2,595.58	0.32	8,006.498	
200.00	199.98	207.98	207.98	0.48	0.37	-80.41	936.02	2,421.28	2,595.61	2,594.76	0.85	3,059.773	
300.00	299.84	307.84	307.84	0.85	0.54	-80.54	936.02	2,421.28	2,594.74	2,593.36	1.38	1,876.212	
400.00	399.45	407.45	407.45	1.22	0.72	-80.75	936.02	2,421.28	2,593.32	2,591.39	1.94	1,339.090	
500.00	498.70	506.70	506.70	1.62	0.89	-81.06	936.02	2,421.28	2,591.38	2,588.87	2.51	1,031.563	
600.00	597.47	605.47	605.47	2.05	1.06	-81.44	936.02	2,421.28	2,588.97	2,585.86	3.11	831.332	
700.00	695.62	703.62	703.62	2.51	1.24	-81.91	936.02	2,421.28	2,586.16	2,582.41	3.75	690.007	
800.00	793.06	801.06	801.06	3.01	1.41	-82.45	936.02	2,421.28	2,583.02	2,578.60	4.42	584.662	
900.00	889.64	897.64	897.64	3.56	1.86	-83.31	934.45	2,421.29	2,579.40	2,573.99	5.41	476.495	
1,000.00	985.27	1,081.25	1,080.95	4.14	2.34	-84.15	925.67	2,421.82	2,573.90	2,567.43	6.47	397.884	
1,100.00	1,079.82	1,183.48	1,182.83	4.78	2.70	-84.88	917.27	2,420.80	2,566.11	2,558.65	7.46	344.025	
1,200.00	1,173.17	1,362.73	1,360.78	5.46	3.36	-86.09	896.04	2,420.28	2,557.53	2,548.74	8.79	290.912	
1,300.00	1,265.21	1,441.26	1,438.60	6.20	3.67	-86.79	885.63	2,419.31	2,547.52	2,537.69	9.83	259.175	
1,400.00	1,355.84	1,516.50	1,513.21	6.99	3.97	-87.51	875.87	2,418.98	2,538.44	2,527.52	10.91	232.595	
1,500.00	1,444.94	1,617.65	1,613.35	7.84	4.38	-88.46	861.61	2,419.39	2,529.88	2,517.72	12.16	208.087	
1,600.00	1,532.39	1,717.45	1,712.15	8.75	4.79	-89.48	847.52	2,419.05	2,521.07	2,507.62	13.46	187.339	
1,700.00	1,618.11	1,781.20	1,775.30	9.71	5.05	-90.22	838.81	2,419.19	2,513.49	2,498.81	14.68	171.225	
1,800.00	1,701.97	1,964.53	1,956.52	10.74	5.82	-92.21	811.28	2,417.47	2,504.83	2,488.43	16.40	152.690	
1,900.00	1,783.88	2,025.22	2,016.64	11.82	6.08	-93.07	803.23	2,415.54	2,496.53	2,478.80	17.73	140.833	
2,000.00	1,863.74	2,084.17	2,075.08	12.96	6.32	-93.90	795.62	2,414.30	2,490.37	2,471.27	19.10	130.413	
2,100.00	1,941.45	2,142.69	2,133.14	14.16	6.56	-94.72	788.32	2,413.60	2,486.45	2,465.94	20.51	121.205	
2,200.00	2,016.92	2,229.42	2,219.23	15.41	6.92	-95.92	777.84	2,412.84	2,484.51	2,462.43	22.08	112.526	
2,280.01	2,075.62	2,300.99	2,290.27	16.47	7.21	-96.93	769.16	2,411.94	2,484.00	2,460.63	23.37	106.269 CC	
2,300.00	2,090.05	2,318.70	2,307.84	16.73	7.29	-97.18	766.95	2,411.71	2,484.04	2,460.34	23.70	104.829	
2,400.00	2,160.76	2,399.13	2,387.61	18.10	7.62	-98.33	756.76	2,410.69	2,485.33	2,460.00	25.32	98.149 ES	
2,500.00	2,228.95	2,483.69	2,471.47	19.53	7.97	-99.55	745.87	2,409.56	2,488.67	2,461.68	27.00	92.189	
2,600.00	2,294.55	2,579.68	2,566.58	21.01	8.38	-100.96	733.13	2,407.80	2,493.94	2,465.21	28.73	86.798	
2,700.00	2,357.48	2,668.65	2,654.63	22.55	8.76	-102.25	720.51	2,405.77	2,501.09	2,470.62	30.47	82.091	
2,800.00	2,418.42	2,733.41	2,718.67	24.13	9.04	-103.28	710.94	2,404.32	2,510.53	2,478.40	32.13	78.145	
2,900.00	2,479.25	2,784.66	2,769.38	25.71	9.26	-104.12	703.62	2,403.35	2,522.44	2,488.72	33.72	74.808	
3,000.00	2,540.09	2,844.13	2,828.28	27.31	9.51	-105.10	695.46	2,402.39	2,536.75	2,501.45	35.30	71.853	
3,100.00	2,600.93	2,906.25	2,889.83	28.90	9.78	-106.11	687.14	2,401.41	2,553.25	2,516.38	36.86	69.261	
3,200.00	2,661.77	2,969.43	2,952.47	30.51	10.04	-107.14	678.91	2,400.37	2,571.85	2,533.46	38.39	66.994	
3,300.00	2,722.61	3,059.75	3,041.78	32.11	10.44	-108.58	665.58	2,399.41	2,591.50	2,551.53	39.97	64.830	
3,400.00	2,783.44	3,110.01	3,091.63	33.72	10.65	-109.39	659.32	2,398.20	2,613.78	2,572.40	41.38	63.169	
3,500.00	2,844.28	3,190.49	3,171.37	35.34	10.99	-110.67	648.49	2,396.84	2,637.67	2,594.83	42.84	61.571	
3,600.00	2,905.12	3,245.01	3,225.38	36.95	11.22	-111.53	641.06	2,396.21	2,663.47	2,619.28	44.18	60.285	
3,700.00	2,965.96	3,415.53	3,393.96	38.57	11.97	-114.18	616.19	2,390.81	2,689.35	2,643.52	45.82	58.691	
3,800.00	3,026.79	3,456.00	3,433.89	40.19	12.15	-114.80	609.84	2,389.03	2,716.27	2,669.23	47.04	57.743	
3,900.00	3,087.63	3,500.30	3,477.66	41.81	12.34	-115.48	603.12	2,387.53	2,745.49	2,697.26	48.23	56.928	
4,000.00	3,148.47	3,550.00	3,526.87	43.43	12.56	-116.22	596.22	2,386.81	2,777.43	2,728.04	49.39	56.235	
4,100.00	3,209.31	3,611.75	3,588.05	45.05	12.82	-117.13	587.90	2,386.04	2,811.27	2,760.73	50.55	55.616	
4,200.00	3,270.14	3,680.66	3,656.27	46.68	13.12	-118.15	578.38	2,384.28	2,846.01	2,794.32	51.69	55.063	
4,300.00	3,330.98	3,727.68	3,702.85	48.31	13.32	-118.83	572.05	2,383.48	2,882.62	2,829.90	52.72	54.682	
4,400.00	3,391.82	3,776.13	3,750.89	49.93	13.52	-119.52	565.74	2,383.04	2,921.07	2,867.36	53.71	54.383	
4,500.00	3,452.66	3,824.67	3,799.06	51.56	13.72	-120.20	559.71	2,382.75	2,961.27	2,906.60	54.67	54.163	
4,600.00	3,513.49	4,000.00	3,887.39	53.19	16.99	-121.44	548.40	2,382.22	3,002.46	2,944.14	58.31	51.487	
4,700.00	3,574.33	4,010.17	3,982.97	54.82	14.51	-122.75	535.55	2,381.01	3,044.24	2,987.42	56.82	53.577	
4,800.00	3,635.17	4,069.25	4,041.52	56.45	14.76	-123.55	527.81	2,379.77	3,087.21	3,029.49	57.72	53.488	
4,900.00	3,696.01	4,124.50	4,096.32	58.08	15.00	-124.29	520.82	2,378.54	3,131.55	3,072.98	58.57	53.467	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ WINDMILL 10-34H - OWB - FINAL SURVEY													Offset Site Error:	0.00 usft
Survey Program: 820-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	3,756.84	4,174.21	4,145.64	59.71	15.20	-124.95	514.77	2,377.52	3,177.30	3,117.93	59.37	53.516		
5,100.00	3,817.68	4,239.18	4,210.16	61.34	15.47	-125.79	507.13	2,376.47	3,224.43	3,164.22	60.20	53.559		
5,200.00	3,878.52	4,341.35	4,311.47	62.97	15.90	-127.06	493.97	2,376.13	3,271.97	3,210.79	61.17	53.486		
5,300.00	3,939.36	4,461.84	4,430.78	64.61	16.42	-128.50	477.11	2,376.43	3,319.89	3,257.69	62.20	53.371		
5,400.00	4,000.19	4,537.59	4,505.66	66.24	16.75	-129.41	465.80	2,375.06	3,367.56	3,304.54	63.02	53.436		
5,500.00	4,061.03	4,590.00	4,557.51	67.87	16.98	-130.02	458.22	2,374.17	3,416.43	3,352.70	63.73	53.610		
5,600.00	4,121.87	4,650.28	4,617.18	69.51	17.25	-130.72	449.70	2,373.41	3,466.37	3,401.92	64.45	53.787		
5,700.00	4,182.71	4,684.00	4,650.56	71.14	17.39	-131.10	444.94	2,373.12	3,517.34	3,452.30	65.04	54.080		
5,800.00	4,243.54	4,729.99	4,696.15	72.77	17.58	-131.62	438.86	2,372.62	3,569.54	3,503.89	65.66	54.367		
5,900.00	4,304.38	4,779.00	4,744.82	74.41	17.79	-132.17	433.23	2,371.75	3,623.36	3,557.10	66.26	54.683		
6,000.00	4,365.22	4,779.00	4,744.82	76.04	17.79	-132.17	433.23	2,371.75	3,678.37	3,611.75	66.63	55.209		
6,100.00	4,426.06	4,812.47	4,778.13	77.68	17.92	-132.54	429.94	2,371.15	3,734.85	3,667.74	67.11	55.650		
6,200.00	4,486.90	4,836.52	4,802.08	79.31	18.01	-132.80	427.87	2,370.89	3,792.73	3,725.19	67.54	56.159		
6,300.00	4,547.73	4,873.00	4,838.47	80.95	18.15	-133.19	425.22	2,370.75	3,851.98	3,783.98	68.00	56.644		
6,400.00	4,608.57	4,873.00	4,838.47	82.58	18.15	-133.19	425.22	2,370.75	3,912.43	3,844.17	68.26	57.319		
6,500.00	4,669.41	4,912.86	4,878.26	84.22	18.29	-133.62	422.93	2,370.75	3,974.00	3,905.29	68.71	57.840		
6,600.00	4,730.25	4,939.56	4,904.94	85.86	18.39	-133.90	421.70	2,370.73	4,036.72	3,967.65	69.07	58.445		
6,700.00	4,791.08	4,968.00	4,933.35	87.49	18.49	-134.19	420.67	2,370.70	4,100.51	4,031.09	69.42	59.064		
6,800.00	4,851.92	5,024.46	4,989.79	89.13	18.68	-134.77	418.90	2,370.71	4,165.11	4,095.17	69.94	59.557		
6,900.00	4,912.76	5,084.69	5,049.99	90.76	18.89	-135.38	417.03	2,370.92	4,230.17	4,159.70	70.46	60.032		
7,000.00	4,973.60	5,142.29	5,107.56	92.40	19.08	-135.94	415.29	2,371.39	4,295.71	4,224.73	70.98	60.523		
7,100.00	5,034.43	5,194.97	5,160.22	94.04	19.26	-136.44	413.79	2,371.69	4,361.75	4,290.30	71.45	61.047		
7,200.00	5,095.27	5,244.45	5,209.67	95.67	19.43	-136.93	412.53	2,370.96	4,428.36	4,356.47	71.88	61.606		
7,300.00	5,156.11	5,311.29	5,276.47	97.31	19.65	-137.57	410.90	2,369.30	4,495.42	4,423.01	72.41	62.087		
7,400.00	5,216.95	5,379.58	5,344.73	98.95	19.88	-138.21	409.12	2,368.09	4,562.75	4,489.81	72.94	62.554		
7,500.00	5,277.78	5,446.21	5,411.33	100.59	20.11	-138.82	407.32	2,367.21	4,630.37	4,556.90	73.47	63.023		
7,600.00	5,338.62	5,502.65	5,467.75	102.22	20.30	-139.32	405.81	2,366.81	4,698.33	4,624.39	73.94	63.543		
7,700.00	5,399.46	5,535.00	5,500.08	103.86	20.41	-139.60	404.92	2,366.71	4,766.68	4,692.42	74.25	64.193		
7,800.00	5,460.30	5,566.00	5,531.08	105.50	20.51	-139.86	404.34	2,366.61	4,835.80	4,761.25	74.55	64.863		
7,900.00	5,521.24	5,566.00	5,531.08	107.13	20.51	-143.51	404.34	2,366.61	4,905.96	4,831.33	74.64	65.730		
8,000.00	5,584.83	5,566.00	5,531.08	108.61	20.51	-162.05	404.34	2,366.61	4,979.48	4,904.81	74.67	66.688		
8,100.00	5,650.69	5,582.29	5,547.37	109.85	20.56	177.59	404.45	2,366.54	5,055.22	4,980.45	74.77	67.609		
8,200.00	5,716.83	5,598.00	5,563.07	110.82	20.61	157.38	405.02	2,366.45	5,131.18	5,056.29	74.89	68.516		
8,300.00	5,781.24	5,598.00	5,563.07	111.52	20.61	138.95	405.02	2,366.45	5,204.77	5,129.79	74.98	69.417		
8,400.00	5,841.96	5,598.00	5,563.07	111.98	20.61	123.36	405.02	2,366.45	5,274.13	5,198.92	75.21	70.130		
8,500.00	5,897.14	5,598.00	5,563.07	112.25	20.61	110.88	405.02	2,366.45	5,337.35	5,261.73	75.63	70.574		
8,600.00	5,945.12	5,598.00	5,563.07	112.37	20.61	101.30	405.02	2,366.45	5,392.77	5,316.48	76.29	70.686		
8,700.00	5,984.42	5,598.00	5,563.07	112.39	20.61	94.24	405.02	2,366.45	5,438.95	5,361.72	77.23	70.426		
8,800.00	6,013.86	5,612.57	5,577.61	112.35	20.65	89.50	405.97	2,366.33	5,474.51	5,395.96	78.55	69.693		
8,900.00	6,032.54	5,613.97	5,579.00	112.30	20.65	86.50	406.09	2,366.32	5,499.00	5,418.95	80.05	68.695		
9,000.00	6,039.89	5,614.56	5,579.59	112.24	20.65	85.18	406.14	2,366.31	5,511.66	5,429.90	81.76	67.409		
9,100.00	6,040.00	5,614.64	5,579.67	112.19	20.65	85.12	406.15	2,366.31	5,517.41	5,433.80	83.61	65.987		
9,200.00	6,040.00	5,614.71	5,579.74	112.16	20.65	85.12	406.15	2,366.31	5,524.83	5,439.31	85.53	64.596		
9,300.00	6,040.00	5,614.78	5,579.81	112.15	20.65	85.12	406.16	2,366.31	5,534.05	5,446.55	87.50	63.246		
9,400.00	6,040.00	5,614.85	5,579.88	112.15	20.65	85.12	406.16	2,366.31	5,545.06	5,455.54	89.52	61.943		
9,500.00	6,040.00	5,614.93	5,579.95	112.16	20.65	85.12	406.17	2,366.31	5,557.85	5,466.27	91.57	60.693		
9,600.00	6,040.00	5,629.00	5,593.95	112.19	20.69	85.27	407.59	2,366.15	5,572.62	5,478.87	93.75	59.442		
9,700.00	6,040.00	5,629.00	5,593.95	112.24	20.69	85.27	407.59	2,366.15	5,588.92	5,493.06	95.85	58.306		
9,800.00	6,040.00	5,629.00	5,593.95	112.31	20.69	85.27	407.59	2,366.15	5,606.95	5,508.98	97.98	57.228		
9,900.00	6,040.00	5,629.00	5,593.95	112.39	20.69	85.27	407.59	2,366.15	5,626.71	5,526.60	100.11	56.207		
10,000.00	6,040.00	5,629.00	5,593.95	112.49	20.69	85.27	407.59	2,366.15	5,648.16	5,545.92	102.24	55.244		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ WINDMILL 10-34H - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 820-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	6,040.00	5,629.00	5,593.95	112.62	20.69	85.27	407.59	2,366.15	5,671.30	5,566.93	104.37	54.338	
10,200.00	6,040.00	5,629.00	5,593.95	112.77	20.69	85.27	407.59	2,366.15	5,696.10	5,589.61	106.50	53.486	
10,300.00	6,040.00	5,629.00	5,593.95	112.94	20.69	85.27	407.59	2,366.15	5,722.55	5,613.94	108.61	52.689	
10,400.00	6,040.00	5,629.00	5,593.95	113.14	20.69	85.27	407.59	2,366.15	5,750.60	5,639.90	110.71	51.943	
10,500.00	6,040.00	5,629.00	5,593.95	113.36	20.69	85.27	407.59	2,366.15	5,780.26	5,667.47	112.79	51.248	
10,600.00	6,040.00	5,629.00	5,593.95	113.62	20.69	85.27	407.59	2,366.15	5,811.48	5,696.63	114.85	50.601	
10,700.00	6,040.00	5,629.00	5,593.95	113.91	20.69	85.27	407.59	2,366.15	5,844.25	5,727.36	116.88	50.001	
10,800.00	6,040.00	5,629.00	5,593.95	114.24	20.69	85.27	407.59	2,366.15	5,878.53	5,759.64	118.89	49.445	
10,900.00	6,040.00	5,629.00	5,593.95	114.61	20.69	85.27	407.59	2,366.15	5,914.31	5,793.44	120.87	48.931	
11,000.00	6,040.00	5,629.00	5,593.95	115.02	20.69	85.27	407.59	2,366.15	5,951.55	5,828.74	122.82	48.459	
11,100.00	6,040.00	5,629.00	5,593.95	115.49	20.69	85.27	407.59	2,366.15	5,990.24	5,865.50	124.73	48.025	
11,200.00	6,040.00	5,629.00	5,593.95	116.00	20.69	85.27	407.59	2,366.15	6,030.33	5,903.71	126.61	47.628	
11,300.00	6,040.00	5,629.00	5,593.95	116.58	20.69	85.27	407.59	2,366.15	6,071.80	5,943.34	128.46	47.266	
11,400.00	6,040.00	5,629.00	5,593.95	117.22	20.69	85.27	407.59	2,366.15	6,114.63	5,984.36	130.27	46.939	
11,500.00	6,040.00	5,629.00	5,593.95	117.92	20.69	85.27	407.59	2,366.15	6,158.78	6,026.74	132.04	46.643	
11,600.00	6,040.00	5,629.00	5,593.95	118.70	20.69	85.27	407.59	2,366.15	6,204.24	6,070.46	133.78	46.378	
11,700.00	6,040.00	5,629.00	5,593.95	119.56	20.69	85.27	407.59	2,366.15	6,250.96	6,115.48	135.47	46.142	
11,800.00	6,040.00	5,629.00	5,593.95	120.51	20.69	85.27	407.59	2,366.15	6,298.92	6,161.79	137.13	45.933	
11,900.00	6,040.00	5,629.00	5,593.95	121.54	20.69	85.27	407.59	2,366.15	6,348.09	6,209.34	138.75	45.751	
12,000.00	6,040.00	5,629.00	5,593.95	122.66	20.69	85.27	407.59	2,366.15	6,398.45	6,258.12	140.33	45.595	
12,100.00	6,040.00	5,629.00	5,593.95	123.87	20.69	85.27	407.59	2,366.15	6,449.97	6,308.10	141.88	45.462	
12,200.00	6,040.00	5,629.00	5,593.95	125.17	20.69	85.27	407.59	2,366.15	6,502.62	6,359.24	143.38	45.352	
12,300.00	6,040.00	5,629.00	5,593.95	126.57	20.69	85.27	407.59	2,366.15	6,556.37	6,411.52	144.85	45.264	
12,400.00	6,040.00	5,629.00	5,593.95	128.06	20.69	85.27	407.59	2,366.15	6,611.20	6,464.92	146.27	45.197	
12,500.00	6,040.00	5,629.00	5,593.95	129.63	20.69	85.27	407.59	2,366.15	6,667.07	6,519.41	147.66	45.150	
12,600.00	6,040.00	5,629.00	5,593.95	131.29	20.69	85.27	407.59	2,366.15	6,723.97	6,574.95	149.02	45.122	
12,700.00	6,040.00	5,629.00	5,593.95	133.03	20.69	85.27	407.59	2,366.15	6,781.86	6,631.53	150.34	45.111 SF	
12,800.00	6,040.00	5,629.00	5,593.95	134.84	20.69	85.27	407.59	2,366.15	6,840.73	6,689.11	151.62	45.119	
12,900.00	6,040.00	5,629.00	5,593.95	136.71	20.69	85.27	407.59	2,366.15	6,900.55	6,747.68	152.86	45.142	
13,000.00	6,040.00	5,629.00	5,593.95	138.66	20.69	85.27	407.59	2,366.15	6,961.28	6,807.21	154.07	45.181	
13,100.00	6,040.00	5,629.00	5,593.95	140.66	20.69	85.27	407.59	2,366.15	7,022.92	6,867.67	155.25	45.236	
13,200.00	6,040.00	5,629.00	5,593.95	142.71	20.69	85.27	407.59	2,366.15	7,085.43	6,929.03	156.39	45.305	
13,300.00	6,040.00	5,629.00	5,593.95	144.81	20.69	85.27	407.59	2,366.15	7,148.79	6,991.29	157.51	45.388	
13,400.00	6,040.00	5,629.00	5,593.95	146.96	20.69	85.27	407.59	2,366.15	7,212.98	7,054.40	158.58	45.484	
13,500.00	6,040.00	5,629.00	5,593.95	149.14	20.69	85.27	407.59	2,366.15	7,277.99	7,118.35	159.63	45.592	
13,600.00	6,040.00	5,629.00	5,593.95	151.36	20.69	85.27	407.59	2,366.15	7,343.77	7,183.12	160.65	45.713	
13,700.00	6,040.00	5,629.00	5,593.95	153.62	20.69	85.27	407.59	2,366.15	7,410.33	7,248.69	161.64	45.845	
13,800.00	6,040.00	5,629.00	5,593.95	155.91	20.69	85.27	407.59	2,366.15	7,477.62	7,315.03	162.60	45.989	
13,900.00	6,040.00	5,629.00	5,593.95	158.22	20.69	85.27	407.59	2,366.15	7,545.65	7,382.12	163.53	46.143	
14,000.00	6,040.00	5,629.00	5,593.95	160.56	20.69	85.27	407.59	2,366.15	7,614.37	7,449.94	164.43	46.308	
14,100.00	6,040.00	5,629.00	5,593.95	162.92	20.69	85.27	407.59	2,366.15	7,683.79	7,518.48	165.31	46.482	
14,200.00	6,040.00	5,629.00	5,593.95	165.30	20.69	85.27	407.59	2,366.15	7,753.87	7,587.72	166.16	46.666	
14,300.00	6,040.00	5,629.00	5,593.95	167.70	20.69	85.27	407.59	2,366.15	7,824.61	7,657.62	166.98	46.859	
14,400.00	6,040.00	5,629.00	5,593.95	170.12	20.69	85.27	407.59	2,366.15	7,895.97	7,728.19	167.78	47.061	
14,500.00	6,040.00	5,629.00	5,593.95	172.55	20.69	85.27	407.59	2,366.15	7,967.95	7,799.40	168.56	47.271	
14,600.00	6,040.00	5,629.00	5,593.95	175.00	20.69	85.27	407.59	2,366.15	8,040.54	7,871.23	169.31	47.490	
14,700.00	6,040.00	5,629.00	5,593.95	177.46	20.69	85.27	407.59	2,366.15	8,113.70	7,943.66	170.04	47.716	
14,800.00	6,040.00	5,629.00	5,593.95	179.94	20.69	85.27	407.59	2,366.15	8,187.43	8,016.68	170.75	47.949	
14,900.00	6,040.00	5,629.00	5,593.95	182.43	20.69	85.27	407.59	2,366.15	8,261.72	8,090.28	171.44	48.190	
15,000.00	6,040.00	5,629.00	5,593.95	184.92	20.69	85.27	407.59	2,366.15	8,336.54	8,164.43	172.11	48.438	
15,100.00	6,040.00	5,629.00	5,593.95	187.43	20.69	85.27	407.59	2,366.15	8,411.89	8,239.13	172.75	48.693	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ ANSCHUTZ WINDMILL 10-34H - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 820-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,629.00	5,593.95	189.95	20.69	85.27	407.59	2,366.15	8,487.74	8,314.36	173.38	48.954	
15,300.00	6,040.00	5,629.00	5,593.95	192.48	20.69	85.27	407.59	2,366.15	8,564.09	8,390.10	173.99	49.221	
15,400.00	6,040.00	5,629.00	5,593.95	195.01	20.69	85.27	407.59	2,366.15	8,640.93	8,466.34	174.58	49.494	
15,500.00	6,040.00	5,629.00	5,593.95	197.55	20.69	85.27	407.59	2,366.15	8,718.23	8,543.07	175.16	49.774	
15,600.00	6,040.00	5,629.00	5,593.95	200.10	20.69	85.27	407.59	2,366.15	8,795.99	8,620.28	175.71	50.058	
15,700.00	6,040.00	5,629.00	5,593.95	202.65	20.69	85.27	407.59	2,366.15	8,874.20	8,697.94	176.26	50.348	
15,800.00	6,040.00	5,629.00	5,593.95	205.22	20.69	85.27	407.59	2,366.15	8,952.84	8,776.06	176.78	50.644	
15,900.00	6,040.00	5,629.00	5,593.95	207.78	20.69	85.27	407.59	2,366.15	9,031.90	8,854.61	177.29	50.944	
16,000.00	6,040.00	5,629.00	5,593.95	210.36	20.69	85.27	407.59	2,366.15	9,111.37	8,933.59	177.78	51.250	
16,100.00	6,040.00	5,629.00	5,593.95	212.93	20.69	85.27	407.59	2,366.15	9,191.25	9,012.99	178.26	51.560	
16,200.00	6,040.00	5,629.00	5,593.95	215.52	20.69	85.27	407.59	2,366.15	9,271.52	9,092.79	178.73	51.874	
16,300.00	6,040.00	5,629.00	5,593.95	218.11	20.69	85.27	407.59	2,366.15	9,352.16	9,172.98	179.18	52.193	
16,400.00	6,040.00	5,629.00	5,593.95	220.70	20.69	85.27	407.59	2,366.15	9,433.18	9,253.56	179.62	52.517	
16,500.00	6,040.00	5,629.00	5,593.95	223.29	20.69	85.27	407.59	2,366.15	9,514.56	9,334.51	180.05	52.844	
16,600.00	6,040.00	5,629.00	5,593.95	225.89	20.69	85.27	407.59	2,366.15	9,596.29	9,415.82	180.46	53.176	
16,700.00	6,040.00	5,629.00	5,593.95	228.50	20.69	85.27	407.59	2,366.15	9,678.36	9,497.49	180.87	53.511	
16,800.00	6,040.00	5,629.00	5,593.95	231.11	20.69	85.27	407.59	2,366.15	9,760.77	9,579.51	181.26	53.850	
16,900.00	6,040.00	5,629.00	5,593.95	233.72	20.69	85.27	407.59	2,366.15	9,843.50	9,661.86	181.64	54.193	
17,000.00	6,040.00	5,629.00	5,593.95	236.33	20.69	85.27	407.59	2,366.15	9,926.55	9,744.54	182.01	54.539	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4841CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 792-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1,167.96	1,151.20	0.00	3.91	158.79	-4,599.85	1,785.16	5,073.18				
100.00	100.00	1,631.27	1,593.34	0.13	6.69	158.06	-4,462.70	1,797.56	5,046.08	5,040.02	6.05	833.832	
200.00	199.98	1,695.23	1,653.55	0.48	7.10	8.81	-4,441.30	1,800.25	5,014.58	5,008.06	6.52	769.464	
300.00	299.84	1,753.15	1,708.16	0.85	7.48	8.81	-4,422.19	1,802.93	4,980.45	4,973.39	7.07	704.663	
400.00	399.45	2,276.55	2,192.73	1.22	11.17	7.68	-4,228.53	1,836.55	4,942.57	4,932.42	10.15	486.806	
500.00	498.70	500.00	2,301.99	1.62	2.49	7.52	-4,179.07	1,841.92	4,894.98	4,891.64	3.34	1,465.048	
600.00	597.47	2,541.00	2,432.03	2.05	13.23	7.29	-4,116.70	1,848.57	4,842.22	4,830.02	12.20	396.807	
700.00	695.62	2,582.88	2,469.49	2.51	13.56	7.33	-4,098.23	1,851.61	4,787.16	4,774.39	12.77	374.898	
800.00	793.06	2,634.00	2,515.39	3.01	13.97	7.33	-4,076.24	1,856.37	4,730.41	4,717.02	13.40	353.100	
900.00	889.64	2,643.89	2,524.29	3.56	14.05	7.48	-4,072.05	1,857.40	4,671.45	4,657.65	13.80	338.542	
1,000.00	985.27	2,707.05	2,581.15	4.14	14.55	7.46	-4,045.37	1,864.06	4,610.41	4,595.89	14.51	317.686	
1,100.00	1,079.82	2,762.47	2,631.13	4.78	14.98	7.47	-4,022.15	1,869.87	4,546.98	4,531.80	15.18	299.495	
1,200.00	1,173.17	2,813.58	2,677.47	5.46	15.38	7.51	-4,001.14	1,874.79	4,481.35	4,465.52	15.83	283.124	
1,300.00	1,265.21	2,850.93	2,711.52	6.20	15.66	7.63	-3,986.13	1,878.03	4,413.63	4,397.24	16.39	269.253	
1,400.00	1,355.84	2,884.95	2,742.74	6.99	15.91	7.78	-3,972.89	1,880.64	4,344.04	4,327.10	16.94	256.465	
1,500.00	1,444.94	2,918.00	2,773.27	7.84	16.16	7.96	-3,960.42	1,882.83	4,272.61	4,255.13	17.48	244.413	
1,600.00	1,532.39	2,951.88	2,804.75	8.75	16.39	8.17	-3,948.03	1,884.78	4,199.38	4,181.36	18.02	233.092	
1,700.00	1,618.11	2,984.66	2,835.36	9.71	16.62	8.42	-3,936.42	1,886.40	4,124.37	4,105.82	18.55	222.385	
1,800.00	1,701.97	3,022.19	2,870.58	10.74	16.87	8.69	-3,923.56	1,887.95	4,047.63	4,028.53	19.10	211.971	
1,900.00	1,783.88	3,087.53	2,931.92	11.82	17.31	8.94	-3,901.23	1,890.81	3,968.86	3,949.10	19.75	200.911	
2,000.00	1,863.74	3,187.22	3,025.23	12.96	17.99	9.15	-3,866.47	1,895.59	3,887.77	3,867.22	20.55	189.205	
2,100.00	1,941.45	3,254.98	3,088.40	14.16	18.46	9.47	-3,842.19	1,899.03	3,804.22	3,783.01	21.20	179.412	
2,200.00	2,016.92	3,339.87	3,167.05	15.41	19.07	9.75	-3,810.82	1,904.84	3,718.67	3,696.74	21.93	169.591	
2,300.00	2,090.05	3,576.00	3,380.87	16.73	20.91	9.18	-3,713.31	1,927.34	3,629.62	3,606.31	23.31	155.704	
2,400.00	2,160.76	3,605.07	3,406.84	18.10	21.14	9.73	-3,700.54	1,930.14	3,538.22	3,514.45	23.77	148.849	
2,500.00	2,228.95	3,623.97	3,423.78	19.53	21.29	10.47	-3,692.35	1,931.98	3,445.70	3,421.53	24.17	142.536	
2,600.00	2,294.55	3,641.82	3,439.80	21.01	21.44	11.36	-3,684.71	1,933.73	3,352.13	3,327.57	24.56	136.484	
2,700.00	2,357.48	3,670.00	3,465.20	22.55	21.67	12.40	-3,672.81	1,936.53	3,257.61	3,232.64	24.97	130.468	
2,800.00	2,418.42	3,670.00	3,465.20	24.13	21.67	12.76	-3,672.81	1,936.53	3,162.37	3,137.11	25.27	125.161	
2,900.00	2,479.25	3,695.63	3,488.38	25.71	21.86	12.62	-3,662.16	1,939.05	3,067.24	3,041.59	25.65	119.578	
3,000.00	2,540.09	3,716.16	3,506.99	27.31	22.02	12.51	-3,653.73	1,941.00	2,972.22	2,946.19	26.03	114.200	
3,100.00	2,600.93	3,737.15	3,526.08	28.90	22.19	12.40	-3,645.22	1,942.92	2,877.31	2,850.90	26.41	108.940	
3,200.00	2,661.77	3,764.00	3,550.58	30.51	22.39	12.26	-3,634.48	1,945.29	2,782.53	2,755.71	26.82	103.756	
3,300.00	2,722.61	3,778.88	3,564.19	32.11	22.50	12.18	-3,628.61	1,946.56	2,687.86	2,660.66	27.21	98.797	
3,400.00	2,783.44	3,799.14	3,582.76	33.72	22.65	12.08	-3,620.70	1,948.27	2,593.35	2,565.74	27.61	93.914	
3,500.00	2,844.28	3,819.96	3,601.90	35.34	22.81	11.98	-3,612.68	1,949.99	2,499.00	2,470.96	28.03	89.143	
3,600.00	2,905.12	3,841.39	3,621.65	36.95	22.96	11.87	-3,604.55	1,951.74	2,404.81	2,376.34	28.47	84.482	
3,700.00	2,965.96	3,864.55	3,643.05	38.57	23.13	11.76	-3,595.90	1,953.58	2,310.79	2,281.88	28.91	79.937	
3,800.00	3,026.79	3,891.74	3,668.25	40.19	23.33	11.63	-3,585.88	1,955.67	2,216.89	2,187.54	29.35	75.522	
3,900.00	3,087.63	3,919.43	3,693.96	41.81	23.52	11.49	-3,575.80	1,957.69	2,123.11	2,093.30	29.81	71.223	
4,000.00	3,148.47	3,947.63	3,720.21	43.43	23.72	11.36	-3,565.68	1,959.63	2,029.45	1,999.17	30.27	67.040	
4,100.00	3,209.31	3,971.51	3,742.49	45.05	23.88	11.26	-3,557.25	1,961.20	1,935.93	1,905.18	30.75	62.953	
4,200.00	3,270.14	3,995.04	3,764.52	46.68	24.04	11.15	-3,549.12	1,962.71	1,842.65	1,811.40	31.25	58.968	
4,300.00	3,330.98	4,019.40	3,787.40	48.31	24.21	11.05	-3,540.88	1,964.23	1,749.61	1,717.85	31.76	55.087	
4,400.00	3,391.82	4,047.00	3,813.40	49.93	24.39	10.94	-3,531.79	1,965.90	1,656.84	1,624.56	32.28	51.331	
4,500.00	3,452.66	4,096.99	3,860.62	51.56	24.71	10.79	-3,515.56	1,968.22	1,564.04	1,531.38	32.66	47.889	
4,600.00	3,513.49	4,151.45	3,912.14	53.19	25.07	10.74	-3,497.92	1,969.29	1,470.85	1,437.87	32.98	44.600	
4,700.00	3,574.33	4,211.27	3,968.42	54.82	25.46	10.65	-3,477.69	1,970.24	1,377.11	1,343.91	33.20	41.482	
4,800.00	3,635.17	4,258.30	4,012.36	56.45	25.78	10.47	-3,460.94	1,971.26	1,282.85	1,249.37	33.48	38.312	
4,900.00	3,696.01	4,297.79	4,049.16	58.08	26.05	10.30	-3,446.66	1,971.98	1,188.39	1,154.56	33.82	35.135	
5,000.00	3,756.84	4,336.07	4,084.80	59.71	26.32	10.12	-3,432.68	1,972.48	1,093.74	1,059.59	34.15	32.023	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4841CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 792-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	4,355.58	4,102.98	61.34	26.45	9.99	-3,425.62	1,972.89	999.27	964.49	34.78	28.729	
5,200.00	3,878.52	4,379.39	4,125.21	62.97	26.61	9.78	-3,417.12	1,973.62	905.13	869.73	35.40	25.571	
5,300.00	3,939.36	4,404.62	4,148.81	64.61	26.79	9.49	-3,408.26	1,974.69	811.36	775.32	36.04	22.512	
5,400.00	4,000.19	4,431.34	4,173.85	66.24	26.97	9.08	-3,399.04	1,976.16	717.99	681.27	36.72	19.552	
5,500.00	4,061.03	4,459.66	4,200.46	67.87	27.15	8.51	-3,389.53	1,977.96	625.08	587.63	37.45	16.693	
5,600.00	4,121.87	4,489.86	4,228.94	69.51	27.35	7.74	-3,379.70	1,980.11	532.68	494.47	38.21	13.940	
5,700.00	4,182.71	4,522.42	4,259.74	71.14	27.56	6.62	-3,369.47	1,982.69	440.86	401.84	39.02	11.298	
5,800.00	4,243.54	4,558.58	4,294.15	72.77	27.78	5.02	-3,358.69	1,985.34	349.58	309.77	39.81	8.782	
5,900.00	4,304.38	4,596.79	4,330.77	74.41	28.00	2.73	-3,348.01	1,987.60	258.84	218.14	40.70	6.360	
6,000.00	4,365.22	4,637.31	4,369.85	76.04	28.23	-1.33	-3,337.48	1,989.46	168.72	126.85	41.87	4.029	
6,100.00	4,426.06	4,679.93	4,411.14	77.68	28.46	-12.97	-3,327.07	1,991.08	79.57	34.01	45.56	1.746	
6,187.61	4,479.36	4,718.96	4,449.12	79.11	28.66	-81.12	-3,318.12	1,992.28	14.22	-89.83	104.06	0.137	Level 1, CC, ES, SF
6,200.00	4,486.90	4,724.59	4,454.60	79.31	28.69	-100.56	-3,316.86	1,992.43	18.01	-67.22	85.23	0.211	Level 1
6,300.00	4,547.73	4,770.73	4,499.64	80.95	28.91	-154.39	-3,306.90	1,993.45	101.02	54.31	46.71	2.163	
6,400.00	4,608.57	4,817.88	4,545.79	82.58	29.13	-162.79	-3,297.26	1,994.11	189.20	143.83	45.38	4.169	
6,500.00	4,669.41	4,865.46	4,592.45	84.22	29.35	-166.13	-3,287.96	1,994.37	277.49	232.03	45.46	6.103	
6,600.00	4,730.25	4,917.61	4,643.69	85.86	29.58	-168.13	-3,278.27	1,994.38	365.58	319.43	46.15	7.922	
6,700.00	4,791.08	4,979.44	4,704.64	87.49	29.84	-169.33	-3,267.95	1,995.56	452.48	405.08	47.41	9.545	
6,800.00	4,851.92	5,042.92	4,767.43	89.13	30.08	-170.07	-3,258.87	1,997.63	538.01	489.47	48.54	11.083	
6,900.00	4,912.76	5,108.93	4,832.97	90.76	30.32	-170.76	-3,251.20	1,999.53	622.35	572.72	49.62	12.541	
7,000.00	4,973.60	5,176.64	4,900.39	92.40	30.53	-171.46	-3,245.09	2,000.85	705.65	655.01	50.64	13.936	
7,100.00	5,034.43	5,242.38	4,965.96	94.04	30.72	-172.12	-3,240.56	2,001.57	788.10	736.63	51.47	15.311	
7,200.00	5,095.27	5,310.13	5,033.63	95.67	30.89	-172.75	-3,237.06	2,001.87	869.85	817.54	52.32	16.626	
7,300.00	5,156.11	5,379.86	5,103.30	97.31	31.06	-173.35	-3,234.59	2,001.84	950.92	897.74	53.17	17.883	
7,400.00	5,216.95	5,446.14	5,169.57	98.95	31.20	-173.87	-3,233.01	2,001.65	1,031.46	977.57	53.90	19.138	
7,500.00	5,277.78	5,512.74	5,236.16	100.59	31.35	-174.29	-3,231.80	2,001.83	1,111.58	1,056.96	54.62	20.351	
7,600.00	5,338.62	5,578.48	5,301.87	102.22	31.49	-174.58	-3,230.52	2,003.01	1,191.35	1,136.03	55.32	21.537	
7,700.00	5,399.46	5,642.69	5,366.07	103.86	31.63	-174.85	-3,229.67	2,003.89	1,270.92	1,214.95	55.97	22.706	
7,800.00	5,460.30	5,711.00	5,434.37	105.50	31.77	-175.13	-3,229.26	2,004.53	1,350.23	1,293.53	56.70	23.814	
7,900.00	5,521.24	5,775.83	5,499.20	107.13	31.90	-175.57	-3,229.03	2,005.49	1,429.19	1,371.84	57.35	24.920	
8,000.00	5,584.83	5,839.90	5,563.19	108.61	32.04	-162.17	-3,227.84	2,008.39	1,505.53	1,447.57	57.96	25.975	
8,100.00	5,650.69	5,884.27	5,607.27	109.85	32.19	145.75	-3,225.48	2,012.73	1,577.16	1,518.90	58.26	27.070	
8,200.00	5,716.83	5,926.00	5,648.32	110.82	32.32	131.34	-3,221.62	2,019.14	1,643.14	1,584.47	58.67	28.005	
8,300.00	5,781.24	5,948.01	5,669.75	111.52	32.42	118.43	-3,218.88	2,023.34	1,702.82	1,643.81	59.01	28.855	
8,400.00	5,841.96	5,965.91	5,687.05	111.98	32.50	107.64	-3,216.26	2,027.09	1,755.65	1,695.90	59.75	29.383	
8,500.00	5,897.14	5,978.65	5,699.30	112.25	32.56	98.90	-3,214.17	2,029.93	1,800.97	1,739.97	61.00	29.523	
8,600.00	5,945.12	5,986.67	5,706.97	112.37	32.60	92.08	-3,212.76	2,031.80	1,838.21	1,775.34	62.87	29.237	
8,700.00	5,984.42	5,990.49	5,710.61	112.39	32.61	87.00	-3,212.07	2,032.71	1,866.88	1,801.48	65.40	28.546	
8,800.00	6,013.86	5,990.63	5,710.74	112.35	32.61	83.47	-3,212.04	2,032.74	1,886.58	1,818.04	68.54	27.524	
8,900.00	6,032.54	5,987.56	5,707.82	112.30	32.60	81.36	-3,212.60	2,032.01	1,897.01	1,824.80	72.20	26.274	
9,000.00	6,039.89	5,981.70	5,702.22	112.24	32.57	80.58	-3,213.64	2,030.64	1,897.94	1,821.70	76.24	24.894	
9,100.00	6,040.00	5,974.42	5,695.24	112.19	32.54	80.39	-3,214.88	2,028.97	1,894.80	1,814.29	80.50	23.537	
9,113.32	6,040.00	5,973.48	5,694.33	112.19	32.54	80.36	-3,215.04	2,028.76	1,894.75	1,813.66	81.09	23.366	
9,200.00	6,040.00	5,967.52	5,688.60	112.16	32.51	80.19	-3,216.00	2,027.44	1,896.70	1,811.83	84.88	22.346	
9,300.00	6,040.00	5,960.99	5,682.31	112.15	32.48	80.00	-3,217.02	2,026.03	1,903.79	1,814.50	89.29	21.323	
9,400.00	6,040.00	5,926.00	5,648.32	112.15	32.32	78.96	-3,221.62	2,019.14	1,916.75	1,823.69	93.06	20.597	
9,500.00	6,040.00	5,926.00	5,648.32	112.16	32.32	78.96	-3,221.62	2,019.14	1,933.74	1,836.24	97.50	19.833	
9,600.00	6,040.00	5,926.00	5,648.32	112.19	32.32	78.96	-3,221.62	2,019.14	1,955.70	1,853.90	101.80	19.212	
9,700.00	6,040.00	5,926.00	5,648.32	112.24	32.32	78.96	-3,221.62	2,019.14	1,982.46	1,876.55	105.91	18.719	
9,800.00	6,040.00	5,926.00	5,648.32	112.31	32.32	78.96	-3,221.62	2,019.14	2,013.84	1,904.03	109.81	18.339	
9,900.00	6,040.00	5,926.00	5,648.32	112.39	32.32	78.96	-3,221.62	2,019.14	2,049.62	1,936.14	113.48	18.061	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4841CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 792-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.00	6,040.00	5,926.00	5,648.32	112.49	32.32	78.96	-3,221.62	2,019.14	2,089.58	1,972.66	116.92	17.872	
10,100.00	6,040.00	5,926.00	5,648.32	112.62	32.32	78.96	-3,221.62	2,019.14	2,133.48	2,013.38	120.10	17.764	
10,200.00	6,040.00	5,926.00	5,648.32	112.77	32.32	78.96	-3,221.62	2,019.14	2,181.09	2,058.04	123.04	17.726	
10,300.00	6,040.00	5,926.00	5,648.32	112.94	32.32	78.96	-3,221.62	2,019.14	2,232.16	2,106.42	125.75	17.751	
10,400.00	6,040.00	5,926.00	5,648.32	113.14	32.32	78.96	-3,221.62	2,019.14	2,286.47	2,158.26	128.21	17.833	
10,500.00	6,040.00	5,926.00	5,648.32	113.36	32.32	78.96	-3,221.62	2,019.14	2,343.79	2,213.33	130.46	17.966	
10,600.00	6,040.00	5,926.00	5,648.32	113.62	32.32	78.96	-3,221.62	2,019.14	2,403.90	2,271.40	132.50	18.143	
10,700.00	6,040.00	5,926.00	5,648.32	113.91	32.32	78.96	-3,221.62	2,019.14	2,466.60	2,332.27	134.34	18.361	
10,800.00	6,040.00	5,926.00	5,648.32	114.24	32.32	78.96	-3,221.62	2,019.14	2,531.71	2,395.71	136.00	18.615	
10,900.00	6,040.00	5,926.00	5,648.32	114.61	32.32	78.96	-3,221.62	2,019.14	2,599.03	2,461.53	137.50	18.902	
11,000.00	6,040.00	5,889.65	5,612.59	115.02	32.21	77.88	-3,225.07	2,013.43	2,667.10	2,528.57	138.52	19.254	
11,100.00	6,040.00	5,887.16	5,610.13	115.49	32.20	77.81	-3,225.26	2,013.10	2,738.18	2,598.46	139.72	19.597	
11,200.00	6,040.00	5,884.78	5,607.78	116.00	32.19	77.74	-3,225.44	2,012.80	2,811.01	2,670.21	140.80	19.965	
11,300.00	6,040.00	5,882.52	5,605.54	116.58	32.18	77.67	-3,225.60	2,012.51	2,885.46	2,743.70	141.76	20.354	
11,400.00	6,040.00	5,880.36	5,603.40	117.22	32.18	77.61	-3,225.76	2,012.25	2,961.40	2,818.78	142.62	20.764	
11,500.00	6,040.00	5,878.29	5,601.36	117.92	32.17	77.55	-3,225.90	2,012.00	3,038.73	2,895.34	143.39	21.191	
11,600.00	6,040.00	5,876.32	5,599.40	118.70	32.16	77.49	-3,226.03	2,011.77	3,117.34	2,973.26	144.08	21.636	
11,700.00	6,040.00	5,874.43	5,597.53	119.56	32.16	77.43	-3,226.15	2,011.55	3,197.14	3,052.45	144.69	22.096	
11,800.00	6,040.00	5,872.62	5,595.73	120.51	32.15	77.38	-3,226.27	2,011.35	3,278.05	3,132.81	145.24	22.570	
11,900.00	6,040.00	5,870.88	5,594.01	121.54	32.15	77.33	-3,226.37	2,011.16	3,359.97	3,214.24	145.73	23.057	
12,000.00	6,040.00	5,832.00	5,555.30	122.66	32.03	76.19	-3,228.04	2,007.92	3,444.16	3,298.23	145.93	23.601	
12,100.00	6,040.00	5,832.00	5,555.30	123.87	32.03	76.19	-3,228.04	2,007.92	3,527.80	3,381.47	146.33	24.108	
12,200.00	6,040.00	5,832.00	5,555.30	125.17	32.03	76.19	-3,228.04	2,007.92	3,612.28	3,465.59	146.69	24.626	
12,300.00	6,040.00	5,832.00	5,555.30	126.57	32.03	76.19	-3,228.04	2,007.92	3,697.52	3,550.52	147.00	25.153	
12,400.00	6,040.00	5,832.00	5,555.30	128.06	32.03	76.19	-3,228.04	2,007.92	3,783.49	3,636.22	147.28	25.689	
12,500.00	6,040.00	5,832.00	5,555.30	129.63	32.03	76.19	-3,228.04	2,007.92	3,870.14	3,722.62	147.52	26.234	
12,600.00	6,040.00	5,832.00	5,555.30	131.29	32.03	76.19	-3,228.04	2,007.92	3,957.41	3,809.68	147.74	26.787	
12,700.00	6,040.00	5,832.00	5,555.30	133.03	32.03	76.19	-3,228.04	2,007.92	4,045.28	3,897.35	147.93	27.347	
12,800.00	6,040.00	5,832.00	5,555.30	134.84	32.03	76.19	-3,228.04	2,007.92	4,133.69	3,985.60	148.09	27.913	
12,900.00	6,040.00	5,832.00	5,555.30	136.71	32.03	76.19	-3,228.04	2,007.92	4,222.62	4,074.39	148.23	28.486	
13,000.00	6,040.00	5,832.00	5,555.30	138.66	32.03	76.19	-3,228.04	2,007.92	4,312.04	4,163.68	148.36	29.065	
13,100.00	6,040.00	5,832.00	5,555.30	140.66	32.03	76.19	-3,228.04	2,007.92	4,401.91	4,253.45	148.46	29.650	
13,200.00	6,040.00	5,832.00	5,555.30	142.71	32.03	76.19	-3,228.04	2,007.92	4,492.21	4,343.66	148.56	30.239	
13,300.00	6,040.00	5,832.00	5,555.30	144.81	32.03	76.19	-3,228.04	2,007.92	4,582.92	4,434.28	148.63	30.834	
13,400.00	6,040.00	5,832.00	5,555.30	146.96	32.03	76.19	-3,228.04	2,007.92	4,674.00	4,525.30	148.70	31.433	
13,500.00	6,040.00	5,832.00	5,555.30	149.14	32.03	76.19	-3,228.04	2,007.92	4,765.44	4,616.69	148.75	32.037	
13,600.00	6,040.00	5,832.00	5,555.30	151.36	32.03	76.19	-3,228.04	2,007.92	4,857.22	4,708.42	148.79	32.644	
13,700.00	6,040.00	5,832.00	5,555.30	153.62	32.03	76.19	-3,228.04	2,007.92	4,949.31	4,800.49	148.83	33.256	
13,800.00	6,040.00	5,832.00	5,555.30	155.91	32.03	76.19	-3,228.04	2,007.92	5,041.71	4,892.86	148.85	33.871	
13,900.00	6,040.00	5,832.00	5,555.30	158.22	32.03	76.19	-3,228.04	2,007.92	5,134.39	4,985.52	148.87	34.489	
14,000.00	6,040.00	5,832.00	5,555.30	160.56	32.03	76.19	-3,228.04	2,007.92	5,227.34	5,078.46	148.88	35.111	
14,100.00	6,040.00	5,832.00	5,555.30	162.92	32.03	76.19	-3,228.04	2,007.92	5,320.55	5,171.66	148.89	35.736	
14,200.00	6,040.00	5,832.00	5,555.30	165.30	32.03	76.19	-3,228.04	2,007.92	5,414.00	5,265.11	148.89	36.363	
14,300.00	6,040.00	5,832.00	5,555.30	167.70	32.03	76.19	-3,228.04	2,007.92	5,507.68	5,358.80	148.88	36.994	
14,400.00	6,040.00	5,832.00	5,555.30	170.12	32.03	76.19	-3,228.04	2,007.92	5,601.58	5,452.71	148.87	37.627	
14,500.00	6,040.00	5,832.00	5,555.30	172.55	32.03	76.19	-3,228.04	2,007.92	5,695.69	5,546.83	148.86	38.262	
14,600.00	6,040.00	5,832.00	5,555.30	175.00	32.03	76.19	-3,228.04	2,007.92	5,789.99	5,641.15	148.84	38.900	
14,700.00	6,040.00	5,832.00	5,555.30	177.46	32.03	76.19	-3,228.04	2,007.92	5,884.48	5,735.66	148.82	39.540	
14,800.00	6,040.00	5,832.00	5,555.30	179.94	32.03	76.19	-3,228.04	2,007.92	5,979.15	5,830.35	148.80	40.182	
14,900.00	6,040.00	5,832.00	5,555.30	182.43	32.03	76.19	-3,228.04	2,007.92	6,073.99	5,925.22	148.78	40.826	
15,000.00	6,040.00	5,832.00	5,555.30	184.92	32.03	76.19	-3,228.04	2,007.92	6,169.00	6,020.25	148.75	41.472	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4841CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 792-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,100.00	6,040.00	5,832.00	5,555.30	187.43	32.03	76.19	-3,228.04	2,007.92	6,264.16	6,115.44	148.72	42.120	
15,200.00	6,040.00	5,832.00	5,555.30	189.95	32.03	76.19	-3,228.04	2,007.92	6,359.47	6,210.78	148.69	42.769	
15,300.00	6,040.00	5,832.00	5,555.30	192.48	32.03	76.19	-3,228.04	2,007.92	6,454.92	6,306.26	148.66	43.421	
15,400.00	6,040.00	5,832.00	5,555.30	195.01	32.03	76.19	-3,228.04	2,007.92	6,550.50	6,401.88	148.63	44.073	
15,500.00	6,040.00	5,832.00	5,555.30	197.55	32.03	76.19	-3,228.04	2,007.92	6,646.22	6,497.63	148.59	44.728	
15,600.00	6,040.00	5,832.00	5,555.30	200.10	32.03	76.19	-3,228.04	2,007.92	6,742.06	6,593.50	148.56	45.383	
15,700.00	6,040.00	5,832.00	5,555.30	202.65	32.03	76.19	-3,228.04	2,007.92	6,838.02	6,689.50	148.52	46.040	
15,800.00	6,040.00	5,832.00	5,555.30	205.22	32.03	76.19	-3,228.04	2,007.92	6,934.10	6,785.61	148.49	46.698	
15,900.00	6,040.00	5,832.00	5,555.30	207.78	32.03	76.19	-3,228.04	2,007.92	7,030.28	6,881.83	148.45	47.358	
16,000.00	6,040.00	5,832.00	5,555.30	210.36	32.03	76.19	-3,228.04	2,007.92	7,126.57	6,978.16	148.41	48.019	
16,100.00	6,040.00	5,832.00	5,555.30	212.93	32.03	76.19	-3,228.04	2,007.92	7,222.96	7,074.58	148.38	48.680	
16,200.00	6,040.00	5,832.00	5,555.30	215.52	32.03	76.19	-3,228.04	2,007.92	7,319.44	7,171.11	148.34	49.343	
16,300.00	6,040.00	5,832.00	5,555.30	218.11	32.03	76.19	-3,228.04	2,007.92	7,416.02	7,267.72	148.30	50.007	
16,400.00	6,040.00	5,832.00	5,555.30	220.70	32.03	76.19	-3,228.04	2,007.92	7,512.69	7,364.43	148.26	50.672	
16,500.00	6,040.00	5,832.00	5,555.30	223.29	32.03	76.19	-3,228.04	2,007.92	7,609.45	7,461.22	148.22	51.338	
16,600.00	6,040.00	5,832.00	5,555.30	225.89	32.03	76.19	-3,228.04	2,007.92	7,706.28	7,558.10	148.19	52.004	
16,700.00	6,040.00	5,832.00	5,555.30	228.50	32.03	76.19	-3,228.04	2,007.92	7,803.20	7,655.05	148.15	52.672	
16,800.00	6,040.00	5,832.00	5,555.30	231.11	32.03	76.19	-3,228.04	2,007.92	7,900.20	7,752.09	148.11	53.340	
16,900.00	6,040.00	5,832.00	5,555.30	233.72	32.03	76.19	-3,228.04	2,007.92	7,997.27	7,849.19	148.07	54.009	
17,000.00	6,040.00	5,832.00	5,555.30	236.33	32.03	76.19	-3,228.04	2,007.92	8,094.41	7,946.37	148.04	54.679	
17,100.00	6,040.00	5,832.00	5,555.30	238.95	32.03	76.19	-3,228.04	2,007.92	8,191.61	8,043.62	148.00	55.349	
17,200.00	6,040.00	5,832.00	5,555.30	241.57	32.03	76.19	-3,228.04	2,007.92	8,288.89	8,140.93	147.96	56.020	
17,300.00	6,040.00	5,832.00	5,555.30	244.19	32.03	76.19	-3,228.04	2,007.92	8,386.23	8,238.30	147.93	56.692	
17,400.00	6,040.00	5,832.00	5,555.30	246.82	32.03	76.19	-3,228.04	2,007.92	8,483.63	8,335.74	147.89	57.365	
17,500.00	6,040.00	5,832.00	5,555.30	249.45	32.03	76.19	-3,228.04	2,007.92	8,581.09	8,433.24	147.85	58.037	
17,600.00	6,040.00	5,832.00	5,555.30	252.08	32.03	76.19	-3,228.04	2,007.92	8,678.61	8,530.79	147.82	58.711	
17,700.00	6,040.00	5,832.00	5,555.30	254.71	32.03	76.19	-3,228.04	2,007.92	8,776.18	8,628.40	147.78	59.385	
17,800.00	6,040.00	5,832.00	5,555.30	257.35	32.03	76.19	-3,228.04	2,007.92	8,873.81	8,726.06	147.75	60.059	
17,900.00	6,040.00	5,832.00	5,555.30	259.99	32.03	76.19	-3,228.04	2,007.92	8,971.49	8,823.78	147.72	60.734	
18,000.00	6,040.00	5,832.00	5,555.30	262.63	32.03	76.19	-3,228.04	2,007.92	9,069.22	8,921.54	147.68	61.410	
18,100.00	6,040.00	5,832.00	5,555.30	265.27	32.03	76.19	-3,228.04	2,007.92	9,167.00	9,019.35	147.65	62.086	
18,200.00	6,040.00	5,832.00	5,555.30	267.91	32.03	76.19	-3,228.04	2,007.92	9,264.83	9,117.21	147.62	62.762	
18,300.00	6,040.00	5,832.00	5,555.30	270.56	32.03	76.19	-3,228.04	2,007.92	9,362.71	9,215.12	147.59	63.439	
18,400.00	6,040.00	5,832.00	5,555.30	273.21	32.03	76.19	-3,228.04	2,007.92	9,460.62	9,313.07	147.56	64.115	
18,500.00	6,040.00	5,832.00	5,555.30	275.86	32.03	76.19	-3,228.04	2,007.92	9,558.58	9,411.06	147.53	64.793	
18,600.00	6,040.00	5,832.00	5,555.30	278.51	32.03	76.19	-3,228.04	2,007.92	9,656.59	9,509.09	147.50	65.470	
18,700.00	6,040.00	5,832.00	5,555.30	281.16	32.03	76.19	-3,228.04	2,007.92	9,754.63	9,607.16	147.47	66.148	
18,800.00	6,040.00	5,832.00	5,555.30	283.81	32.03	76.19	-3,228.04	2,007.92	9,852.71	9,705.28	147.44	66.827	
18,900.00	6,040.00	5,832.00	5,555.30	286.47	32.03	76.19	-3,228.04	2,007.92	9,950.83	9,803.43	147.41	67.505	
18,919.70	6,040.00	5,832.00	5,555.30	286.99	32.03	76.19	-3,228.04	2,007.92	9,970.17	9,822.77	147.40	67.639	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 897-MWD OWSG												Offset Well Error:	0.00 usft
Reference													
Offset													
Semi Major Axis													
Distance													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1,098.54	1,082.89	0.00	3.50	158.76	-4,630.49	1,799.78	5,090.76				
100.00	100.00	1,160.79	1,142.71	0.13	3.86	158.63	-4,614.21	1,805.32	5,069.28	5,065.53	3.74	1,353.668	
200.00	199.98	1,233.82	1,213.03	0.48	4.27	9.33	-4,595.58	1,811.73	5,046.73	5,042.44	4.29	1,175.795	
300.00	299.84	1,306.15	1,282.77	0.85	4.67	9.28	-4,577.46	1,818.01	5,021.30	5,016.36	4.94	1,015.720	
400.00	399.45	1,454.95	1,426.28	1.22	5.51	9.09	-4,540.27	1,830.89	4,992.82	4,986.82	6.00	832.327	
500.00	498.70	2,212.15	2,138.96	1.62	10.40	7.54	-4,295.90	1,887.58	4,954.15	4,943.92	10.23	484.301	
600.00	597.47	2,306.12	2,224.64	2.05	11.11	7.40	-4,258.38	1,896.58	4,906.22	4,895.13	11.09	442.289	
700.00	695.62	2,387.05	2,298.22	2.51	11.73	7.29	-4,225.73	1,905.06	4,855.29	4,843.39	11.89	408.209	
800.00	793.06	2,455.48	2,360.48	3.01	12.25	7.23	-4,198.27	1,912.26	4,801.66	4,789.03	12.63	380.100	
900.00	889.64	2,517.99	2,417.35	3.56	12.73	7.19	-4,173.26	1,919.19	4,745.49	4,732.15	13.35	355.572	
1,000.00	985.27	2,595.09	2,487.40	4.14	13.33	7.09	-4,142.41	1,928.40	4,686.79	4,672.64	14.15	331.235	
1,100.00	1,079.82	2,692.64	2,576.17	4.78	14.08	6.94	-4,103.43	1,939.20	4,625.21	4,610.15	15.07	306.976	
1,200.00	1,173.17	2,787.73	2,662.76	5.46	14.80	6.80	-4,065.31	1,948.72	4,560.61	4,544.64	15.96	285.723	
1,300.00	1,265.21	2,853.23	2,722.44	6.20	15.30	6.78	-4,039.03	1,954.90	4,493.29	4,476.60	16.69	269.254	
1,400.00	1,355.84	2,898.75	2,764.10	6.99	15.64	6.85	-4,021.12	1,958.85	4,423.83	4,406.52	17.30	255.657	
1,500.00	1,444.94	2,942.39	2,804.22	7.84	15.96	6.95	-4,004.31	1,962.32	4,352.34	4,334.43	17.91	243.067	
1,600.00	1,532.39	2,983.84	2,842.50	8.75	16.26	7.08	-3,988.69	1,965.36	4,278.89	4,260.40	18.49	231.402	
1,700.00	1,618.11	3,018.00	2,874.16	9.71	16.51	7.25	-3,976.09	1,967.68	4,203.55	4,184.51	19.04	220.766	
1,800.00	1,701.97	3,051.20	2,905.01	10.74	16.74	7.45	-3,964.04	1,970.03	4,126.46	4,106.87	19.58	210.706	
1,900.00	1,783.88	3,079.12	2,930.98	11.82	16.94	7.70	-3,954.05	1,972.28	4,047.72	4,027.62	20.10	201.359	
2,000.00	1,863.74	3,112.00	2,961.61	12.96	17.17	7.94	-3,942.46	1,975.25	3,967.40	3,946.76	20.64	192.212	
2,100.00	1,941.45	3,133.48	2,981.64	14.16	17.31	8.27	-3,935.01	1,977.30	3,885.51	3,864.38	21.13	183.923	
2,200.00	2,016.92	3,160.05	3,006.51	15.41	17.49	8.61	-3,925.98	1,979.84	3,802.11	3,780.48	21.63	175.782	
2,300.00	2,090.05	3,185.87	3,030.73	16.73	17.67	9.01	-3,917.40	1,982.29	3,717.24	3,695.12	22.13	168.008	
2,400.00	2,160.76	3,213.29	3,056.54	18.10	17.85	9.46	-3,908.50	1,984.89	3,630.96	3,608.34	22.62	160.526	
2,500.00	2,228.95	3,249.16	3,090.41	19.53	18.08	9.97	-3,897.11	1,988.06	3,543.21	3,520.08	23.13	153.194	
2,600.00	2,294.55	3,283.28	3,122.73	21.01	18.30	10.59	-3,886.52	1,990.76	3,454.01	3,430.39	23.62	146.236	
2,700.00	2,357.48	3,317.92	3,155.63	22.55	18.52	11.34	-3,875.98	1,993.26	3,363.43	3,339.34	24.09	139.595	
2,800.00	2,418.42	3,353.43	3,189.36	24.13	18.74	11.52	-3,865.21	1,995.89	3,271.89	3,247.34	24.56	133.237	
2,900.00	2,479.25	3,389.06	3,223.20	25.71	18.97	11.46	-3,854.40	1,998.67	3,180.36	3,155.34	25.02	127.118	
3,000.00	2,540.09	3,419.52	3,252.13	27.31	19.16	11.40	-3,845.18	2,001.14	3,088.92	3,063.44	25.48	121.248	
3,100.00	2,600.93	3,449.56	3,280.66	28.90	19.34	11.33	-3,836.15	2,003.69	2,997.62	2,971.68	25.94	115.557	
3,200.00	2,661.77	3,480.07	3,309.66	30.51	19.54	11.26	-3,827.05	2,006.38	2,906.47	2,880.05	26.41	110.034	
3,300.00	2,722.61	3,488.00	3,317.20	32.11	19.59	11.24	-3,824.70	2,007.10	2,815.59	2,788.73	26.86	104.819	
3,400.00	2,783.44	3,524.50	3,352.01	33.72	19.80	11.15	-3,814.19	2,010.29	2,724.85	2,697.50	27.36	99.595	
3,500.00	2,844.28	3,546.42	3,373.01	35.34	19.93	11.11	-3,808.17	2,012.07	2,634.53	2,606.68	27.85	94.590	
3,600.00	2,905.12	3,582.00	3,407.26	36.95	20.14	11.06	-3,798.89	2,014.75	2,544.61	2,516.25	28.37	89.706	
3,700.00	2,965.96	3,582.00	3,407.26	38.57	20.14	11.06	-3,798.89	2,014.75	2,454.98	2,426.09	28.89	84.989	
3,800.00	3,026.79	3,621.65	3,445.57	40.19	20.35	11.03	-3,789.09	2,017.63	2,365.63	2,336.22	29.42	80.417	
3,900.00	3,087.63	3,650.06	3,473.08	41.81	20.51	11.00	-3,782.31	2,019.74	2,276.67	2,246.70	29.97	75.976	
4,000.00	3,148.47	3,676.00	3,498.23	43.43	20.65	10.98	-3,776.30	2,021.71	2,188.06	2,157.52	30.53	71.658	
4,100.00	3,209.31	3,705.73	3,527.13	45.05	20.80	10.96	-3,769.69	2,023.99	2,099.85	2,068.74	31.11	67.494	
4,200.00	3,270.14	3,733.50	3,554.19	46.68	20.94	10.95	-3,763.82	2,026.10	2,012.10	1,980.39	31.71	63.449	
4,300.00	3,330.98	3,770.00	3,589.85	48.31	21.12	10.95	-3,756.55	2,028.87	1,924.86	1,892.55	32.31	59.574	
4,400.00	3,391.82	3,790.85	3,610.27	49.93	21.21	10.95	-3,752.66	2,030.42	1,838.09	1,805.12	32.97	55.747	
4,500.00	3,452.66	3,820.07	3,638.98	51.56	21.34	10.98	-3,747.58	2,032.50	1,751.94	1,718.31	33.63	52.090	
4,600.00	3,513.49	3,864.00	3,682.27	53.19	21.53	11.06	-3,740.75	2,035.39	1,666.51	1,632.26	34.25	48.651	
4,700.00	3,574.33	3,889.95	3,707.91	54.82	21.63	11.13	-3,737.09	2,036.92	1,581.49	1,546.51	34.98	45.212	
4,800.00	3,635.17	3,935.96	3,753.48	56.45	21.81	11.31	-3,731.03	2,039.10	1,496.85	1,461.24	35.62	42.025	
4,900.00	3,696.01	3,981.49	3,798.65	58.08	21.97	11.58	-3,725.57	2,040.59	1,412.49	1,376.21	36.27	38.939	
5,000.00	3,756.84	4,026.64	3,843.54	59.71	22.13	11.94	-3,720.78	2,041.34	1,328.47	1,291.51	36.95	35.949	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4841CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 897-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	4,067.57	3,884.29	61.34	22.26	12.37	-3,717.03	2,041.41	1,244.88	1,207.17	37.71	33.013	
5,200.00	3,878.52	4,103.11	3,919.74	62.97	22.35	12.82	-3,714.47	2,041.20	1,162.14	1,123.58	38.56	30.135	
5,300.00	3,939.36	4,146.00	3,962.57	64.61	22.47	13.47	-3,712.35	2,040.71	1,080.46	1,041.04	39.42	27.407	
5,400.00	4,000.19	4,189.95	4,006.49	66.24	22.57	14.26	-3,710.83	2,040.08	999.61	959.26	40.34	24.778	
5,500.00	4,061.03	4,242.45	4,058.96	67.87	22.69	15.34	-3,709.34	2,039.34	919.27	878.02	41.26	22.282	
5,600.00	4,121.87	4,297.94	4,114.43	69.51	22.81	16.69	-3,708.04	2,038.55	839.40	797.16	42.24	19.870	
5,700.00	4,182.71	4,350.54	4,167.02	71.14	22.93	18.20	-3,707.04	2,037.81	760.02	716.59	43.43	17.500	
5,800.00	4,243.54	4,398.10	4,214.58	72.77	23.02	19.80	-3,706.77	2,037.43	681.81	636.89	44.92	15.178	
5,900.00	4,304.38	4,447.62	4,264.09	74.41	23.12	21.76	-3,707.28	2,037.43	605.13	558.44	46.69	12.959	
6,000.00	4,365.22	4,498.92	4,315.37	76.04	23.20	24.22	-3,708.83	2,037.58	530.32	481.42	48.90	10.844	
6,100.00	4,426.06	4,558.55	4,374.93	77.68	23.30	27.80	-3,711.70	2,037.86	457.60	405.92	51.68	8.855	
6,200.00	4,486.90	4,623.50	4,439.80	79.31	23.40	32.88	-3,714.86	2,038.19	386.45	330.98	55.47	6.967	
6,300.00	4,547.73	4,688.05	4,504.28	80.95	23.51	39.67	-3,717.92	2,038.50	317.76	256.64	61.12	5.199	
6,400.00	4,608.57	4,751.76	4,567.91	82.58	23.62	48.84	-3,720.93	2,038.79	253.68	183.80	69.88	3.630	
6,500.00	4,669.41	4,816.10	4,632.18	84.22	23.73	61.40	-3,724.14	2,039.03	198.92	115.58	83.34	2.387	
6,600.00	4,730.25	4,882.10	4,698.13	85.86	23.84	78.09	-3,726.62	2,039.04	162.38	62.02	100.36	1.618	
6,660.50	4,767.05	4,920.41	4,736.43	86.85	23.92	89.01	-3,727.49	2,038.90	155.37	48.14	107.23	1.449	Level 3, CC, ES, SF
6,700.00	4,791.08	4,945.02	4,761.03	87.49	23.97	96.11	-3,727.92	2,038.79	158.42	50.46	107.96	1.467	Level 3
6,800.00	4,851.92	5,006.27	4,822.28	89.13	24.09	112.59	-3,728.59	2,038.45	190.20	91.39	98.81	1.925	
6,900.00	4,912.76	5,066.82	4,882.82	90.76	24.22	125.72	-3,729.18	2,037.95	244.57	158.32	86.25	2.835	
7,000.00	4,973.60	5,128.56	4,944.56	92.40	24.35	135.70	-3,729.83	2,037.37	309.83	232.85	76.98	4.025	
7,100.00	5,034.43	5,190.66	5,006.65	94.04	24.49	143.11	-3,730.28	2,037.12	380.23	309.44	70.79	5.371	
7,200.00	5,095.27	5,252.05	5,068.05	95.67	24.62	148.55	-3,730.73	2,036.96	453.43	386.72	66.71	6.797	
7,300.00	5,156.11	5,314.24	5,130.24	97.31	24.76	152.73	-3,731.26	2,036.82	528.27	464.22	64.05	8.248	
7,400.00	5,216.95	5,376.84	5,192.83	98.95	24.90	156.04	-3,731.61	2,037.02	604.04	541.78	62.26	9.701	
7,500.00	5,277.78	5,438.40	5,254.38	100.59	25.04	158.65	-3,731.92	2,037.35	680.49	619.44	61.05	11.147	
7,600.00	5,338.62	5,509.88	5,325.85	102.22	25.21	161.12	-3,732.19	2,038.31	757.17	696.64	60.53	12.510	
7,700.00	5,399.46	5,582.34	5,398.24	103.86	25.39	163.34	-3,732.06	2,041.59	833.15	772.96	60.19	13.842	
7,800.00	5,460.30	5,645.69	5,461.51	105.50	25.55	164.98	-3,731.97	2,044.85	909.23	849.38	59.85	15.191	
7,900.00	5,521.24	5,709.79	5,595.97	107.13	28.52	-173.60	-3,709.51	2,371.16	978.50	911.71	66.80	14.649	
8,000.00	5,584.83	5,766.64	5,627.69	108.61	28.87	-177.17	-3,711.98	2,417.07	1,014.39	945.18	69.21	14.657	
8,100.00	5,650.69	5,837.53	5,698.86	109.85	29.16	166.52	-3,713.30	2,450.73	1,052.54	980.82	71.71	14.677	
8,200.00	5,716.83	5,908.35	5,764.27	110.82	31.27	165.38	-3,714.50	2,465.69	1,090.59	1,005.97	84.62	12.888	
8,300.00	5,781.24	5,972.36	5,828.38	111.52	31.06	151.53	-3,714.69	2,469.82	1,133.73	1,047.71	86.02	13.179	
8,400.00	5,841.96	6,033.26	5,888.36	111.98	30.06	134.67	-3,715.12	2,543.55	1,178.99	1,096.07	82.93	14.217	
8,500.00	5,897.14	6,093.65	5,943.97	112.25	29.67	121.94	-3,714.61	2,503.84	1,224.13	1,140.88	83.25	14.704	
8,600.00	5,945.12	6,145.95	6,001.14	112.37	29.30	111.17	-3,713.76	2,466.02	1,267.17	1,183.10	84.07	15.073	
8,700.00	5,984.42	6,179.54	6,040.67	112.39	29.03	102.74	-3,712.77	2,435.91	1,306.41	1,220.48	85.93	15.203	
8,800.00	6,013.86	6,208.05	6,071.14	112.35	28.75	96.11	-3,711.24	2,401.78	1,340.41	1,252.40	88.01	15.231	
8,900.00	6,032.54	6,220.86	6,084.54	112.30	28.40	90.91	-3,708.53	2,354.87	1,367.40	1,277.76	89.64	15.254	
9,000.00	6,039.89	6,178.30	5,922.79	112.24	27.84	86.41	-3,704.17	2,273.16	1,385.00	1,295.79	89.22	15.524	
9,100.00	6,040.00	6,054.26	5,830.73	112.19	27.23	82.51	-3,706.76	2,190.38	1,393.98	1,305.43	88.54	15.743	
9,200.00	6,040.00	5,994.83	5,783.07	112.16	26.94	80.55	-3,709.82	2,155.03	1,406.38	1,314.99	91.39	15.389	
9,300.00	6,040.00	5,946.56	5,743.90	112.15	26.72	78.95	-3,712.19	2,126.91	1,423.62	1,328.88	94.74	15.027	
9,400.00	6,040.00	5,869.62	5,678.72	112.15	26.36	76.30	-3,717.71	2,086.60	1,445.26	1,348.38	96.88	14.918	
9,500.00	6,040.00	5,838.00	5,650.16	112.16	26.21	75.13	-3,721.70	2,073.68	1,471.30	1,370.37	100.93	14.577	
9,600.00	6,040.00	5,838.00	5,650.16	112.19	26.21	75.13	-3,721.70	2,073.68	1,503.35	1,397.55	105.79	14.210	
9,700.00	6,040.00	5,838.00	5,650.16	112.24	26.21	75.13	-3,721.70	2,073.68	1,541.23	1,431.01	110.22	13.983	
9,800.00	6,040.00	5,838.00	5,650.16	112.31	26.21	75.13	-3,721.70	2,073.68	1,584.52	1,470.32	114.20	13.875	
9,900.00	6,040.00	5,838.00	5,650.16	112.39	26.21	75.13	-3,721.70	2,073.68	1,632.80	1,515.06	117.74	13.868	
10,000.00	6,040.00	5,838.00	5,650.16	112.49	26.21	75.13	-3,721.70	2,073.68	1,685.63	1,564.77	120.86	13.947	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4841CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 897-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	5,796.80	5,611.38	112.62	26.04	73.56	-3,726.65	2,060.79	1,739.74	1,617.00	122.74	14.174	
10,200.00	6,040.00	5,792.71	5,607.43	112.77	26.02	73.40	-3,727.04	2,059.78	1,799.82	1,674.70	125.12	14.385	
10,300.00	6,040.00	5,789.00	5,603.84	112.94	26.01	73.26	-3,727.38	2,058.91	1,863.27	1,736.09	127.19	14.650	
10,400.00	6,040.00	5,785.62	5,600.56	113.14	25.99	73.13	-3,727.67	2,058.15	1,929.78	1,800.81	128.98	14.962	
10,500.00	6,040.00	5,744.00	5,559.55	113.36	25.82	71.52	-3,730.21	2,051.71	2,001.68	1,871.74	129.94	15.405	
10,600.00	6,040.00	5,744.00	5,559.55	113.62	25.82	71.52	-3,730.21	2,051.71	2,073.07	1,941.72	131.35	15.783	
10,700.00	6,040.00	5,744.00	5,559.55	113.91	25.82	71.52	-3,730.21	2,051.71	2,146.75	2,014.19	132.56	16.194	
10,800.00	6,040.00	5,744.00	5,559.55	114.24	25.82	71.52	-3,730.21	2,051.71	2,222.49	2,088.89	133.60	16.636	
10,900.00	6,040.00	5,744.00	5,559.55	114.61	25.82	71.52	-3,730.21	2,051.71	2,300.08	2,165.60	134.48	17.104	
11,000.00	6,040.00	5,744.00	5,559.55	115.02	25.82	71.52	-3,730.21	2,051.71	2,379.35	2,244.12	135.23	17.595	
11,100.00	6,040.00	5,744.00	5,559.55	115.49	25.82	71.52	-3,730.21	2,051.71	2,460.12	2,324.26	135.86	18.107	
11,200.00	6,040.00	5,744.00	5,559.55	116.00	25.82	71.52	-3,730.21	2,051.71	2,542.27	2,405.87	136.40	18.638	
11,300.00	6,040.00	5,744.00	5,559.55	116.58	25.82	71.52	-3,730.21	2,051.71	2,625.65	2,488.80	136.85	19.186	
11,400.00	6,040.00	5,744.00	5,559.55	117.22	25.82	71.52	-3,730.21	2,051.71	2,710.16	2,572.92	137.23	19.749	
11,500.00	6,040.00	5,744.00	5,559.55	117.92	25.82	71.52	-3,730.21	2,051.71	2,795.69	2,658.14	137.55	20.325	
11,600.00	6,040.00	5,744.00	5,559.55	118.70	25.82	71.52	-3,730.21	2,051.71	2,882.15	2,744.34	137.81	20.914	
11,700.00	6,040.00	5,744.00	5,559.55	119.56	25.82	71.52	-3,730.21	2,051.71	2,969.46	2,831.44	138.02	21.514	
11,800.00	6,040.00	5,744.00	5,559.55	120.51	25.82	71.52	-3,730.21	2,051.71	3,057.55	2,919.35	138.20	22.124	
11,900.00	6,040.00	5,744.00	5,559.55	121.54	25.82	71.52	-3,730.21	2,051.71	3,146.35	3,008.01	138.34	22.744	
12,000.00	6,040.00	5,744.00	5,559.55	122.66	25.82	71.52	-3,730.21	2,051.71	3,235.81	3,097.36	138.45	23.372	
12,100.00	6,040.00	5,744.00	5,559.55	123.87	25.82	71.52	-3,730.21	2,051.71	3,325.86	3,187.33	138.53	24.009	
12,200.00	6,040.00	5,744.00	5,559.55	125.17	25.82	71.52	-3,730.21	2,051.71	3,416.47	3,277.88	138.59	24.652	
12,300.00	6,040.00	5,744.00	5,559.55	126.57	25.82	71.52	-3,730.21	2,051.71	3,507.59	3,368.96	138.63	25.302	
12,400.00	6,040.00	5,744.00	5,559.55	128.06	25.82	71.52	-3,730.21	2,051.71	3,599.18	3,460.53	138.65	25.958	
12,500.00	6,040.00	5,744.00	5,559.55	129.63	25.82	71.52	-3,730.21	2,051.71	3,691.21	3,552.55	138.66	26.620	
12,600.00	6,040.00	5,744.00	5,559.55	131.29	25.82	71.52	-3,730.21	2,051.71	3,783.64	3,644.98	138.66	27.287	
12,700.00	6,040.00	5,744.00	5,559.55	133.03	25.82	71.52	-3,730.21	2,051.71	3,876.45	3,737.80	138.64	27.960	
12,800.00	6,040.00	5,744.00	5,559.55	134.84	25.82	71.52	-3,730.21	2,051.71	3,969.60	3,830.98	138.62	28.636	
12,900.00	6,040.00	5,744.00	5,559.55	136.71	25.82	71.52	-3,730.21	2,051.71	4,063.09	3,924.49	138.59	29.317	
13,000.00	6,040.00	5,744.00	5,559.55	138.66	25.82	71.52	-3,730.21	2,051.71	4,156.87	4,018.32	138.55	30.002	
13,100.00	6,040.00	5,744.00	5,559.55	140.66	25.82	71.52	-3,730.21	2,051.71	4,250.94	4,112.43	138.51	30.690	
13,200.00	6,040.00	5,744.00	5,559.55	142.71	25.82	71.52	-3,730.21	2,051.71	4,345.28	4,206.81	138.46	31.382	
13,300.00	6,040.00	5,744.00	5,559.55	144.81	25.82	71.52	-3,730.21	2,051.71	4,439.86	4,301.44	138.41	32.077	
13,400.00	6,040.00	5,744.00	5,559.55	146.96	25.82	71.52	-3,730.21	2,051.71	4,534.67	4,396.31	138.36	32.775	
13,500.00	6,040.00	5,744.00	5,559.55	149.14	25.82	71.52	-3,730.21	2,051.71	4,629.70	4,491.40	138.30	33.476	
13,600.00	6,040.00	5,744.00	5,559.55	151.36	25.82	71.52	-3,730.21	2,051.71	4,724.94	4,586.70	138.24	34.179	
13,700.00	6,040.00	5,744.00	5,559.55	153.62	25.82	71.52	-3,730.21	2,051.71	4,820.37	4,682.19	138.18	34.885	
13,800.00	6,040.00	5,744.00	5,559.55	155.91	25.82	71.52	-3,730.21	2,051.71	4,915.98	4,777.87	138.11	35.594	
13,900.00	6,040.00	5,744.00	5,559.55	158.22	25.82	71.52	-3,730.21	2,051.71	5,011.77	4,873.72	138.05	36.304	
14,000.00	6,040.00	5,744.00	5,559.55	160.56	25.82	71.52	-3,730.21	2,051.71	5,107.71	4,969.73	137.98	37.017	
14,100.00	6,040.00	5,744.00	5,559.55	162.92	25.82	71.52	-3,730.21	2,051.71	5,203.81	5,065.89	137.92	37.731	
14,200.00	6,040.00	5,744.00	5,559.55	165.30	25.82	71.52	-3,730.21	2,051.71	5,300.05	5,162.20	137.85	38.447	
14,300.00	6,040.00	5,744.00	5,559.55	167.70	25.82	71.52	-3,730.21	2,051.71	5,396.43	5,258.65	137.79	39.165	
14,400.00	6,040.00	5,744.00	5,559.55	170.12	25.82	71.52	-3,730.21	2,051.71	5,492.94	5,355.22	137.72	39.885	
14,500.00	6,040.00	5,744.00	5,559.55	172.55	25.82	71.52	-3,730.21	2,051.71	5,589.57	5,451.92	137.65	40.606	
14,600.00	6,040.00	5,744.00	5,559.55	175.00	25.82	71.52	-3,730.21	2,051.71	5,686.32	5,548.73	137.59	41.329	
14,700.00	6,040.00	5,744.00	5,559.55	177.46	25.82	71.52	-3,730.21	2,051.71	5,783.18	5,645.66	137.52	42.053	
14,800.00	6,040.00	5,744.00	5,559.55	179.94	25.82	71.52	-3,730.21	2,051.71	5,880.14	5,742.68	137.46	42.778	
14,900.00	6,040.00	5,744.00	5,559.55	182.43	25.82	71.52	-3,730.21	2,051.71	5,977.20	5,839.81	137.39	43.505	
15,000.00	6,040.00	5,710.41	5,526.09	184.92	25.73	70.25	-3,731.24	2,048.90	6,073.98	5,936.73	137.25	44.255	
15,100.00	6,040.00	5,708.55	5,524.24	187.43	25.72	70.18	-3,731.29	2,048.76	6,171.19	6,034.01	137.18	44.985	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4841CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 897-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,200.00	6,040.00	5,706.74	5,522.43	189.95	25.72	70.11	-3,731.33	2,048.63	6,268.49	6,131.37	137.12	45.716	
15,300.00	6,040.00	5,704.96	5,520.66	192.48	25.71	70.04	-3,731.37	2,048.49	6,365.86	6,228.81	137.05	46.448	
15,400.00	6,040.00	5,703.21	5,518.92	195.01	25.71	69.97	-3,731.41	2,048.36	6,463.32	6,326.32	136.99	47.180	
15,500.00	6,040.00	5,701.51	5,517.22	197.55	25.70	69.91	-3,731.44	2,048.24	6,560.84	6,423.91	136.93	47.914	
15,600.00	6,040.00	5,699.83	5,515.55	200.10	25.70	69.85	-3,731.47	2,048.12	6,658.44	6,521.58	136.87	48.648	
15,700.00	6,040.00	5,698.19	5,513.91	202.65	25.69	69.79	-3,731.51	2,048.00	6,756.11	6,619.30	136.81	49.383	
15,800.00	6,040.00	5,696.58	5,512.31	205.22	25.69	69.73	-3,731.54	2,047.89	6,853.85	6,717.10	136.75	50.119	
15,900.00	6,040.00	5,695.00	5,510.73	207.78	25.69	69.67	-3,731.57	2,047.78	6,951.64	6,814.95	136.69	50.856	
16,000.00	6,040.00	5,693.45	5,509.19	210.36	25.68	69.61	-3,731.59	2,047.67	7,049.50	6,912.86	136.64	51.593	
16,100.00	6,040.00	5,691.94	5,507.67	212.93	25.68	69.55	-3,731.62	2,047.56	7,147.42	7,010.83	136.58	52.330	
16,200.00	6,040.00	5,690.44	5,506.18	215.52	25.67	69.50	-3,731.64	2,047.46	7,245.39	7,108.86	136.53	53.069	
16,300.00	6,040.00	5,688.98	5,504.73	218.11	25.67	69.44	-3,731.67	2,047.36	7,343.41	7,206.94	136.48	53.808	
16,400.00	6,040.00	5,687.55	5,503.29	220.70	25.66	69.39	-3,731.69	2,047.27	7,441.49	7,305.06	136.42	54.547	
16,500.00	6,040.00	5,686.14	5,501.89	223.29	25.66	69.34	-3,731.71	2,047.17	7,539.61	7,403.24	136.37	55.287	
16,600.00	6,040.00	5,685.00	5,465.81	225.89	25.56	68.00	-3,731.97	2,045.07	7,638.16	7,501.90	136.26	56.055	
16,700.00	6,040.00	5,650.00	5,465.81	228.50	25.56	68.00	-3,731.97	2,045.07	7,736.35	7,600.13	136.22	56.795	
16,800.00	6,040.00	5,650.00	5,465.81	231.11	25.56	68.00	-3,731.97	2,045.07	7,834.58	7,698.41	136.17	57.535	
16,900.00	6,040.00	5,650.00	5,465.81	233.72	25.56	68.00	-3,731.97	2,045.07	7,932.86	7,796.73	136.13	58.275	
17,000.00	6,040.00	5,650.00	5,465.81	236.33	25.56	68.00	-3,731.97	2,045.07	8,031.18	7,895.09	136.08	59.016	
17,100.00	6,040.00	5,650.00	5,465.81	238.95	25.56	68.00	-3,731.97	2,045.07	8,129.54	7,993.50	136.04	59.757	
17,200.00	6,040.00	5,650.00	5,465.81	241.57	25.56	68.00	-3,731.97	2,045.07	8,227.94	8,091.94	136.00	60.499	
17,300.00	6,040.00	5,650.00	5,465.81	244.19	25.56	68.00	-3,731.97	2,045.07	8,326.38	8,190.42	135.96	61.240	
17,400.00	6,040.00	5,650.00	5,465.81	246.82	25.56	68.00	-3,731.97	2,045.07	8,424.85	8,288.93	135.92	61.982	
17,500.00	6,040.00	5,650.00	5,465.81	249.45	25.56	68.00	-3,731.97	2,045.07	8,523.36	8,387.48	135.89	62.725	
17,600.00	6,040.00	5,650.00	5,465.81	252.08	25.56	68.00	-3,731.97	2,045.07	8,621.91	8,486.06	135.85	63.467	
17,700.00	6,040.00	5,650.00	5,465.81	254.71	25.56	68.00	-3,731.97	2,045.07	8,720.49	8,584.68	135.81	64.210	
17,800.00	6,040.00	5,650.00	5,465.81	257.35	25.56	68.00	-3,731.97	2,045.07	8,819.10	8,683.32	135.78	64.953	
17,900.00	6,040.00	5,650.00	5,465.81	259.99	25.56	68.00	-3,731.97	2,045.07	8,917.74	8,782.00	135.74	65.696	
18,000.00	6,040.00	5,650.00	5,465.81	262.63	25.56	68.00	-3,731.97	2,045.07	9,016.41	8,880.70	135.71	66.440	
18,100.00	6,040.00	5,650.00	5,465.81	265.27	25.56	68.00	-3,731.97	2,045.07	9,115.11	8,979.44	135.68	67.183	
18,200.00	6,040.00	5,650.00	5,465.81	267.91	25.56	68.00	-3,731.97	2,045.07	9,213.84	9,078.20	135.64	67.927	
18,300.00	6,040.00	5,650.00	5,465.81	270.56	25.56	68.00	-3,731.97	2,045.07	9,312.59	9,176.98	135.61	68.671	
18,400.00	6,040.00	5,650.00	5,465.81	273.21	25.56	68.00	-3,731.97	2,045.07	9,411.38	9,275.79	135.58	69.415	
18,500.00	6,040.00	5,650.00	5,465.81	275.86	25.56	68.00	-3,731.97	2,045.07	9,510.18	9,374.63	135.55	70.159	
18,600.00	6,040.00	5,650.00	5,465.81	278.51	25.56	68.00	-3,731.97	2,045.07	9,609.01	9,473.49	135.52	70.903	
18,700.00	6,040.00	5,650.00	5,465.81	281.16	25.56	68.00	-3,731.97	2,045.07	9,707.87	9,572.37	135.50	71.647	
18,800.00	6,040.00	5,650.00	5,465.81	283.81	25.56	68.00	-3,731.97	2,045.07	9,806.75	9,671.28	135.47	72.392	
18,900.00	6,040.00	5,650.00	5,465.81	286.47	25.56	68.00	-3,731.97	2,045.07	9,905.65	9,770.21	135.44	73.136	
18,919.70	6,040.00	5,650.00	5,465.81	286.99	25.56	68.00	-3,731.97	2,045.07	9,925.14	9,789.70	135.44	73.283	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4956C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 775-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	159.92	-4,794.63	1,752.73	5,105.03				
100.00	100.00	348.72	348.37	0.13	0.79	159.81	-4,782.41	1,758.58	5,103.01	5,102.10	0.91	5,618.520	
200.00	199.98	827.64	822.95	0.48	1.87	10.13	-4,725.97	1,785.58	5,092.16	5,089.86	2.30	2,214.523	
300.00	299.84	909.91	904.00	0.85	2.37	10.09	-4,713.11	1,791.58	5,074.86	5,071.76	3.10	1,638.875	
400.00	399.45	1,139.76	1,128.96	1.22	3.48	9.80	-4,671.50	1,813.15	5,052.73	5,048.24	4.49	1,125.418	
500.00	498.70	1,412.91	1,393.45	1.62	4.95	9.36	-4,610.88	1,844.26	5,024.06	5,017.88	6.18	813.135	
600.00	597.47	1,503.15	1,480.30	2.05	5.47	9.28	-4,588.95	1,855.13	4,990.65	4,983.66	6.99	714.318	
700.00	695.62	1,578.07	1,552.03	2.51	5.91	9.22	-4,570.31	1,866.10	4,954.38	4,946.64	7.74	640.231	
800.00	793.06	1,651.67	1,622.30	3.01	6.35	9.16	-4,551.87	1,877.93	4,915.28	4,906.78	8.50	578.474	
900.00	889.64	1,721.84	1,689.45	3.56	6.76	9.13	-4,534.69	1,888.82	4,873.42	4,864.17	9.24	527.243	
1,000.00	985.27	1,786.73	1,751.57	4.14	7.15	9.12	-4,519.01	1,899.15	4,828.90	4,818.93	9.97	484.492	
1,100.00	1,079.82	1,100.00	1,926.00	4.78	2.90	8.78	-4,472.37	1,930.01	4,780.48	4,773.97	6.51	734.708	
1,200.00	1,173.17	2,071.33	2,022.42	5.46	8.91	8.69	-4,445.49	1,946.31	4,728.16	4,715.87	12.29	384.814	
1,300.00	1,265.21	2,122.91	2,071.68	6.20	9.21	8.75	-4,432.24	1,953.91	4,673.27	4,660.32	12.95	360.976	
1,400.00	1,355.84	2,171.00	2,117.88	6.99	9.50	8.85	-4,420.52	1,960.29	4,616.14	4,602.55	13.59	339.674	
1,500.00	1,444.94	2,208.86	2,154.45	7.84	9.70	9.00	-4,411.81	1,964.84	4,556.90	4,542.73	14.17	321.552	
1,600.00	1,532.39	2,262.00	2,206.04	8.75	9.99	9.16	-4,400.46	1,970.58	4,495.70	4,480.87	14.83	303.227	
1,700.00	1,618.11	2,262.00	2,206.04	9.71	9.99	9.42	-4,400.46	1,970.58	4,432.52	4,417.27	15.25	290.686	
1,800.00	1,701.97	2,306.81	2,249.75	10.74	10.21	9.64	-4,391.72	1,975.12	4,367.41	4,351.55	15.86	275.350	
1,900.00	1,783.88	2,354.00	2,295.95	11.82	10.45	9.89	-4,383.38	1,979.96	4,300.72	4,284.23	16.49	260.868	
2,000.00	1,863.74	2,354.00	2,295.95	12.96	10.45	10.22	-4,383.38	1,979.96	4,232.07	4,215.15	16.93	250.020	
2,100.00	1,941.45	2,405.57	2,346.54	14.16	10.69	10.53	-4,374.99	1,985.36	4,161.61	4,144.04	17.57	236.868	
2,200.00	2,016.92	2,448.00	2,388.22	15.41	10.89	10.89	-4,368.46	1,989.92	4,089.30	4,071.12	18.18	224.965	
2,300.00	2,090.05	2,505.14	2,444.42	16.73	11.15	11.29	-4,360.01	1,995.84	4,014.98	3,996.15	18.83	213.213	
2,400.00	2,160.76	2,576.05	2,514.29	18.10	11.47	11.76	-4,349.86	2,002.43	3,938.43	3,918.91	19.52	201.766	
2,500.00	2,228.95	2,679.03	2,615.80	19.53	11.93	12.35	-4,334.88	2,011.09	3,859.44	3,839.15	20.29	190.202	
2,600.00	2,294.55	2,763.49	2,698.81	21.01	12.32	13.02	-4,321.27	2,018.70	3,777.58	3,756.59	20.99	179.968	
2,700.00	2,357.48	2,810.07	2,744.63	22.55	12.53	13.78	-4,313.86	2,022.63	3,693.86	3,672.29	21.57	171.261	
2,800.00	2,418.42	2,825.00	2,759.33	24.13	12.60	14.01	-4,311.54	2,023.81	3,609.07	3,587.01	22.06	163.598	
2,900.00	2,479.25	2,866.75	2,800.47	25.71	12.79	14.08	-4,305.32	2,027.20	3,524.45	3,501.83	22.62	155.790	
3,000.00	2,540.09	2,892.61	2,825.98	27.31	12.90	14.13	-4,301.71	2,029.43	3,440.34	3,417.18	23.16	148.531	
3,100.00	2,600.93	2,919.00	2,852.03	28.90	13.02	14.18	-4,298.22	2,031.81	3,356.68	3,332.97	23.72	141.523	
3,200.00	2,661.77	2,952.19	2,884.83	30.51	13.15	14.25	-4,294.09	2,034.80	3,273.44	3,249.14	24.30	134.719	
3,300.00	2,722.61	2,985.86	2,918.14	32.11	13.30	14.33	-4,290.19	2,037.74	3,190.58	3,165.69	24.89	128.170	
3,400.00	2,783.44	3,021.86	2,953.81	33.72	13.44	14.42	-4,286.34	2,040.76	3,108.11	3,082.61	25.50	121.864	
3,500.00	2,844.28	3,066.04	2,997.62	35.34	13.62	14.54	-4,281.91	2,044.31	3,025.94	2,999.80	26.13	115.789	
3,600.00	2,905.12	3,108.00	3,039.27	36.95	13.78	14.68	-4,277.95	2,047.54	2,944.01	2,917.24	26.77	109.964	
3,700.00	2,965.96	3,148.75	3,079.76	38.57	13.93	14.82	-4,274.41	2,050.50	2,862.40	2,834.98	27.42	104.399	
3,800.00	3,026.79	3,187.86	3,118.66	40.19	14.07	14.98	-4,271.39	2,053.12	2,781.19	2,753.11	28.08	99.047	
3,900.00	3,087.63	3,228.98	3,159.62	41.81	14.22	15.16	-4,268.63	2,055.57	2,700.38	2,671.63	28.75	93.926	
4,000.00	3,148.47	3,271.36	3,201.90	43.43	14.35	15.39	-4,266.34	2,057.40	2,619.96	2,590.52	29.44	89.005	
4,100.00	3,209.31	3,313.31	3,243.79	45.05	14.48	15.66	-4,264.62	2,058.54	2,539.94	2,509.81	30.14	84.272	
4,200.00	3,270.14	3,354.65	3,285.11	46.68	14.60	15.96	-4,263.39	2,059.28	2,460.39	2,429.53	30.86	79.727	
4,300.00	3,330.98	3,399.07	3,329.52	48.31	14.73	16.31	-4,262.56	2,059.72	2,381.34	2,349.73	31.60	75.350	
4,400.00	3,391.82	3,456.94	3,387.38	49.93	14.88	16.81	-4,261.76	2,060.05	2,302.54	2,270.20	32.35	71.185	
4,500.00	3,452.66	3,516.13	3,446.57	51.56	15.04	17.36	-4,261.05	2,060.25	2,223.88	2,190.77	33.11	67.167	
4,600.00	3,513.49	3,576.42	3,506.85	53.19	15.20	17.96	-4,260.35	2,060.37	2,145.31	2,111.42	33.90	63.288	
4,700.00	3,574.33	3,636.19	3,566.61	54.82	15.36	18.60	-4,259.70	2,060.38	2,066.85	2,032.14	34.72	59.537	
4,800.00	3,635.17	3,696.85	3,627.28	56.45	15.53	19.31	-4,259.11	2,060.22	1,988.51	1,952.94	35.57	55.911	
4,900.00	3,696.01	3,758.94	3,689.36	58.08	15.69	20.09	-4,258.43	2,060.14	1,910.25	1,873.80	36.45	52.409	
5,000.00	3,756.84	3,817.38	3,747.80	59.71	15.85	20.88	-4,257.77	2,060.04	1,832.13	1,794.74	37.39	49.003	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4956C - OWB - FINAL SURVEY													Offset Site Error:	0.00 usft
Survey Program: 775-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	3,817.68	3,873.64	3,804.05	61.34	16.00	21.71	-4,257.30	2,059.70	1,754.26	1,715.87	38.39	45.695		
5,200.00	3,878.52	3,925.51	3,855.93	62.97	16.14	22.54	-4,257.07	2,059.36	1,676.81	1,637.34	39.47	42.481		
5,300.00	3,939.36	3,983.37	3,913.79	64.61	16.29	23.55	-4,257.07	2,059.02	1,599.85	1,559.25	40.60	39.403		
5,400.00	4,000.19	4,047.43	3,977.84	66.24	16.46	24.76	-4,257.01	2,058.52	1,523.08	1,481.30	41.79	36.449		
5,500.00	4,061.03	4,111.45	4,041.86	67.87	16.63	26.10	-4,256.82	2,057.92	1,446.48	1,403.41	43.07	33.582		
5,600.00	4,121.87	4,170.25	4,100.66	69.51	16.79	27.45	-4,256.56	2,057.33	1,370.15	1,325.65	44.50	30.788		
5,700.00	4,182.71	4,224.97	4,155.37	71.14	16.93	28.83	-4,256.50	2,056.80	1,294.46	1,248.37	46.10	28.081		
5,800.00	4,243.54	4,278.08	4,208.48	72.77	17.07	30.29	-4,256.71	2,056.35	1,219.59	1,171.72	47.87	25.478		
5,900.00	4,304.38	4,331.60	4,262.00	74.41	17.21	31.90	-4,257.26	2,055.98	1,145.72	1,095.89	49.84	22.990		
6,000.00	4,365.22	4,397.41	4,327.80	76.04	17.38	34.09	-4,258.00	2,055.60	1,072.67	1,020.71	51.96	20.643		
6,100.00	4,426.06	4,458.25	4,388.63	77.68	17.54	36.34	-4,258.51	2,055.29	1,000.35	945.95	54.40	18.387		
6,200.00	4,486.90	4,516.23	4,446.61	79.31	17.69	38.72	-4,259.15	2,055.13	929.31	872.10	57.21	16.245		
6,300.00	4,547.73	4,586.70	4,517.08	80.95	17.88	41.98	-4,259.72	2,054.95	859.45	799.10	60.35	14.242		
6,400.00	4,608.57	4,651.44	4,581.82	82.58	18.07	45.39	-4,259.67	2,054.66	790.76	726.72	64.04	12.348		
6,500.00	4,669.41	4,713.04	4,643.42	84.22	18.24	49.06	-4,259.48	2,054.28	724.18	655.80	68.38	10.590		
6,600.00	4,730.25	4,774.80	4,705.18	85.86	18.42	53.19	-4,259.19	2,054.04	660.40	586.97	73.43	8.994		
6,700.00	4,791.08	4,834.48	4,764.86	87.49	18.60	57.63	-4,258.87	2,054.05	600.36	521.09	79.27	7.574		
6,800.00	4,851.92	4,893.17	4,823.54	89.13	18.77	62.45	-4,258.78	2,054.15	545.54	459.63	85.91	6.350		
6,900.00	4,912.76	4,957.36	4,887.73	90.76	18.96	68.25	-4,258.64	2,054.41	497.31	404.13	93.18	5.337		
7,000.00	4,973.60	5,019.93	4,950.29	92.40	19.14	74.41	-4,258.20	2,054.87	457.47	356.76	100.70	4.543		
7,100.00	5,034.43	5,081.17	5,011.54	94.04	19.33	80.83	-4,257.66	2,055.40	428.68	321.07	107.61	3.984		
7,200.00	5,095.27	5,142.82	5,073.18	95.67	19.52	87.56	-4,257.07	2,056.05	413.30	300.60	112.70	3.667		
7,253.48	5,127.81	5,175.86	5,106.21	96.55	19.62	91.21	-4,256.73	2,056.47	411.13	296.83	114.30	3.597 CC, ES		
7,300.00	5,156.11	5,204.60	5,134.95	97.31	19.71	94.39	-4,256.47	2,056.89	412.77	297.83	114.94	3.591 SF		
7,400.00	5,216.95	5,267.19	5,197.52	98.95	19.91	101.19	-4,256.11	2,058.04	427.06	312.97	114.09	3.743		
7,500.00	5,277.78	5,328.74	5,259.06	100.59	20.10	107.63	-4,255.69	2,059.33	454.69	343.92	110.77	4.105		
7,600.00	5,338.62	5,389.01	5,319.32	102.22	20.29	113.59	-4,254.87	2,060.56	493.64	387.62	106.02	4.656		
7,700.00	5,399.46	5,448.83	5,379.12	103.86	20.48	119.05	-4,254.10	2,061.67	541.61	440.76	100.85	5.370		
7,800.00	5,460.30	5,518.26	5,448.53	105.50	20.70	124.74	-4,253.59	2,063.25	596.03	499.98	96.05	6.206		
7,900.00	5,521.24	5,599.12	5,529.32	107.13	20.96	128.44	-4,253.48	2,066.42	654.18	562.32	91.86	7.121		
8,000.00	5,584.83	5,613.60	5,543.16	108.61	21.15	132.19	-4,227.08	2,077.92	680.72	615.07	86.64	8.037		
8,100.00	5,650.69	5,682.72	5,612.04	109.85	21.34	136.02	-4,227.08	2,072.03	667.08	593.74	83.34	9.096		
8,141.50	5,678.22	5,710.25	5,640.04	110.25	21.53	139.85	-4,227.08	2,072.03	665.77	589.51	81.05	9.731		
8,200.00	5,716.83	5,748.86	5,688.11	110.82	21.72	143.68	-4,227.08	2,072.03	668.34	588.44	79.90	8.365		
8,300.00	5,781.24	5,813.27	5,741.27	111.52	21.91	147.44	-4,227.09	2,068.31	683.86	599.45	84.41	8.101		
8,400.00	5,841.96	5,873.99	5,801.99	111.98	22.10	151.19	-4,227.12	2,064.38	710.55	623.32	87.23	8.146		
8,500.00	5,897.14	5,929.17	5,867.17	112.25	22.29	154.94	-4,226.92	2,059.25	744.12	655.90	88.23	8.434		
8,600.00	5,945.12	5,977.15	5,915.15	112.37	22.48	158.69	-4,225.27	2,058.28	779.84	691.42	88.42	8.820		
8,700.00	5,984.42	6,016.45	5,952.45	112.39	22.67	162.44	-4,222.18	2,056.69	810.53	735.40	88.61	9.206		
8,800.00	6,013.86	6,045.89	5,981.89	112.35	22.86	166.19	-4,230.84	2,054.96	827.41	754.21	88.80	9.592		
8,900.00	6,032.54	6,064.57	6,000.57	112.30	23.05	169.94	-4,232.93	2,053.23	841.18	761.87	89.00	9.978		
9,000.00	6,039.89	6,071.92	6,007.92	112.24	23.24	173.69	-4,234.36	2,051.50	851.50	765.49	89.20	10.364		
9,100.00	6,040.00	6,072.03	6,008.03	112.19	23.43	177.44	-4,235.22	2,049.77	862.73	770.47	89.40	10.750		
9,200.00	6,040.00	6,072.14	6,008.14	112.16	23.62	181.19	-4,236.38	2,048.04	874.06	775.55	89.60	11.136		
9,300.00	6,040.00	6,072.25	6,008.25	112.15	23.81	184.94	-4,237.73	2,046.31	885.39	780.63	89.80	11.522		
9,400.00	6,040.00	6,072.36	6,008.36	112.15	24.00	188.69	-4,239.72	2,044.58	896.72	785.71	90.00	11.908		
9,500.00	6,040.00	6,072.47	6,008.47	112.16	24.19	192.44	-4,241.90	2,042.85	908.05	790.79	90.20	12.294		
9,600.00	6,040.00	6,072.58	6,008.58	112.19	24.38	196.19	-4,243.00	2,041.12	919.38	795.87	90.40	12.680		
9,700.00	6,040.00	6,072.69	6,008.69	112.24	24.57	200.00	-4,245.04	2,039.39	930.71	800.95	90.60	13.066		
9,800.00	6,040.00	6,072.80	6,008.80	112.31	24.76	203.75	-4,246.17	2,037.66	942.04	806.03	90.80	13.452		
9,900.00	6,040.00	6,072.91	6,008.91	112.39	24.95	207.50	-4,247.15	2,035.93	953.37	811.11	91.00	13.838		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4956C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 775-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,000.00	6,040.00	5,769.66	5,697.38	112.49	21.62	69.37	-4,248.00	2,092.39	1,295.74	1,169.22	126.52	10.242	
10,100.00	6,040.00	5,740.00	5,668.69	112.62	21.48	67.62	-4,249.99	2,085.15	1,370.24	1,242.84	127.41	10.755	
10,200.00	6,040.00	5,740.00	5,668.69	112.77	21.48	67.62	-4,249.99	2,085.15	1,447.12	1,318.42	128.69	11.245	
10,300.00	6,040.00	5,740.00	5,668.69	112.94	21.48	67.62	-4,249.99	2,085.15	1,526.67	1,397.01	129.67	11.774	
10,400.00	6,040.00	5,740.00	5,668.69	113.14	21.48	67.62	-4,249.99	2,085.15	1,608.51	1,478.11	130.40	12.335	
10,500.00	6,040.00	5,740.00	5,668.69	113.36	21.48	67.62	-4,249.99	2,085.15	1,692.30	1,561.37	130.94	12.925	
10,600.00	6,040.00	5,740.00	5,668.69	113.62	21.48	67.62	-4,249.99	2,085.15	1,777.77	1,646.45	131.32	13.537	
10,700.00	6,040.00	5,740.00	5,668.69	113.91	21.48	67.62	-4,249.99	2,085.15	1,864.69	1,733.10	131.59	14.170	
10,800.00	6,040.00	5,740.00	5,668.69	114.24	21.48	67.62	-4,249.99	2,085.15	1,952.85	1,821.09	131.77	14.820	
10,900.00	6,040.00	5,740.00	5,668.69	114.61	21.48	67.62	-4,249.99	2,085.15	2,042.11	1,910.24	131.87	15.486	
11,000.00	6,040.00	5,703.50	5,633.00	115.02	21.33	65.50	-4,251.92	2,077.79	2,130.96	1,999.40	131.56	16.198	
11,100.00	6,040.00	5,699.59	5,629.15	115.49	21.32	65.28	-4,252.07	2,077.11	2,221.72	2,090.16	131.55	16.889	
11,200.00	6,040.00	5,695.92	5,625.54	116.00	21.30	65.07	-4,252.21	2,076.49	2,313.21	2,181.69	131.52	17.589	
11,300.00	6,040.00	5,692.47	5,622.14	116.58	21.29	64.88	-4,252.34	2,075.93	2,405.35	2,273.90	131.46	18.298	
11,400.00	6,040.00	5,689.23	5,618.93	117.22	21.28	64.69	-4,252.45	2,075.42	2,498.08	2,366.70	131.38	19.015	
11,500.00	6,040.00	5,686.16	5,615.91	117.92	21.27	64.52	-4,252.54	2,074.95	2,591.33	2,460.04	131.29	19.738	
11,600.00	6,040.00	5,683.27	5,613.05	118.70	21.25	64.36	-4,252.63	2,074.52	2,685.05	2,553.86	131.18	20.468	
11,700.00	6,040.00	5,646.00	5,576.06	119.56	21.11	62.30	-4,253.27	2,070.05	2,780.34	2,649.50	130.84	21.250	
11,800.00	6,040.00	5,646.00	5,576.06	120.51	21.11	62.30	-4,253.27	2,070.05	2,874.69	2,743.94	130.75	21.986	
11,900.00	6,040.00	5,646.00	5,576.06	121.54	21.11	62.30	-4,253.27	2,070.05	2,969.41	2,838.75	130.66	22.727	
12,000.00	6,040.00	5,646.00	5,576.06	122.66	21.11	62.30	-4,253.27	2,070.05	3,064.47	2,933.91	130.56	23.472	
12,100.00	6,040.00	5,646.00	5,576.06	123.87	21.11	62.30	-4,253.27	2,070.05	3,159.83	3,029.37	130.45	24.222	
12,200.00	6,040.00	5,646.00	5,576.06	125.17	21.11	62.30	-4,253.27	2,070.05	3,255.47	3,125.12	130.34	24.976	
12,300.00	6,040.00	5,646.00	5,576.06	126.57	21.11	62.30	-4,253.27	2,070.05	3,351.36	3,221.13	130.23	25.733	
12,400.00	6,040.00	5,646.00	5,576.06	128.06	21.11	62.30	-4,253.27	2,070.05	3,447.49	3,317.36	130.12	26.494	
12,500.00	6,040.00	5,646.00	5,576.06	129.63	21.11	62.30	-4,253.27	2,070.05	3,543.83	3,413.82	130.01	27.257	
12,600.00	6,040.00	5,646.00	5,576.06	131.29	21.11	62.30	-4,253.27	2,070.05	3,640.37	3,510.46	129.90	28.024	
12,700.00	6,040.00	5,646.00	5,576.06	133.03	21.11	62.30	-4,253.27	2,070.05	3,737.09	3,607.30	129.79	28.793	
12,800.00	6,040.00	5,646.00	5,576.06	134.84	21.11	62.30	-4,253.27	2,070.05	3,833.98	3,704.29	129.68	29.564	
12,900.00	6,040.00	5,646.00	5,576.06	136.71	21.11	62.30	-4,253.27	2,070.05	3,931.02	3,801.45	129.58	30.337	
13,000.00	6,040.00	5,646.00	5,576.06	138.66	21.11	62.30	-4,253.27	2,070.05	4,028.21	3,898.74	129.47	31.113	
13,100.00	6,040.00	5,646.00	5,576.06	140.66	21.11	62.30	-4,253.27	2,070.05	4,125.54	3,996.17	129.37	31.890	
13,200.00	6,040.00	5,646.00	5,576.06	142.71	21.11	62.30	-4,253.27	2,070.05	4,222.99	4,093.72	129.27	32.669	
13,300.00	6,040.00	5,646.00	5,576.06	144.81	21.11	62.30	-4,253.27	2,070.05	4,320.55	4,191.38	129.17	33.449	
13,400.00	6,040.00	5,646.00	5,576.06	146.96	21.11	62.30	-4,253.27	2,070.05	4,418.23	4,289.16	129.07	34.231	
13,500.00	6,040.00	5,646.00	5,576.06	149.14	21.11	62.30	-4,253.27	2,070.05	4,516.00	4,387.03	128.97	35.015	
13,600.00	6,040.00	5,646.00	5,576.06	151.36	21.11	62.30	-4,253.27	2,070.05	4,613.87	4,484.99	128.88	35.800	
13,700.00	6,040.00	5,646.00	5,576.06	153.62	21.11	62.30	-4,253.27	2,070.05	4,711.83	4,583.04	128.79	36.586	
13,800.00	6,040.00	5,646.00	5,576.06	155.91	21.11	62.30	-4,253.27	2,070.05	4,809.88	4,681.18	128.70	37.373	
13,900.00	6,040.00	5,646.00	5,576.06	158.22	21.11	62.30	-4,253.27	2,070.05	4,908.00	4,779.39	128.61	38.161	
14,000.00	6,040.00	5,646.00	5,576.06	160.56	21.11	62.30	-4,253.27	2,070.05	5,006.20	4,877.67	128.53	38.950	
14,100.00	6,040.00	5,646.00	5,576.06	162.92	21.11	62.30	-4,253.27	2,070.05	5,104.47	4,976.02	128.45	39.740	
14,200.00	6,040.00	5,646.00	5,576.06	165.30	21.11	62.30	-4,253.27	2,070.05	5,202.80	5,074.43	128.37	40.530	
14,300.00	6,040.00	5,646.00	5,576.06	167.70	21.11	62.30	-4,253.27	2,070.05	5,301.20	5,172.91	128.29	41.322	
14,400.00	6,040.00	5,646.00	5,576.06	170.12	21.11	62.30	-4,253.27	2,070.05	5,399.65	5,271.44	128.21	42.114	
14,500.00	6,040.00	5,646.00	5,576.06	172.55	21.11	62.30	-4,253.27	2,070.05	5,498.16	5,370.02	128.14	42.907	
14,600.00	6,040.00	5,646.00	5,576.06	175.00	21.11	62.30	-4,253.27	2,070.05	5,596.73	5,468.66	128.07	43.701	
14,700.00	6,040.00	5,646.00	5,576.06	177.46	21.11	62.30	-4,253.27	2,070.05	5,695.34	5,567.34	128.00	44.495	
14,800.00	6,040.00	5,646.00	5,576.06	179.94	21.11	62.30	-4,253.27	2,070.05	5,794.00	5,666.07	127.93	45.290	
14,900.00	6,040.00	5,646.00	5,576.06	182.43	21.11	62.30	-4,253.27	2,070.05	5,892.71	5,764.84	127.87	46.085	
15,000.00	6,040.00	5,646.00	5,576.06	184.92	21.11	62.30	-4,253.27	2,070.05	5,991.46	5,863.66	127.80	46.881	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-4956C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 775-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,100.00	6,040.00	5,646.00	5,576.06	187.43	21.11	62.30	-4,253.27	2,070.05	6,090.25	5,962.51	127.74	47.677	
15,200.00	6,040.00	5,646.00	5,576.06	189.95	21.11	62.30	-4,253.27	2,070.05	6,189.08	6,061.40	127.68	48.474	
15,300.00	6,040.00	5,646.00	5,576.06	192.48	21.11	62.30	-4,253.27	2,070.05	6,287.94	6,160.32	127.62	49.271	
15,400.00	6,040.00	5,646.00	5,576.06	195.01	21.11	62.30	-4,253.27	2,070.05	6,386.85	6,259.28	127.56	50.068	
15,500.00	6,040.00	5,646.00	5,576.06	197.55	21.11	62.30	-4,253.27	2,070.05	6,485.78	6,358.27	127.51	50.866	
15,600.00	6,040.00	5,646.00	5,576.06	200.10	21.11	62.30	-4,253.27	2,070.05	6,584.75	6,457.29	127.45	51.664	
15,700.00	6,040.00	5,646.00	5,576.06	202.65	21.11	62.30	-4,253.27	2,070.05	6,683.75	6,556.34	127.40	52.462	
15,800.00	6,040.00	5,646.00	5,576.06	205.22	21.11	62.30	-4,253.27	2,070.05	6,782.77	6,655.42	127.35	53.260	
15,900.00	6,040.00	5,646.00	5,576.06	207.78	21.11	62.30	-4,253.27	2,070.05	6,881.83	6,754.53	127.30	54.059	
16,000.00	6,040.00	5,608.65	5,538.83	210.36	20.99	60.32	-4,253.45	2,067.04	6,980.33	6,853.15	127.18	54.885	
16,100.00	6,040.00	5,607.49	5,537.68	212.93	20.98	60.26	-4,253.45	2,066.96	7,079.41	6,952.28	127.13	55.685	
16,200.00	6,040.00	5,606.36	5,536.55	215.52	20.98	60.20	-4,253.46	2,066.88	7,178.51	7,051.42	127.09	56.485	
16,300.00	6,040.00	5,605.25	5,535.44	218.11	20.98	60.14	-4,253.46	2,066.81	7,277.63	7,150.59	127.04	57.286	
16,400.00	6,040.00	5,604.17	5,534.36	220.70	20.97	60.08	-4,253.47	2,066.74	7,376.77	7,249.77	127.00	58.086	
16,500.00	6,040.00	5,603.11	5,533.30	223.29	20.97	60.03	-4,253.47	2,066.67	7,475.94	7,348.98	126.96	58.886	
16,600.00	6,040.00	5,602.07	5,532.27	225.89	20.97	59.98	-4,253.47	2,066.61	7,575.12	7,448.21	126.91	59.687	
16,700.00	6,040.00	5,601.06	5,531.26	228.50	20.96	59.92	-4,253.48	2,066.54	7,674.33	7,547.46	126.87	60.488	
16,800.00	6,040.00	5,600.07	5,530.27	231.11	20.96	59.87	-4,253.48	2,066.48	7,773.56	7,646.72	126.84	61.288	
16,900.00	6,040.00	5,599.10	5,529.30	233.72	20.96	59.82	-4,253.48	2,066.42	7,872.81	7,746.01	126.80	62.089	
17,000.00	6,040.00	5,598.15	5,528.36	236.33	20.95	59.77	-4,253.49	2,066.36	7,972.07	7,845.31	126.76	62.890	
17,100.00	6,040.00	5,597.22	5,527.43	238.95	20.95	59.73	-4,253.49	2,066.31	8,071.35	7,944.62	126.73	63.690	
17,200.00	6,040.00	5,596.31	5,526.52	241.57	20.95	59.68	-4,253.49	2,066.25	8,170.65	8,043.95	126.69	64.491	
17,300.00	6,040.00	5,595.42	5,525.63	244.19	20.94	59.63	-4,253.49	2,066.20	8,269.96	8,143.30	126.66	65.292	
17,400.00	6,040.00	5,594.55	5,524.76	246.82	20.94	59.59	-4,253.50	2,066.15	8,369.29	8,242.66	126.63	66.093	
17,500.00	6,040.00	5,593.69	5,523.91	249.45	20.94	59.54	-4,253.50	2,066.10	8,468.64	8,342.04	126.60	66.893	
17,600.00	6,040.00	5,592.86	5,523.07	252.08	20.94	59.50	-4,253.50	2,066.05	8,568.00	8,441.43	126.57	67.694	
17,700.00	6,040.00	5,592.03	5,522.25	254.71	20.93	59.46	-4,253.50	2,066.01	8,667.37	8,540.83	126.54	68.495	
17,800.00	6,040.00	5,591.23	5,521.44	257.35	20.93	59.42	-4,253.51	2,065.96	8,766.76	8,640.25	126.51	69.295	
17,900.00	6,040.00	5,552.00	5,482.25	259.99	20.80	57.45	-4,253.57	2,064.29	8,866.75	8,740.33	126.42	70.138	
18,000.00	6,040.00	5,552.00	5,482.25	262.63	20.80	57.45	-4,253.57	2,064.29	8,966.14	8,839.75	126.40	70.937	
18,100.00	6,040.00	5,552.00	5,482.25	265.27	20.80	57.45	-4,253.57	2,064.29	9,065.54	8,939.17	126.37	71.737	
18,200.00	6,040.00	5,552.00	5,482.25	267.91	20.80	57.45	-4,253.57	2,064.29	9,164.96	9,038.61	126.35	72.536	
18,300.00	6,040.00	5,552.00	5,482.25	270.56	20.80	57.45	-4,253.57	2,064.29	9,264.39	9,138.06	126.33	73.336	
18,400.00	6,040.00	5,552.00	5,482.25	273.21	20.80	57.45	-4,253.57	2,064.29	9,363.83	9,237.52	126.31	74.135	
18,500.00	6,040.00	5,552.00	5,482.25	275.86	20.80	57.45	-4,253.57	2,064.29	9,463.28	9,336.99	126.29	74.934	
18,600.00	6,040.00	5,552.00	5,482.25	278.51	20.80	57.45	-4,253.57	2,064.29	9,562.75	9,436.48	126.27	75.733	
18,700.00	6,040.00	5,552.00	5,482.25	281.16	20.80	57.45	-4,253.57	2,064.29	9,662.22	9,535.97	126.25	76.532	
18,800.00	6,040.00	5,552.00	5,482.25	283.81	20.80	57.45	-4,253.57	2,064.29	9,761.71	9,635.47	126.23	77.330	
18,900.00	6,040.00	5,552.00	5,482.25	286.47	20.80	57.45	-4,253.57	2,064.29	9,861.20	9,734.99	126.22	78.129	
18,919.70	6,040.00	5,552.00	5,482.25	286.99	20.80	57.45	-4,253.57	2,064.29	9,880.81	9,754.59	126.21	78.286	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-6457C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 747-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	159.98	-4,809.89	1,752.75	5,119.37				
100.00	100.00	67.10	67.10	0.13	0.12	159.98	-4,809.89	1,752.84	5,119.33	5,119.07	0.25	N/A	
200.00	199.98	160.93	160.92	0.48	0.28	10.76	-4,809.87	1,753.29	5,117.76	5,116.99	0.77	6,672.520	
300.00	299.84	254.66	254.65	0.85	0.45	10.77	-4,809.84	1,754.11	5,112.88	5,111.59	1.29	3,958.589	
400.00	399.45	348.19	348.18	1.22	0.61	10.81	-4,809.79	1,755.30	5,104.70	5,102.88	1.82	2,802.019	
500.00	498.70	441.44	441.41	1.62	0.78	10.86	-4,809.73	1,756.84	5,093.23	5,090.88	2.36	2,162.356	
600.00	597.47	534.29	534.24	2.05	0.94	10.93	-4,809.65	1,758.75	5,078.48	5,075.59	2.89	1,755.798	
700.00	695.62	626.65	626.57	2.51	1.10	11.01	-4,809.56	1,761.00	5,060.47	5,057.04	3.43	1,473.997	
800.00	793.06	718.42	718.31	3.01	1.26	11.11	-4,809.46	1,763.60	5,039.21	5,035.24	3.98	1,266.735	
900.00	889.64	841.85	841.67	3.56	1.66	11.24	-4,808.92	1,767.71	5,014.52	5,009.76	4.76	1,052.835	
1,000.00	985.27	925.48	925.22	4.14	1.96	11.37	-4,807.89	1,771.26	4,986.11	4,980.65	5.46	912.643	
1,100.00	1,079.82	972.00	971.62	4.78	2.14	11.49	-4,807.21	1,774.51	4,955.15	4,949.11	6.04	820.610	
1,200.00	1,173.17	1,023.02	1,022.43	5.46	2.33	11.62	-4,806.61	1,779.08	4,921.82	4,915.17	6.64	740.791	
1,300.00	1,265.21	1,063.00	1,062.20	6.20	2.48	11.77	-4,806.36	1,783.17	4,886.21	4,878.99	7.22	676.995	
1,400.00	1,355.84	1,095.47	1,094.47	6.99	2.61	11.93	-4,806.45	1,786.79	4,848.52	4,840.74	7.78	623.497	
1,500.00	1,444.94	1,124.36	1,123.14	7.84	2.72	12.10	-4,806.89	1,790.21	4,808.88	4,800.55	8.33	577.146	
1,600.00	1,532.39	1,154.00	1,152.54	8.75	2.84	12.29	-4,807.68	1,793.91	4,767.32	4,758.42	8.90	535.606	
1,700.00	1,618.11	1,300.96	1,298.12	9.71	3.44	12.49	-4,811.29	1,813.69	4,722.87	4,712.95	9.93	475.729	
1,800.00	1,701.97	1,467.65	1,463.21	10.74	4.13	12.71	-4,811.91	1,836.72	4,673.52	4,662.48	11.04	423.383	
1,900.00	1,783.88	1,519.00	1,514.13	11.82	4.34	12.99	-4,812.05	1,843.29	4,621.14	4,609.42	11.72	394.370	
2,000.00	1,863.74	1,576.91	1,571.52	12.96	4.58	13.30	-4,812.46	1,851.09	4,566.41	4,553.98	12.43	367.288	
2,100.00	1,941.45	2,100.00	1,732.46	14.16	6.84	13.64	-4,812.78	1,876.07	4,509.39	4,494.31	15.08	298.959	
2,200.00	2,016.92	1,875.80	1,866.92	15.41	5.87	14.04	-4,810.04	1,896.32	4,447.33	4,432.78	14.56	305.515	
2,300.00	2,090.05	1,920.93	1,911.50	16.73	6.06	14.47	-4,808.96	1,903.26	4,382.61	4,367.36	15.24	287.507	
2,400.00	2,160.76	1,975.00	1,964.78	18.10	6.30	14.94	-4,807.89	1,912.36	4,315.95	4,299.98	15.97	270.291	
2,500.00	2,228.95	2,071.74	2,059.90	19.53	6.74	15.47	-4,805.49	1,929.84	4,246.90	4,230.04	16.85	251.998	
2,600.00	2,294.55	2,176.52	2,162.64	21.01	7.24	16.05	-4,801.10	1,949.92	4,174.45	4,156.68	17.77	234.911	
2,700.00	2,357.48	2,214.81	2,200.05	22.55	7.42	16.69	-4,799.33	1,957.88	4,099.92	4,081.46	18.46	222.133	
2,800.00	2,418.42	2,249.00	2,233.37	24.13	7.59	16.87	-4,797.83	1,965.41	4,024.23	4,005.10	19.13	210.353	
2,900.00	2,479.25	2,296.02	2,279.13	25.71	7.82	16.88	-4,795.99	1,976.02	3,948.87	3,929.01	19.86	198.823	
3,000.00	2,540.09	2,341.00	2,322.94	27.31	8.05	16.89	-4,794.52	1,986.15	3,873.88	3,853.28	20.60	188.056	
3,100.00	2,600.93	2,386.01	2,366.82	28.90	8.27	16.90	-4,793.38	1,996.12	3,799.26	3,777.92	21.35	177.983	
3,200.00	2,661.77	2,435.00	2,414.66	30.51	8.52	16.93	-4,792.54	2,006.63	3,725.00	3,702.88	22.12	168.421	
3,300.00	2,722.61	2,479.47	2,458.15	32.11	8.74	16.96	-4,792.14	2,015.90	3,651.09	3,628.21	22.88	159.557	
3,400.00	2,783.44	2,530.00	2,507.62	33.72	8.98	17.01	-4,792.08	2,026.20	3,577.59	3,553.91	23.68	151.103	
3,500.00	2,844.28	2,606.86	2,582.97	35.34	9.35	17.10	-4,792.25	2,041.38	3,504.18	3,479.64	24.54	142.823	
3,600.00	2,905.12	2,693.82	2,668.41	36.95	9.76	17.23	-4,792.39	2,057.51	3,430.44	3,405.03	25.41	135.014	
3,700.00	2,965.96	2,801.51	2,774.80	38.57	10.24	17.49	-4,792.81	2,074.13	3,356.17	3,329.88	26.30	127.634	
3,800.00	3,026.79	2,866.51	2,839.36	40.19	10.50	17.72	-4,793.47	2,081.64	3,281.42	3,254.32	27.10	121.064	
3,900.00	3,087.63	3,020.27	2,992.66	41.81	11.07	18.47	-4,795.59	2,093.05	3,206.28	3,178.32	27.97	114.639	
4,000.00	3,148.47	3,098.23	3,070.58	43.43	11.33	18.97	-4,796.21	2,095.62	3,129.75	3,100.98	28.77	108.773	
4,100.00	3,209.31	3,159.68	3,132.02	45.05	11.52	19.41	-4,796.90	2,096.66	3,053.16	3,023.58	29.58	103.205	
4,200.00	3,270.14	3,231.85	3,204.17	46.68	11.75	19.96	-4,797.70	2,097.70	2,976.61	2,946.20	30.41	97.880	
4,300.00	3,330.98	3,309.80	3,282.11	48.31	11.99	20.60	-4,798.25	2,098.41	2,899.81	2,868.56	31.25	92.792	
4,400.00	3,391.82	3,382.74	3,355.06	49.93	12.21	21.24	-4,798.57	2,098.60	2,822.83	2,790.72	32.11	87.913	
4,500.00	3,452.66	3,446.84	3,419.15	51.56	12.40	21.85	-4,798.73	2,098.63	2,745.83	2,712.83	33.00	83.206	
4,600.00	3,513.49	3,507.58	3,479.89	53.19	12.58	22.45	-4,798.82	2,098.67	2,668.90	2,634.98	33.92	78.680	
4,700.00	3,574.33	3,565.98	3,538.30	54.82	12.76	23.06	-4,799.02	2,098.47	2,592.16	2,557.28	34.88	74.319	
4,800.00	3,635.17	3,624.37	3,596.68	56.45	12.92	23.72	-4,799.35	2,098.08	2,515.64	2,479.77	35.87	70.135	
4,900.00	3,696.01	3,687.70	3,660.01	58.08	13.10	24.48	-4,799.78	2,097.46	2,439.33	2,402.44	36.89	66.121	
5,000.00	3,756.84	3,757.13	3,729.43	59.71	13.30	25.37	-4,800.13	2,096.53	2,363.05	2,325.10	37.95	62.270	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-6457C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 747-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	3,802.59	3,774.88	61.34	13.43	25.99	-4,800.46	2,095.85	2,287.10	2,247.99	39.11	58.483	
5,200.00	3,878.52	3,850.71	3,822.99	62.97	13.57	26.68	-4,801.09	2,095.17	2,211.75	2,171.43	40.32	54.855	
5,300.00	3,939.36	3,902.89	3,875.16	64.61	13.73	27.45	-4,802.02	2,094.51	2,136.99	2,095.40	41.59	51.381	
5,400.00	4,000.19	3,962.23	3,934.48	66.24	13.90	28.39	-4,803.28	2,093.88	2,062.76	2,019.84	42.91	48.067	
5,500.00	4,061.03	4,037.12	4,009.35	67.87	14.12	29.66	-4,804.67	2,092.75	1,988.64	1,944.36	44.28	44.911	
5,600.00	4,121.87	4,131.31	4,103.52	69.51	14.40	31.40	-4,805.30	2,091.07	1,914.16	1,868.50	45.67	41.916	
5,700.00	4,182.71	4,187.27	4,159.47	71.14	14.57	32.50	-4,805.22	2,090.29	1,839.67	1,792.42	47.25	38.931	
5,800.00	4,243.54	4,243.66	4,215.87	72.77	14.74	33.68	-4,805.19	2,089.83	1,765.76	1,716.81	48.94	36.077	
5,900.00	4,304.38	4,298.94	4,271.14	74.41	14.91	34.89	-4,805.30	2,089.50	1,692.54	1,641.78	50.76	33.344	
6,000.00	4,365.22	4,361.01	4,333.22	76.04	15.10	36.35	-4,805.54	2,089.13	1,620.01	1,567.33	52.69	30.749	
6,100.00	4,426.06	4,424.79	4,396.99	77.68	15.29	37.97	-4,805.66	2,088.62	1,548.03	1,493.27	54.76	28.269	
6,200.00	4,486.90	4,485.87	4,458.07	79.31	15.48	39.63	-4,805.72	2,088.20	1,476.76	1,419.74	57.02	25.900	
6,300.00	4,547.73	4,548.18	4,520.38	80.95	15.67	41.45	-4,805.73	2,087.81	1,406.33	1,346.87	59.46	23.650	
6,400.00	4,608.57	4,610.37	4,582.57	82.58	15.87	43.41	-4,805.66	2,087.26	1,336.85	1,274.71	62.14	21.515	
6,500.00	4,669.41	4,672.11	4,644.30	84.22	16.07	45.48	-4,805.52	2,087.25	1,268.50	1,203.46	65.04	19.503	
6,600.00	4,730.25	4,733.62	4,705.81	85.86	16.28	47.66	-4,805.36	2,088.00	1,201.45	1,133.26	68.19	17.620	
6,700.00	4,791.08	4,795.61	4,767.79	87.49	16.49	50.01	-4,805.20	2,089.07	1,135.94	1,064.32	71.62	15.862	
6,800.00	4,851.92	4,860.65	4,832.83	89.13	16.71	52.67	-4,804.87	2,090.15	1,072.10	996.74	75.35	14.227	
6,900.00	4,912.76	4,922.28	4,894.44	90.76	16.92	55.40	-4,804.39	2,091.01	1,010.28	930.81	79.47	12.712	
7,000.00	4,973.60	4,982.79	4,954.95	92.40	17.13	58.27	-4,803.96	2,091.94	951.08	867.12	83.96	11.327	
7,100.00	5,034.43	5,042.78	5,014.92	94.04	17.33	61.31	-4,803.59	2,092.92	895.04	806.22	88.82	10.077	
7,200.00	5,095.27	5,104.40	5,076.53	95.67	17.54	64.63	-4,803.25	2,093.94	842.76	748.75	94.00	8.965	
7,300.00	5,156.11	5,166.78	5,138.91	97.31	17.76	68.21	-4,802.79	2,094.92	794.84	695.38	99.46	7.992	
7,400.00	5,216.95	5,228.67	5,200.79	98.95	17.97	71.97	-4,802.16	2,095.78	752.15	647.11	105.05	7.160	
7,500.00	5,277.78	5,289.49	5,261.60	100.59	18.18	75.85	-4,801.42	2,096.54	715.72	605.15	110.57	6.473	
7,600.00	5,338.62	5,350.24	5,322.34	102.22	18.38	79.87	-4,800.81	2,097.47	686.61	570.92	115.69	5.935	
7,700.00	5,399.46	5,413.79	5,385.88	103.86	18.60	84.18	-4,800.14	2,098.61	665.61	545.52	120.08	5.543	
7,800.00	5,460.30	5,476.44	5,448.51	105.50	18.82	88.53	-4,799.22	2,099.83	653.42	530.01	123.41	5.295	
7,900.00	5,521.24	5,538.57	5,510.61	107.13	19.03	91.28	-4,798.20	2,101.14	650.26	524.86	125.40	5.185	
8,000.00	5,584.83	5,579.21	5,551.31	108.61	19.24	94.16	-4,797.50	2,102.05	619.51	576.45	125.40	5.185	
8,100.00	5,650.69	5,658.39	5,634.05	109.85	19.45	97.16	-4,796.50	2,102.96	533.06	491.03	125.40	5.185	
8,200.00	5,716.83	5,719.54	5,695.19	110.82	19.66	100.28	-4,795.49	2,103.87	452.17	410.01	125.40	5.185	
8,300.00	5,781.24	5,783.25	5,758.80	111.52	19.87	103.41	-4,794.48	2,104.78	382.43	337.00	125.40	5.185	
8,400.00	5,841.96	5,841.55	5,817.11	111.98	20.08	106.54	-4,793.47	2,105.69	329.71	276.03	125.40	5.185	
8,500.00	5,897.14	5,896.95	5,872.20	112.25	20.29	109.67	-4,792.46	2,106.60	298.03	233.47	125.40	5.185	
8,600.00	5,945.12	5,945.41	5,920.26	112.37	20.50	112.80	-4,791.45	2,107.51	284.67	212.79	125.40	5.185	
8,700.00	5,984.42	5,984.62	5,959.27	112.39	20.71	115.93	-4,790.44	2,108.42	279.71	207.62	125.40	5.185	
8,785.62	6,010.27	6,010.27	6,010.27	112.36	20.92	119.06	-4,789.43	2,109.33	277.57	206.09	125.40	5.185	
8,800.00	6,013.86	6,013.86	6,013.86	112.35	21.13	122.19	-4,788.42	2,110.24	277.65	205.96	125.40	5.185	
8,900.00	6,032.54	6,032.54	6,032.54	112.30	21.34	125.32	-4,787.41	2,111.15	283.32	204.09	125.40	5.185	
9,000.00	6,039.89	6,039.89	6,039.89	112.24	21.55	128.45	-4,796.40	2,112.06	298.92	205.75	125.40	5.185	
9,100.00	6,040.00	5,968.08	5,926.09	112.19	21.76	131.58	-4,795.39	2,112.97	328.56	221.18	125.40	5.185	
9,200.00	6,040.00	5,936.45	5,898.21	112.16	21.97	134.71	-4,794.38	2,113.88	377.95	260.76	125.40	5.185	
9,300.00	6,040.00	5,915.00	5,878.77	112.15	22.18	137.84	-4,793.37	2,114.79	441.88	318.69	125.40	5.185	
9,400.00	6,040.00	5,887.24	5,853.12	112.15	22.39	140.97	-4,792.36	2,115.70	515.41	389.88	125.40	5.185	
9,500.00	6,040.00	5,867.31	5,834.44	112.16	22.60	144.10	-4,791.35	2,116.61	595.39	468.50	125.40	5.185	
9,600.00	6,040.00	5,850.33	5,818.35	112.19	22.81	147.23	-4,790.34	2,117.52	679.78	552.29	125.40	5.185	
9,700.00	6,040.00	5,821.00	5,790.26	112.24	23.02	150.36	-4,789.33	2,118.43	767.59	640.48	125.40	5.185	
9,800.00	6,040.00	5,821.00	5,790.26	112.31	23.23	153.49	-4,788.32	2,119.34	857.09	729.49	125.40	5.185	
9,900.00	6,040.00	5,821.00	5,790.26	112.39	23.44	156.62	-4,787.31	2,120.25	948.68	820.93	125.40	5.185	
10,000.00	6,040.00	5,821.00	5,790.26	112.49	23.65	159.75	-4,786.30	2,121.16	1,041.82	914.10	125.40	5.185	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-6457C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 747-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	6,040.00	5,789.36	5,759.60	112.62	20.02	48.62	-4,796.25	2,126.82	1,135.09	1,008.09	127.00	8.938	
10,200.00	6,040.00	5,780.25	5,750.72	112.77	19.98	47.63	-4,796.35	2,124.80	1,229.66	1,102.92	126.74	9.702	
10,300.00	6,040.00	5,771.99	5,742.65	112.94	19.95	46.75	-4,796.43	2,123.06	1,324.89	1,198.40	126.48	10.475	
10,400.00	6,040.00	5,764.46	5,735.28	113.14	19.91	45.97	-4,796.50	2,121.54	1,420.65	1,294.42	126.23	11.254	
10,500.00	6,040.00	5,757.58	5,728.52	113.36	19.88	45.27	-4,796.56	2,120.22	1,516.87	1,390.88	125.99	12.039	
10,600.00	6,040.00	5,727.00	5,698.39	113.62	19.74	42.36	-4,796.81	2,115.02	1,614.02	1,488.53	125.49	12.862	
10,700.00	6,040.00	5,727.00	5,698.39	113.91	19.74	42.36	-4,796.81	2,115.02	1,710.72	1,585.35	125.36	13.646	
10,800.00	6,040.00	5,727.00	5,698.39	114.24	19.74	42.36	-4,796.81	2,115.02	1,807.77	1,682.55	125.22	14.436	
10,900.00	6,040.00	5,727.00	5,698.39	114.61	19.74	42.36	-4,796.81	2,115.02	1,905.13	1,780.05	125.08	15.231	
11,000.00	6,040.00	5,727.00	5,698.39	115.02	19.74	42.36	-4,796.81	2,115.02	2,002.75	1,877.81	124.94	16.030	
11,100.00	6,040.00	5,727.00	5,698.39	115.49	19.74	42.36	-4,796.81	2,115.02	2,100.59	1,975.79	124.80	16.832	
11,200.00	6,040.00	5,727.00	5,698.39	116.00	19.74	42.36	-4,796.81	2,115.02	2,198.63	2,073.97	124.66	17.637	
11,300.00	6,040.00	5,727.00	5,698.39	116.58	19.74	42.36	-4,796.81	2,115.02	2,296.83	2,172.31	124.53	18.444	
11,400.00	6,040.00	5,727.00	5,698.39	117.22	19.74	42.36	-4,796.81	2,115.02	2,395.19	2,270.79	124.40	19.254	
11,500.00	6,040.00	5,727.00	5,698.39	117.92	19.74	42.36	-4,796.81	2,115.02	2,493.67	2,369.40	124.27	20.066	
11,600.00	6,040.00	5,727.00	5,698.39	118.70	19.74	42.36	-4,796.81	2,115.02	2,592.27	2,468.12	124.15	20.880	
11,700.00	6,040.00	5,727.00	5,698.39	119.56	19.74	42.36	-4,796.81	2,115.02	2,690.98	2,566.94	124.04	21.695	
11,800.00	6,040.00	5,727.00	5,698.39	120.51	19.74	42.36	-4,796.81	2,115.02	2,789.78	2,665.85	123.93	22.511	
11,900.00	6,040.00	5,694.21	5,665.90	121.54	19.61	39.54	-4,797.03	2,110.58	2,887.95	2,764.27	123.69	23.349	
12,000.00	6,040.00	5,691.12	5,662.83	122.66	19.60	39.29	-4,797.05	2,110.22	2,986.77	2,863.20	123.58	24.169	
12,100.00	6,040.00	5,688.18	5,659.92	123.87	19.59	39.06	-4,797.07	2,109.88	3,085.66	2,962.18	123.48	24.990	
12,200.00	6,040.00	5,685.38	5,657.13	125.17	19.58	38.83	-4,797.08	2,109.56	3,184.61	3,061.23	123.38	25.811	
12,300.00	6,040.00	5,682.71	5,654.48	126.57	19.57	38.62	-4,797.10	2,109.27	3,283.61	3,160.32	123.29	26.633	
12,400.00	6,040.00	5,680.16	5,651.94	128.06	19.56	38.42	-4,797.11	2,108.99	3,382.66	3,259.46	123.20	27.456	
12,500.00	6,040.00	5,677.72	5,649.52	129.63	19.55	38.24	-4,797.12	2,108.74	3,481.76	3,358.64	123.12	28.280	
12,600.00	6,040.00	5,675.39	5,647.19	131.29	19.54	38.06	-4,797.13	2,108.50	3,580.90	3,457.86	123.04	29.104	
12,700.00	6,040.00	5,673.15	5,644.97	133.03	19.53	37.89	-4,797.14	2,108.27	3,680.08	3,557.12	122.96	29.928	
12,800.00	6,040.00	5,671.01	5,642.84	134.84	19.52	37.73	-4,797.15	2,108.06	3,779.30	3,656.41	122.89	30.753	
12,900.00	6,040.00	5,668.95	5,640.79	136.71	19.52	37.57	-4,797.16	2,107.86	3,878.55	3,755.73	122.82	31.579	
13,000.00	6,040.00	5,633.00	5,604.95	138.66	19.37	35.04	-4,797.28	2,105.05	3,978.54	3,855.89	122.65	32.438	
13,100.00	6,040.00	5,633.00	5,604.95	140.66	19.37	35.04	-4,797.28	2,105.05	4,077.78	3,955.18	122.60	33.261	
13,200.00	6,040.00	5,633.00	5,604.95	142.71	19.37	35.04	-4,797.28	2,105.05	4,177.05	4,054.51	122.54	34.086	
13,300.00	6,040.00	5,633.00	5,604.95	144.81	19.37	35.04	-4,797.28	2,105.05	4,276.36	4,153.87	122.49	34.911	
13,400.00	6,040.00	5,633.00	5,604.95	146.96	19.37	35.04	-4,797.28	2,105.05	4,375.70	4,253.25	122.45	35.736	
13,500.00	6,040.00	5,633.00	5,604.95	149.14	19.37	35.04	-4,797.28	2,105.05	4,475.07	4,352.67	122.40	36.562	
13,600.00	6,040.00	5,633.00	5,604.95	151.36	19.37	35.04	-4,797.28	2,105.05	4,574.46	4,452.11	122.35	37.387	
13,700.00	6,040.00	5,633.00	5,604.95	153.62	19.37	35.04	-4,797.28	2,105.05	4,673.89	4,551.58	122.31	38.214	
13,800.00	6,040.00	5,633.00	5,604.95	155.91	19.37	35.04	-4,797.28	2,105.05	4,773.33	4,651.06	122.27	39.040	
13,900.00	6,040.00	5,633.00	5,604.95	158.22	19.37	35.04	-4,797.28	2,105.05	4,872.80	4,750.57	122.23	39.867	
14,000.00	6,040.00	5,633.00	5,604.95	160.56	19.37	35.04	-4,797.28	2,105.05	4,972.29	4,850.10	122.19	40.694	
14,100.00	6,040.00	5,633.00	5,604.95	162.92	19.37	35.04	-4,797.28	2,105.05	5,071.80	4,949.65	122.15	41.521	
14,200.00	6,040.00	5,633.00	5,604.95	165.30	19.37	35.04	-4,797.28	2,105.05	5,171.33	5,049.21	122.12	42.348	
14,300.00	6,040.00	5,633.00	5,604.95	167.70	19.37	35.04	-4,797.28	2,105.05	5,270.87	5,148.79	122.08	43.175	
14,400.00	6,040.00	5,633.00	5,604.95	170.12	19.37	35.04	-4,797.28	2,105.05	5,370.44	5,248.39	122.05	44.002	
14,500.00	6,040.00	5,633.00	5,604.95	172.55	19.37	35.04	-4,797.28	2,105.05	5,470.02	5,348.00	122.02	44.830	
14,600.00	6,040.00	5,633.00	5,604.95	175.00	19.37	35.04	-4,797.28	2,105.05	5,569.61	5,447.63	121.99	45.657	
14,700.00	6,040.00	5,633.00	5,604.95	177.46	19.37	35.04	-4,797.28	2,105.05	5,669.22	5,547.26	121.96	46.485	
14,800.00	6,040.00	5,633.00	5,604.95	179.94	19.37	35.04	-4,797.28	2,105.05	5,768.84	5,646.91	121.93	47.313	
14,900.00	6,040.00	5,633.00	5,604.95	182.43	19.37	35.04	-4,797.28	2,105.05	5,868.48	5,746.57	121.90	48.140	
15,000.00	6,040.00	5,633.00	5,604.95	184.92	19.37	35.04	-4,797.28	2,105.05	5,968.13	5,846.25	121.88	48.968	
15,100.00	6,040.00	5,633.00	5,604.95	187.43	19.37	35.04	-4,797.28	2,105.05	6,067.79	5,945.93	121.85	49.796	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-02-6457C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 747-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,633.00	5,604.95	189.95	19.37	35.04	-4,797.28	2,105.05	6,167.46	6,045.62	121.83	50.623	
15,300.00	6,040.00	5,633.00	5,604.95	192.48	19.37	35.04	-4,797.28	2,105.05	6,267.14	6,145.33	121.81	51.451	
15,400.00	6,040.00	5,633.00	5,604.95	195.01	19.37	35.04	-4,797.28	2,105.05	6,366.83	6,245.04	121.79	52.278	
15,500.00	6,040.00	5,633.00	5,604.95	197.55	19.37	35.04	-4,797.28	2,105.05	6,466.53	6,344.76	121.77	53.106	
15,600.00	6,040.00	5,633.00	5,604.95	200.10	19.37	35.04	-4,797.28	2,105.05	6,566.24	6,444.49	121.75	53.933	
15,700.00	6,040.00	5,633.00	5,604.95	202.65	19.37	35.04	-4,797.28	2,105.05	6,665.95	6,544.22	121.73	54.761	
15,800.00	6,040.00	5,633.00	5,604.95	205.22	19.37	35.04	-4,797.28	2,105.05	6,765.68	6,643.97	121.71	55.588	
15,900.00	6,040.00	5,633.00	5,604.95	207.78	19.37	35.04	-4,797.28	2,105.05	6,865.41	6,743.72	121.69	56.415	
16,000.00	6,040.00	5,633.00	5,604.95	210.36	19.37	35.04	-4,797.28	2,105.05	6,965.16	6,843.48	121.68	57.242	
16,100.00	6,040.00	5,633.00	5,604.95	212.93	19.37	35.04	-4,797.28	2,105.05	7,064.90	6,943.24	121.66	58.069	
16,200.00	6,040.00	5,633.00	5,604.95	215.52	19.37	35.04	-4,797.28	2,105.05	7,164.66	7,043.01	121.65	58.896	
16,300.00	6,040.00	5,633.00	5,604.95	218.11	19.37	35.04	-4,797.28	2,105.05	7,264.42	7,142.79	121.64	59.723	
16,400.00	6,040.00	5,633.00	5,604.95	220.70	19.37	35.04	-4,797.28	2,105.05	7,364.19	7,242.57	121.62	60.549	
16,500.00	6,040.00	5,633.00	5,604.95	223.29	19.37	35.04	-4,797.28	2,105.05	7,463.97	7,342.36	121.61	61.376	
16,600.00	6,040.00	5,633.00	5,604.95	225.89	19.37	35.04	-4,797.28	2,105.05	7,563.75	7,442.15	121.60	62.202	
16,700.00	6,040.00	5,633.00	5,604.95	228.50	19.37	35.04	-4,797.28	2,105.05	7,663.54	7,541.95	121.59	63.028	
16,800.00	6,040.00	5,633.00	5,604.95	231.11	19.37	35.04	-4,797.28	2,105.05	7,763.33	7,641.75	121.58	63.854	
16,900.00	6,040.00	5,633.00	5,604.95	233.72	19.37	35.04	-4,797.28	2,105.05	7,863.13	7,741.56	121.57	64.680	
17,000.00	6,040.00	5,633.00	5,604.95	236.33	19.37	35.04	-4,797.28	2,105.05	7,962.93	7,841.37	121.56	65.505	
17,100.00	6,040.00	5,633.00	5,604.95	238.95	19.37	35.04	-4,797.28	2,105.05	8,062.74	7,941.18	121.55	66.330	
17,200.00	6,040.00	5,633.00	5,604.95	241.57	19.37	35.04	-4,797.28	2,105.05	8,162.55	8,041.00	121.55	67.155	
17,300.00	6,040.00	5,633.00	5,604.95	244.19	19.37	35.04	-4,797.28	2,105.05	8,262.37	8,140.83	121.54	67.980	
17,400.00	6,040.00	5,633.00	5,604.95	246.82	19.37	35.04	-4,797.28	2,105.05	8,362.19	8,240.65	121.53	68.805	
17,500.00	6,040.00	5,633.00	5,604.95	249.45	19.37	35.04	-4,797.28	2,105.05	8,462.01	8,340.49	121.53	69.629	
17,600.00	6,040.00	5,633.00	5,604.95	252.08	19.37	35.04	-4,797.28	2,105.05	8,561.84	8,440.32	121.52	70.454	
17,700.00	6,040.00	5,633.00	5,604.95	254.71	19.37	35.04	-4,797.28	2,105.05	8,661.68	8,540.16	121.52	71.278	
17,800.00	6,040.00	5,633.00	5,604.95	257.35	19.37	35.04	-4,797.28	2,105.05	8,761.52	8,640.00	121.52	72.101	
17,900.00	6,040.00	5,633.00	5,604.95	259.99	19.37	35.04	-4,797.28	2,105.05	8,861.36	8,739.84	121.51	72.925	
18,000.00	6,040.00	5,633.00	5,604.95	262.63	19.37	35.04	-4,797.28	2,105.05	8,961.20	8,839.69	121.51	73.748	
18,100.00	6,040.00	5,633.00	5,604.95	265.27	19.37	35.04	-4,797.28	2,105.05	9,061.05	8,939.54	121.51	74.571	
18,200.00	6,040.00	5,633.00	5,604.95	267.91	19.37	35.04	-4,797.28	2,105.05	9,160.90	9,039.39	121.51	75.394	
18,300.00	6,040.00	5,633.00	5,604.95	270.56	19.37	35.04	-4,797.28	2,105.05	9,260.76	9,139.25	121.51	76.216	
18,400.00	6,040.00	5,633.00	5,604.95	273.21	19.37	35.04	-4,797.28	2,105.05	9,360.61	9,239.11	121.51	77.038	
18,500.00	6,040.00	5,633.00	5,604.95	275.86	19.37	35.04	-4,797.28	2,105.05	9,460.47	9,338.97	121.51	77.860	
18,600.00	6,040.00	5,596.88	5,568.88	278.51	19.24	32.77	-4,797.47	2,103.12	9,560.00	9,438.56	121.44	78.723	
18,700.00	6,040.00	5,595.95	5,567.95	281.16	19.24	32.72	-4,797.47	2,103.07	9,659.85	9,538.41	121.44	79.545	
18,800.00	6,040.00	5,595.03	5,567.04	283.81	19.24	32.66	-4,797.48	2,103.03	9,759.70	9,638.27	121.44	80.368	
18,900.00	6,040.00	5,594.13	5,566.14	286.47	19.23	32.61	-4,797.49	2,102.99	9,859.56	9,738.12	121.44	81.190	
18,919.70	6,040.00	5,593.96	5,565.96	286.99	19.23	32.60	-4,797.49	2,102.98	9,879.24	9,757.80	121.44	81.352	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-0108C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 780-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	160.03	-4,824.10	1,752.75	5,132.72				
100.00	100.00	0.00	0.00	0.13	0.00	160.03	-4,824.10	1,752.75	5,133.14	5,133.00	0.14	N/A	
200.00	199.98	0.00	0.00	0.48	0.00	10.80	-4,824.10	1,752.75	5,133.79	5,133.31	0.48	N/A	
300.00	299.84	0.00	0.00	0.85	0.00	10.81	-4,824.10	1,752.75	5,132.96	5,132.13	0.84	6,127.048	
400.00	399.45	0.00	0.00	1.22	0.00	10.82	-4,824.10	1,752.75	5,130.66	5,129.46	1.20	4,283.739	
500.00	498.70	207.02	206.92	1.62	0.51	10.88	-4,828.77	1,755.48	5,117.36	5,115.40	1.97	2,602.101	
600.00	597.47	250.83	250.66	2.05	0.62	10.93	-4,830.96	1,756.76	5,107.64	5,105.22	2.42	2,108.865	
700.00	695.62	294.58	294.31	2.51	0.73	10.98	-4,833.56	1,758.28	5,095.60	5,092.72	2.88	1,767.568	
800.00	793.06	338.26	337.84	3.01	0.84	11.05	-4,836.57	1,760.05	5,081.24	5,077.89	3.35	1,516.746	
900.00	889.64	381.84	381.25	3.56	0.94	11.14	-4,839.99	1,762.05	5,064.56	5,060.74	3.82	1,324.174	
1,000.00	985.27	425.32	424.50	4.14	1.05	11.23	-4,843.81	1,764.28	5,045.59	5,041.28	4.31	1,171.343	
1,100.00	1,079.82	468.68	467.59	4.78	1.16	11.34	-4,848.03	1,766.75	5,024.32	5,019.52	4.80	1,046.865	
1,200.00	1,173.17	511.91	510.49	5.46	1.27	11.46	-4,852.64	1,769.45	5,000.76	4,995.46	5.30	943.356	
1,300.00	1,265.21	555.00	553.18	6.20	1.37	11.59	-4,857.64	1,772.38	4,974.93	4,969.12	5.81	855.813	
1,400.00	1,355.84	597.92	595.65	6.99	1.48	11.74	-4,863.02	1,775.53	4,946.84	4,940.51	6.34	780.729	
1,500.00	1,444.94	779.50	774.47	7.84	1.93	12.01	-4,890.17	1,791.41	4,920.86	4,913.73	7.13	690.221	
1,600.00	1,532.39	779.50	774.47	8.75	1.93	12.17	-4,890.17	1,791.41	4,886.05	4,878.45	7.59	643.389	
1,700.00	1,618.11	779.50	774.47	9.71	1.93	12.33	-4,890.17	1,791.41	4,849.83	4,841.75	8.07	600.693	
1,800.00	1,701.97	779.50	774.47	10.74	1.93	12.51	-4,890.17	1,791.41	4,812.22	4,803.65	8.57	561.633	
1,900.00	1,783.88	828.56	822.56	11.82	2.17	12.75	-4,898.53	1,796.29	4,772.90	4,763.64	9.26	515.187	
2,000.00	1,863.74	897.04	889.64	12.96	2.51	13.05	-4,910.47	1,803.22	4,730.98	4,720.93	10.04	471.080	
2,100.00	1,941.45	967.55	958.64	14.16	2.86	13.38	-4,923.00	1,810.51	4,686.38	4,675.54	10.84	432.270	
2,200.00	2,016.92	1,008.13	998.29	15.41	3.07	13.69	-4,930.41	1,814.97	4,639.39	4,627.84	11.55	401.829	
2,300.00	2,090.05	1,063.00	1,051.71	16.73	3.36	14.05	-4,940.85	1,821.86	4,590.42	4,578.11	12.31	372.838	
2,400.00	2,160.76	1,187.43	1,173.05	18.10	4.01	14.56	-4,963.42	1,837.64	4,537.84	4,524.50	13.35	340.005	
2,500.00	2,228.95	1,221.62	1,206.33	19.53	4.20	14.96	-4,969.62	1,842.41	4,482.93	4,468.87	14.06	318.795	
2,600.00	2,294.55	1,296.65	1,279.12	21.01	4.60	15.46	-4,983.60	1,854.01	4,426.03	4,411.09	14.94	296.277	
2,700.00	2,357.48	1,393.21	1,372.91	22.55	5.13	16.06	-5,000.86	1,869.17	4,365.89	4,349.99	15.90	274.583	
2,800.00	2,418.42	1,458.35	1,436.18	24.13	5.49	16.32	-5,012.53	1,879.46	4,303.92	4,287.16	16.76	256.844	
2,900.00	2,479.25	1,520.00	1,495.97	25.71	5.83	16.46	-5,023.80	1,889.33	4,242.21	4,224.60	17.61	240.894	
3,000.00	2,540.09	1,611.00	1,584.31	27.31	6.32	16.67	-5,039.90	1,904.11	4,180.07	4,161.50	18.57	225.060	
3,100.00	2,600.93	1,611.00	1,584.31	28.90	6.32	16.67	-5,039.90	1,904.11	4,119.03	4,099.77	19.25	213.940	
3,200.00	2,661.77	1,662.17	1,633.88	30.51	6.62	16.79	-5,049.57	1,912.26	4,058.27	4,038.16	20.12	201.740	
3,300.00	2,722.61	1,702.00	1,672.22	32.11	6.85	16.91	-5,058.53	1,918.30	3,999.35	3,978.39	20.96	190.800	
3,400.00	2,783.44	3,400.00	1,727.82	33.72	16.96	17.07	-5,071.55	1,927.18	3,940.87	3,912.03	28.84	136.654	
3,500.00	2,844.28	1,880.57	1,844.29	35.34	7.89	17.43	-5,097.88	1,945.24	3,881.67	3,858.67	23.00	168.781	
3,600.00	2,905.12	2,187.23	2,142.24	36.95	9.57	18.46	-5,157.53	1,986.12	3,821.25	3,796.66	24.59	155.386	
3,700.00	2,965.96	2,232.42	2,186.43	38.57	9.80	18.63	-5,165.09	1,991.76	3,757.84	3,732.35	25.49	147.411	
3,800.00	3,026.79	3,800.00	2,278.49	40.19	17.75	18.99	-5,180.99	2,003.10	3,694.49	3,662.08	32.41	113.996	
3,900.00	3,087.63	2,386.01	2,336.72	41.81	10.58	19.23	-5,190.95	2,010.06	3,631.10	3,603.61	27.48	132.119	
4,000.00	3,148.47	2,436.00	2,385.52	43.43	10.84	19.43	-5,199.92	2,016.11	3,568.60	3,540.16	28.45	125.450	
4,100.00	3,209.31	2,467.85	2,416.54	45.05	11.01	19.57	-5,205.93	2,020.09	3,506.89	3,477.49	29.39	119.303	
4,200.00	3,270.14	2,515.15	2,462.54	46.68	11.27	19.77	-5,215.16	2,026.14	3,445.96	3,415.57	30.40	113.372	
4,300.00	3,330.98	2,586.13	2,531.46	48.31	11.66	20.07	-5,229.43	2,035.38	3,385.62	3,354.15	31.46	107.605	
4,400.00	3,391.82	2,677.59	2,620.29	49.93	12.16	20.48	-5,247.71	2,047.16	3,325.25	3,292.66	32.59	102.040	
4,500.00	3,452.66	3,206.78	3,141.25	51.56	14.59	23.40	-5,319.83	2,100.28	3,260.36	3,226.25	34.11	95.597	
4,600.00	3,513.49	3,528.09	3,461.93	53.19	15.57	26.14	-5,335.31	2,106.10	3,188.52	3,153.43	35.09	90.876	
4,700.00	3,574.33	3,594.00	3,527.83	54.82	15.73	26.82	-5,336.08	2,104.64	3,112.99	3,076.86	36.13	86.168	
4,800.00	3,635.17	3,653.30	3,587.10	56.45	15.87	27.47	-5,336.75	2,103.38	3,037.66	3,000.45	37.21	81.642	
4,900.00	3,696.01	3,713.61	3,647.40	58.08	16.01	28.15	-5,337.43	2,102.20	2,962.55	2,924.23	38.33	77.299	
5,000.00	3,756.84	3,780.80	3,714.57	59.71	16.17	28.94	-5,338.18	2,100.83	2,887.67	2,848.19	39.48	73.144	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-0108C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 780-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	3,860.20	3,793.94	61.34	16.36	29.95	-5,338.78	2,098.53	2,812.71	2,772.05	40.67	69.167	
5,200.00	3,878.52	3,904.98	3,838.71	62.97	16.48	30.53	-5,339.07	2,097.67	2,738.07	2,696.12	41.95	65.274	
5,300.00	3,939.36	3,959.70	3,893.43	64.61	16.62	31.25	-5,339.44	2,097.45	2,663.91	2,620.65	43.26	61.582	
5,400.00	4,000.19	4,024.70	3,958.43	66.24	16.80	32.12	-5,339.83	2,097.43	2,590.04	2,545.43	44.61	58.059	
5,500.00	4,061.03	4,086.49	4,020.21	67.87	16.97	33.00	-5,340.15	2,097.37	2,516.43	2,470.40	46.03	54.671	
5,600.00	4,121.87	4,150.16	4,083.88	69.51	17.14	33.95	-5,340.47	2,097.29	2,443.15	2,395.65	47.51	51.428	
5,700.00	4,182.71	4,219.53	4,153.25	71.14	17.32	35.05	-5,340.66	2,096.98	2,370.09	2,321.05	49.04	48.328	
5,800.00	4,243.54	4,326.02	4,259.73	72.77	17.59	36.87	-5,339.78	2,096.13	2,296.78	2,246.23	50.55	45.439	
5,900.00	4,304.38	4,381.25	4,314.95	74.41	17.72	37.87	-5,338.86	2,095.61	2,223.40	2,171.13	52.27	42.537	
6,000.00	4,365.22	4,441.00	4,374.69	76.04	17.86	39.02	-5,337.87	2,095.01	2,150.54	2,096.46	54.08	39.767	
6,100.00	4,426.06	4,501.59	4,435.26	77.68	18.01	40.25	-5,336.84	2,094.23	2,078.21	2,022.22	55.99	37.116	
6,200.00	4,486.90	4,566.69	4,480.36	79.31	18.13	41.20	-5,336.19	2,093.79	2,006.69	1,948.61	58.08	34.553	
6,300.00	4,547.73	4,591.72	4,525.38	80.95	18.25	42.16	-5,335.87	2,093.93	1,936.31	1,876.04	60.27	32.128	
6,400.00	4,608.57	4,653.98	4,587.64	82.58	18.42	43.54	-5,335.67	2,094.71	1,866.93	1,804.40	62.53	29.858	
6,500.00	4,669.41	4,713.33	4,646.98	84.22	18.59	44.93	-5,335.38	2,095.52	1,798.25	1,733.32	64.94	27.693	
6,600.00	4,730.25	4,762.84	4,696.50	85.86	18.74	46.15	-5,335.38	2,095.83	1,730.78	1,663.23	67.55	25.622	
6,700.00	4,791.08	4,816.99	4,750.65	87.49	18.89	47.56	-5,335.69	2,095.74	1,664.72	1,594.38	70.33	23.669	
6,800.00	4,851.92	4,876.05	4,809.70	89.13	19.07	49.18	-5,336.15	2,095.63	1,599.97	1,526.68	73.28	21.832	
6,900.00	4,912.76	4,934.52	4,868.17	90.76	19.24	50.86	-5,336.70	2,095.60	1,536.65	1,460.22	76.43	20.105	
7,000.00	4,973.60	4,994.94	4,928.58	92.40	19.43	52.67	-5,337.40	2,095.68	1,474.94	1,395.16	79.77	18.489	
7,100.00	5,034.43	5,059.37	4,993.01	94.04	19.62	54.71	-5,338.10	2,095.86	1,414.86	1,331.54	83.32	16.982	
7,200.00	5,095.27	5,124.64	5,058.28	95.67	19.82	56.88	-5,338.65	2,096.08	1,356.54	1,269.46	87.08	15.578	
7,300.00	5,156.11	5,185.53	5,119.17	97.31	20.01	59.00	-5,339.02	2,096.19	1,300.26	1,209.17	91.09	14.274	
7,400.00	5,216.95	5,241.15	5,174.79	98.95	20.18	61.03	-5,339.59	2,096.39	1,246.66	1,151.34	95.33	13.078	
7,500.00	5,277.78	5,308.43	5,242.06	100.59	20.39	63.58	-5,340.40	2,096.75	1,195.92	1,096.20	99.72	11.992	
7,600.00	5,338.62	5,374.71	5,308.33	102.22	20.60	66.22	-5,340.71	2,097.04	1,147.91	1,043.60	104.31	11.005	
7,700.00	5,399.46	5,434.36	5,367.99	103.86	20.78	68.70	-5,340.95	2,097.24	1,103.46	994.42	109.05	10.119	
7,800.00	5,460.30	5,506.56	5,440.19	105.50	21.01	71.79	-5,341.15	2,097.85	1,062.84	949.04	113.80	9.340	
7,900.00	5,521.24	5,821.82	5,747.42	107.13	22.12	83.00	-5,331.21	2,153.69	1,020.02	906.67	113.36	8.998	
8,000.00	5,584.83	6,215.37	6,035.67	108.61	24.78	83.11	-5,319.87	2,410.45	942.26	847.00	95.26	9.892	
8,100.00	5,650.69	8,100.00	6,091.57	109.85	51.50	66.39	-5,320.85	2,523.03	851.00	741.02	109.97	7.738	
8,200.00	5,716.83	6,422.26	6,117.13	110.82	27.40	-4.94	-5,321.59	2,599.44	753.28	671.23	82.05	9.181	
8,300.00	5,781.24	6,413.12	6,114.90	111.52	27.27	-67.95	-5,321.53	2,590.58	654.45	571.69	82.77	7.907	
8,400.00	5,841.96	6,375.74	6,105.00	111.98	26.73	-85.34	-5,321.27	2,554.54	558.70	473.33	85.37	6.544	
8,500.00	5,897.14	6,297.25	6,075.84	112.25	25.71	-87.62	-5,320.38	2,481.77	467.23	373.48	93.75	4.984	
8,600.00	5,945.12	6,253.81	6,055.29	112.37	25.22	-92.31	-5,319.90	2,443.51	383.77	289.90	93.87	4.088	
8,700.00	5,984.42	6,203.40	6,029.28	112.39	24.67	-92.37	-5,319.95	2,400.33	315.37	224.28	91.09	3.462	
8,800.00	6,013.86	6,145.62	5,996.77	112.35	24.15	-88.11	-5,320.67	2,352.58	270.46	186.38	84.07	3.217 SF	
8,887.66	6,030.84	6,092.69	5,964.56	112.30	23.70	-81.46	-5,321.78	2,310.60	257.14	182.45	74.70	3.443 CC, ES	
8,900.00	6,032.54	6,085.39	5,959.87	112.30	23.65	-80.35	-5,321.95	2,305.00	257.41	184.03	73.37	3.508	
9,000.00	6,039.89	6,029.26	5,921.39	112.24	23.24	-70.11	-5,323.39	2,264.22	277.99	211.26	66.73	4.166	
9,100.00	6,040.00	5,981.63	5,885.48	112.19	22.94	-62.65	-5,324.78	2,232.99	322.80	253.68	69.13	4.670	
9,200.00	6,040.00	5,943.85	5,854.96	112.16	22.73	-57.40	-5,326.14	2,210.76	381.96	305.62	76.35	5.003	
9,300.00	6,040.00	5,916.00	5,831.43	112.15	22.57	-53.77	-5,327.29	2,195.92	451.43	367.35	84.08	5.369	
9,400.00	6,040.00	5,882.33	5,802.06	112.15	22.41	-49.71	-5,328.74	2,179.51	527.75	437.68	90.07	5.859	
9,500.00	6,040.00	5,856.37	5,778.90	112.16	22.29	-46.84	-5,329.82	2,167.84	608.80	513.79	95.01	6.408	
9,600.00	6,040.00	5,822.00	5,747.59	112.19	22.12	-43.37	-5,331.20	2,153.76	693.50	595.01	98.49	7.041	
9,700.00	6,040.00	5,822.00	5,747.59	112.24	22.12	-43.37	-5,331.20	2,153.76	780.46	678.14	102.33	7.627	
9,800.00	6,040.00	5,794.93	5,722.51	112.31	22.01	-40.91	-5,332.45	2,143.64	869.38	764.83	104.55	8.315	
9,900.00	6,040.00	5,777.87	5,706.56	112.39	21.95	-39.50	-5,333.42	2,137.64	959.88	853.30	106.58	9.006	
10,000.00	6,040.00	5,762.36	5,691.99	112.49	21.88	-38.30	-5,334.43	2,132.45	1,051.56	943.31	108.25	9.714	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-0108C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 780-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	5,728.00	5,659.43	112.62	21.75	-35.90	-5,337.09	2,121.82	1,144.63	1,035.40	109.24	10.478	
10,200.00	6,040.00	5,728.00	5,659.43	112.77	21.75	-35.90	-5,337.09	2,121.82	1,237.73	1,127.02	110.71	11.180	
10,300.00	6,040.00	5,728.00	5,659.43	112.94	21.75	-35.90	-5,337.09	2,121.82	1,331.82	1,219.89	111.93	11.899	
10,400.00	6,040.00	5,728.00	5,659.43	113.14	21.75	-35.90	-5,337.09	2,121.82	1,426.72	1,313.76	112.96	12.631	
10,500.00	6,040.00	5,728.00	5,659.43	113.36	21.75	-35.90	-5,337.09	2,121.82	1,522.27	1,408.44	113.83	13.374	
10,600.00	6,040.00	5,728.00	5,659.43	113.62	21.75	-35.90	-5,337.09	2,121.82	1,618.36	1,503.79	114.57	14.125	
10,700.00	6,040.00	5,728.00	5,659.43	113.91	21.75	-35.90	-5,337.09	2,121.82	1,714.90	1,599.68	115.22	14.884	
10,800.00	6,040.00	5,728.00	5,659.43	114.24	21.75	-35.90	-5,337.09	2,121.82	1,811.81	1,696.03	115.78	15.649	
10,900.00	6,040.00	5,690.24	5,622.98	114.61	21.61	-33.52	-5,339.68	2,112.32	1,907.19	1,791.21	115.98	16.444	
11,000.00	6,040.00	5,686.14	5,618.98	115.02	21.60	-33.27	-5,339.88	2,111.47	2,004.28	1,887.87	116.41	17.217	
11,100.00	6,040.00	5,682.38	5,615.30	115.49	21.59	-33.04	-5,340.06	2,110.72	2,101.61	1,984.81	116.81	17.992	
11,200.00	6,040.00	5,678.91	5,611.89	116.00	21.57	-32.83	-5,340.20	2,110.06	2,199.15	2,081.99	117.16	18.771	
11,300.00	6,040.00	5,675.69	5,608.74	116.58	21.56	-32.64	-5,340.33	2,109.47	2,296.87	2,179.40	117.48	19.552	
11,400.00	6,040.00	5,672.71	5,605.80	117.22	21.55	-32.46	-5,340.44	2,108.94	2,394.76	2,276.99	117.77	20.335	
11,500.00	6,040.00	5,634.00	5,567.45	117.92	21.42	-30.22	-5,341.10	2,103.86	2,494.42	2,376.54	117.88	21.161	
11,600.00	6,040.00	5,634.00	5,567.45	118.70	21.42	-30.22	-5,341.10	2,103.86	2,592.35	2,474.21	118.14	21.943	
11,700.00	6,040.00	5,634.00	5,567.45	119.56	21.42	-30.22	-5,341.10	2,103.86	2,690.44	2,572.06	118.38	22.727	
11,800.00	6,040.00	5,634.00	5,567.45	120.51	21.42	-30.22	-5,341.10	2,103.86	2,788.67	2,670.07	118.60	23.513	
11,900.00	6,040.00	5,634.00	5,567.45	121.54	21.42	-30.22	-5,341.10	2,103.86	2,887.01	2,768.21	118.80	24.301	
12,000.00	6,040.00	5,634.00	5,567.45	122.66	21.42	-30.22	-5,341.10	2,103.86	2,985.47	2,866.48	118.99	25.090	
12,100.00	6,040.00	5,634.00	5,567.45	123.87	21.42	-30.22	-5,341.10	2,103.86	3,084.02	2,964.86	119.16	25.881	
12,200.00	6,040.00	5,634.00	5,567.45	125.17	21.42	-30.22	-5,341.10	2,103.86	3,182.67	3,063.35	119.32	26.673	
12,300.00	6,040.00	5,634.00	5,567.45	126.57	21.42	-30.22	-5,341.10	2,103.86	3,281.40	3,161.93	119.47	27.466	
12,400.00	6,040.00	5,634.00	5,567.45	128.06	21.42	-30.22	-5,341.10	2,103.86	3,380.20	3,260.59	119.61	28.261	
12,500.00	6,040.00	5,634.00	5,567.45	129.63	21.42	-30.22	-5,341.10	2,103.86	3,479.07	3,359.33	119.74	29.056	
12,600.00	6,040.00	5,634.00	5,567.45	131.29	21.42	-30.22	-5,341.10	2,103.86	3,578.00	3,458.14	119.86	29.852	
12,700.00	6,040.00	5,634.00	5,567.45	133.03	21.42	-30.22	-5,341.10	2,103.86	3,676.99	3,557.02	119.97	30.649	
12,800.00	6,040.00	5,634.00	5,567.45	134.84	21.42	-30.22	-5,341.10	2,103.86	3,776.04	3,655.96	120.08	31.446	
12,900.00	6,040.00	5,634.00	5,567.45	136.71	21.42	-30.22	-5,341.10	2,103.86	3,875.13	3,754.95	120.18	32.244	
13,000.00	6,040.00	5,634.00	5,567.45	138.66	21.42	-30.22	-5,341.10	2,103.86	3,974.27	3,854.00	120.28	33.043	
13,100.00	6,040.00	5,634.00	5,567.45	140.66	21.42	-30.22	-5,341.10	2,103.86	4,073.45	3,953.09	120.37	33.842	
13,200.00	6,040.00	5,634.00	5,567.45	142.71	21.42	-30.22	-5,341.10	2,103.86	4,172.67	4,052.22	120.45	34.642	
13,300.00	6,040.00	5,634.00	5,567.45	144.81	21.42	-30.22	-5,341.10	2,103.86	4,271.93	4,151.40	120.53	35.442	
13,400.00	6,040.00	5,634.00	5,567.45	146.96	21.42	-30.22	-5,341.10	2,103.86	4,371.22	4,250.61	120.61	36.243	
13,500.00	6,040.00	5,634.00	5,567.45	149.14	21.42	-30.22	-5,341.10	2,103.86	4,470.54	4,349.86	120.68	37.043	
13,600.00	6,040.00	5,634.00	5,567.45	151.36	21.42	-30.22	-5,341.10	2,103.86	4,569.89	4,449.14	120.75	37.845	
13,700.00	6,040.00	5,634.00	5,567.45	153.62	21.42	-30.22	-5,341.10	2,103.86	4,669.27	4,548.45	120.82	38.646	
13,800.00	6,040.00	5,634.00	5,567.45	155.91	21.42	-30.22	-5,341.10	2,103.86	4,768.68	4,647.79	120.89	39.448	
13,900.00	6,040.00	5,634.00	5,567.45	158.22	21.42	-30.22	-5,341.10	2,103.86	4,868.11	4,747.16	120.95	40.250	
14,000.00	6,040.00	5,634.00	5,567.45	160.56	21.42	-30.22	-5,341.10	2,103.86	4,967.56	4,846.55	121.01	41.052	
14,100.00	6,040.00	5,634.00	5,567.45	162.92	21.42	-30.22	-5,341.10	2,103.86	5,067.03	4,945.97	121.06	41.854	
14,200.00	6,040.00	5,634.00	5,567.45	165.30	21.42	-30.22	-5,341.10	2,103.86	5,166.53	5,045.41	121.12	42.656	
14,300.00	6,040.00	5,634.00	5,567.45	167.70	21.42	-30.22	-5,341.10	2,103.86	5,266.04	5,144.87	121.17	43.459	
14,400.00	6,040.00	5,634.00	5,567.45	170.12	21.42	-30.22	-5,341.10	2,103.86	5,365.57	5,244.35	121.22	44.261	
14,500.00	6,040.00	5,634.00	5,567.45	172.55	21.42	-30.22	-5,341.10	2,103.86	5,465.12	5,343.85	121.27	45.064	
14,600.00	6,040.00	5,634.00	5,567.45	175.00	21.42	-30.22	-5,341.10	2,103.86	5,564.69	5,443.36	121.32	45.867	
14,700.00	6,040.00	5,634.00	5,567.45	177.46	21.42	-30.22	-5,341.10	2,103.86	5,664.27	5,542.90	121.37	46.670	
14,800.00	6,040.00	5,634.00	5,567.45	179.94	21.42	-30.22	-5,341.10	2,103.86	5,763.86	5,642.45	121.41	47.472	
14,900.00	6,040.00	5,634.00	5,567.45	182.43	21.42	-30.22	-5,341.10	2,103.86	5,863.47	5,742.01	121.46	48.275	
15,000.00	6,040.00	5,634.00	5,567.45	184.92	21.42	-30.22	-5,341.10	2,103.86	5,963.09	5,841.59	121.50	49.078	
15,100.00	6,040.00	5,634.00	5,567.45	187.43	21.42	-30.22	-5,341.10	2,103.86	6,062.73	5,941.18	121.54	49.881	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-0108C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 780-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,634.00	5,567.45	189.95	21.42	-30.22	-5,341.10	2,103.86	6,162.37	6,040.79	121.58	50.684	
15,300.00	6,040.00	5,634.00	5,567.45	192.48	21.42	-30.22	-5,341.10	2,103.86	6,262.03	6,140.40	121.62	51.487	
15,400.00	6,040.00	5,634.00	5,567.45	195.01	21.42	-30.22	-5,341.10	2,103.86	6,361.70	6,240.03	121.66	52.289	
15,500.00	6,040.00	5,634.00	5,567.45	197.55	21.42	-30.22	-5,341.10	2,103.86	6,461.37	6,339.67	121.70	53.092	
15,600.00	6,040.00	5,634.00	5,567.45	200.10	21.42	-30.22	-5,341.10	2,103.86	6,561.06	6,439.32	121.74	53.895	
15,700.00	6,040.00	5,634.00	5,567.45	202.65	21.42	-30.22	-5,341.10	2,103.86	6,660.76	6,538.99	121.77	54.697	
15,800.00	6,040.00	5,634.00	5,567.45	205.22	21.42	-30.22	-5,341.10	2,103.86	6,760.47	6,638.66	121.81	55.500	
15,900.00	6,040.00	5,634.00	5,567.45	207.78	21.42	-30.22	-5,341.10	2,103.86	6,860.18	6,738.34	121.85	56.302	
16,000.00	6,040.00	5,634.00	5,567.45	210.36	21.42	-30.22	-5,341.10	2,103.86	6,959.90	6,838.02	121.88	57.104	
16,100.00	6,040.00	5,634.00	5,567.45	212.93	21.42	-30.22	-5,341.10	2,103.86	7,059.64	6,937.72	121.91	57.907	
16,200.00	6,040.00	5,634.00	5,567.45	215.52	21.42	-30.22	-5,341.10	2,103.86	7,159.37	7,037.43	121.95	58.709	
16,300.00	6,040.00	5,634.00	5,567.45	218.11	21.42	-30.22	-5,341.10	2,103.86	7,259.12	7,137.14	121.98	59.511	
16,400.00	6,040.00	5,634.00	5,567.45	220.70	21.42	-30.22	-5,341.10	2,103.86	7,358.87	7,236.86	122.01	60.312	
16,500.00	6,040.00	5,634.00	5,567.45	223.29	21.42	-30.22	-5,341.10	2,103.86	7,458.63	7,336.59	122.04	61.114	
16,600.00	6,040.00	5,634.00	5,567.45	225.89	21.42	-30.22	-5,341.10	2,103.86	7,558.40	7,436.32	122.08	61.915	
16,700.00	6,040.00	5,634.00	5,567.45	228.50	21.42	-30.22	-5,341.10	2,103.86	7,658.17	7,536.06	122.11	62.717	
16,800.00	6,040.00	5,595.15	5,528.71	231.11	21.29	-28.18	-5,341.09	2,100.92	7,757.33	7,635.24	122.09	63.539	
16,900.00	6,040.00	5,594.18	5,527.74	233.72	21.29	-28.13	-5,341.09	2,100.86	7,857.08	7,734.96	122.12	64.340	
17,000.00	6,040.00	5,593.23	5,526.79	236.33	21.28	-28.08	-5,341.09	2,100.80	7,956.84	7,834.69	122.15	65.142	
17,100.00	6,040.00	5,592.30	5,525.86	238.95	21.28	-28.04	-5,341.09	2,100.75	8,056.60	7,934.43	122.18	65.943	
17,200.00	6,040.00	5,591.39	5,524.95	241.57	21.28	-27.99	-5,341.09	2,100.69	8,156.37	8,034.17	122.20	66.744	
17,300.00	6,040.00	5,590.49	5,524.06	244.19	21.28	-27.95	-5,341.09	2,100.64	8,256.15	8,133.92	122.23	67.545	
17,400.00	6,040.00	5,589.62	5,523.19	246.82	21.27	-27.91	-5,341.09	2,100.59	8,355.93	8,233.67	122.26	68.346	
17,500.00	6,040.00	5,588.76	5,522.33	249.45	21.27	-27.87	-5,341.09	2,100.54	8,455.71	8,333.42	122.29	69.146	
17,600.00	6,040.00	5,587.92	5,521.49	252.08	21.27	-27.83	-5,341.09	2,100.49	8,555.50	8,433.18	122.31	69.946	
17,700.00	6,040.00	5,587.10	5,520.67	254.71	21.27	-27.79	-5,341.09	2,100.44	8,655.29	8,532.95	122.34	70.746	
17,800.00	6,040.00	5,586.29	5,519.86	257.35	21.26	-27.75	-5,341.09	2,100.40	8,755.09	8,632.72	122.37	71.546	
17,900.00	6,040.00	5,585.50	5,519.07	259.99	21.26	-27.71	-5,341.09	2,100.35	8,854.89	8,732.49	122.40	72.346	
18,000.00	6,040.00	5,584.72	5,518.30	262.63	21.26	-27.67	-5,341.09	2,100.31	8,954.69	8,832.27	122.42	73.145	
18,100.00	6,040.00	5,583.96	5,517.54	265.27	21.25	-27.64	-5,341.09	2,100.27	9,054.50	8,932.05	122.45	73.944	
18,200.00	6,040.00	5,583.21	5,516.79	267.91	21.25	-27.60	-5,341.09	2,100.23	9,154.31	9,031.84	122.48	74.743	
18,300.00	6,040.00	5,582.47	5,516.06	270.56	21.25	-27.57	-5,341.09	2,100.19	9,254.13	9,131.62	122.50	75.542	
18,400.00	6,040.00	5,581.75	5,515.34	273.21	21.25	-27.53	-5,341.09	2,100.15	9,353.95	9,231.42	122.53	76.340	
18,500.00	6,040.00	5,581.05	5,514.63	275.86	21.25	-27.50	-5,341.09	2,100.11	9,453.77	9,331.21	122.56	77.138	
18,600.00	6,040.00	5,580.35	5,513.94	278.51	21.24	-27.47	-5,341.09	2,100.08	9,553.60	9,431.01	122.58	77.936	
18,700.00	6,040.00	5,579.67	5,513.26	281.16	21.24	-27.43	-5,341.09	2,100.04	9,653.42	9,530.82	122.61	78.733	
18,800.00	6,040.00	5,540.00	5,473.62	283.81	21.11	-25.68	-5,341.14	2,098.53	9,753.86	9,631.27	122.59	79.568	
18,900.00	6,040.00	5,540.00	5,473.62	286.47	21.11	-25.68	-5,341.14	2,098.53	9,853.67	9,731.06	122.61	80.364	
18,919.70	6,040.00	5,540.00	5,473.62	286.99	21.11	-25.68	-5,341.14	2,098.53	9,873.34	9,750.72	122.62	80.521	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 777-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	160.09	-4,839.03	1,752.75	5,146.76				
100.00	100.00	0.00	0.00	0.13	0.00	160.09	-4,839.03	1,752.75	5,147.18	5,147.04	0.14	N/A	
200.00	199.98	0.00	0.00	0.48	0.00	10.86	-4,839.03	1,752.75	5,147.83	5,147.34	0.48	N/A	
300.00	299.84	0.00	0.00	0.85	0.00	10.86	-4,839.03	1,752.75	5,146.99	5,146.15	0.84	6,143.770	
400.00	399.45	0.00	0.00	1.22	0.00	10.87	-4,839.03	1,752.75	5,144.66	5,143.47	1.20	4,295.353	
500.00	498.70	202.92	202.83	1.62	0.50	10.95	-4,844.03	1,754.48	5,131.56	5,129.61	1.96	2,623.275	
600.00	597.47	245.86	245.69	2.05	0.61	11.00	-4,846.37	1,755.29	5,121.92	5,119.51	2.41	2,125.953	
700.00	695.62	288.72	288.46	2.51	0.72	11.06	-4,849.15	1,756.25	5,109.97	5,107.10	2.87	1,781.856	
800.00	793.06	331.51	331.11	3.01	0.82	11.14	-4,852.37	1,757.36	5,095.71	5,092.38	3.33	1,528.989	
900.00	889.64	374.20	373.63	3.56	0.93	11.23	-4,856.02	1,758.63	5,079.16	5,075.36	3.81	1,334.851	
1,000.00	985.27	416.78	415.99	4.14	1.04	11.33	-4,860.10	1,760.04	5,060.32	5,056.04	4.29	1,180.775	
1,100.00	1,079.82	459.24	458.17	4.78	1.14	11.45	-4,864.60	1,761.60	5,039.21	5,034.43	4.78	1,055.282	
1,200.00	1,173.17	501.55	500.16	5.46	1.25	11.58	-4,869.53	1,763.30	5,015.82	5,010.55	5.27	950.922	
1,300.00	1,265.21	543.71	541.94	6.20	1.35	11.73	-4,874.86	1,765.14	4,990.18	4,984.40	5.78	862.654	
1,400.00	1,355.84	585.69	583.48	6.99	1.46	11.89	-4,880.60	1,767.13	4,962.30	4,956.00	6.31	786.941	
1,500.00	1,444.94	776.50	771.36	7.84	1.93	12.26	-4,911.99	1,777.99	4,937.29	4,930.18	7.12	693.892	
1,600.00	1,532.39	776.50	771.36	8.75	1.93	12.42	-4,911.99	1,777.99	4,902.53	4,894.95	7.58	646.725	
1,700.00	1,618.11	776.50	771.36	9.71	1.93	12.58	-4,911.99	1,777.99	4,866.37	4,858.31	8.06	603.730	
1,800.00	1,701.97	776.50	771.36	10.74	1.93	12.76	-4,911.99	1,777.99	4,828.81	4,820.25	8.56	564.400	
1,900.00	1,783.88	805.66	799.94	11.82	2.07	13.00	-4,917.47	1,779.87	4,789.77	4,780.59	9.18	521.903	
2,000.00	1,863.74	879.00	871.78	12.96	2.43	13.35	-4,931.47	1,784.50	4,748.21	4,738.24	9.97	476.043	
2,100.00	1,941.45	949.18	940.47	14.16	2.78	13.72	-4,945.13	1,788.99	4,703.96	4,693.19	10.77	436.569	
2,200.00	2,016.92	970.00	960.84	15.41	2.89	14.02	-4,949.22	1,790.36	4,657.40	4,645.99	11.40	408.390	
2,300.00	2,090.05	1,021.66	1,011.25	16.73	3.16	14.41	-4,959.82	1,794.15	4,608.64	4,596.47	12.17	378.818	
2,400.00	2,160.76	1,061.00	1,049.49	18.10	3.37	14.80	-4,968.47	1,797.51	4,558.18	4,545.29	12.89	353.575	
2,500.00	2,228.95	1,167.01	1,152.43	19.53	3.94	15.41	-4,991.81	1,807.30	4,505.28	4,491.40	13.88	324.572	
2,600.00	2,294.55	1,192.76	1,177.40	21.01	4.09	15.84	-4,997.61	1,809.68	4,449.73	4,435.14	14.58	305.178	
2,700.00	2,357.48	1,244.00	1,226.99	22.55	4.37	16.40	-5,009.65	1,814.35	4,392.32	4,376.93	15.39	285.317	
2,800.00	2,418.42	1,304.51	1,285.46	24.13	4.72	16.73	-5,024.21	1,819.84	4,333.46	4,317.21	16.25	266.626	
2,900.00	2,479.25	1,498.00	1,473.19	25.71	5.78	17.45	-5,068.10	1,836.26	4,273.43	4,255.86	17.57	243.177	
3,000.00	2,540.09	1,560.17	1,533.71	27.31	6.12	17.71	-5,081.68	1,840.50	4,212.50	4,194.04	18.46	228.257	
3,100.00	2,600.93	1,611.68	1,583.76	28.90	6.40	17.92	-5,093.27	1,844.09	4,152.15	4,132.83	19.32	214.927	
3,200.00	2,661.77	1,724.17	1,693.20	30.51	7.00	18.39	-5,117.73	1,853.00	4,091.43	4,071.04	20.39	200.655	
3,300.00	2,722.61	1,768.08	1,735.89	32.11	7.24	18.58	-5,127.44	1,856.37	4,031.14	4,009.88	21.26	189.589	
3,400.00	2,783.44	1,843.14	1,808.75	33.72	7.65	18.92	-5,144.62	1,861.85	3,971.45	3,949.20	22.25	178.492	
3,500.00	2,844.28	1,882.00	1,846.50	35.34	7.86	19.10	-5,153.28	1,865.06	3,911.86	3,888.72	23.14	169.028	
3,600.00	2,905.12	1,936.04	1,898.88	36.95	8.17	19.34	-5,165.72	1,869.70	3,852.92	3,828.82	24.10	159.855	
3,700.00	2,965.96	1,974.00	1,935.52	38.57	8.38	19.51	-5,175.09	1,872.91	3,795.15	3,770.11	25.03	151.601	
3,800.00	3,026.79	2,029.49	1,988.97	40.19	8.71	19.78	-5,189.21	1,877.80	3,738.19	3,712.15	26.04	143.558	
3,900.00	3,087.63	2,103.45	2,060.11	41.81	9.15	20.12	-5,208.12	1,884.94	3,681.65	3,654.53	27.12	135.766	
4,000.00	3,148.47	2,201.84	2,154.77	43.43	9.73	20.58	-5,232.91	1,895.21	3,625.10	3,596.82	28.28	128.188	
4,100.00	3,209.31	2,293.30	2,242.95	45.05	10.26	21.04	-5,255.67	1,903.64	3,568.15	3,538.71	29.44	121.191	
4,200.00	3,270.14	2,426.13	2,371.21	46.68	11.03	21.76	-5,288.28	1,914.92	3,511.11	3,480.38	30.73	114.248	
4,300.00	3,330.98	2,519.92	2,462.13	48.31	11.55	22.31	-5,310.39	1,921.39	3,452.99	3,421.05	31.94	108.113	
4,400.00	3,391.82	2,619.86	2,559.11	49.93	12.10	22.91	-5,333.40	1,928.60	3,394.66	3,361.48	33.18	102.319	
4,500.00	3,452.66	2,711.30	2,647.95	51.56	12.60	23.47	-5,353.81	1,935.86	3,336.07	3,301.66	34.41	96.948	
4,600.00	3,513.49	2,827.71	2,761.24	53.19	13.23	24.20	-5,378.79	1,945.63	3,277.05	3,241.34	35.71	91.762	
4,700.00	3,574.33	2,876.99	2,809.19	54.82	13.49	24.52	-5,389.43	1,949.51	3,218.17	3,181.26	36.91	87.199	
4,800.00	3,635.17	2,959.47	2,889.43	56.45	13.93	25.09	-5,407.58	1,955.51	3,159.77	3,121.57	38.20	82.714	
4,900.00	3,696.01	3,031.47	2,959.52	58.08	14.32	25.60	-5,423.11	1,960.94	3,101.28	3,061.77	39.50	78.505	
5,000.00	3,756.84	3,083.08	3,009.69	59.71	14.60	25.98	-5,434.62	1,964.74	3,043.54	3,002.73	40.80	74.591	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 777-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	3,189.75	3,113.35	61.34	15.18	26.79	-5,458.50	1,972.54	2,986.13	2,943.88	42.24	70.686	
5,200.00	3,878.52	3,226.54	3,149.11	62.97	15.38	27.08	-5,466.78	1,975.12	2,928.98	2,885.38	43.59	67.190	
5,300.00	3,939.36	3,282.00	3,202.81	64.61	15.69	27.54	-5,480.24	1,978.48	2,873.24	2,828.22	45.02	63.816	
5,400.00	4,000.19	3,329.12	3,248.32	66.24	15.96	27.95	-5,492.12	1,981.11	2,818.48	2,772.00	46.48	60.635	
5,500.00	4,061.03	3,405.70	3,322.32	67.87	16.39	28.63	-5,511.35	1,985.58	2,764.15	2,716.09	48.05	57.521	
5,600.00	4,121.87	3,499.70	3,413.09	69.51	16.93	29.48	-5,535.11	1,991.19	2,710.37	2,660.66	49.72	54.516	
5,700.00	4,182.71	3,649.12	3,558.04	71.14	17.76	30.81	-5,568.83	2,004.43	2,654.61	2,603.14	51.47	51.576	
5,800.00	4,243.54	3,712.56	3,619.64	72.77	18.11	31.39	-5,582.68	2,010.53	2,598.99	2,545.86	53.13	48.921	
5,900.00	4,304.38	3,777.63	3,682.82	74.41	18.46	32.04	-5,597.42	2,015.67	2,544.21	2,489.35	54.86	46.377	
6,000.00	4,365.22	3,858.69	3,761.48	76.04	18.91	32.87	-5,615.96	2,021.88	2,490.00	2,433.32	56.68	43.930	
6,100.00	4,426.06	3,970.77	3,870.55	77.68	19.51	34.08	-5,640.40	2,030.25	2,435.26	2,376.65	58.61	41.548	
6,200.00	4,486.90	4,045.24	3,943.06	79.31	19.91	34.92	-5,656.34	2,035.95	2,380.75	2,320.20	60.55	39.317	
6,300.00	4,547.73	4,131.57	4,027.13	80.95	20.37	35.92	-5,674.66	2,043.00	2,326.57	2,264.00	62.57	37.183	
6,400.00	4,608.57	4,203.92	4,097.58	82.58	20.76	36.79	-5,689.94	2,049.23	2,272.82	2,208.18	64.64	35.159	
6,500.00	4,669.41	4,262.39	4,154.44	84.22	21.08	37.50	-5,702.52	2,054.41	2,219.93	2,153.15	66.78	33.244	
6,600.00	4,730.25	4,317.57	4,207.96	85.86	21.38	38.20	-5,714.97	2,059.46	2,168.40	2,099.42	68.98	31.436	
6,700.00	4,791.08	4,419.23	4,306.60	87.49	21.94	39.53	-5,737.86	2,068.54	2,117.42	2,046.08	71.34	29.680	
6,800.00	4,851.92	4,515.89	4,400.60	89.13	22.46	40.87	-5,758.71	2,076.96	2,066.35	1,992.57	73.79	28.005	
6,900.00	4,912.76	4,625.93	4,507.96	90.76	23.04	42.48	-5,780.83	2,086.60	2,014.76	1,938.42	76.33	26.395	
7,000.00	4,973.60	4,709.90	4,590.13	92.40	23.46	43.81	-5,796.96	2,092.76	1,963.39	1,884.39	78.99	24.855	
7,100.00	5,034.43	4,857.57	4,735.31	94.04	24.16	46.40	-5,822.60	2,100.98	1,911.99	1,830.14	81.85	23.360	
7,200.00	5,095.27	5,023.14	4,899.62	95.67	24.82	49.72	-5,842.12	2,106.24	1,857.15	1,772.32	84.83	21.893	
7,300.00	5,156.11	5,124.46	5,000.52	97.31	25.17	51.94	-5,850.86	2,109.18	1,801.74	1,713.81	87.93	20.490	
7,400.00	5,216.95	5,200.00	5,112.02	98.95	32.11	54.63	-5,856.98	2,110.50	1,745.61	1,647.50	98.11	17.792	
7,500.00	5,277.78	5,365.72	5,241.56	100.59	25.87	58.05	-5,859.42	2,110.97	1,688.78	1,594.19	94.59	17.853	
7,600.00	5,338.62	5,430.80	5,306.63	102.22	26.03	59.88	-5,859.63	2,110.91	1,633.35	1,535.04	98.31	16.614	
7,700.00	5,399.46	5,515.05	5,390.89	103.86	26.23	62.35	-5,859.44	2,111.50	1,579.51	1,477.39	102.11	15.468	
7,800.00	5,460.30	5,934.02	5,785.53	105.50	27.37	73.04	-5,837.44	2,219.71	1,515.19	1,416.36	98.83	15.331	
7,900.00	5,521.24	6,018.80	5,853.25	107.13	27.74	71.55	-5,835.08	2,270.60	1,448.13	1,347.52	100.61	14.394	
8,000.00	5,584.83	6,121.88	5,929.01	108.61	28.28	56.96	-5,834.46	2,340.44	1,373.42	1,272.81	100.61	13.651	
8,100.00	5,650.69	6,409.10	6,087.51	109.85	30.40	23.27	-5,828.38	2,576.76	1,286.03	1,198.23	87.80	14.648	
8,200.00	5,716.83	6,430.99	6,095.15	110.82	30.62	-13.32	-5,827.71	2,597.27	1,192.75	1,104.97	87.78	13.587	
8,300.00	5,781.24	6,428.73	6,094.39	111.52	30.60	-43.11	-5,827.78	2,595.13	1,101.17	1,013.39	87.78	12.544	
8,400.00	5,841.96	6,407.86	6,087.06	111.98	30.39	-62.58	-5,828.42	2,575.61	1,014.84	927.32	87.52	11.596	
8,500.00	5,897.14	6,362.92	6,069.55	112.25	29.97	-74.06	-5,830.05	2,534.26	937.15	849.52	87.63	10.694	
8,600.00	5,945.12	6,292.48	6,036.93	112.37	29.39	-79.92	-5,831.89	2,471.88	870.53	782.09	88.44	9.843	
8,700.00	5,984.42	6,236.28	6,005.67	112.39	28.99	-83.85	-5,832.91	2,425.24	818.25	731.94	86.31	9.480 SF	
8,800.00	6,013.86	6,183.20	5,971.34	112.35	28.64	-85.34	-5,833.86	2,384.78	784.08	701.79	82.29	9.529	
8,900.00	6,032.54	6,120.17	5,927.80	112.30	28.27	-83.95	-5,834.47	2,339.23	769.94	691.60	78.34	9.828 ES	
8,921.08	6,035.04	6,106.32	5,917.99	112.28	28.19	-83.35	-5,834.50	2,329.45	769.50	691.96	77.55	9.923 CC	
9,000.00	6,039.89	6,065.67	5,888.55	112.24	27.98	-80.92	-5,834.61	2,301.43	775.76	701.77	73.99	10.485	
9,100.00	6,040.00	6,016.89	5,851.78	112.19	27.73	-78.04	-5,835.10	2,269.38	796.92	726.39	70.53	11.298	
9,200.00	6,040.00	5,978.33	5,821.58	112.16	27.56	-75.88	-5,835.86	2,245.42	826.36	757.87	68.48	12.067	
9,300.00	6,040.00	5,945.15	5,794.72	112.15	27.42	-73.99	-5,836.97	2,225.98	863.93	795.61	68.32	12.645	
9,400.00	6,040.00	5,914.00	5,768.80	112.15	27.29	-72.22	-5,838.39	2,208.76	909.03	839.15	69.88	13.009	
9,500.00	6,040.00	5,889.68	5,748.16	112.16	27.21	-70.85	-5,839.84	2,195.98	960.88	888.28	72.59	13.237	
9,600.00	6,040.00	5,866.02	5,727.80	112.19	27.13	-69.53	-5,841.60	2,184.06	1,018.67	942.68	75.99	13.406	
9,700.00	6,040.00	5,844.26	5,708.85	112.24	27.07	-68.33	-5,843.53	2,173.56	1,081.60	1,001.97	79.63	13.583	
9,800.00	6,040.00	5,820.00	5,687.47	112.31	26.99	-67.02	-5,846.03	2,162.36	1,148.95	1,065.73	83.22	13.807	
9,900.00	6,040.00	5,820.00	5,687.47	112.39	26.99	-67.02	-5,846.03	2,162.36	1,220.23	1,133.36	86.87	14.047	
10,000.00	6,040.00	5,790.97	5,661.34	112.49	26.91	-65.46	-5,849.03	2,150.07	1,294.42	1,204.43	89.99	14.384	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 777-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	5,777.51	5,648.98	112.62	26.87	-64.74	-5,850.27	2,144.90	1,371.65	1,278.64	93.00	14.748	
10,200.00	6,040.00	5,765.67	5,637.98	112.77	26.84	-64.10	-5,851.29	2,140.64	1,451.33	1,355.58	95.76	15.156	
10,300.00	6,040.00	5,726.00	5,600.39	112.94	26.73	-61.96	-5,854.18	2,128.32	1,534.07	1,436.02	98.05	15.645	
10,400.00	6,040.00	5,726.00	5,600.39	113.14	26.73	-61.96	-5,854.18	2,128.32	1,617.23	1,516.84	100.39	16.109	
10,500.00	6,040.00	5,726.00	5,600.39	113.36	26.73	-61.96	-5,854.18	2,128.32	1,702.21	1,599.71	102.50	16.607	
10,600.00	6,040.00	5,726.00	5,600.39	113.62	26.73	-61.96	-5,854.18	2,128.32	1,788.74	1,684.34	104.39	17.135	
10,700.00	6,040.00	5,726.00	5,600.39	113.91	26.73	-61.96	-5,854.18	2,128.32	1,876.60	1,770.51	106.10	17.687	
10,800.00	6,040.00	5,726.00	5,600.39	114.24	26.73	-61.96	-5,854.18	2,128.32	1,965.63	1,858.00	107.64	18.262	
10,900.00	6,040.00	5,726.00	5,600.39	114.61	26.73	-61.96	-5,854.18	2,128.32	2,055.67	1,946.64	109.03	18.854	
11,000.00	6,040.00	5,726.00	5,600.39	115.02	26.73	-61.96	-5,854.18	2,128.32	2,146.59	2,036.30	110.29	19.463	
11,100.00	6,040.00	5,726.00	5,600.39	115.49	26.73	-61.96	-5,854.18	2,128.32	2,238.28	2,126.85	111.43	20.086	
11,200.00	6,040.00	5,726.00	5,600.39	116.00	26.73	-61.96	-5,854.18	2,128.32	2,330.66	2,218.18	112.48	20.721	
11,300.00	6,040.00	5,726.00	5,600.39	116.58	26.73	-61.96	-5,854.18	2,128.32	2,423.64	2,310.21	113.43	21.367	
11,400.00	6,040.00	5,726.00	5,600.39	117.22	26.73	-61.96	-5,854.18	2,128.32	2,517.16	2,402.86	114.30	22.022	
11,500.00	6,040.00	5,726.00	5,600.39	117.92	26.73	-61.96	-5,854.18	2,128.32	2,611.16	2,496.06	115.10	22.686	
11,600.00	6,040.00	5,726.00	5,600.39	118.70	26.73	-61.96	-5,854.18	2,128.32	2,705.59	2,589.75	115.84	23.356	
11,700.00	6,040.00	5,726.00	5,600.39	119.56	26.73	-61.96	-5,854.18	2,128.32	2,800.41	2,683.89	116.52	24.033	
11,800.00	6,040.00	5,726.00	5,600.39	120.51	26.73	-61.96	-5,854.18	2,128.32	2,895.58	2,778.43	117.15	24.716	
11,900.00	6,040.00	5,685.15	5,560.62	121.54	26.63	-59.78	-5,856.33	2,119.36	2,988.74	2,871.08	117.67	25.400	
12,000.00	6,040.00	5,683.20	5,558.70	122.66	26.63	-59.68	-5,856.41	2,119.04	3,084.29	2,966.07	118.21	26.091	
12,100.00	6,040.00	5,681.37	5,556.89	123.87	26.62	-59.58	-5,856.49	2,118.75	3,180.09	3,061.37	118.72	26.786	
12,200.00	6,040.00	5,679.64	5,555.19	125.17	26.62	-59.49	-5,856.56	2,118.48	3,276.14	3,156.94	119.20	27.485	
12,300.00	6,040.00	5,678.01	5,553.58	126.57	26.62	-59.40	-5,856.62	2,118.23	3,372.42	3,252.77	119.65	28.187	
12,400.00	6,040.00	5,676.47	5,552.05	128.06	26.61	-59.32	-5,856.68	2,118.01	3,468.89	3,348.83	120.06	28.892	
12,500.00	6,040.00	5,675.01	5,550.61	129.63	26.61	-59.24	-5,856.74	2,117.80	3,565.56	3,445.10	120.46	29.601	
12,600.00	6,040.00	5,673.63	5,549.24	131.29	26.61	-59.17	-5,856.79	2,117.61	3,662.39	3,541.57	120.82	30.312	
12,700.00	6,040.00	5,632.00	5,507.79	133.03	26.50	-57.00	-5,857.91	2,114.22	3,761.64	3,640.49	121.14	31.051	
12,800.00	6,040.00	5,632.00	5,507.79	134.84	26.50	-57.00	-5,857.91	2,114.22	3,858.65	3,737.17	121.48	31.765	
12,900.00	6,040.00	5,632.00	5,507.79	136.71	26.50	-57.00	-5,857.91	2,114.22	3,955.81	3,834.02	121.79	32.481	
13,000.00	6,040.00	5,632.00	5,507.79	138.66	26.50	-57.00	-5,857.91	2,114.22	4,053.10	3,931.02	122.09	33.199	
13,100.00	6,040.00	5,632.00	5,507.79	140.66	26.50	-57.00	-5,857.91	2,114.22	4,150.53	4,028.16	122.37	33.919	
13,200.00	6,040.00	5,632.00	5,507.79	142.71	26.50	-57.00	-5,857.91	2,114.22	4,248.07	4,125.44	122.63	34.640	
13,300.00	6,040.00	5,632.00	5,507.79	144.81	26.50	-57.00	-5,857.91	2,114.22	4,345.73	4,222.84	122.89	35.364	
13,400.00	6,040.00	5,632.00	5,507.79	146.96	26.50	-57.00	-5,857.91	2,114.22	4,443.49	4,320.36	123.13	36.089	
13,500.00	6,040.00	5,632.00	5,507.79	149.14	26.50	-57.00	-5,857.91	2,114.22	4,541.35	4,417.99	123.36	36.815	
13,600.00	6,040.00	5,632.00	5,507.79	151.36	26.50	-57.00	-5,857.91	2,114.22	4,639.30	4,515.72	123.58	37.542	
13,700.00	6,040.00	5,632.00	5,507.79	153.62	26.50	-57.00	-5,857.91	2,114.22	4,737.33	4,613.55	123.78	38.271	
13,800.00	6,040.00	5,632.00	5,507.79	155.91	26.50	-57.00	-5,857.91	2,114.22	4,835.45	4,711.46	123.98	39.001	
13,900.00	6,040.00	5,632.00	5,507.79	158.22	26.50	-57.00	-5,857.91	2,114.22	4,933.64	4,809.46	124.17	39.731	
14,000.00	6,040.00	5,632.00	5,507.79	160.56	26.50	-57.00	-5,857.91	2,114.22	5,031.90	4,907.54	124.36	40.463	
14,100.00	6,040.00	5,632.00	5,507.79	162.92	26.50	-57.00	-5,857.91	2,114.22	5,130.23	5,005.70	124.53	41.196	
14,200.00	6,040.00	5,632.00	5,507.79	165.30	26.50	-57.00	-5,857.91	2,114.22	5,228.62	5,103.92	124.70	41.929	
14,300.00	6,040.00	5,632.00	5,507.79	167.70	26.50	-57.00	-5,857.91	2,114.22	5,327.07	5,202.21	124.86	42.663	
14,400.00	6,040.00	5,632.00	5,507.79	170.12	26.50	-57.00	-5,857.91	2,114.22	5,425.58	5,300.57	125.02	43.398	
14,500.00	6,040.00	5,632.00	5,507.79	172.55	26.50	-57.00	-5,857.91	2,114.22	5,524.15	5,398.98	125.17	44.134	
14,600.00	6,040.00	5,632.00	5,507.79	175.00	26.50	-57.00	-5,857.91	2,114.22	5,622.76	5,497.45	125.31	44.870	
14,700.00	6,040.00	5,632.00	5,507.79	177.46	26.50	-57.00	-5,857.91	2,114.22	5,721.42	5,595.97	125.45	45.606	
14,800.00	6,040.00	5,632.00	5,507.79	179.94	26.50	-57.00	-5,857.91	2,114.22	5,820.13	5,694.54	125.59	46.344	
14,900.00	6,040.00	5,632.00	5,507.79	182.43	26.50	-57.00	-5,857.91	2,114.22	5,918.88	5,793.17	125.72	47.081	
15,000.00	6,040.00	5,632.00	5,507.79	184.92	26.50	-57.00	-5,857.91	2,114.22	6,017.67	5,891.83	125.84	47.820	
15,100.00	6,040.00	5,632.00	5,507.79	187.43	26.50	-57.00	-5,857.91	2,114.22	6,116.50	5,990.54	125.96	48.558	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 777-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,632.00	5,507.79	189.95	26.50	-57.00	-5,857.91	2,114.22	6,215.37	6,089.29	126.08	49.297	
15,300.00	6,040.00	5,632.00	5,507.79	192.48	26.50	-57.00	-5,857.91	2,114.22	6,314.28	6,188.08	126.19	50.036	
15,400.00	6,040.00	5,632.00	5,507.79	195.01	26.50	-57.00	-5,857.91	2,114.22	6,413.22	6,286.91	126.30	50.776	
15,500.00	6,040.00	5,632.00	5,507.79	197.55	26.50	-57.00	-5,857.91	2,114.22	6,512.19	6,385.78	126.41	51.516	
15,600.00	6,040.00	5,632.00	5,507.79	200.10	26.50	-57.00	-5,857.91	2,114.22	6,611.19	6,484.67	126.52	52.256	
15,700.00	6,040.00	5,632.00	5,507.79	202.65	26.50	-57.00	-5,857.91	2,114.22	6,710.22	6,583.60	126.62	52.996	
15,800.00	6,040.00	5,632.00	5,507.79	205.22	26.50	-57.00	-5,857.91	2,114.22	6,809.28	6,682.57	126.71	53.737	
15,900.00	6,040.00	5,632.00	5,507.79	207.78	26.50	-57.00	-5,857.91	2,114.22	6,908.37	6,781.56	126.81	54.478	
16,000.00	6,040.00	5,632.00	5,507.79	210.36	26.50	-57.00	-5,857.91	2,114.22	7,007.48	6,880.58	126.90	55.219	
16,100.00	6,040.00	5,632.00	5,507.79	212.93	26.50	-57.00	-5,857.91	2,114.22	7,106.62	6,979.62	126.99	55.960	
16,200.00	6,040.00	5,632.00	5,507.79	215.52	26.50	-57.00	-5,857.91	2,114.22	7,205.78	7,078.70	127.08	56.702	
16,300.00	6,040.00	5,632.00	5,507.79	218.11	26.50	-57.00	-5,857.91	2,114.22	7,304.96	7,177.79	127.17	57.443	
16,400.00	6,040.00	5,632.00	5,507.79	220.70	26.50	-57.00	-5,857.91	2,114.22	7,404.17	7,276.92	127.25	58.185	
16,500.00	6,040.00	5,632.00	5,507.79	223.29	26.50	-57.00	-5,857.91	2,114.22	7,503.40	7,376.06	127.34	58.926	
16,600.00	6,040.00	5,632.00	5,507.79	225.89	26.50	-57.00	-5,857.91	2,114.22	7,602.64	7,475.23	127.42	59.668	
16,700.00	6,040.00	5,632.00	5,507.79	228.50	26.50	-57.00	-5,857.91	2,114.22	7,701.91	7,574.42	127.49	60.410	
16,800.00	6,040.00	5,632.00	5,507.79	231.11	26.50	-57.00	-5,857.91	2,114.22	7,801.20	7,673.63	127.57	61.152	
16,900.00	6,040.00	5,632.00	5,507.79	233.72	26.50	-57.00	-5,857.91	2,114.22	7,900.50	7,772.85	127.65	61.894	
17,000.00	6,040.00	5,632.00	5,507.79	236.33	26.50	-57.00	-5,857.91	2,114.22	7,999.82	7,872.10	127.72	62.635	
17,100.00	6,040.00	5,632.00	5,507.79	238.95	26.50	-57.00	-5,857.91	2,114.22	8,099.16	7,971.37	127.79	63.377	
17,200.00	6,040.00	5,632.00	5,507.79	241.57	26.50	-57.00	-5,857.91	2,114.22	8,198.51	8,070.65	127.86	64.119	
17,300.00	6,040.00	5,632.00	5,507.79	244.19	26.50	-57.00	-5,857.91	2,114.22	8,297.88	8,169.95	127.93	64.861	
17,400.00	6,040.00	5,632.00	5,507.79	246.82	26.50	-57.00	-5,857.91	2,114.22	8,397.27	8,269.27	128.00	65.603	
17,500.00	6,040.00	5,632.00	5,507.79	249.45	26.50	-57.00	-5,857.91	2,114.22	8,496.67	8,368.60	128.07	66.345	
17,600.00	6,040.00	5,632.00	5,507.79	252.08	26.50	-57.00	-5,857.91	2,114.22	8,596.08	8,467.95	128.13	67.087	
17,700.00	6,040.00	5,632.00	5,507.79	254.71	26.50	-57.00	-5,857.91	2,114.22	8,695.51	8,567.31	128.20	67.829	
17,800.00	6,040.00	5,632.00	5,507.79	257.35	26.50	-57.00	-5,857.91	2,114.22	8,794.94	8,666.68	128.26	68.570	
17,900.00	6,040.00	5,632.00	5,507.79	259.99	26.50	-57.00	-5,857.91	2,114.22	8,894.40	8,766.07	128.32	69.312	
18,000.00	6,040.00	5,632.00	5,507.79	262.63	26.50	-57.00	-5,857.91	2,114.22	8,993.86	8,865.47	128.39	70.053	
18,100.00	6,040.00	5,632.00	5,507.79	265.27	26.50	-57.00	-5,857.91	2,114.22	9,093.34	8,964.89	128.45	70.795	
18,200.00	6,040.00	5,632.00	5,507.79	267.91	26.50	-57.00	-5,857.91	2,114.22	9,192.82	9,064.32	128.51	71.536	
18,300.00	6,040.00	5,632.00	5,507.79	270.56	26.50	-57.00	-5,857.91	2,114.22	9,292.32	9,163.76	128.56	72.277	
18,400.00	6,040.00	5,632.00	5,507.79	273.21	26.50	-57.00	-5,857.91	2,114.22	9,391.83	9,263.21	128.62	73.018	
18,500.00	6,040.00	5,632.00	5,507.79	275.86	26.50	-57.00	-5,857.91	2,114.22	9,491.35	9,362.67	128.68	73.759	
18,600.00	6,040.00	5,632.00	5,507.79	278.51	26.50	-57.00	-5,857.91	2,114.22	9,590.88	9,462.14	128.74	74.500	
18,700.00	6,040.00	5,632.00	5,507.79	281.16	26.50	-57.00	-5,857.91	2,114.22	9,690.42	9,561.63	128.79	75.241	
18,800.00	6,040.00	5,632.00	5,507.79	283.81	26.50	-57.00	-5,857.91	2,114.22	9,789.97	9,661.12	128.85	75.981	
18,900.00	6,040.00	5,632.00	5,507.79	286.47	26.50	-57.00	-5,857.91	2,114.22	9,889.52	9,760.62	128.90	76.722	
18,919.70	6,040.00	5,632.00	5,507.79	286.99	26.50	-57.00	-5,857.91	2,114.22	9,909.14	9,780.23	128.91	76.867	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 783-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	160.15	-4,854.33	1,752.75	5,161.15				
100.00	100.00	0.00	0.00	0.13	0.00	160.15	-4,854.33	1,752.75	5,161.57	5,161.43	0.14	N/A	
200.00	199.98	0.00	0.00	0.48	0.00	10.92	-4,854.33	1,752.75	5,162.21	5,161.72	0.48	N/A	
300.00	299.84	0.00	0.00	0.85	0.00	10.92	-4,854.33	1,752.75	5,161.36	5,160.52	0.84	6,160.906	
400.00	399.45	0.00	0.00	1.22	0.00	10.93	-4,854.33	1,752.75	5,159.02	5,157.82	1.20	4,307.254	
500.00	498.70	200.04	199.95	1.62	0.50	11.00	-4,859.23	1,754.66	5,146.06	5,144.10	1.95	2,635.645	
600.00	597.47	242.37	242.21	2.05	0.61	11.05	-4,861.52	1,755.56	5,136.46	5,134.06	2.40	2,135.918	
700.00	695.62	284.64	284.38	2.51	0.72	11.12	-4,864.24	1,756.63	5,124.57	5,121.70	2.86	1,790.168	
800.00	793.06	326.83	326.43	3.01	0.83	11.19	-4,867.39	1,757.86	5,110.38	5,107.05	3.33	1,536.091	
900.00	889.64	368.93	368.36	3.56	0.93	11.28	-4,870.97	1,759.26	5,093.90	5,090.10	3.80	1,341.028	
1,000.00	985.27	410.93	410.13	4.14	1.04	11.38	-4,874.97	1,760.82	5,075.15	5,070.87	4.28	1,186.221	
1,100.00	1,079.82	452.81	451.74	4.78	1.14	11.49	-4,879.39	1,762.55	5,054.12	5,049.35	4.77	1,060.134	
1,200.00	1,173.17	494.55	493.16	5.46	1.25	11.62	-4,884.21	1,764.44	5,030.84	5,025.57	5.27	955.283	
1,300.00	1,265.21	536.15	534.38	6.20	1.35	11.77	-4,889.44	1,766.48	5,005.31	4,999.53	5.78	866.602	
1,400.00	1,355.84	577.58	575.37	6.99	1.46	11.93	-4,895.07	1,768.68	4,977.54	4,971.24	6.30	790.537	
1,500.00	1,444.94	782.50	777.00	7.84	1.98	12.29	-4,928.98	1,781.95	4,953.77	4,946.64	7.13	694.357	
1,600.00	1,532.39	782.50	777.00	8.75	1.98	12.45	-4,928.98	1,781.95	4,918.86	4,911.26	7.60	647.280	
1,700.00	1,618.11	782.50	777.00	9.71	1.98	12.62	-4,928.98	1,781.95	4,882.54	4,874.46	8.08	604.352	
1,800.00	1,701.97	782.50	777.00	10.74	1.98	12.80	-4,928.98	1,781.95	4,844.83	4,836.25	8.57	565.071	
1,900.00	1,783.88	782.50	777.00	11.82	1.98	12.99	-4,928.98	1,781.95	4,805.73	4,796.64	9.08	529.018	
2,000.00	1,863.74	818.06	811.77	12.96	2.16	13.25	-4,935.96	1,784.56	4,764.93	4,755.18	9.75	488.907	
2,100.00	1,941.45	854.01	846.84	14.16	2.34	13.54	-4,943.45	1,787.12	4,722.09	4,711.67	10.42	453.112	
2,200.00	2,016.92	879.00	871.16	15.41	2.47	13.83	-4,948.92	1,788.85	4,677.27	4,666.21	11.07	422.546	
2,300.00	2,090.05	919.74	910.70	16.73	2.70	14.19	-4,958.32	1,791.70	4,630.47	4,618.68	11.80	392.550	
2,400.00	2,160.76	970.00	959.26	18.10	2.98	14.60	-4,970.77	1,795.33	4,581.92	4,569.35	12.57	364.512	
2,500.00	2,228.95	970.00	959.26	19.53	2.98	14.90	-4,970.77	1,795.33	4,531.33	4,518.15	13.17	344.044	
2,600.00	2,294.55	1,012.30	999.92	21.01	3.23	15.36	-4,981.97	1,798.48	4,478.92	4,464.97	13.95	321.020	
2,700.00	2,357.48	1,061.00	1,046.50	22.55	3.52	15.88	-4,995.68	1,802.18	4,424.84	4,410.08	14.77	299.643	
2,800.00	2,418.42	1,061.00	1,046.50	24.13	3.52	15.97	-4,995.68	1,802.18	4,369.58	4,354.17	15.41	283.477	
2,900.00	2,479.25	1,120.14	1,102.79	25.71	3.90	16.19	-5,013.19	1,806.88	4,315.06	4,298.75	16.31	264.549	
3,000.00	2,540.09	1,174.26	1,154.13	27.31	4.24	16.40	-5,029.73	1,811.44	4,261.40	4,244.21	17.19	247.970	
3,100.00	2,600.93	1,244.00	1,220.25	28.90	4.70	16.67	-5,051.11	1,817.33	4,207.99	4,189.84	18.15	231.812	
3,200.00	2,661.77	1,290.36	1,264.12	30.51	5.01	16.86	-5,065.63	1,821.07	4,155.21	4,136.17	19.04	218.188	
3,300.00	2,722.61	1,336.00	1,307.10	32.11	5.31	17.05	-5,080.57	1,824.48	4,103.45	4,083.50	19.95	205.650	
3,400.00	2,783.44	1,365.09	1,334.39	33.72	5.51	17.18	-5,090.43	1,826.58	4,052.70	4,031.89	20.82	194.683	
3,500.00	2,844.28	1,401.30	1,368.22	35.34	5.77	17.33	-5,103.05	1,829.27	4,003.07	3,981.35	21.73	184.255	
3,600.00	2,905.12	3,600.00	1,450.48	36.95	21.45	17.72	-5,134.25	1,836.22	3,954.12	3,921.73	32.38	122.100	
3,700.00	2,965.96	1,599.15	1,552.93	38.57	7.17	18.22	-5,172.20	1,844.93	3,904.60	3,880.51	24.09	162.078	
3,800.00	3,026.79	1,645.76	1,596.44	40.19	7.50	18.44	-5,188.53	1,848.46	3,855.60	3,830.51	25.10	153.637	
3,900.00	3,087.63	1,700.00	1,646.83	41.81	7.90	18.69	-5,208.06	1,853.04	3,807.68	3,781.53	26.15	145.623	
4,000.00	3,148.47	1,747.85	1,691.13	43.43	8.25	18.91	-5,225.57	1,857.61	3,760.64	3,733.45	27.19	138.298	
4,100.00	3,209.31	1,816.03	1,754.10	45.05	8.77	19.21	-5,250.60	1,865.13	3,714.25	3,685.91	28.33	131.096	
4,200.00	3,270.14	1,889.78	1,822.09	46.68	9.33	19.52	-5,277.67	1,874.28	3,668.29	3,638.78	29.51	124.310	
4,300.00	3,330.98	1,955.50	1,882.51	48.31	9.83	19.79	-5,301.89	1,883.32	3,622.86	3,592.19	30.67	118.124	
4,400.00	3,391.82	2,050.27	1,969.52	49.93	10.57	20.18	-5,336.96	1,896.78	3,577.80	3,545.84	31.96	111.946	
4,500.00	3,452.66	2,101.84	2,016.89	51.56	10.97	20.41	-5,356.27	1,903.27	3,533.01	3,499.90	33.11	106.709	
4,600.00	3,513.49	2,157.00	2,067.29	53.19	11.40	20.69	-5,377.94	1,909.03	3,489.48	3,455.17	34.30	101.730	
4,700.00	3,574.33	2,275.82	2,175.92	54.82	12.33	21.34	-5,424.99	1,919.06	3,446.28	3,410.48	35.80	96.268	
4,800.00	3,635.17	2,492.65	2,376.27	56.45	13.97	22.44	-5,503.97	1,943.86	3,400.66	3,363.01	37.65	90.326	
4,900.00	3,696.01	2,529.00	2,410.07	58.08	14.24	22.62	-5,516.42	1,948.69	3,354.09	3,315.25	38.84	86.366	
5,000.00	3,756.84	2,584.38	2,461.40	59.71	14.66	22.91	-5,536.15	1,955.30	3,308.54	3,268.42	40.12	82.468	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 783-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	2,623.00	2,496.91	61.34	14.95	23.13	-5,550.86	1,959.03	3,264.72	3,223.35	41.37	78.912	
5,200.00	3,878.52	2,699.55	2,567.06	62.97	15.55	23.59	-5,580.68	1,966.08	3,221.95	3,179.14	42.81	75.255	
5,300.00	3,939.36	2,800.80	2,659.86	64.61	16.34	24.20	-5,619.91	1,976.15	3,179.37	3,134.98	44.39	71.630	
5,400.00	4,000.19	5,400.00	2,829.55	66.24	35.66	25.27	-5,686.55	1,997.57	3,134.58	3,077.28	57.30	54.707	
5,500.00	4,061.03	3,059.93	2,899.80	67.87	18.29	25.74	-5,713.03	2,005.99	3,089.22	3,041.43	47.79	64.647	
5,600.00	4,121.87	3,121.23	2,956.59	69.51	18.75	26.14	-5,735.20	2,012.39	3,044.97	2,995.69	49.29	61.780	
5,700.00	4,182.71	3,188.00	3,018.32	71.14	19.25	26.57	-5,759.49	2,019.94	3,001.34	2,950.50	50.84	59.039	
5,800.00	4,243.54	3,251.80	3,077.07	72.77	19.75	26.97	-5,783.01	2,028.01	2,958.55	2,906.14	52.40	56.458	
5,900.00	4,304.38	3,282.00	3,104.75	74.41	19.98	27.15	-5,794.36	2,032.17	2,917.11	2,863.25	53.86	54.164	
6,000.00	4,365.22	3,325.74	3,144.57	76.04	20.34	27.43	-5,811.52	2,037.90	2,877.34	2,821.94	55.40	51.941	
6,100.00	4,426.06	3,376.00	3,189.79	77.68	20.75	27.78	-5,832.77	2,043.36	2,839.90	2,782.89	57.01	49.812	
6,200.00	4,486.90	3,400.79	3,211.93	79.31	20.97	27.97	-5,843.67	2,045.70	2,804.08	2,745.56	58.52	47.919	
6,300.00	4,547.73	3,473.57	3,276.84	80.95	21.59	28.52	-5,875.98	2,052.00	2,769.62	2,709.28	60.35	45.896	
6,400.00	4,608.57	3,605.16	3,394.54	82.58	22.70	29.59	-5,934.05	2,061.40	2,735.33	2,672.71	62.62	43.683	
6,500.00	4,669.41	4,074.81	3,831.92	84.22	26.00	34.26	-6,103.59	2,070.89	2,691.14	2,624.25	66.89	40.234	
6,600.00	4,730.25	4,161.30	3,914.52	85.86	26.54	35.18	-6,129.05	2,073.92	2,644.63	2,575.58	69.05	38.297	
6,700.00	4,791.08	4,221.00	3,971.25	87.49	26.92	35.80	-6,147.39	2,076.84	2,599.68	2,528.51	71.17	36.529	
6,800.00	4,851.92	4,288.48	4,035.20	89.13	27.36	36.51	-6,168.56	2,080.89	2,555.86	2,482.50	73.36	34.838	
6,900.00	4,912.76	4,416.93	4,157.24	90.76	28.19	37.89	-6,207.64	2,089.58	2,511.91	2,436.06	75.85	33.118	
7,000.00	4,973.60	4,587.93	4,321.19	92.40	29.23	39.82	-6,254.72	2,101.49	2,465.91	2,387.41	78.50	31.414	
7,100.00	5,034.43	4,730.37	4,458.80	94.04	30.03	41.53	-6,290.11	2,111.64	2,418.59	2,337.51	81.08	29.829	
7,200.00	5,095.27	4,868.70	4,593.50	95.67	30.76	43.32	-6,320.20	2,120.73	2,369.20	2,285.47	83.72	28.298	
7,300.00	5,156.11	7,300.00	4,764.91	97.31	41.36	45.82	-6,352.05	2,129.45	2,317.88	2,223.10	94.78	24.454	
7,400.00	5,216.95	5,217.63	4,937.54	98.95	32.24	48.64	-6,375.60	2,134.61	2,264.08	2,174.80	89.28	25.360	
7,500.00	5,277.78	7,500.00	5,144.12	100.59	38.10	52.50	-6,391.51	2,135.22	2,207.45	2,109.60	97.85	22.559	
7,600.00	5,338.62	5,557.32	5,276.48	102.22	33.15	55.26	-6,394.93	2,133.37	2,149.31	2,054.21	95.10	22.601	
7,700.00	5,399.46	5,667.95	5,387.10	103.86	33.34	57.72	-6,394.82	2,132.37	2,090.95	1,992.74	98.21	21.291	
7,800.00	5,460.30	5,731.80	5,450.95	105.50	33.44	59.19	-6,394.20	2,132.14	2,033.62	1,932.01	101.60	20.016	
7,900.00	5,521.24	5,786.06	5,505.20	107.13	33.52	57.76	-6,393.74	2,132.04	1,977.68	1,872.52	105.15	18.808	
8,000.00	5,584.83	6,359.80	6,012.48	108.61	35.17	48.58	-6,383.29	2,350.27	1,909.16	1,812.46	96.70	19.743	
8,100.00	5,650.69	6,534.39	6,115.00	109.85	36.05	20.86	-6,378.82	2,490.78	1,823.56	1,731.23	92.34	19.749	
8,200.00	5,716.83	6,617.34	6,148.58	110.82	36.60	-13.22	-6,377.54	2,566.54	1,733.75	1,643.90	89.85	19.296	
8,300.00	5,781.24	6,615.07	6,147.82	111.52	36.59	-39.49	-6,377.56	2,564.40	1,645.43	1,555.62	89.81	18.321	
8,400.00	5,841.96	6,580.93	6,135.24	111.98	36.34	-57.79	-6,378.02	2,532.67	1,562.03	1,471.89	90.14	17.330	
8,500.00	5,897.14	6,537.35	6,116.38	112.25	36.07	-70.57	-6,378.76	2,493.40	1,486.36	1,396.46	89.90	16.533	
8,600.00	5,945.12	6,487.46	6,091.50	112.37	35.78	-79.21	-6,379.76	2,450.18	1,421.20	1,332.27	88.93	15.981	
8,700.00	5,984.42	6,437.57	6,063.14	112.39	35.52	-84.84	-6,380.97	2,409.17	1,369.22	1,282.19	87.03	15.732 SF	
8,800.00	6,013.86	6,388.71	6,032.02	112.35	35.29	-88.01	-6,382.41	2,371.56	1,332.86	1,248.59	84.28	15.816	
8,900.00	6,032.54	6,317.91	5,983.71	112.30	34.99	-88.26	-6,384.36	2,319.84	1,313.43	1,231.15	82.28	15.964	
8,964.93	6,038.62	6,273.61	5,952.56	112.26	34.81	-87.48	-6,385.22	2,288.36	1,309.83	1,228.99	80.85	16.202 CC, ES	
9,000.00	6,039.89	6,252.68	5,937.24	112.24	34.73	-86.81	-6,385.57	2,274.10	1,310.89	1,230.97	79.92	16.403	
9,100.00	6,040.00	6,199.00	5,896.02	112.19	34.53	-84.94	-6,386.35	2,239.74	1,320.85	1,243.58	77.28	17.093	
9,200.00	6,040.00	6,164.98	5,868.21	112.16	34.41	-83.74	-6,386.83	2,220.17	1,336.36	1,261.85	74.51	17.936	
9,300.00	6,040.00	6,138.36	5,845.37	112.15	34.33	-82.75	-6,387.26	2,206.52	1,357.86	1,285.49	72.38	18.761	
9,400.00	6,040.00	6,105.00	5,815.56	112.15	34.22	-81.47	-6,387.87	2,191.58	1,385.54	1,314.08	71.46	19.389	
9,500.00	6,040.00	6,105.00	5,815.56	112.16	34.22	-81.47	-6,387.87	2,191.58	1,418.94	1,348.13	70.81	20.039	
9,600.00	6,040.00	6,077.92	5,790.66	112.19	34.15	-80.41	-6,388.43	2,180.94	1,457.93	1,386.13	71.80	20.306	
9,700.00	6,040.00	6,060.79	5,774.71	112.24	34.10	-79.73	-6,388.80	2,174.71	1,502.15	1,428.75	73.40	20.465	
9,800.00	6,040.00	6,045.67	5,760.50	112.31	34.06	-79.13	-6,389.16	2,169.55	1,551.20	1,475.61	75.59	20.521	
9,900.00	6,040.00	6,011.00	5,727.52	112.39	33.97	-77.75	-6,390.02	2,158.92	1,605.04	1,526.66	78.38	20.478	
10,000.00	6,040.00	6,011.00	5,727.52	112.49	33.97	-77.75	-6,390.02	2,158.92	1,662.31	1,581.24	81.07	20.504	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 783-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	6,011.00	5,727.52	112.62	33.97	-77.75	-6,390.02	2,158.92	1,723.49	1,639.56	83.92	20.536	
10,200.00	6,040.00	6,011.00	5,727.52	112.77	33.97	-77.75	-6,390.02	2,158.92	1,788.17	1,701.35	86.81	20.598	
10,300.00	6,040.00	6,011.00	5,727.52	112.94	33.97	-77.75	-6,390.02	2,158.92	1,855.98	1,766.32	89.66	20.699	
10,400.00	6,040.00	5,982.05	5,699.59	113.14	33.91	-76.59	-6,390.76	2,151.34	1,925.93	1,833.43	92.51	20.819	
10,500.00	6,040.00	5,974.59	5,692.34	113.36	33.89	-76.30	-6,390.95	2,149.58	1,998.66	1,903.52	95.15	21.006	
10,600.00	6,040.00	5,967.77	5,685.70	113.62	33.87	-76.02	-6,391.11	2,148.05	2,073.59	1,975.95	97.64	21.236	
10,700.00	6,040.00	5,961.53	5,679.91	113.91	33.86	-75.77	-6,391.26	2,146.71	2,150.49	2,050.50	99.99	21.507	
10,800.00	6,040.00	5,955.79	5,673.99	114.24	33.85	-75.55	-6,391.40	2,145.52	2,229.16	2,126.97	102.19	21.815	
10,900.00	6,040.00	5,950.49	5,668.80	114.61	33.83	-75.33	-6,391.52	2,144.47	2,309.44	2,205.20	104.24	22.155	
11,000.00	6,040.00	5,917.00	5,635.81	115.02	33.76	-74.00	-6,392.26	2,138.80	2,391.84	2,285.64	106.20	22.522	
11,100.00	6,040.00	5,917.00	5,635.81	115.49	33.76	-74.00	-6,392.26	2,138.80	2,474.67	2,366.70	107.97	22.920	
11,200.00	6,040.00	5,917.00	5,635.81	116.00	33.76	-74.00	-6,392.26	2,138.80	2,558.73	2,449.11	109.62	23.341	
11,300.00	6,040.00	5,917.00	5,635.81	116.58	33.76	-74.00	-6,392.26	2,138.80	2,643.90	2,532.74	111.16	23.784	
11,400.00	6,040.00	5,917.00	5,635.81	117.22	33.76	-74.00	-6,392.26	2,138.80	2,730.07	2,617.48	112.60	24.246	
11,500.00	6,040.00	5,917.00	5,635.81	117.92	33.76	-74.00	-6,392.26	2,138.80	2,817.16	2,703.23	113.94	24.726	
11,600.00	6,040.00	5,917.00	5,635.81	118.70	33.76	-74.00	-6,392.26	2,138.80	2,905.08	2,789.90	115.19	25.221	
11,700.00	6,040.00	5,917.00	5,635.81	119.56	33.76	-74.00	-6,392.26	2,138.80	2,993.76	2,877.41	116.35	25.730	
11,800.00	6,040.00	5,917.00	5,635.81	120.51	33.76	-74.00	-6,392.26	2,138.80	3,083.14	2,965.69	117.44	26.252	
11,900.00	6,040.00	5,917.00	5,635.81	121.54	33.76	-74.00	-6,392.26	2,138.80	3,173.14	3,054.68	118.47	26.785	
12,000.00	6,040.00	5,917.00	5,635.81	122.66	33.76	-74.00	-6,392.26	2,138.80	3,263.73	3,144.31	119.42	27.329	
12,100.00	6,040.00	5,917.00	5,635.81	123.87	33.76	-74.00	-6,392.26	2,138.80	3,354.85	3,234.53	120.32	27.882	
12,200.00	6,040.00	5,917.00	5,635.81	125.17	33.76	-74.00	-6,392.26	2,138.80	3,446.47	3,325.30	121.17	28.444	
12,300.00	6,040.00	5,917.00	5,635.81	126.57	33.76	-74.00	-6,392.26	2,138.80	3,538.54	3,416.58	121.96	29.014	
12,400.00	6,040.00	5,917.00	5,635.81	128.06	33.76	-74.00	-6,392.26	2,138.80	3,631.03	3,508.32	122.71	29.591	
12,500.00	6,040.00	5,917.00	5,635.81	129.63	33.76	-74.00	-6,392.26	2,138.80	3,723.90	3,600.49	123.41	30.174	
12,600.00	6,040.00	5,917.00	5,635.81	131.29	33.76	-74.00	-6,392.26	2,138.80	3,817.14	3,693.06	124.08	30.764	
12,700.00	6,040.00	5,917.00	5,635.81	133.03	33.76	-74.00	-6,392.26	2,138.80	3,910.71	3,786.00	124.71	31.359	
12,800.00	6,040.00	5,917.00	5,635.81	134.84	33.76	-74.00	-6,392.26	2,138.80	4,004.59	3,879.29	125.30	31.960	
12,900.00	6,040.00	5,917.00	5,635.81	136.71	33.76	-74.00	-6,392.26	2,138.80	4,098.77	3,972.90	125.87	32.565	
13,000.00	6,040.00	5,917.00	5,635.81	138.66	33.76	-74.00	-6,392.26	2,138.80	4,193.21	4,066.81	126.40	33.174	
13,100.00	6,040.00	5,917.00	5,635.81	140.66	33.76	-74.00	-6,392.26	2,138.80	4,287.90	4,160.99	126.91	33.787	
13,200.00	6,040.00	5,917.00	5,635.81	142.71	33.76	-74.00	-6,392.26	2,138.80	4,382.83	4,255.44	127.39	34.405	
13,300.00	6,040.00	5,917.00	5,635.81	144.81	33.76	-74.00	-6,392.26	2,138.80	4,477.98	4,350.13	127.85	35.025	
13,400.00	6,040.00	5,917.00	5,635.81	146.96	33.76	-74.00	-6,392.26	2,138.80	4,573.34	4,445.05	128.29	35.649	
13,500.00	6,040.00	5,917.00	5,635.81	149.14	33.76	-74.00	-6,392.26	2,138.80	4,668.89	4,540.18	128.70	36.276	
13,600.00	6,040.00	5,917.00	5,635.81	151.36	33.76	-74.00	-6,392.26	2,138.80	4,764.62	4,635.52	129.10	36.906	
13,700.00	6,040.00	5,917.00	5,635.81	153.62	33.76	-74.00	-6,392.26	2,138.80	4,860.53	4,731.05	129.48	37.539	
13,800.00	6,040.00	5,917.00	5,635.81	155.91	33.76	-74.00	-6,392.26	2,138.80	4,956.59	4,826.75	129.84	38.173	
13,900.00	6,040.00	5,917.00	5,635.81	158.22	33.76	-74.00	-6,392.26	2,138.80	5,052.81	4,922.62	130.19	38.811	
14,000.00	6,040.00	5,917.00	5,635.81	160.56	33.76	-74.00	-6,392.26	2,138.80	5,149.18	5,018.65	130.52	39.450	
14,100.00	6,040.00	5,917.00	5,635.81	162.92	33.76	-74.00	-6,392.26	2,138.80	5,245.68	5,114.83	130.84	40.091	
14,200.00	6,040.00	5,917.00	5,635.81	165.30	33.76	-74.00	-6,392.26	2,138.80	5,342.31	5,211.16	131.15	40.734	
14,300.00	6,040.00	5,917.00	5,635.81	167.70	33.76	-74.00	-6,392.26	2,138.80	5,439.06	5,307.61	131.44	41.379	
14,400.00	6,040.00	5,875.29	5,594.37	170.12	33.68	-72.35	-6,393.01	2,134.10	5,534.50	5,402.74	131.76	42.005	
14,500.00	6,040.00	5,874.42	5,593.50	172.55	33.68	-72.31	-6,393.02	2,134.03	5,631.41	5,499.38	132.03	42.652	
14,600.00	6,040.00	5,873.57	5,592.66	175.00	33.68	-72.28	-6,393.03	2,133.96	5,728.43	5,596.14	132.29	43.301	
14,700.00	6,040.00	5,872.75	5,591.84	177.46	33.68	-72.25	-6,393.04	2,133.90	5,825.55	5,693.01	132.55	43.951	
14,800.00	6,040.00	5,871.96	5,591.05	179.94	33.68	-72.22	-6,393.05	2,133.84	5,922.77	5,789.98	132.79	44.603	
14,900.00	6,040.00	5,871.19	5,590.29	182.43	33.67	-72.19	-6,393.06	2,133.78	6,020.07	5,887.05	133.02	45.256	
15,000.00	6,040.00	5,870.44	5,589.54	184.92	33.67	-72.16	-6,393.07	2,133.73	6,117.47	5,984.22	133.25	45.910	
15,100.00	6,040.00	5,869.72	5,588.82	187.43	33.67	-72.13	-6,393.08	2,133.67	6,214.94	6,081.47	133.47	46.565	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 783-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,200.00	6,040.00	5,869.02	5,588.12	189.95	33.67	-72.10	-6,393.09	2,133.62	6,312.49	6,178.81	133.68	47.221	
15,300.00	6,040.00	5,868.34	5,587.45	192.48	33.67	-72.07	-6,393.10	2,133.58	6,410.12	6,276.23	133.88	47.878	
15,400.00	6,040.00	5,867.68	5,586.79	195.01	33.67	-72.05	-6,393.11	2,133.53	6,507.82	6,373.73	134.08	48.536	
15,500.00	6,040.00	5,867.04	5,586.15	197.55	33.67	-72.02	-6,393.12	2,133.49	6,605.58	6,471.31	134.27	49.195	
15,600.00	6,040.00	5,866.42	5,585.53	200.10	33.67	-72.00	-6,393.13	2,133.44	6,703.41	6,568.95	134.46	49.855	
15,700.00	6,040.00	5,865.81	5,584.92	202.65	33.66	-71.98	-6,393.13	2,133.40	6,801.31	6,666.67	134.64	50.515	
15,800.00	6,040.00	5,865.22	5,584.33	205.22	33.66	-71.95	-6,393.14	2,133.36	6,899.26	6,764.45	134.81	51.176	
15,900.00	6,040.00	5,864.65	5,583.76	207.78	33.66	-71.93	-6,393.15	2,133.33	6,997.27	6,862.29	134.98	51.838	
16,000.00	6,040.00	5,822.00	5,541.14	210.36	33.58	-70.27	-6,393.52	2,131.98	7,096.78	6,961.61	135.17	52.502	
16,100.00	6,040.00	5,822.00	5,541.14	212.93	33.58	-70.27	-6,393.52	2,131.98	7,194.86	7,059.53	135.33	53.165	
16,200.00	6,040.00	5,822.00	5,541.14	215.52	33.58	-70.27	-6,393.52	2,131.98	7,292.99	7,157.51	135.48	53.829	
16,300.00	6,040.00	5,822.00	5,541.14	218.11	33.58	-70.27	-6,393.52	2,131.98	7,391.18	7,255.54	135.64	54.493	
16,400.00	6,040.00	5,822.00	5,541.14	220.70	33.58	-70.27	-6,393.52	2,131.98	7,489.41	7,353.63	135.78	55.158	
16,500.00	6,040.00	5,822.00	5,541.14	223.29	33.58	-70.27	-6,393.52	2,131.98	7,587.68	7,451.76	135.92	55.823	
16,600.00	6,040.00	5,822.00	5,541.14	225.89	33.58	-70.27	-6,393.52	2,131.98	7,686.01	7,549.94	136.06	56.488	
16,700.00	6,040.00	5,822.00	5,541.14	228.50	33.58	-70.27	-6,393.52	2,131.98	7,784.37	7,648.17	136.20	57.154	
16,800.00	6,040.00	5,822.00	5,541.14	231.11	33.58	-70.27	-6,393.52	2,131.98	7,882.78	7,746.45	136.33	57.821	
16,900.00	6,040.00	5,822.00	5,541.14	233.72	33.58	-70.27	-6,393.52	2,131.98	7,981.22	7,844.76	136.46	58.488	
17,000.00	6,040.00	5,822.00	5,541.14	236.33	33.58	-70.27	-6,393.52	2,131.98	8,079.71	7,943.12	136.59	59.155	
17,100.00	6,040.00	5,822.00	5,541.14	238.95	33.58	-70.27	-6,393.52	2,131.98	8,178.23	8,041.52	136.71	59.822	
17,200.00	6,040.00	5,822.00	5,541.14	241.57	33.58	-70.27	-6,393.52	2,131.98	8,276.78	8,139.95	136.83	60.490	
17,300.00	6,040.00	5,822.00	5,541.14	244.19	33.58	-70.27	-6,393.52	2,131.98	8,375.37	8,238.43	136.95	61.158	
17,400.00	6,040.00	5,822.00	5,541.14	246.82	33.58	-70.27	-6,393.52	2,131.98	8,474.00	8,336.94	137.06	61.826	
17,500.00	6,040.00	5,822.00	5,541.14	249.45	33.58	-70.27	-6,393.52	2,131.98	8,572.65	8,435.48	137.17	62.495	
17,600.00	6,040.00	5,822.00	5,541.14	252.08	33.58	-70.27	-6,393.52	2,131.98	8,671.34	8,534.05	137.28	63.164	
17,700.00	6,040.00	5,822.00	5,541.14	254.71	33.58	-70.27	-6,393.52	2,131.98	8,770.05	8,632.66	137.39	63.833	
17,800.00	6,040.00	5,822.00	5,541.14	257.35	33.58	-70.27	-6,393.52	2,131.98	8,868.80	8,731.30	137.50	64.502	
17,900.00	6,040.00	5,822.00	5,541.14	259.99	33.58	-70.27	-6,393.52	2,131.98	8,967.57	8,829.97	137.60	65.172	
18,000.00	6,040.00	5,822.00	5,541.14	262.63	33.58	-70.27	-6,393.52	2,131.98	9,066.37	8,928.67	137.70	65.841	
18,100.00	6,040.00	5,822.00	5,541.14	265.27	33.58	-70.27	-6,393.52	2,131.98	9,165.19	9,027.39	137.80	66.511	
18,200.00	6,040.00	5,822.00	5,541.14	267.91	33.58	-70.27	-6,393.52	2,131.98	9,264.05	9,126.15	137.90	67.181	
18,300.00	6,040.00	5,822.00	5,541.14	270.56	33.58	-70.27	-6,393.52	2,131.98	9,362.92	9,224.93	137.99	67.851	
18,400.00	6,040.00	5,822.00	5,541.14	273.21	33.58	-70.27	-6,393.52	2,131.98	9,461.82	9,323.73	138.09	68.521	
18,500.00	6,040.00	5,822.00	5,541.14	275.86	33.58	-70.27	-6,393.52	2,131.98	9,560.74	9,422.56	138.18	69.191	
18,600.00	6,040.00	5,822.00	5,541.14	278.51	33.58	-70.27	-6,393.52	2,131.98	9,659.68	9,521.41	138.27	69.861	
18,700.00	6,040.00	5,822.00	5,541.14	281.16	33.58	-70.27	-6,393.52	2,131.98	9,758.65	9,620.29	138.36	70.532	
18,800.00	6,040.00	5,822.00	5,541.14	283.81	33.58	-70.27	-6,393.52	2,131.98	9,857.63	9,719.19	138.45	71.202	
18,900.00	6,040.00	5,822.00	5,541.14	286.47	33.58	-70.27	-6,393.52	2,131.98	9,956.64	9,818.11	138.53	71.873	
18,919.70	6,040.00	5,822.00	5,541.14	286.99	33.58	-70.27	-6,393.52	2,131.98	9,976.15	9,837.60	138.55	72.005	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 783-MWD OWSG, 8640-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	160.15	-4,854.33	1,752.75	5,161.15				
100.00	100.00	0.00	0.00	0.13	0.00	160.15	-4,854.33	1,752.75	5,161.57	5,161.43	0.14	N/A	
200.00	199.98	0.00	0.00	0.48	0.00	10.92	-4,854.33	1,752.75	5,162.21	5,161.72	0.48	N/A	
300.00	299.84	0.00	0.00	0.85	0.00	10.92	-4,854.33	1,752.75	5,161.36	5,160.52	0.84	6,160.906	
400.00	399.45	0.00	0.00	1.22	0.00	10.93	-4,854.33	1,752.75	5,159.02	5,157.82	1.20	4,307.254	
500.00	498.70	200.04	199.95	1.62	0.50	11.00	-4,859.23	1,754.66	5,146.06	5,144.10	1.95	2,635.645	
600.00	597.47	242.37	242.21	2.05	0.61	11.05	-4,861.52	1,755.56	5,136.46	5,134.06	2.40	2,135.918	
700.00	695.62	284.64	284.38	2.51	0.72	11.12	-4,864.24	1,756.63	5,124.57	5,121.70	2.86	1,790.168	
800.00	793.06	326.83	326.43	3.01	0.83	11.19	-4,867.39	1,757.86	5,110.38	5,107.05	3.33	1,536.091	
900.00	889.64	368.93	368.36	3.56	0.93	11.28	-4,870.97	1,759.26	5,093.90	5,090.10	3.80	1,341.028	
1,000.00	985.27	410.93	410.13	4.14	1.04	11.38	-4,874.97	1,760.82	5,075.15	5,070.87	4.28	1,186.221	
1,100.00	1,079.82	452.81	451.74	4.78	1.14	11.49	-4,879.39	1,762.55	5,054.12	5,049.35	4.77	1,060.134	
1,200.00	1,173.17	494.55	493.16	5.46	1.25	11.62	-4,884.21	1,764.44	5,030.84	5,025.57	5.27	955.283	
1,300.00	1,265.21	536.15	534.38	6.20	1.35	11.77	-4,889.44	1,766.48	5,005.31	4,999.53	5.78	866.602	
1,400.00	1,355.84	577.58	575.37	6.99	1.46	11.93	-4,895.07	1,768.68	4,977.54	4,971.24	6.30	790.537	
1,500.00	1,444.94	782.50	777.00	7.84	1.98	12.29	-4,928.98	1,781.95	4,953.77	4,946.64	7.13	694.357	
1,600.00	1,532.39	782.50	777.00	8.75	1.98	12.45	-4,928.98	1,781.95	4,918.86	4,911.26	7.60	647.280	
1,700.00	1,618.11	782.50	777.00	9.71	1.98	12.62	-4,928.98	1,781.95	4,882.54	4,874.46	8.08	604.352	
1,800.00	1,701.97	782.50	777.00	10.74	1.98	12.80	-4,928.98	1,781.95	4,844.83	4,836.25	8.57	565.071	
1,900.00	1,783.88	782.50	777.00	11.82	1.98	12.99	-4,928.98	1,781.95	4,805.73	4,796.64	9.08	529.018	
2,000.00	1,863.74	818.06	811.77	12.96	2.16	13.25	-4,935.96	1,784.56	4,764.93	4,755.18	9.75	488.907	
2,100.00	1,941.45	854.01	846.84	14.16	2.34	13.54	-4,943.45	1,787.12	4,722.09	4,711.67	10.42	453.112	
2,200.00	2,016.92	879.00	871.16	15.41	2.47	13.83	-4,948.92	1,788.85	4,677.27	4,666.21	11.07	422.546	
2,300.00	2,090.05	919.74	910.70	16.73	2.70	14.19	-4,958.32	1,791.70	4,630.47	4,618.68	11.80	392.550	
2,400.00	2,160.76	970.00	959.26	18.10	2.98	14.60	-4,970.77	1,795.33	4,581.92	4,569.35	12.57	364.512	
2,500.00	2,228.95	970.00	959.26	19.53	2.98	14.90	-4,970.77	1,795.33	4,531.33	4,518.15	13.17	344.044	
2,600.00	2,294.55	1,012.30	999.92	21.01	3.23	15.36	-4,981.97	1,798.48	4,478.92	4,464.97	13.95	321.020	
2,700.00	2,357.48	1,061.00	1,046.50	22.55	3.52	15.88	-4,995.68	1,802.18	4,424.84	4,410.08	14.77	299.643	
2,800.00	2,418.42	1,061.00	1,046.50	24.13	3.52	15.97	-4,995.68	1,802.18	4,369.58	4,354.17	15.41	283.477	
2,900.00	2,479.25	1,120.14	1,102.79	25.71	3.90	16.19	-5,013.19	1,806.88	4,315.06	4,298.75	16.31	264.549	
3,000.00	2,540.09	1,174.26	1,154.13	27.31	4.24	16.40	-5,029.73	1,811.44	4,261.40	4,244.21	17.19	247.970	
3,100.00	2,600.93	1,244.00	1,220.25	28.90	4.70	16.67	-5,051.11	1,817.33	4,207.99	4,189.84	18.15	231.812	
3,200.00	2,661.77	1,290.36	1,264.12	30.51	5.01	16.86	-5,065.63	1,821.07	4,155.21	4,136.17	19.04	218.188	
3,300.00	2,722.61	1,336.00	1,307.10	32.11	5.31	17.05	-5,080.57	1,824.48	4,103.45	4,083.50	19.95	205.650	
3,400.00	2,783.44	1,365.09	1,334.39	33.72	5.51	17.18	-5,090.43	1,826.58	4,052.70	4,031.89	20.82	194.683	
3,500.00	2,844.28	1,401.30	1,368.22	35.34	5.77	17.33	-5,103.05	1,829.27	4,003.07	3,981.35	21.73	184.255	
3,600.00	2,905.12	3,600.00	1,450.48	36.95	21.45	17.72	-5,134.25	1,836.22	3,954.12	3,921.73	32.38	122.100	
3,700.00	2,965.96	1,599.15	1,552.93	38.57	7.17	18.22	-5,172.20	1,844.93	3,904.60	3,880.51	24.09	162.078	
3,800.00	3,026.79	1,645.76	1,596.44	40.19	7.50	18.44	-5,188.53	1,848.46	3,855.60	3,830.51	25.10	153.637	
3,900.00	3,087.63	1,700.00	1,646.83	41.81	7.90	18.69	-5,208.06	1,853.04	3,807.68	3,781.53	26.15	145.623	
4,000.00	3,148.47	1,747.85	1,691.13	43.43	8.25	18.91	-5,225.57	1,857.61	3,760.64	3,733.45	27.19	138.298	
4,100.00	3,209.31	1,816.03	1,754.10	45.05	8.77	19.21	-5,250.60	1,865.13	3,714.25	3,685.91	28.33	131.096	
4,200.00	3,270.14	1,889.78	1,822.09	46.68	9.33	19.52	-5,277.67	1,874.28	3,668.29	3,638.78	29.51	124.310	
4,300.00	3,330.98	1,955.50	1,882.51	48.31	9.83	19.79	-5,301.89	1,883.32	3,622.86	3,592.19	30.67	118.124	
4,400.00	3,391.82	2,050.27	1,969.52	49.93	10.57	20.18	-5,336.96	1,896.78	3,577.80	3,545.84	31.96	111.946	
4,500.00	3,452.66	2,101.84	2,016.89	51.56	10.97	20.41	-5,356.27	1,903.27	3,533.01	3,499.90	33.11	106.709	
4,600.00	3,513.49	2,157.00	2,067.29	53.19	11.40	20.69	-5,377.94	1,909.03	3,489.48	3,455.17	34.30	101.730	
4,700.00	3,574.33	2,275.82	2,175.92	54.82	12.33	21.34	-5,424.99	1,919.06	3,446.28	3,410.48	35.80	96.268	
4,800.00	3,635.17	2,492.65	2,376.27	56.45	13.97	22.44	-5,503.97	1,943.86	3,400.66	3,363.01	37.65	90.326	
4,900.00	3,696.01	2,529.00	2,410.07	58.08	14.24	22.62	-5,516.42	1,948.69	3,354.09	3,315.25	38.84	86.366	
5,000.00	3,756.84	2,584.38	2,461.40	59.71	14.66	22.91	-5,536.15	1,955.30	3,308.54	3,268.42	40.12	82.468	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 783-MWD OWSG, 8640-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	2,623.00	2,496.91	61.34	14.95	23.13	-5,550.86	1,959.03	3,264.72	3,223.35	41.37	78.912	
5,200.00	3,878.52	2,699.55	2,567.06	62.97	15.55	23.59	-5,580.68	1,966.08	3,221.95	3,179.14	42.81	75.255	
5,300.00	3,939.36	2,800.80	2,659.86	64.61	16.34	24.20	-5,619.91	1,976.15	3,179.37	3,134.98	44.39	71.630	
5,400.00	4,000.19	5,400.00	2,829.55	66.24	35.66	25.27	-5,686.55	1,997.57	3,134.58	3,077.28	57.30	54.707	
5,500.00	4,061.03	3,059.93	2,899.80	67.87	18.29	25.74	-5,713.03	2,005.99	3,089.22	3,041.43	47.79	64.647	
5,600.00	4,121.87	3,121.23	2,956.59	69.51	18.75	26.14	-5,735.20	2,012.39	3,044.97	2,995.69	49.29	61.780	
5,700.00	4,182.71	3,188.00	3,018.32	71.14	19.25	26.57	-5,759.49	2,019.94	3,001.34	2,950.50	50.84	59.039	
5,800.00	4,243.54	3,251.80	3,077.07	72.77	19.75	26.97	-5,783.01	2,028.01	2,958.55	2,906.14	52.40	56.458	
5,900.00	4,304.38	3,282.00	3,104.75	74.41	19.98	27.15	-5,794.36	2,032.17	2,917.11	2,863.25	53.86	54.164	
6,000.00	4,365.22	3,325.74	3,144.57	76.04	20.34	27.43	-5,811.52	2,037.90	2,877.34	2,821.94	55.40	51.941	
6,100.00	4,426.06	3,376.00	3,189.79	77.68	20.75	27.78	-5,832.77	2,043.36	2,839.90	2,782.89	57.01	49.812	
6,200.00	4,486.90	3,400.79	3,211.93	79.31	20.97	27.97	-5,843.67	2,045.70	2,804.08	2,745.56	58.52	47.919	
6,300.00	4,547.73	3,473.57	3,276.84	80.95	21.59	28.52	-5,875.98	2,052.00	2,769.62	2,709.28	60.35	45.896	
6,400.00	4,608.57	3,605.16	3,394.54	82.58	22.70	29.59	-5,934.05	2,061.40	2,735.33	2,672.71	62.62	43.683	
6,500.00	4,669.41	4,074.81	3,831.92	84.22	26.00	34.26	-6,103.59	2,070.89	2,691.14	2,624.25	66.89	40.234	
6,600.00	4,730.25	4,161.30	3,914.52	85.86	26.54	35.18	-6,129.05	2,073.92	2,644.63	2,575.58	69.05	38.297	
6,700.00	4,791.08	4,221.00	3,971.25	87.49	26.92	35.80	-6,147.39	2,076.84	2,599.68	2,528.51	71.17	36.529	
6,800.00	4,851.92	4,288.48	4,035.20	89.13	27.36	36.51	-6,168.56	2,080.89	2,555.86	2,482.50	73.36	34.838	
6,900.00	4,912.76	4,416.93	4,157.24	90.76	28.19	37.89	-6,207.64	2,089.58	2,511.91	2,436.06	75.85	33.118	
7,000.00	4,973.60	4,587.93	4,321.19	92.40	29.23	39.82	-6,254.72	2,101.49	2,465.91	2,387.41	78.50	31.414	
7,100.00	5,034.43	4,730.37	4,458.80	94.04	30.03	41.53	-6,290.11	2,111.64	2,418.59	2,337.51	81.08	29.829	
7,200.00	5,095.27	4,868.70	4,593.50	95.67	30.76	43.32	-6,320.20	2,120.73	2,369.20	2,285.47	83.72	28.298	
7,300.00	5,156.11	7,300.00	4,764.91	97.31	41.36	45.82	-6,352.05	2,129.45	2,317.88	2,223.10	94.78	24.454	
7,400.00	5,216.95	5,217.63	4,937.54	98.95	32.24	48.64	-6,375.60	2,134.61	2,264.08	2,174.80	89.28	25.360	
7,500.00	5,277.78	7,500.00	5,144.12	100.59	38.10	52.50	-6,391.51	2,135.22	2,207.45	2,109.60	97.85	22.559	
7,600.00	5,338.62	5,557.32	5,276.48	102.22	33.15	55.26	-6,394.93	2,133.37	2,149.31	2,054.21	95.10	22.601	
7,700.00	5,399.46	5,667.95	5,387.10	103.86	33.34	57.72	-6,394.82	2,132.37	2,090.95	1,992.74	98.21	21.291	
7,800.00	5,460.30	5,731.80	5,450.95	105.50	33.44	59.19	-6,394.20	2,132.14	2,033.62	1,932.01	101.60	20.016	
7,900.00	5,521.24	5,786.06	5,505.20	107.13	33.52	57.76	-6,393.74	2,132.04	1,977.68	1,872.52	105.15	18.808	
8,000.00	5,584.83	6,359.80	6,012.48	108.61	35.17	48.58	-6,383.29	2,350.27	1,909.16	1,812.46	96.70	19.743	
8,100.00	5,650.69	6,534.39	6,115.00	109.85	36.05	20.86	-6,378.82	2,490.78	1,823.56	1,731.23	92.34	19.749	
8,200.00	5,716.83	6,617.34	6,148.58	110.82	36.60	-13.22	-6,377.54	2,566.54	1,733.75	1,643.90	89.85	19.296	
8,300.00	5,781.24	6,615.07	6,147.82	111.52	36.59	-39.49	-6,377.56	2,564.40	1,645.43	1,555.62	89.81	18.321	
8,400.00	5,841.96	6,580.93	6,135.24	111.98	36.34	-57.79	-6,378.02	2,532.67	1,562.03	1,471.89	90.14	17.330	
8,500.00	5,897.14	6,537.35	6,116.38	112.25	36.07	-70.57	-6,378.76	2,493.40	1,486.36	1,396.46	89.90	16.533	
8,600.00	5,945.12	6,487.46	6,091.50	112.37	35.78	-79.21	-6,379.76	2,450.18	1,421.20	1,332.27	88.93	15.981	
8,700.00	5,984.42	6,437.57	6,063.14	112.39	35.52	-84.84	-6,380.97	2,409.17	1,369.22	1,282.19	87.03	15.732 SF	
8,800.00	6,013.86	6,388.71	6,032.02	112.35	35.29	-88.01	-6,382.41	2,371.56	1,332.86	1,248.59	84.28	15.816	
8,900.00	6,032.54	6,317.91	5,983.71	112.30	34.99	-88.26	-6,384.36	2,319.84	1,313.43	1,231.15	82.28	15.964	
8,964.93	6,038.62	6,273.61	5,952.56	112.26	34.81	-87.48	-6,385.22	2,288.36	1,309.83	1,228.99	80.85	16.202 CC, ES	
9,000.00	6,039.89	6,252.68	5,937.24	112.24	34.73	-86.81	-6,385.57	2,274.10	1,310.89	1,230.97	79.92	16.403	
9,100.00	6,040.00	6,199.00	5,896.02	112.19	34.53	-84.94	-6,386.35	2,239.74	1,320.85	1,243.58	77.28	17.093	
9,200.00	6,040.00	6,164.98	5,868.21	112.16	34.41	-83.74	-6,386.83	2,220.17	1,336.36	1,261.85	74.51	17.936	
9,300.00	6,040.00	6,138.36	5,845.37	112.15	34.33	-82.75	-6,387.26	2,206.52	1,357.86	1,285.49	72.38	18.761	
9,400.00	6,040.00	6,105.00	5,815.56	112.15	34.22	-81.47	-6,387.87	2,191.58	1,385.54	1,314.08	71.46	19.389	
9,500.00	6,040.00	6,105.00	5,815.56	112.16	34.22	-81.47	-6,387.87	2,191.58	1,418.94	1,348.13	70.81	20.039	
9,600.00	6,040.00	6,077.92	5,790.66	112.19	34.15	-80.41	-6,388.43	2,180.94	1,457.93	1,386.13	71.80	20.306	
9,700.00	6,040.00	6,060.79	5,774.71	112.24	34.10	-79.73	-6,388.80	2,174.71	1,502.15	1,428.75	73.40	20.465	
9,800.00	6,040.00	6,045.67	5,760.50	112.31	34.06	-79.13	-6,389.16	2,169.55	1,551.20	1,475.61	75.59	20.521	
9,900.00	6,040.00	6,011.00	5,727.52	112.39	33.97	-77.75	-6,390.02	2,158.92	1,605.04	1,526.66	78.38	20.478	
10,000.00	6,040.00	6,011.00	5,727.52	112.49	33.97	-77.75	-6,390.02	2,158.92	1,662.31	1,581.24	81.07	20.504	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 783-MWD OWSG, 8640-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	6,011.00	5,727.52	112.62	33.97	-77.75	-6,390.02	2,158.92	1,723.49	1,639.56	83.92	20.536	
10,200.00	6,040.00	6,011.00	5,727.52	112.77	33.97	-77.75	-6,390.02	2,158.92	1,788.17	1,701.35	86.81	20.598	
10,300.00	6,040.00	6,011.00	5,727.52	112.94	33.97	-77.75	-6,390.02	2,158.92	1,855.98	1,766.32	89.66	20.699	
10,400.00	6,040.00	5,982.05	5,699.59	113.14	33.91	-76.59	-6,390.76	2,151.34	1,925.93	1,833.43	92.51	20.819	
10,500.00	6,040.00	5,974.59	5,692.34	113.36	33.89	-76.30	-6,390.95	2,149.58	1,998.66	1,903.52	95.15	21.006	
10,600.00	6,040.00	5,967.77	5,685.70	113.62	33.87	-76.02	-6,391.11	2,148.05	2,073.59	1,975.95	97.64	21.236	
10,700.00	6,040.00	5,961.53	5,679.91	113.91	33.86	-75.77	-6,391.26	2,146.71	2,150.49	2,050.50	99.99	21.507	
10,800.00	6,040.00	5,955.79	5,673.99	114.24	33.85	-75.55	-6,391.40	2,145.52	2,229.16	2,126.97	102.19	21.815	
10,900.00	6,040.00	5,950.49	5,668.80	114.61	33.83	-75.33	-6,391.52	2,144.47	2,309.44	2,205.20	104.24	22.155	
11,000.00	6,040.00	5,917.00	5,635.81	115.02	33.76	-74.00	-6,392.26	2,138.80	2,391.84	2,285.64	106.20	22.522	
11,100.00	6,040.00	5,917.00	5,635.81	115.49	33.76	-74.00	-6,392.26	2,138.80	2,474.67	2,366.70	107.97	22.920	
11,200.00	6,040.00	5,917.00	5,635.81	116.00	33.76	-74.00	-6,392.26	2,138.80	2,558.73	2,449.11	109.62	23.341	
11,300.00	6,040.00	5,917.00	5,635.81	116.58	33.76	-74.00	-6,392.26	2,138.80	2,643.90	2,532.74	111.16	23.784	
11,400.00	6,040.00	5,917.00	5,635.81	117.22	33.76	-74.00	-6,392.26	2,138.80	2,730.07	2,617.48	112.60	24.246	
11,500.00	6,040.00	5,917.00	5,635.81	117.92	33.76	-74.00	-6,392.26	2,138.80	2,817.16	2,703.23	113.94	24.726	
11,600.00	6,040.00	5,917.00	5,635.81	118.70	33.76	-74.00	-6,392.26	2,138.80	2,905.08	2,789.90	115.19	25.221	
11,700.00	6,040.00	5,917.00	5,635.81	119.56	33.76	-74.00	-6,392.26	2,138.80	2,993.76	2,877.41	116.35	25.730	
11,800.00	6,040.00	5,917.00	5,635.81	120.51	33.76	-74.00	-6,392.26	2,138.80	3,083.14	2,965.69	117.44	26.252	
11,900.00	6,040.00	5,917.00	5,635.81	121.54	33.76	-74.00	-6,392.26	2,138.80	3,173.14	3,054.68	118.47	26.785	
12,000.00	6,040.00	5,917.00	5,635.81	122.66	33.76	-74.00	-6,392.26	2,138.80	3,263.73	3,144.31	119.42	27.329	
12,100.00	6,040.00	5,917.00	5,635.81	123.87	33.76	-74.00	-6,392.26	2,138.80	3,354.85	3,234.53	120.32	27.882	
12,200.00	6,040.00	5,917.00	5,635.81	125.17	33.76	-74.00	-6,392.26	2,138.80	3,446.47	3,325.30	121.17	28.444	
12,300.00	6,040.00	5,917.00	5,635.81	126.57	33.76	-74.00	-6,392.26	2,138.80	3,538.54	3,416.58	121.96	29.014	
12,400.00	6,040.00	5,917.00	5,635.81	128.06	33.76	-74.00	-6,392.26	2,138.80	3,631.03	3,508.32	122.71	29.591	
12,500.00	6,040.00	5,917.00	5,635.81	129.63	33.76	-74.00	-6,392.26	2,138.80	3,723.90	3,600.49	123.41	30.174	
12,600.00	6,040.00	5,917.00	5,635.81	131.29	33.76	-74.00	-6,392.26	2,138.80	3,817.14	3,693.06	124.08	30.764	
12,700.00	6,040.00	5,917.00	5,635.81	133.03	33.76	-74.00	-6,392.26	2,138.80	3,910.71	3,786.00	124.71	31.359	
12,800.00	6,040.00	5,917.00	5,635.81	134.84	33.76	-74.00	-6,392.26	2,138.80	4,004.59	3,879.29	125.30	31.960	
12,900.00	6,040.00	5,917.00	5,635.81	136.71	33.76	-74.00	-6,392.26	2,138.80	4,098.77	3,972.90	125.87	32.565	
13,000.00	6,040.00	5,917.00	5,635.81	138.66	33.76	-74.00	-6,392.26	2,138.80	4,193.21	4,066.81	126.40	33.174	
13,100.00	6,040.00	5,917.00	5,635.81	140.66	33.76	-74.00	-6,392.26	2,138.80	4,287.90	4,160.99	126.91	33.787	
13,200.00	6,040.00	5,917.00	5,635.81	142.71	33.76	-74.00	-6,392.26	2,138.80	4,382.83	4,255.44	127.39	34.405	
13,300.00	6,040.00	5,917.00	5,635.81	144.81	33.76	-74.00	-6,392.26	2,138.80	4,477.98	4,350.13	127.85	35.025	
13,400.00	6,040.00	5,917.00	5,635.81	146.96	33.76	-74.00	-6,392.26	2,138.80	4,573.34	4,445.05	128.29	35.649	
13,500.00	6,040.00	5,917.00	5,635.81	149.14	33.76	-74.00	-6,392.26	2,138.80	4,668.89	4,540.18	128.70	36.276	
13,600.00	6,040.00	5,917.00	5,635.81	151.36	33.76	-74.00	-6,392.26	2,138.80	4,764.62	4,635.52	129.10	36.906	
13,700.00	6,040.00	5,917.00	5,635.81	153.62	33.76	-74.00	-6,392.26	2,138.80	4,860.53	4,731.05	129.48	37.539	
13,800.00	6,040.00	5,917.00	5,635.81	155.91	33.76	-74.00	-6,392.26	2,138.80	4,956.59	4,826.75	129.84	38.173	
13,900.00	6,040.00	5,917.00	5,635.81	158.22	33.76	-74.00	-6,392.26	2,138.80	5,052.81	4,922.62	130.19	38.811	
14,000.00	6,040.00	5,917.00	5,635.81	160.56	33.76	-74.00	-6,392.26	2,138.80	5,149.18	5,018.65	130.52	39.450	
14,100.00	6,040.00	5,917.00	5,635.81	162.92	33.76	-74.00	-6,392.26	2,138.80	5,245.68	5,114.83	130.84	40.091	
14,200.00	6,040.00	5,917.00	5,635.81	165.30	33.76	-74.00	-6,392.26	2,138.80	5,342.31	5,211.16	131.15	40.734	
14,300.00	6,040.00	5,917.00	5,635.81	167.70	33.76	-74.00	-6,392.26	2,138.80	5,439.06	5,307.61	131.44	41.379	
14,400.00	6,040.00	5,875.29	5,594.37	170.12	33.68	-72.35	-6,393.01	2,134.10	5,534.50	5,402.74	131.76	42.005	
14,500.00	6,040.00	5,874.42	5,593.50	172.55	33.68	-72.31	-6,393.02	2,134.03	5,631.41	5,499.38	132.03	42.652	
14,600.00	6,040.00	5,873.57	5,592.66	175.00	33.68	-72.28	-6,393.03	2,133.96	5,728.43	5,596.14	132.29	43.301	
14,700.00	6,040.00	5,872.75	5,591.84	177.46	33.68	-72.25	-6,393.04	2,133.90	5,825.55	5,693.01	132.55	43.951	
14,800.00	6,040.00	5,871.96	5,591.05	179.94	33.68	-72.22	-6,393.05	2,133.84	5,922.77	5,789.98	132.79	44.603	
14,900.00	6,040.00	5,871.19	5,590.29	182.43	33.67	-72.19	-6,393.06	2,133.78	6,020.07	5,887.05	133.02	45.256	
15,000.00	6,040.00	5,870.44	5,589.54	184.92	33.67	-72.16	-6,393.07	2,133.73	6,117.47	5,984.22	133.25	45.910	
15,100.00	6,040.00	5,869.72	5,588.82	187.43	33.67	-72.13	-6,393.08	2,133.67	6,214.94	6,081.47	133.47	46.565	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1609CS - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 783-MWD OWSG, 8640-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,200.00	6,040.00	5,869.02	5,588.12	189.95	33.67	-72.10	-6,393.09	2,133.62	6,312.49	6,178.81	133.68	47.221	
15,300.00	6,040.00	5,868.34	5,587.45	192.48	33.67	-72.07	-6,393.10	2,133.58	6,410.12	6,276.23	133.88	47.878	
15,400.00	6,040.00	5,867.68	5,586.79	195.01	33.67	-72.05	-6,393.11	2,133.53	6,507.82	6,373.73	134.08	48.536	
15,500.00	6,040.00	5,867.04	5,586.15	197.55	33.67	-72.02	-6,393.12	2,133.49	6,605.58	6,471.31	134.27	49.195	
15,600.00	6,040.00	5,866.42	5,585.53	200.10	33.67	-72.00	-6,393.13	2,133.44	6,703.41	6,568.95	134.46	49.855	
15,700.00	6,040.00	5,865.81	5,584.92	202.65	33.66	-71.98	-6,393.13	2,133.40	6,801.31	6,666.67	134.64	50.515	
15,800.00	6,040.00	5,865.22	5,584.33	205.22	33.66	-71.95	-6,393.14	2,133.36	6,899.26	6,764.45	134.81	51.176	
15,900.00	6,040.00	5,864.65	5,583.76	207.78	33.66	-71.93	-6,393.15	2,133.33	6,997.27	6,862.29	134.98	51.838	
16,000.00	6,040.00	5,822.00	5,541.14	210.36	33.58	-70.27	-6,393.52	2,131.98	7,096.78	6,961.61	135.17	52.502	
16,100.00	6,040.00	5,822.00	5,541.14	212.93	33.58	-70.27	-6,393.52	2,131.98	7,194.86	7,059.53	135.33	53.165	
16,200.00	6,040.00	5,822.00	5,541.14	215.52	33.58	-70.27	-6,393.52	2,131.98	7,292.99	7,157.51	135.48	53.829	
16,300.00	6,040.00	5,822.00	5,541.14	218.11	33.58	-70.27	-6,393.52	2,131.98	7,391.18	7,255.54	135.64	54.493	
16,400.00	6,040.00	5,822.00	5,541.14	220.70	33.58	-70.27	-6,393.52	2,131.98	7,489.41	7,353.63	135.78	55.158	
16,500.00	6,040.00	5,822.00	5,541.14	223.29	33.58	-70.27	-6,393.52	2,131.98	7,587.68	7,451.76	135.92	55.823	
16,600.00	6,040.00	5,822.00	5,541.14	225.89	33.58	-70.27	-6,393.52	2,131.98	7,686.01	7,549.94	136.06	56.488	
16,700.00	6,040.00	5,822.00	5,541.14	228.50	33.58	-70.27	-6,393.52	2,131.98	7,784.37	7,648.17	136.20	57.154	
16,800.00	6,040.00	5,822.00	5,541.14	231.11	33.58	-70.27	-6,393.52	2,131.98	7,882.78	7,746.45	136.33	57.821	
16,900.00	6,040.00	5,822.00	5,541.14	233.72	33.58	-70.27	-6,393.52	2,131.98	7,981.22	7,844.76	136.46	58.488	
17,000.00	6,040.00	5,822.00	5,541.14	236.33	33.58	-70.27	-6,393.52	2,131.98	8,079.71	7,943.12	136.59	59.155	
17,100.00	6,040.00	5,822.00	5,541.14	238.95	33.58	-70.27	-6,393.52	2,131.98	8,178.23	8,041.52	136.71	59.822	
17,200.00	6,040.00	5,822.00	5,541.14	241.57	33.58	-70.27	-6,393.52	2,131.98	8,276.78	8,139.95	136.83	60.490	
17,300.00	6,040.00	5,822.00	5,541.14	244.19	33.58	-70.27	-6,393.52	2,131.98	8,375.37	8,238.43	136.95	61.158	
17,400.00	6,040.00	5,822.00	5,541.14	246.82	33.58	-70.27	-6,393.52	2,131.98	8,474.00	8,336.94	137.06	61.826	
17,500.00	6,040.00	5,822.00	5,541.14	249.45	33.58	-70.27	-6,393.52	2,131.98	8,572.65	8,435.48	137.17	62.495	
17,600.00	6,040.00	5,822.00	5,541.14	252.08	33.58	-70.27	-6,393.52	2,131.98	8,671.34	8,534.05	137.28	63.164	
17,700.00	6,040.00	5,822.00	5,541.14	254.71	33.58	-70.27	-6,393.52	2,131.98	8,770.05	8,632.66	137.39	63.833	
17,800.00	6,040.00	5,822.00	5,541.14	257.35	33.58	-70.27	-6,393.52	2,131.98	8,868.80	8,731.30	137.50	64.502	
17,900.00	6,040.00	5,822.00	5,541.14	259.99	33.58	-70.27	-6,393.52	2,131.98	8,967.57	8,829.97	137.60	65.172	
18,000.00	6,040.00	5,822.00	5,541.14	262.63	33.58	-70.27	-6,393.52	2,131.98	9,066.37	8,928.67	137.70	65.841	
18,100.00	6,040.00	5,822.00	5,541.14	265.27	33.58	-70.27	-6,393.52	2,131.98	9,165.19	9,027.39	137.80	66.511	
18,200.00	6,040.00	5,822.00	5,541.14	267.91	33.58	-70.27	-6,393.52	2,131.98	9,264.05	9,126.15	137.90	67.181	
18,300.00	6,040.00	5,822.00	5,541.14	270.56	33.58	-70.27	-6,393.52	2,131.98	9,362.92	9,224.93	137.99	67.851	
18,400.00	6,040.00	5,822.00	5,541.14	273.21	33.58	-70.27	-6,393.52	2,131.98	9,461.82	9,323.73	138.09	68.521	
18,500.00	6,040.00	5,822.00	5,541.14	275.86	33.58	-70.27	-6,393.52	2,131.98	9,560.74	9,422.56	138.18	69.191	
18,600.00	6,040.00	5,822.00	5,541.14	278.51	33.58	-70.27	-6,393.52	2,131.98	9,659.68	9,521.41	138.27	69.861	
18,700.00	6,040.00	5,822.00	5,541.14	281.16	33.58	-70.27	-6,393.52	2,131.98	9,758.65	9,620.29	138.36	70.532	
18,800.00	6,040.00	5,822.00	5,541.14	283.81	33.58	-70.27	-6,393.52	2,131.98	9,857.63	9,719.19	138.45	71.202	
18,900.00	6,040.00	5,822.00	5,541.14	286.47	33.58	-70.27	-6,393.52	2,131.98	9,956.64	9,818.11	138.53	71.873	
18,919.70	6,040.00	5,822.00	5,541.14	286.99	33.58	-70.27	-6,393.52	2,131.98	9,976.15	9,837.60	138.55	72.005	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 863-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	2,724.21	2,653.74	0.00	12.35	165.43	-8,067.65	2,096.32	8,758.96				
100.00	100.00	2,782.50	2,709.08	0.13	12.71	165.40	-8,049.35	2,096.77	8,728.58	8,718.28	10.31	847.018	
200.00	199.98	2,815.36	2,740.34	0.48	12.91	16.34	-8,039.23	2,096.98	8,697.09	8,686.49	10.60	820.567	
300.00	299.84	2,877.50	2,799.51	0.85	13.30	16.52	-8,020.25	2,097.66	8,662.91	8,651.78	11.14	777.893	
400.00	399.45	2,921.68	2,841.63	1.22	13.56	16.72	-8,006.93	2,098.24	8,626.03	8,614.40	11.63	741.761	
500.00	498.70	2,973.50	2,891.12	1.62	13.88	16.95	-7,991.56	2,098.86	8,586.53	8,574.35	12.17	705.327	
600.00	597.47	3,000.00	3,058.14	2.05	0.77	17.18	-7,938.93	2,101.17	8,543.57	8,541.12	2.44	3,495.809	
700.00	695.62	3,675.17	3,555.57	2.51	18.32	17.37	-7,767.01	2,106.13	8,496.22	8,480.31	15.91	534.123	
800.00	793.06	3,697.81	3,576.80	3.01	18.47	17.75	-7,759.12	2,106.18	8,442.95	8,426.61	16.34	516.595	
900.00	889.64	3,736.50	3,613.22	3.56	18.73	18.16	-7,746.06	2,106.02	8,387.57	8,370.71	16.86	497.562	
1,000.00	985.27	3,736.50	3,613.22	4.14	18.73	18.61	-7,746.06	2,106.02	8,329.93	8,312.72	17.21	484.006	
1,100.00	1,079.82	3,776.44	3,650.97	4.78	18.98	19.10	-7,733.02	2,105.66	8,270.16	8,252.42	17.74	466.246	
1,200.00	1,173.17	3,832.50	3,704.12	5.46	19.34	19.65	-7,715.22	2,105.05	8,208.34	8,190.00	18.34	447.614	
1,300.00	1,265.21	3,845.50	3,716.48	6.20	19.42	20.23	-7,711.16	2,104.90	8,144.20	8,125.44	18.77	433.960	
1,400.00	1,355.84	3,916.58	3,784.00	6.99	19.86	20.91	-7,688.98	2,104.14	8,077.86	8,058.42	19.44	415.562	
1,500.00	1,444.84	3,928.50	3,795.32	7.84	19.94	21.61	-7,685.26	2,104.03	8,009.35	7,989.48	19.88	402.911	
1,600.00	1,532.39	3,928.50	3,795.32	8.75	19.94	22.34	-7,685.26	2,104.03	7,939.15	7,918.87	20.28	391.460	
1,700.00	1,618.11	3,975.96	3,840.54	9.71	20.22	23.22	-7,670.87	2,103.63	7,866.71	7,845.83	20.88	376.829	
1,800.00	1,701.97	4,023.50	3,886.12	10.74	20.51	24.19	-7,657.33	2,103.31	7,793.04	7,771.57	21.48	362.835	
1,900.00	1,783.88	4,023.50	3,886.12	11.82	20.51	25.16	-7,657.33	2,103.31	7,717.24	7,695.33	21.91	352.251	
2,000.00	1,863.74	4,174.49	4,030.67	12.96	21.40	26.61	-7,613.73	2,103.93	7,639.81	7,616.90	22.91	333.449	
2,100.00	1,941.45	4,277.11	4,128.52	14.16	22.03	28.14	-7,582.84	2,104.24	7,559.41	7,535.67	23.74	318.482	
2,200.00	2,016.92	4,342.68	4,190.96	15.41	22.43	29.77	-7,562.83	2,104.76	7,477.10	7,452.68	24.43	306.114	
2,300.00	2,090.05	4,399.38	4,244.95	16.73	22.78	31.58	-7,545.50	2,105.12	7,393.11	7,368.02	25.09	294.684	
2,400.00	2,160.76	4,501.50	4,341.95	18.10	23.42	33.88	-7,513.58	2,106.08	7,307.12	7,281.21	25.92	281.961	
2,500.00	2,228.95	4,501.50	4,341.95	19.53	23.42	35.92	-7,513.58	2,106.08	7,219.95	7,193.56	26.39	273.576	
2,600.00	2,294.55	4,540.68	4,379.14	21.01	23.66	38.46	-7,501.27	2,106.63	7,131.38	7,104.37	27.01	264.030	
2,700.00	2,357.48	4,552.99	4,390.86	22.55	23.74	41.12	-7,497.51	2,106.80	7,041.95	7,014.40	27.55	255.615	
2,800.00	2,418.42	4,564.78	4,402.10	24.13	23.81	41.95	-7,493.94	2,106.95	6,951.86	6,923.76	28.10	247.400	
2,900.00	2,479.25	4,596.50	4,432.40	25.71	24.01	42.25	-7,484.57	2,107.37	6,862.04	6,833.31	28.73	238.862	
3,000.00	2,540.09	4,596.50	4,432.40	27.31	24.01	42.25	-7,484.57	2,107.37	6,772.26	6,742.99	29.28	231.306	
3,100.00	2,600.93	3,100.00	4,586.65	28.90	14.64	43.82	-7,435.66	2,109.73	6,682.49	6,659.39	23.10	289.242	
3,200.00	2,661.77	3,200.00	4,621.86	30.51	15.26	44.20	-7,424.10	2,110.23	6,592.26	6,568.20	24.07	273.911	
3,300.00	2,722.61	4,828.48	4,653.21	32.11	25.43	44.55	-7,413.59	2,110.39	6,501.86	6,470.17	31.69	205.185	
3,400.00	2,783.44	4,840.16	4,664.32	33.72	25.51	44.67	-7,409.99	2,110.44	6,411.88	6,379.55	32.34	198.279	
3,500.00	2,844.28	4,852.03	4,675.64	35.34	25.58	44.80	-7,406.39	2,110.47	6,322.14	6,289.13	33.01	191.532	
3,600.00	2,905.12	4,883.50	4,705.69	36.95	25.77	45.15	-7,397.07	2,110.50	6,232.73	6,198.99	33.75	184.691	
3,700.00	2,965.96	4,883.50	4,705.69	38.57	25.77	45.15	-7,397.07	2,110.50	6,143.40	6,108.97	34.43	178.433	
3,800.00	3,026.79	4,883.50	4,705.69	40.19	25.77	45.15	-7,397.07	2,110.50	6,054.40	6,019.26	35.14	172.315	
3,900.00	3,087.63	4,883.50	4,705.69	41.81	25.77	45.15	-7,397.07	2,110.50	5,965.75	5,929.88	35.87	166.338	
4,000.00	3,148.47	4,917.32	4,738.09	43.43	25.97	45.53	-7,387.38	2,110.62	5,877.19	5,840.50	36.69	160.199	
4,100.00	3,209.31	4,931.78	4,751.98	45.05	26.05	45.69	-7,383.32	2,110.74	5,789.00	5,751.51	37.49	154.414	
4,200.00	3,270.14	4,946.58	4,766.19	46.68	26.14	45.86	-7,379.23	2,110.93	5,701.10	5,662.78	38.32	148.789	
4,300.00	3,330.98	4,979.50	4,797.88	48.31	26.33	46.23	-7,370.32	2,111.51	5,613.57	5,574.38	39.20	143.214	
4,400.00	3,391.82	4,979.50	4,797.88	49.93	26.33	46.23	-7,370.32	2,111.51	5,526.21	5,486.16	40.05	137.996	
4,500.00	3,452.66	5,003.24	4,820.77	51.56	26.46	46.51	-7,364.03	2,112.01	5,439.19	5,398.24	40.96	132.801	
4,600.00	3,513.49	5,031.29	4,847.82	53.19	26.62	46.84	-7,356.65	2,112.61	5,352.42	5,310.52	41.90	127.745	
4,700.00	3,574.33	5,552.50	5,344.27	54.82	29.81	54.04	-7,199.34	2,116.89	5,265.11	5,221.68	43.43	121.225	
4,800.00	3,635.17	5,585.01	5,374.72	56.45	30.02	54.59	-7,188.02	2,115.72	5,175.04	5,130.66	44.39	116.592	
4,900.00	3,696.01	5,595.10	5,384.20	58.08	30.09	54.76	-7,184.60	2,115.35	5,085.45	5,040.11	45.35	112.150	
5,000.00	3,756.84	5,605.42	5,393.91	59.71	30.15	54.94	-7,181.14	2,114.98	4,996.19	4,949.85	46.34	107.823	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1724C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 863-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	5,615.98	5,403.87	61.34	30.22	55.12	-7,177.64	2,114.59	4,907.27	4,859.90	47.36	103.611	
5,200.00	3,878.52	5,648.50	5,434.64	62.97	30.43	55.69	-7,167.17	2,113.41	4,818.86	4,770.42	48.44	99.484	
5,300.00	3,939.36	5,648.50	5,434.64	64.61	30.43	55.69	-7,167.17	2,113.41	4,730.56	4,681.03	49.53	95.515	
5,400.00	4,000.19	5,648.50	5,434.64	66.24	30.43	55.69	-7,167.17	2,113.41	4,642.74	4,592.08	50.66	91.653	
5,500.00	4,061.03	5,674.49	5,459.29	67.87	30.60	56.16	-7,159.01	2,112.46	4,555.31	4,503.47	51.84	87.879	
5,600.00	4,121.87	5,699.27	5,482.82	69.51	30.75	56.60	-7,151.28	2,111.57	4,468.22	4,415.16	53.06	84.217	
5,700.00	4,182.71	5,724.34	5,506.65	71.14	30.91	57.06	-7,143.51	2,110.68	4,381.48	4,327.16	54.32	80.665	
5,800.00	4,243.54	5,743.50	5,524.86	72.77	31.03	57.42	-7,137.62	2,110.01	4,295.11	4,239.49	55.62	77.221	
5,900.00	4,304.38	5,764.49	5,544.85	74.41	31.15	57.81	-7,131.21	2,109.48	4,209.18	4,152.21	56.97	73.885	
6,000.00	4,365.22	5,782.38	5,561.91	76.04	31.26	58.14	-7,125.82	2,109.34	4,123.73	4,065.37	58.36	70.656	
6,100.00	4,426.06	5,801.25	5,579.92	77.68	31.38	58.49	-7,120.21	2,109.50	4,038.78	3,978.98	59.80	67.534	
6,200.00	4,486.90	5,838.50	5,615.52	79.31	31.60	59.17	-7,109.34	2,110.78	3,954.42	3,893.15	61.27	64.544	
6,300.00	4,547.73	5,838.50	5,615.52	80.95	31.60	59.17	-7,109.34	2,110.78	3,870.44	3,807.61	62.83	61.598	
6,400.00	4,608.57	5,869.34	5,645.00	82.58	31.78	59.72	-7,100.53	2,112.79	3,787.05	3,722.65	64.40	58.803	
6,500.00	4,669.41	5,897.36	5,671.77	84.22	31.94	60.22	-7,092.65	2,115.35	3,704.18	3,638.16	66.02	56.106	
6,600.00	4,730.25	6,000.00	5,747.32	85.86	36.10	61.54	-7,070.23	2,129.14	3,621.58	3,551.54	70.04	51.704	
6,700.00	4,791.08	6,475.72	6,084.24	87.49	35.10	63.36	-6,941.39	2,438.15	3,536.92	3,472.66	64.26	55.042	
6,800.00	4,851.92	6,507.50	6,092.87	89.13	35.30	62.91	-6,935.95	2,468.25	3,448.59	3,383.09	65.49	52.657	
6,900.00	4,912.76	6,507.50	6,092.87	90.76	35.30	62.91	-6,935.95	2,468.25	3,360.38	3,293.28	67.10	50.077	
7,000.00	4,973.60	6,534.03	6,099.41	92.40	35.44	62.50	-6,931.96	2,493.65	3,272.77	3,204.26	68.51	47.768	
7,100.00	5,034.43	6,588.35	6,112.72	94.04	35.77	61.61	-6,923.65	2,545.65	3,185.25	3,115.61	69.64	45.738	
7,200.00	5,095.27	6,603.50	6,116.42	95.67	35.87	61.36	-6,921.31	2,560.16	3,097.92	3,026.69	71.23	43.491	
7,300.00	5,156.11	6,640.79	6,124.55	97.31	36.10	60.68	-6,916.08	2,596.17	3,010.88	2,938.24	72.65	41.446	
7,400.00	5,216.95	6,662.12	6,128.34	98.95	36.24	60.24	-6,913.60	2,617.01	2,924.45	2,850.17	74.28	39.370	
7,500.00	5,277.78	6,691.50	6,132.53	100.59	36.45	59.59	-6,910.80	2,645.95	2,838.62	2,762.75	75.87	37.416	
7,600.00	5,338.62	6,691.50	6,132.53	102.22	36.45	59.59	-6,910.80	2,645.95	2,753.42	2,675.52	77.91	35.342	
7,700.00	5,399.46	6,717.48	6,135.08	103.86	36.63	58.95	-6,909.04	2,671.74	2,668.93	2,589.25	79.69	33.492	
7,800.00	5,460.30	6,734.50	6,136.09	105.50	36.75	58.50	-6,908.30	2,688.72	2,585.34	2,503.68	81.66	31.660	
7,900.00	5,521.24	6,762.90	6,137.12	107.13	36.94	53.53	-6,907.47	2,717.08	2,502.45	2,418.91	83.54	29.955	
8,000.00	5,584.83	6,784.49	6,137.64	108.61	37.09	30.15	-6,906.98	2,738.66	2,416.86	2,331.83	85.03	28.423	
8,100.00	5,650.69	6,793.05	6,137.77	109.85	37.15	3.23	-6,906.82	2,747.22	2,329.18	2,243.22	85.96	27.098	
8,200.00	5,716.83	6,788.68	6,137.71	110.82	37.12	-22.82	-6,906.90	2,742.85	2,242.19	2,155.87	86.32	25.976	
8,300.00	5,781.24	6,771.89	6,137.37	111.52	37.00	-44.43	-6,907.25	2,726.07	2,158.67	2,072.53	86.15	25.058	
8,400.00	5,841.96	6,743.52	6,136.46	111.98	36.80	-60.91	-6,908.01	2,697.72	2,081.33	1,995.84	85.49	24.345	
8,500.00	5,897.14	6,719.76	6,135.25	112.25	36.64	-73.35	-6,908.92	2,674.01	2,012.85	1,928.74	84.11	23.930	
8,600.00	5,945.12	6,691.50	6,132.53	112.37	36.45	-82.21	-6,910.80	2,645.95	1,956.17	1,873.86	82.32	23.764 SF	
8,700.00	5,984.42	6,664.27	6,128.69	112.39	36.26	-88.29	-6,913.38	2,619.12	1,913.57	1,833.42	80.15	23.873	
8,800.00	6,013.86	6,628.43	6,122.07	112.35	36.02	-91.93	-6,917.69	2,584.17	1,886.77	1,808.74	78.03	24.180	
8,900.00	6,032.54	6,569.73	6,108.17	112.30	35.65	-93.28	-6,926.52	2,527.83	1,876.71	1,800.23	76.49	24.536	
8,916.58	6,034.55	6,552.49	6,103.95	112.29	35.55	-93.26	-6,929.15	2,511.32	1,876.52	1,800.09	76.43	24.551 CC, ES	
9,000.00	6,039.89	6,507.50	6,092.87	112.24	35.30	-92.88	-6,935.95	2,468.25	1,881.74	1,806.56	75.18	25.030	
9,100.00	6,040.00	6,469.98	6,082.52	112.19	35.07	-92.43	-6,942.51	2,432.79	1,898.24	1,824.57	73.67	25.766	
9,200.00	6,040.00	6,444.54	6,074.31	112.16	34.93	-92.17	-6,948.01	2,409.36	1,918.79	1,846.45	72.35	26.523	
9,300.00	6,040.00	6,412.50	6,062.63	112.15	34.75	-91.81	-6,956.10	2,380.65	1,943.17	1,871.56	71.61	27.137	
9,400.00	6,040.00	6,374.36	6,046.49	112.15	34.52	-91.31	-6,966.54	2,347.72	1,970.79	1,899.35	71.44	27.587	
9,500.00	6,040.00	6,316.50	6,017.03	112.16	34.19	-90.41	-6,982.43	2,300.56	2,000.88	1,929.03	71.85	27.850	
9,600.00	6,040.00	6,260.50	5,982.68	112.19	33.89	-89.38	-6,997.12	2,258.91	2,033.23	1,960.64	72.59	28.011	
9,700.00	6,040.00	6,220.50	5,954.64	112.24	33.69	-88.55	-7,006.72	2,232.07	2,067.97	1,994.47	73.50	28.136	
9,800.00	6,040.00	6,191.68	5,932.98	112.31	33.55	-87.91	-7,013.44	2,214.29	2,105.89	2,031.18	74.71	28.188	
9,900.00	6,040.00	6,171.21	5,917.04	112.39	33.44	-87.45	-7,018.33	2,202.41	2,147.21	2,071.00	76.21	28.174	
10,000.00	6,040.00	6,125.50	5,879.92	112.49	33.22	-86.37	-7,029.52	2,178.22	2,192.34	2,114.35	77.99	28.112	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1724C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 863-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	6,125.50	5,879.92	112.62	33.22	-86.37	-7,029.52	2,178.22	2,239.66	2,159.70	79.96	28.010	
10,200.00	6,040.00	6,125.50	5,879.92	112.77	33.22	-86.37	-7,029.52	2,178.22	2,290.38	2,208.24	82.14	27.885	
10,300.00	6,040.00	6,125.50	5,879.92	112.94	33.22	-86.37	-7,029.52	2,178.22	2,344.26	2,259.81	84.45	27.760	
10,400.00	6,040.00	6,125.50	5,879.92	113.14	33.22	-86.37	-7,029.52	2,178.22	2,401.11	2,314.27	86.83	27.652	
10,500.00	6,040.00	6,125.50	5,879.92	113.36	33.22	-86.37	-7,029.52	2,178.22	2,460.70	2,371.46	89.24	27.574	
10,600.00	6,040.00	6,085.27	5,845.60	113.62	33.00	-85.39	-7,039.93	2,160.02	2,521.15	2,429.77	91.38	27.589	
10,700.00	6,040.00	6,077.75	5,839.03	113.91	32.96	-85.21	-7,041.96	2,156.99	2,584.95	2,491.28	93.67	27.596	
10,800.00	6,040.00	6,070.78	5,832.90	114.24	32.92	-85.03	-7,043.86	2,154.28	2,650.88	2,554.98	95.90	27.641	
10,900.00	6,040.00	6,030.50	5,796.77	114.61	32.71	-84.02	-7,055.25	2,140.63	2,720.04	2,622.17	97.87	27.794	
11,000.00	6,040.00	6,030.50	5,796.77	115.02	32.71	-84.02	-7,055.25	2,140.63	2,789.40	2,689.42	99.99	27.898	
11,100.00	6,040.00	6,030.50	5,796.77	115.49	32.71	-84.02	-7,055.25	2,140.63	2,860.58	2,758.56	102.03	28.038	
11,200.00	6,040.00	6,030.50	5,796.77	116.00	32.71	-84.02	-7,055.25	2,140.63	2,933.45	2,829.47	103.98	28.212	
11,300.00	6,040.00	6,030.50	5,796.77	116.58	32.71	-84.02	-7,055.25	2,140.63	3,007.87	2,902.03	105.84	28.419	
11,400.00	6,040.00	6,030.50	5,796.77	117.22	32.71	-84.02	-7,055.25	2,140.63	3,083.74	2,976.12	107.62	28.655	
11,500.00	6,040.00	6,030.50	5,796.77	117.92	32.71	-84.02	-7,055.25	2,140.63	3,160.95	3,051.65	109.30	28.919	
11,600.00	6,040.00	6,030.50	5,796.77	118.70	32.71	-84.02	-7,055.25	2,140.63	3,239.41	3,128.50	110.91	29.208	
11,700.00	6,040.00	6,030.50	5,796.77	119.56	32.71	-84.02	-7,055.25	2,140.63	3,319.03	3,206.60	112.43	29.520	
11,800.00	6,040.00	6,030.50	5,796.77	120.51	32.71	-84.02	-7,055.25	2,140.63	3,399.72	3,285.85	113.88	29.854	
11,900.00	6,040.00	6,030.50	5,796.77	121.54	32.71	-84.02	-7,055.25	2,140.63	3,481.42	3,366.17	115.25	30.208	
12,000.00	6,040.00	6,030.50	5,796.77	122.66	32.71	-84.02	-7,055.25	2,140.63	3,564.05	3,447.51	116.55	30.580	
12,100.00	6,040.00	6,030.50	5,796.77	123.87	32.71	-84.02	-7,055.25	2,140.63	3,647.55	3,529.77	117.78	30.969	
12,200.00	6,040.00	6,030.50	5,796.77	125.17	32.71	-84.02	-7,055.25	2,140.63	3,731.86	3,612.92	118.95	31.374	
12,300.00	6,040.00	6,030.50	5,796.77	126.57	32.71	-84.02	-7,055.25	2,140.63	3,816.93	3,696.88	120.06	31.792	
12,400.00	6,040.00	5,991.39	5,760.77	128.06	32.48	-83.03	-7,066.50	2,130.31	3,901.47	3,780.52	120.95	32.258	
12,500.00	6,040.00	5,987.79	5,757.41	129.63	32.46	-82.94	-7,067.53	2,129.49	3,987.66	3,865.73	121.94	32.703	
12,600.00	6,040.00	5,984.36	5,754.22	131.29	32.44	-82.85	-7,068.50	2,128.72	4,074.47	3,951.59	122.88	33.159	
12,700.00	6,040.00	5,981.10	5,751.17	133.03	32.42	-82.77	-7,069.42	2,128.01	4,161.85	4,038.07	123.77	33.624	
12,800.00	6,040.00	5,977.99	5,748.26	134.84	32.41	-82.69	-7,070.30	2,127.35	4,249.77	4,125.14	124.63	34.100	
12,900.00	6,040.00	5,975.03	5,745.49	136.71	32.39	-82.61	-7,071.14	2,126.74	4,338.20	4,212.76	125.44	34.584	
13,000.00	6,040.00	5,934.50	5,707.18	138.66	32.16	-81.58	-7,082.39	2,119.82	4,428.28	4,302.20	126.08	35.122	
13,100.00	6,040.00	5,934.50	5,707.18	140.66	32.16	-81.58	-7,082.39	2,119.82	4,517.48	4,390.65	126.84	35.617	
13,200.00	6,040.00	5,934.50	5,707.18	142.71	32.16	-81.58	-7,082.39	2,119.82	4,607.12	4,479.57	127.55	36.120	
13,300.00	6,040.00	5,934.50	5,707.18	144.81	32.16	-81.58	-7,082.39	2,119.82	4,697.18	4,568.95	128.24	36.629	
13,400.00	6,040.00	5,934.50	5,707.18	146.96	32.16	-81.58	-7,082.39	2,119.82	4,787.64	4,658.75	128.89	37.146	
13,500.00	6,040.00	5,934.50	5,707.18	149.14	32.16	-81.58	-7,082.39	2,119.82	4,878.47	4,748.96	129.51	37.668	
13,600.00	6,040.00	5,934.50	5,707.18	151.36	32.16	-81.58	-7,082.39	2,119.82	4,969.65	4,839.54	130.11	38.196	
13,700.00	6,040.00	5,934.50	5,707.18	153.62	32.16	-81.58	-7,082.39	2,119.82	5,061.16	4,930.48	130.68	38.730	
13,800.00	6,040.00	5,934.50	5,707.18	155.91	32.16	-81.58	-7,082.39	2,119.82	5,152.99	5,021.76	131.23	39.268	
13,900.00	6,040.00	5,934.50	5,707.18	158.22	32.16	-81.58	-7,082.39	2,119.82	5,245.12	5,113.37	131.75	39.811	
14,000.00	6,040.00	5,934.50	5,707.18	160.56	32.16	-81.58	-7,082.39	2,119.82	5,337.53	5,205.28	132.25	40.359	
14,100.00	6,040.00	5,934.50	5,707.18	162.92	32.16	-81.58	-7,082.39	2,119.82	5,430.21	5,297.48	132.73	40.911	
14,200.00	6,040.00	5,934.50	5,707.18	165.30	32.16	-81.58	-7,082.39	2,119.82	5,523.14	5,389.95	133.19	41.467	
14,300.00	6,040.00	5,934.50	5,707.18	167.70	32.16	-81.58	-7,082.39	2,119.82	5,616.32	5,482.68	133.64	42.026	
14,400.00	6,040.00	5,934.50	5,707.18	170.12	32.16	-81.58	-7,082.39	2,119.82	5,709.73	5,575.67	134.07	42.589	
14,500.00	6,040.00	5,934.50	5,707.18	172.55	32.16	-81.58	-7,082.39	2,119.82	5,803.36	5,668.89	134.48	43.156	
14,600.00	6,040.00	5,934.50	5,707.18	175.00	32.16	-81.58	-7,082.39	2,119.82	5,897.20	5,762.33	134.87	43.725	
14,700.00	6,040.00	5,934.50	5,707.18	177.46	32.16	-81.58	-7,082.39	2,119.82	5,991.24	5,855.99	135.25	44.298	
14,800.00	6,040.00	5,934.50	5,707.18	179.94	32.16	-81.58	-7,082.39	2,119.82	6,085.46	5,949.85	135.62	44.873	
14,900.00	6,040.00	5,934.50	5,707.18	182.43	32.16	-81.58	-7,082.39	2,119.82	6,179.87	6,043.90	135.97	45.451	
15,000.00	6,040.00	5,934.50	5,707.18	184.92	32.16	-81.58	-7,082.39	2,119.82	6,274.45	6,138.14	136.31	46.031	
15,100.00	6,040.00	5,934.50	5,707.18	187.43	32.16	-81.58	-7,082.39	2,119.82	6,369.20	6,232.56	136.64	46.614	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-1724C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 863-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,934.50	5,707.18	189.95	32.16	-81.58	-7,082.39	2,119.82	6,464.11	6,327.15	136.95	47.199	
15,300.00	6,040.00	5,934.50	5,707.18	192.48	32.16	-81.58	-7,082.39	2,119.82	6,559.16	6,421.90	137.26	47.786	
15,400.00	6,040.00	5,934.50	5,707.18	195.01	32.16	-81.58	-7,082.39	2,119.82	6,654.37	6,516.81	137.56	48.375	
15,500.00	6,040.00	5,934.50	5,707.18	197.55	32.16	-81.58	-7,082.39	2,119.82	6,749.71	6,611.86	137.84	48.966	
15,600.00	6,040.00	5,934.50	5,707.18	200.10	32.16	-81.58	-7,082.39	2,119.82	6,845.18	6,707.06	138.12	49.559	
15,700.00	6,040.00	5,934.50	5,707.18	202.65	32.16	-81.58	-7,082.39	2,119.82	6,940.78	6,802.39	138.39	50.154	
15,800.00	6,040.00	5,934.50	5,707.18	205.22	32.16	-81.58	-7,082.39	2,119.82	7,036.50	6,897.86	138.65	50.751	
15,900.00	6,040.00	5,934.50	5,707.18	207.78	32.16	-81.58	-7,082.39	2,119.82	7,132.35	6,993.44	138.90	51.348	
16,000.00	6,040.00	5,934.50	5,707.18	210.36	32.16	-81.58	-7,082.39	2,119.82	7,228.30	7,089.15	139.15	51.948	
16,100.00	6,040.00	5,934.50	5,707.18	212.93	32.16	-81.58	-7,082.39	2,119.82	7,324.36	7,184.98	139.38	52.549	
16,200.00	6,040.00	5,934.50	5,707.18	215.52	32.16	-81.58	-7,082.39	2,119.82	7,420.53	7,280.91	139.61	53.151	
16,300.00	6,040.00	5,934.50	5,707.18	218.11	32.16	-81.58	-7,082.39	2,119.82	7,516.79	7,376.96	139.84	53.755	
16,400.00	6,040.00	5,934.50	5,707.18	220.70	32.16	-81.58	-7,082.39	2,119.82	7,613.15	7,473.10	140.05	54.359	
16,500.00	6,040.00	5,934.50	5,707.18	223.29	32.16	-81.58	-7,082.39	2,119.82	7,709.61	7,569.35	140.26	54.965	
16,600.00	6,040.00	5,934.50	5,707.18	225.89	32.16	-81.58	-7,082.39	2,119.82	7,806.15	7,665.69	140.47	55.573	
16,700.00	6,040.00	5,934.50	5,707.18	228.50	32.16	-81.58	-7,082.39	2,119.82	7,902.78	7,762.12	140.67	56.181	
16,800.00	6,040.00	5,934.50	5,707.18	231.11	32.16	-81.58	-7,082.39	2,119.82	7,999.50	7,858.64	140.86	56.790	
16,900.00	6,040.00	5,934.50	5,707.18	233.72	32.16	-81.58	-7,082.39	2,119.82	8,096.29	7,955.24	141.05	57.400	
17,000.00	6,040.00	5,934.50	5,707.18	236.33	32.16	-81.58	-7,082.39	2,119.82	8,193.16	8,051.92	141.23	58.011	
17,100.00	6,040.00	5,934.50	5,707.18	238.95	32.16	-81.58	-7,082.39	2,119.82	8,290.10	8,148.69	141.41	58.623	
17,200.00	6,040.00	5,934.50	5,707.18	241.57	32.16	-81.58	-7,082.39	2,119.82	8,387.12	8,245.53	141.59	59.236	
17,300.00	6,040.00	5,934.50	5,707.18	244.19	32.16	-81.58	-7,082.39	2,119.82	8,484.20	8,342.45	141.76	59.850	
17,400.00	6,040.00	5,934.50	5,707.18	246.82	32.16	-81.58	-7,082.39	2,119.82	8,581.36	8,439.43	141.92	60.464	
17,500.00	6,040.00	5,934.50	5,707.18	249.45	32.16	-81.58	-7,082.39	2,119.82	8,678.57	8,536.49	142.09	61.079	
17,600.00	6,040.00	5,934.50	5,707.18	252.08	32.16	-81.58	-7,082.39	2,119.82	8,775.85	8,633.61	142.24	61.695	
17,700.00	6,040.00	5,892.44	5,667.08	254.71	31.91	-80.51	-7,094.02	2,114.85	8,872.29	8,729.94	142.35	62.328	
17,800.00	6,040.00	5,891.32	5,666.01	257.35	31.91	-80.48	-7,094.34	2,114.74	8,969.64	8,827.14	142.50	62.945	
17,900.00	6,040.00	5,890.22	5,664.96	259.99	31.90	-80.45	-7,094.64	2,114.63	9,067.05	8,924.40	142.65	63.563	
18,000.00	6,040.00	5,889.14	5,663.93	262.63	31.89	-80.43	-7,094.95	2,114.52	9,164.51	9,021.72	142.79	64.181	
18,100.00	6,040.00	5,888.09	5,662.92	265.27	31.89	-80.40	-7,095.24	2,114.42	9,262.03	9,119.10	142.93	64.801	
18,200.00	6,040.00	5,887.05	5,661.93	267.91	31.88	-80.37	-7,095.54	2,114.32	9,359.59	9,216.52	143.07	65.420	
18,300.00	6,040.00	5,886.03	5,660.95	270.56	31.88	-80.35	-7,095.82	2,114.23	9,457.21	9,314.00	143.20	66.040	
18,400.00	6,040.00	5,885.03	5,660.00	273.21	31.87	-80.32	-7,096.10	2,114.14	9,554.87	9,411.54	143.34	66.661	
18,500.00	6,040.00	5,884.05	5,659.06	275.86	31.87	-80.30	-7,096.38	2,114.04	9,652.58	9,509.12	143.47	67.282	
18,600.00	6,040.00	5,883.08	5,658.14	278.51	31.86	-80.27	-7,096.65	2,113.96	9,750.34	9,606.75	143.59	67.903	
18,700.00	6,040.00	5,882.14	5,657.23	281.16	31.85	-80.25	-7,096.92	2,113.87	9,848.14	9,704.42	143.72	68.525	
18,800.00	6,040.00	5,881.21	5,656.35	283.81	31.85	-80.23	-7,097.18	2,113.79	9,945.98	9,802.15	143.84	69.147	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-3225C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	166.47	-8,649.30	2,080.65	8,896.11				
100.00	100.00	76.56	76.56	0.13	0.12	166.47	-8,649.23	2,080.69	8,895.99	8,895.73	0.25	N/A	
200.00	199.98	189.59	189.59	0.48	0.37	17.26	-8,648.88	2,080.93	8,894.07	8,893.22	0.86	N/A	
300.00	299.84	3,640.50	3,538.60	0.85	16.64	16.44	-7,980.77	2,113.49	8,875.63	8,861.03	14.60	608.106	
400.00	399.45	3,681.06	3,576.18	1.22	16.91	16.71	-7,965.52	2,113.19	8,831.31	8,816.26	15.05	586.611	
500.00	498.70	3,736.50	3,627.74	1.62	17.29	16.99	-7,945.14	2,112.50	8,784.59	8,768.99	15.60	563.145	
600.00	597.47	3,736.50	3,627.74	2.05	17.29	17.33	-7,945.14	2,112.50	8,735.39	8,719.47	15.92	548.601	
700.00	695.62	3,786.31	3,674.23	2.51	17.61	17.68	-7,927.29	2,111.68	8,683.81	8,667.34	16.46	527.443	
800.00	793.06	3,832.50	3,717.51	3.01	17.91	18.08	-7,911.17	2,110.81	8,629.98	8,612.98	17.00	507.728	
900.00	889.64	3,832.50	3,717.51	3.56	17.91	18.50	-7,911.17	2,110.81	8,573.87	8,556.52	17.35	494.210	
1,000.00	985.27	3,868.11	3,750.98	4.14	18.14	18.97	-7,899.03	2,110.31	8,515.56	8,497.70	17.85	476.992	
1,100.00	1,079.82	3,890.39	3,771.97	4.78	18.28	19.48	-7,891.58	2,110.20	8,455.17	8,436.86	18.31	461.788	
1,200.00	1,173.17	3,928.50	3,807.98	5.46	18.52	20.03	-7,879.08	2,110.40	8,392.78	8,373.94	18.84	445.534	
1,300.00	1,265.21	4,197.66	4,060.78	6.20	20.26	20.72	-7,787.01	2,116.80	8,327.67	8,307.36	20.32	409.874	
1,400.00	1,355.84	4,214.50	4,076.53	6.99	20.37	21.41	-7,781.05	2,117.11	8,258.86	8,238.09	20.77	397.610	
1,500.00	1,444.94	4,214.50	4,076.53	7.84	20.37	22.15	-7,781.05	2,117.11	8,188.31	8,167.14	21.16	386.885	
1,600.00	1,532.39	4,263.00	4,122.05	8.75	20.68	23.01	-7,764.34	2,117.82	8,115.54	8,093.79	21.76	373.014	
1,700.00	1,618.11	4,310.50	4,166.93	9.71	20.99	23.96	-7,748.79	2,118.28	8,041.44	8,019.09	22.35	359.791	
1,800.00	1,701.97	4,310.50	4,166.93	10.74	20.99	24.93	-7,748.79	2,118.28	7,965.26	7,942.49	22.77	349.832	
1,900.00	1,783.88	1,900.00	4,334.74	11.82	6.03	26.38	-7,689.76	2,120.31	7,887.05	7,874.51	12.54	628.973	
2,000.00	1,863.74	4,542.22	4,385.27	12.96	22.47	27.76	-7,671.26	2,120.93	7,806.14	7,781.65	24.49	318.740	
2,100.00	1,941.45	4,559.97	4,401.98	14.16	22.58	29.19	-7,665.28	2,121.14	7,723.83	7,698.84	24.99	309.037	
2,200.00	2,016.92	4,596.50	4,436.46	15.41	22.82	30.86	-7,653.22	2,121.58	7,640.18	7,614.61	25.57	298.782	
2,300.00	2,090.05	4,596.50	4,436.46	16.73	22.82	32.56	-7,653.22	2,121.58	7,555.03	7,529.01	26.03	290.264	
2,400.00	2,160.76	4,596.50	4,436.46	18.10	22.82	34.45	-7,653.22	2,121.58	7,468.72	7,442.23	26.50	281.873	
2,500.00	2,228.95	4,628.14	4,466.42	19.53	23.02	36.74	-7,643.04	2,121.95	7,381.14	7,354.06	27.08	272.556	
2,600.00	2,294.55	4,644.32	4,481.76	21.01	23.12	39.21	-7,637.92	2,122.11	7,292.48	7,264.85	27.62	263.987	
2,700.00	2,357.48	4,659.50	4,496.18	22.55	23.21	41.98	-7,633.17	2,122.25	7,202.78	7,174.61	28.18	255.639	
2,800.00	2,418.42	2,800.00	4,555.01	24.13	11.72	43.31	-7,613.97	2,122.55	7,112.44	7,091.76	20.67	344.072	
2,900.00	2,479.25	2,900.00	4,589.67	25.71	12.34	43.67	-7,602.54	2,122.62	7,021.93	7,000.35	21.58	325.323	
3,000.00	2,540.09	3,000.00	4,624.33	27.31	12.95	44.03	-7,591.12	2,122.68	6,931.50	6,908.99	22.51	307.882	
3,100.00	2,600.93	4,787.50	4,617.80	28.90	24.00	43.96	-7,593.27	2,122.67	6,841.28	6,810.56	30.72	222.683	
3,200.00	2,661.77	4,828.43	4,656.65	30.51	24.25	44.38	-7,580.41	2,122.47	6,750.87	6,719.45	31.42	214.852	
3,300.00	2,722.61	4,838.52	4,666.27	32.11	24.31	44.49	-7,577.35	2,122.40	6,660.95	6,628.90	32.06	207.786	
3,400.00	2,783.44	4,848.80	4,676.07	33.72	24.37	44.60	-7,574.27	2,122.32	6,571.27	6,538.55	32.71	200.875	
3,500.00	2,844.28	4,883.50	4,709.27	35.34	24.58	44.97	-7,564.17	2,122.01	6,481.98	6,448.53	33.45	193.788	
3,600.00	2,905.12	4,883.50	4,709.27	36.95	24.58	44.97	-7,564.17	2,122.01	6,392.68	6,358.56	34.12	187.356	
3,700.00	2,965.96	4,883.50	4,709.27	38.57	24.58	44.97	-7,564.17	2,122.01	6,303.69	6,268.88	34.81	181.065	
3,800.00	3,026.79	4,883.50	4,709.27	40.19	24.58	44.97	-7,564.17	2,122.01	6,215.04	6,179.51	35.53	174.918	
3,900.00	3,087.63	4,883.50	4,709.27	41.81	24.58	44.97	-7,564.17	2,122.01	6,126.74	6,090.47	36.27	168.916	
4,000.00	3,148.47	4,883.50	4,709.27	43.43	24.58	44.97	-7,564.17	2,122.01	6,038.81	6,001.78	37.03	163.060	
4,100.00	3,209.31	4,883.50	4,709.27	45.05	24.58	44.97	-7,564.17	2,122.01	5,951.26	5,913.43	37.82	157.350	
4,200.00	3,270.14	4,925.89	4,750.06	46.68	24.82	45.44	-7,552.63	2,121.59	5,863.44	5,824.73	38.71	151.469	
4,300.00	3,330.98	4,935.39	4,759.24	48.31	24.87	45.54	-7,550.18	2,121.50	5,776.37	5,736.80	39.56	146.009	
4,400.00	3,391.82	4,978.50	4,801.05	49.93	25.11	46.03	-7,539.68	2,121.14	5,690.06	5,649.57	40.49	140.518	
4,500.00	3,452.66	4,978.50	4,801.05	51.56	25.11	46.03	-7,539.68	2,121.14	5,603.51	5,562.13	41.38	135.423	
4,600.00	3,513.49	4,978.50	4,801.05	53.19	25.11	46.03	-7,539.68	2,121.14	5,517.40	5,475.11	42.29	130.468	
4,700.00	3,574.33	4,978.50	4,801.05	54.82	25.11	46.03	-7,539.68	2,121.14	5,431.78	5,388.55	43.23	125.650	
4,800.00	3,635.17	4,978.50	4,801.05	56.45	25.11	46.03	-7,539.68	2,121.14	5,346.65	5,302.45	44.20	120.969	
4,900.00	3,696.01	4,978.50	4,801.05	58.08	25.11	46.03	-7,539.68	2,121.14	5,262.05	5,216.85	45.20	116.424	
5,000.00	3,756.84	4,978.50	4,801.05	59.71	25.11	46.03	-7,539.68	2,121.14	5,177.99	5,131.77	46.23	112.012	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-3225C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	5,022.23	4,843.70	61.34	25.32	46.54	-7,530.05	2,120.81	5,093.83	5,046.49	47.34	107.605	
5,200.00	3,878.52	5,034.61	4,855.81	62.97	25.38	46.69	-7,527.50	2,120.71	5,010.50	4,962.06	48.44	103.429	
5,300.00	3,939.36	5,074.50	4,894.96	64.61	25.58	47.16	-7,519.82	2,120.41	4,927.95	4,878.34	49.61	99.332	
5,400.00	4,000.19	5,074.50	4,894.96	66.24	25.58	47.16	-7,519.82	2,120.41	4,845.46	4,794.69	50.77	95.439	
5,500.00	4,061.03	5,074.50	4,894.96	67.87	25.58	47.16	-7,519.82	2,120.41	4,763.65	4,711.68	51.97	91.669	
5,600.00	4,121.87	5,113.50	4,933.31	69.51	25.76	47.64	-7,512.73	2,120.19	4,682.35	4,629.12	53.23	87.963	
5,700.00	4,182.71	5,155.99	4,975.09	71.14	25.95	48.17	-7,505.04	2,120.14	4,601.36	4,546.83	54.53	84.380	
5,800.00	4,243.54	5,169.50	4,988.38	72.77	26.02	48.34	-7,502.60	2,120.16	4,520.79	4,464.94	55.85	80.946	
5,900.00	4,304.38	5,204.77	5,023.11	74.41	26.17	48.78	-7,496.41	2,120.21	4,440.67	4,383.45	57.22	77.608	
6,000.00	4,365.22	5,226.22	5,044.25	76.04	26.27	49.06	-7,492.82	2,120.20	4,361.18	4,302.56	58.62	74.393	
6,100.00	4,426.06	5,265.50	5,083.03	77.68	26.44	49.57	-7,486.59	2,120.10	4,282.39	4,222.31	60.08	71.277	
6,200.00	4,486.90	5,265.50	5,083.03	79.31	26.44	49.57	-7,486.59	2,120.10	4,204.09	4,142.53	61.56	68.289	
6,300.00	4,547.73	5,265.50	5,083.03	80.95	26.44	49.57	-7,486.59	2,120.10	4,126.72	4,063.63	63.09	65.408	
6,400.00	4,608.57	5,309.84	5,126.90	82.58	26.62	50.17	-7,480.17	2,119.96	4,049.75	3,985.06	64.69	62.603	
6,500.00	4,669.41	5,330.63	5,147.51	84.22	26.70	50.45	-7,477.39	2,119.91	3,973.72	3,907.39	66.33	59.912	
6,600.00	4,730.25	5,361.50	5,178.14	85.86	26.83	50.87	-7,473.57	2,119.85	3,898.52	3,830.50	68.02	57.315	
6,700.00	4,791.08	5,361.50	5,178.14	87.49	26.83	50.87	-7,473.57	2,119.85	3,824.16	3,754.41	69.75	54.825	
6,800.00	4,851.92	5,400.49	5,216.88	89.13	26.97	51.41	-7,469.17	2,119.81	3,750.56	3,679.01	71.56	52.415	
6,900.00	4,912.76	5,426.22	5,242.48	90.76	27.07	51.78	-7,466.51	2,119.80	3,677.90	3,604.49	73.41	50.100	
7,000.00	4,973.60	5,457.50	5,273.61	92.40	27.18	52.22	-7,463.53	2,119.81	3,606.17	3,530.84	75.33	47.872	
7,100.00	5,034.43	5,487.95	5,303.95	94.04	27.28	52.66	-7,460.83	2,119.83	3,535.33	3,458.02	77.31	45.732	
7,200.00	5,095.27	5,525.84	5,341.70	95.67	27.41	53.22	-7,457.64	2,119.86	3,465.34	3,385.99	79.35	43.672	
7,300.00	5,156.11	5,552.50	5,368.27	97.31	27.51	53.62	-7,455.50	2,119.87	3,396.27	3,314.82	81.46	41.695	
7,400.00	5,216.95	5,584.69	5,400.37	98.95	27.61	54.10	-7,453.16	2,119.83	3,328.27	3,244.64	83.63	39.798	
7,500.00	5,277.78	5,609.90	5,425.54	100.59	27.69	54.49	-7,451.59	2,119.70	3,261.51	3,175.64	85.87	37.982	
7,600.00	5,338.62	5,648.50	5,464.09	102.22	27.81	55.09	-7,449.63	2,119.34	3,196.08	3,107.89	88.20	36.238	
7,700.00	5,399.46	5,648.50	5,464.09	103.86	27.81	55.09	-7,449.63	2,119.34	3,131.96	3,041.41	90.55	34.588	
7,800.00	5,460.30	5,688.63	5,504.19	105.50	27.92	55.72	-7,448.18	2,118.89	3,069.19	2,976.17	93.02	32.996	
7,900.00	5,521.24	5,716.23	5,531.78	107.13	27.99	53.20	-7,447.54	2,118.60	3,007.78	2,912.26	95.52	31.488	
8,000.00	5,584.83	5,999.40	5,808.00	108.61	28.71	40.40	-7,444.44	2,169.82	2,941.56	2,845.19	96.37	30.523	
8,100.00	5,650.69	6,825.22	6,128.16	109.85	32.52	-1.00	-7,451.90	2,858.73	2,864.56	2,779.62	84.94	33.725	
8,200.00	5,716.83	6,814.07	6,128.14	110.82	32.38	-24.88	-7,452.47	2,847.59	2,780.13	2,694.90	85.23	32.618	
8,300.00	5,781.24	6,782.30	6,128.13	111.52	32.00	-44.63	-7,454.03	2,815.86	2,699.57	2,614.45	85.12	31.717	
8,400.00	5,841.96	6,305.07	6,044.48	111.98	29.40	-48.34	-7,449.05	2,358.19	2,622.24	2,529.63	92.61	28.315	
8,500.00	5,897.14	6,298.68	6,040.53	112.25	29.38	-63.18	-7,448.86	2,353.18	2,549.96	2,458.64	91.32	27.922	
8,600.00	5,945.12	6,280.64	6,029.12	112.37	29.34	-73.84	-7,448.36	2,339.21	2,486.88	2,397.12	89.76	27.706	
8,700.00	5,984.42	6,254.23	6,011.80	112.39	29.28	-81.14	-7,447.74	2,319.29	2,435.39	2,347.43	87.96	27.689 SF	
8,800.00	6,013.86	6,223.85	5,990.99	112.35	29.22	-85.77	-7,447.21	2,297.17	2,397.48	2,311.53	85.95	27.892	
8,900.00	6,032.54	6,158.08	5,942.67	112.30	29.07	-87.48	-7,446.14	2,252.60	2,374.28	2,289.71	84.57	28.075	
9,000.00	6,039.89	6,110.09	5,904.65	112.24	28.97	-87.61	-7,445.16	2,223.34	2,366.32	2,283.53	82.79	28.582 ES	
9,000.85	6,039.90	6,109.81	5,904.42	112.24	28.97	-87.60	-7,445.15	2,223.18	2,366.32	2,283.55	82.77	28.587 CC	
9,100.00	6,040.00	6,079.21	5,878.89	112.19	28.90	-86.98	-7,444.68	2,206.35	2,369.62	2,288.74	80.88	29.298	
9,200.00	6,040.00	6,053.36	5,856.55	112.16	28.84	-86.44	-7,444.43	2,193.34	2,376.61	2,297.46	79.15	30.027	
9,300.00	6,040.00	6,030.50	5,836.27	112.15	28.79	-85.95	-7,444.32	2,182.79	2,387.30	2,309.60	77.69	30.728	
9,400.00	6,040.00	6,030.50	5,836.27	112.15	28.79	-85.95	-7,444.32	2,182.79	2,401.88	2,325.54	76.34	31.464	
9,500.00	6,040.00	6,000.93	5,809.41	112.16	28.71	-85.31	-7,444.43	2,170.42	2,419.98	2,344.26	75.73	31.957	
9,600.00	6,040.00	5,988.08	5,797.55	112.19	28.68	-85.02	-7,444.59	2,165.49	2,441.96	2,366.62	75.34	32.414	
9,700.00	6,040.00	5,976.52	5,786.79	112.24	28.65	-84.76	-7,444.79	2,161.28	2,467.61	2,392.27	75.35	32.750	
9,800.00	6,040.00	5,966.07	5,776.99	112.31	28.62	-84.53	-7,445.01	2,157.66	2,496.85	2,421.11	75.74	32.966	
9,900.00	6,040.00	5,934.50	5,747.01	112.39	28.54	-83.81	-7,445.97	2,147.83	2,529.92	2,453.32	76.61	33.025	
10,000.00	6,040.00	5,934.50	5,747.01	112.49	28.54	-83.81	-7,445.97	2,147.83	2,565.80	2,488.19	77.61	33.060	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-3225C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	5,934.50	5,747.01	112.62	28.54	-83.81	-7,445.97	2,147.83	2,605.03	2,526.13	78.90	33.018	
10,200.00	6,040.00	5,934.50	5,747.01	112.77	28.54	-83.81	-7,445.97	2,147.83	2,647.46	2,567.04	80.42	32.921	
10,300.00	6,040.00	5,910.80	5,724.21	112.94	28.48	-83.27	-7,446.70	2,141.41	2,692.77	2,610.59	82.19	32.764	
10,400.00	6,040.00	5,894.88	5,708.79	113.14	28.44	-82.90	-7,447.04	2,137.46	2,740.84	2,656.79	84.05	32.611	
10,500.00	6,040.00	5,881.16	5,695.43	113.36	28.40	-82.58	-7,447.24	2,134.31	2,791.53	2,705.54	85.99	32.465	
10,600.00	6,040.00	5,869.22	5,683.77	113.62	28.37	-82.30	-7,447.34	2,131.75	2,844.73	2,756.76	87.97	32.337	
10,700.00	6,040.00	5,858.75	5,673.51	113.91	28.34	-82.06	-7,447.37	2,129.65	2,900.33	2,810.35	89.98	32.232	
10,800.00	6,040.00	5,838.50	5,653.61	114.24	28.29	-81.59	-7,447.28	2,125.96	2,958.24	2,866.24	92.00	32.155	
10,900.00	6,040.00	5,838.50	5,653.61	114.61	28.29	-81.59	-7,447.28	2,125.96	3,018.22	2,924.23	93.99	32.112	
11,000.00	6,040.00	5,838.50	5,653.61	115.02	28.29	-81.59	-7,447.28	2,125.96	3,080.28	2,984.32	95.95	32.101	
11,100.00	6,040.00	5,838.50	5,653.61	115.49	28.29	-81.59	-7,447.28	2,125.96	3,144.29	3,046.41	97.88	32.124	
11,200.00	6,040.00	5,838.50	5,653.61	116.00	28.29	-81.59	-7,447.28	2,125.96	3,210.15	3,110.39	99.76	32.179	
11,300.00	6,040.00	5,838.50	5,653.61	116.58	28.29	-81.59	-7,447.28	2,125.96	3,277.73	3,176.15	101.58	32.267	
11,400.00	6,040.00	5,838.50	5,653.61	117.22	28.29	-81.59	-7,447.28	2,125.96	3,346.93	3,243.59	103.35	32.385	
11,500.00	6,040.00	5,838.50	5,653.61	117.92	28.29	-81.59	-7,447.28	2,125.96	3,417.67	3,312.61	105.05	32.533	
11,600.00	6,040.00	5,838.50	5,653.61	118.70	28.29	-81.59	-7,447.28	2,125.96	3,489.83	3,383.14	106.69	32.710	
11,700.00	6,040.00	5,838.50	5,653.61	119.56	28.29	-81.59	-7,447.28	2,125.96	3,563.34	3,455.07	108.27	32.912	
11,800.00	6,040.00	5,838.50	5,653.61	120.51	28.29	-81.59	-7,447.28	2,125.96	3,638.11	3,528.33	109.78	33.140	
11,900.00	6,040.00	5,838.50	5,653.61	121.54	28.29	-81.59	-7,447.28	2,125.96	3,714.07	3,602.84	111.23	33.391	
12,000.00	6,040.00	5,838.50	5,653.61	122.66	28.29	-81.59	-7,447.28	2,125.96	3,791.14	3,678.53	112.62	33.664	
12,100.00	6,040.00	5,838.50	5,653.61	123.87	28.29	-81.59	-7,447.28	2,125.96	3,869.27	3,755.32	113.95	33.957	
12,200.00	6,040.00	5,838.50	5,653.61	125.17	28.29	-81.59	-7,447.28	2,125.96	3,948.38	3,833.16	115.22	34.269	
12,300.00	6,040.00	5,838.50	5,653.61	126.57	28.29	-81.59	-7,447.28	2,125.96	4,028.42	3,911.99	116.43	34.599	
12,400.00	6,040.00	5,838.50	5,653.61	128.06	28.29	-81.59	-7,447.28	2,125.96	4,109.33	3,991.74	117.59	34.945	
12,500.00	6,040.00	5,838.50	5,653.61	129.63	28.29	-81.59	-7,447.28	2,125.96	4,191.07	4,072.37	118.70	35.307	
12,600.00	6,040.00	5,838.50	5,653.61	131.29	28.29	-81.59	-7,447.28	2,125.96	4,273.59	4,153.82	119.77	35.683	
12,700.00	6,040.00	5,838.50	5,653.61	133.03	28.29	-81.59	-7,447.28	2,125.96	4,356.84	4,236.06	120.78	36.073	
12,800.00	6,040.00	5,838.50	5,653.61	134.84	28.29	-81.59	-7,447.28	2,125.96	4,440.78	4,319.03	121.75	36.475	
12,900.00	6,040.00	5,838.50	5,653.61	136.71	28.29	-81.59	-7,447.28	2,125.96	4,525.37	4,402.69	122.68	36.888	
13,000.00	6,040.00	5,838.50	5,653.61	138.66	28.29	-81.59	-7,447.28	2,125.96	4,610.58	4,487.01	123.57	37.313	
13,100.00	6,040.00	5,838.50	5,653.61	140.66	28.29	-81.59	-7,447.28	2,125.96	4,696.37	4,571.96	124.41	37.748	
13,200.00	6,040.00	5,838.50	5,653.61	142.71	28.29	-81.59	-7,447.28	2,125.96	4,782.71	4,657.49	125.23	38.192	
13,300.00	6,040.00	5,796.33	5,611.81	144.81	28.19	-80.60	-7,447.05	2,120.46	4,867.84	4,741.85	126.00	38.635	
13,400.00	6,040.00	5,795.40	5,610.88	146.96	28.19	-80.58	-7,447.05	2,120.38	4,955.12	4,828.38	126.74	39.096	
13,500.00	6,040.00	5,794.51	5,609.99	149.14	28.19	-80.55	-7,447.05	2,120.30	5,042.87	4,915.42	127.46	39.566	
13,600.00	6,040.00	5,793.64	5,609.13	151.36	28.18	-80.53	-7,447.05	2,120.23	5,131.07	5,002.93	128.14	40.043	
13,700.00	6,040.00	5,792.81	5,608.30	153.62	28.18	-80.51	-7,447.04	2,120.16	5,219.70	5,090.90	128.80	40.526	
13,800.00	6,040.00	5,792.01	5,607.51	155.91	28.18	-80.50	-7,447.04	2,120.09	5,308.72	5,179.29	129.43	41.017	
13,900.00	6,040.00	5,791.24	5,606.74	158.22	28.18	-80.48	-7,447.04	2,120.03	5,398.13	5,268.10	130.03	41.513	
14,000.00	6,040.00	5,790.50	5,605.99	160.56	28.18	-80.46	-7,447.04	2,119.97	5,487.90	5,357.29	130.61	42.016	
14,100.00	6,040.00	5,789.78	5,605.28	162.92	28.18	-80.44	-7,447.04	2,119.91	5,578.02	5,446.85	131.17	42.524	
14,200.00	6,040.00	5,789.08	5,604.58	165.30	28.17	-80.43	-7,447.04	2,119.86	5,668.47	5,536.76	131.71	43.037	
14,300.00	6,040.00	5,788.41	5,603.91	167.70	28.17	-80.41	-7,447.04	2,119.80	5,759.24	5,627.01	132.23	43.556	
14,400.00	6,040.00	5,787.76	5,603.26	170.12	28.17	-80.40	-7,447.04	2,119.76	5,850.30	5,717.58	132.72	44.078	
14,500.00	6,040.00	5,787.13	5,602.64	172.55	28.17	-80.38	-7,447.04	2,119.71	5,941.66	5,808.45	133.20	44.606	
14,600.00	6,040.00	5,786.52	5,602.03	175.00	28.17	-80.37	-7,447.04	2,119.67	6,033.28	5,899.62	133.67	45.137	
14,700.00	6,040.00	5,743.50	5,559.04	177.46	28.06	-79.36	-7,447.20	2,118.33	6,126.96	5,992.87	134.09	45.694	
14,800.00	6,040.00	5,743.50	5,559.04	179.94	28.06	-79.36	-7,447.20	2,118.33	6,219.05	6,084.53	134.51	46.233	
14,900.00	6,040.00	5,743.50	5,559.04	182.43	28.06	-79.36	-7,447.20	2,118.33	6,311.38	6,176.45	134.93	46.776	
15,000.00	6,040.00	5,743.50	5,559.04	184.92	28.06	-79.36	-7,447.20	2,118.33	6,403.94	6,268.61	135.33	47.322	
15,100.00	6,040.00	5,743.50	5,559.04	187.43	28.06	-79.36	-7,447.20	2,118.33	6,496.72	6,361.01	135.71	47.871	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-3225C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,200.00	6,040.00	5,743.50	5,559.04	189.95	28.06	-79.36	-7,447.20	2,118.33	6,589.71	6,453.63	136.09	48.423	
15,300.00	6,040.00	5,743.50	5,559.04	192.48	28.06	-79.36	-7,447.20	2,118.33	6,682.91	6,546.46	136.45	48.978	
15,400.00	6,040.00	5,743.50	5,559.04	195.01	28.06	-79.36	-7,447.20	2,118.33	6,776.30	6,639.50	136.80	49.536	
15,500.00	6,040.00	5,743.50	5,559.04	197.55	28.06	-79.36	-7,447.20	2,118.33	6,869.87	6,732.74	137.13	50.096	
15,600.00	6,040.00	5,743.50	5,559.04	200.10	28.06	-79.36	-7,447.20	2,118.33	6,963.63	6,826.17	137.46	50.659	
15,700.00	6,040.00	5,743.50	5,559.04	202.65	28.06	-79.36	-7,447.20	2,118.33	7,057.55	6,919.77	137.78	51.225	
15,800.00	6,040.00	5,743.50	5,559.04	205.22	28.06	-79.36	-7,447.20	2,118.33	7,151.64	7,013.56	138.08	51.793	
15,900.00	6,040.00	5,743.50	5,559.04	207.78	28.06	-79.36	-7,447.20	2,118.33	7,245.89	7,107.51	138.38	52.363	
16,000.00	6,040.00	5,743.50	5,559.04	210.36	28.06	-79.36	-7,447.20	2,118.33	7,340.29	7,201.62	138.67	52.935	
16,100.00	6,040.00	5,743.50	5,559.04	212.93	28.06	-79.36	-7,447.20	2,118.33	7,434.84	7,295.89	138.95	53.509	
16,200.00	6,040.00	5,743.50	5,559.04	215.52	28.06	-79.36	-7,447.20	2,118.33	7,529.52	7,390.31	139.22	54.085	
16,300.00	6,040.00	5,743.50	5,559.04	218.11	28.06	-79.36	-7,447.20	2,118.33	7,624.35	7,484.87	139.48	54.662	
16,400.00	6,040.00	5,743.50	5,559.04	220.70	28.06	-79.36	-7,447.20	2,118.33	7,719.30	7,579.56	139.74	55.242	
16,500.00	6,040.00	5,743.50	5,559.04	223.29	28.06	-79.36	-7,447.20	2,118.33	7,814.38	7,674.40	139.98	55.823	
16,600.00	6,040.00	5,743.50	5,559.04	225.89	28.06	-79.36	-7,447.20	2,118.33	7,909.58	7,769.36	140.23	56.406	
16,700.00	6,040.00	5,743.50	5,559.04	228.50	28.06	-79.36	-7,447.20	2,118.33	8,004.90	7,864.44	140.46	56.990	
16,800.00	6,040.00	5,743.50	5,559.04	231.11	28.06	-79.36	-7,447.20	2,118.33	8,100.33	7,959.64	140.69	57.576	
16,900.00	6,040.00	5,743.50	5,559.04	233.72	28.06	-79.36	-7,447.20	2,118.33	8,195.87	8,054.96	140.91	58.163	
17,000.00	6,040.00	5,743.50	5,559.04	236.33	28.06	-79.36	-7,447.20	2,118.33	8,291.52	8,150.39	141.13	58.752	
17,100.00	6,040.00	5,743.50	5,559.04	238.95	28.06	-79.36	-7,447.20	2,118.33	8,387.26	8,245.92	141.34	59.342	
17,200.00	6,040.00	5,743.50	5,559.04	241.57	28.06	-79.36	-7,447.20	2,118.33	8,483.11	8,341.56	141.54	59.933	
17,300.00	6,040.00	5,743.50	5,559.04	244.19	28.06	-79.36	-7,447.20	2,118.33	8,579.05	8,437.30	141.74	60.525	
17,400.00	6,040.00	5,743.50	5,559.04	246.82	28.06	-79.36	-7,447.20	2,118.33	8,675.08	8,533.14	141.94	61.118	
17,500.00	6,040.00	5,743.50	5,559.04	249.45	28.06	-79.36	-7,447.20	2,118.33	8,771.20	8,629.07	142.13	61.712	
17,600.00	6,040.00	5,743.50	5,559.04	252.08	28.06	-79.36	-7,447.20	2,118.33	8,867.40	8,725.09	142.32	62.308	
17,700.00	6,040.00	5,743.50	5,559.04	254.71	28.06	-79.36	-7,447.20	2,118.33	8,963.69	8,821.20	142.50	62.904	
17,800.00	6,040.00	5,743.50	5,559.04	257.35	28.06	-79.36	-7,447.20	2,118.33	9,060.06	8,917.39	142.67	63.502	
17,900.00	6,040.00	5,743.50	5,559.04	259.99	28.06	-79.36	-7,447.20	2,118.33	9,156.51	9,013.66	142.85	64.100	
18,000.00	6,040.00	5,743.50	5,559.04	262.63	28.06	-79.36	-7,447.20	2,118.33	9,253.03	9,110.02	143.02	64.699	
18,100.00	6,040.00	5,743.50	5,559.04	265.27	28.06	-79.36	-7,447.20	2,118.33	9,349.63	9,206.45	143.18	65.299	
18,200.00	6,040.00	5,743.50	5,559.04	267.91	28.06	-79.36	-7,447.20	2,118.33	9,446.30	9,302.95	143.34	65.900	
18,300.00	6,040.00	5,743.50	5,559.04	270.56	28.06	-79.36	-7,447.20	2,118.33	9,543.03	9,399.53	143.50	66.501	
18,400.00	6,040.00	5,743.50	5,559.04	273.21	28.06	-79.36	-7,447.20	2,118.33	9,639.83	9,496.18	143.66	67.104	
18,500.00	6,040.00	5,743.50	5,559.04	275.86	28.06	-79.36	-7,447.20	2,118.33	9,736.70	9,592.89	143.81	67.707	
18,600.00	6,040.00	5,743.50	5,559.04	278.51	28.06	-79.36	-7,447.20	2,118.33	9,833.63	9,689.67	143.96	68.310	
18,700.00	6,040.00	5,743.50	5,559.04	281.16	28.06	-79.36	-7,447.20	2,118.33	9,930.62	9,786.52	144.10	68.914	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-3340C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	166.47	-8,663.50	2,084.55	8,910.83				
100.00	100.00	55.94	55.94	0.13	0.08	166.47	-8,663.52	2,084.56	8,910.79	8,910.57	0.22	N/A	
200.00	199.98	144.15	144.15	0.48	0.22	17.26	-8,663.65	2,084.61	8,909.27	8,908.57	0.70	N/A	
300.00	299.84	244.55	244.55	0.85	0.57	17.29	-8,663.87	2,084.83	8,904.54	8,903.13	1.41	6,313.194	
400.00	399.45	337.00	337.00	1.22	0.89	17.36	-8,663.95	2,085.07	8,896.37	8,894.26	2.11	4,224.612	
500.00	498.70	407.33	407.33	1.62	1.15	17.44	-8,664.18	2,085.57	8,885.20	8,882.47	2.73	3,256.456	
600.00	597.47	531.72	531.71	2.05	1.59	17.56	-8,664.36	2,086.13	8,870.45	8,866.91	3.55	2,500.944	
700.00	695.62	651.49	651.49	2.51	2.00	17.72	-8,664.82	2,085.99	8,852.61	8,848.26	4.35	2,037.362	
800.00	793.06	723.95	723.94	3.01	2.25	17.89	-8,665.02	2,085.58	8,831.29	8,826.31	4.98	1,772.581	
900.00	889.64	3,581.82	3,520.76	3.56	14.20	19.01	-8,219.99	2,096.41	8,791.27	8,775.81	15.46	568.539	
1,000.00	985.27	3,600.62	3,538.61	4.14	14.31	19.45	-8,214.13	2,096.69	8,735.88	8,719.97	15.91	549.239	
1,100.00	1,079.82	3,640.50	3,576.64	4.78	14.53	19.94	-8,202.13	2,097.36	8,678.48	8,662.05	16.44	528.028	
1,200.00	1,173.17	3,640.50	3,576.64	5.46	14.53	20.45	-8,202.13	2,097.36	8,618.78	8,601.96	16.82	512.293	
1,300.00	1,265.21	3,640.50	3,576.64	6.20	14.53	21.00	-8,202.13	2,097.36	8,557.22	8,540.00	17.22	496.876	
1,400.00	1,355.84	3,694.40	3,628.24	6.99	14.82	21.64	-8,186.59	2,098.31	8,493.37	8,475.54	17.83	476.403	
1,500.00	1,444.94	3,736.50	3,668.66	7.84	15.05	22.33	-8,174.83	2,099.03	8,427.60	8,409.20	18.40	458.053	
1,600.00	1,532.39	3,755.82	3,687.24	8.75	15.16	23.06	-8,169.54	2,099.34	8,359.77	8,340.88	18.90	442.430	
1,700.00	1,618.11	3,792.21	3,722.27	9.71	15.35	23.89	-8,159.72	2,099.81	8,289.96	8,270.50	19.46	425.955	
1,800.00	1,701.97	3,832.50	3,761.12	10.74	15.57	24.80	-8,149.05	2,100.17	8,218.20	8,198.14	20.05	409.850	
1,900.00	1,783.88	3,859.28	3,786.98	11.82	15.71	25.79	-8,142.08	2,100.32	8,144.55	8,123.94	20.60	395.313	
2,000.00	1,863.74	3,889.55	3,816.24	12.96	15.87	26.88	-8,134.35	2,100.40	8,069.11	8,047.93	21.18	381.050	
2,100.00	1,941.45	3,928.50	3,853.96	14.16	16.07	28.11	-8,124.61	2,100.39	7,991.95	7,970.16	21.79	366.800	
2,200.00	2,016.92	3,928.50	3,853.96	15.41	16.07	29.34	-8,124.61	2,100.39	7,913.16	7,890.88	22.28	355.118	
2,300.00	2,090.05	3,960.19	3,884.69	16.73	16.23	30.80	-8,116.90	2,100.37	7,832.80	7,809.91	22.89	342.151	
2,400.00	2,160.76	3,978.37	3,902.36	18.10	16.32	32.37	-8,112.58	2,100.40	7,751.02	7,727.55	23.47	330.235	
2,500.00	2,228.95	4,023.50	3,946.27	19.53	16.55	34.24	-8,102.20	2,100.62	7,668.01	7,643.87	24.15	317.582	
2,600.00	2,294.55	4,023.50	3,946.27	21.01	16.55	36.06	-8,102.20	2,100.62	7,583.43	7,558.74	24.69	307.104	
2,700.00	2,357.48	4,034.09	3,956.59	22.55	16.61	38.14	-8,099.82	2,100.71	7,497.72	7,472.43	25.29	296.483	
2,800.00	2,418.42	4,066.91	3,988.57	24.13	16.77	38.93	-8,092.44	2,101.15	7,411.18	7,385.22	25.96	285.445	
2,900.00	2,479.25	4,100.12	4,020.92	25.71	16.94	39.16	-8,084.97	2,101.85	7,324.73	7,298.08	26.65	274.821	
3,000.00	2,540.09	4,119.50	4,039.80	27.31	17.03	39.30	-8,080.62	2,102.38	7,238.44	7,211.12	27.32	264.939	
3,100.00	2,600.93	4,156.09	4,075.45	28.90	17.21	39.56	-8,072.46	2,103.49	7,152.31	7,124.25	28.05	254.941	
3,200.00	2,661.77	4,182.15	4,100.86	30.51	17.34	39.74	-8,066.73	2,104.32	7,066.39	7,037.61	28.78	245.555	
3,300.00	2,722.61	4,214.50	4,132.42	32.11	17.50	39.98	-8,059.71	2,105.39	6,980.68	6,951.14	29.53	236.368	
3,400.00	2,783.44	4,214.50	4,132.42	33.72	17.50	39.98	-8,059.71	2,105.39	6,895.22	6,864.99	30.23	228.117	
3,500.00	2,844.28	4,214.50	4,132.42	35.34	17.50	39.98	-8,059.71	2,105.39	6,810.16	6,779.21	30.94	220.099	
3,600.00	2,905.12	4,254.98	4,172.00	36.95	17.70	40.28	-8,051.27	2,106.59	6,725.12	6,693.35	31.77	211.685	
3,700.00	2,965.96	4,269.94	4,186.65	38.57	17.77	40.39	-8,048.30	2,106.95	6,640.55	6,608.00	32.56	203.962	
3,800.00	3,026.79	4,310.50	4,226.47	40.19	17.96	40.71	-8,040.64	2,107.71	6,556.47	6,523.04	33.42	196.171	
3,900.00	3,087.63	4,310.50	4,226.47	41.81	17.96	40.71	-8,040.64	2,107.71	6,472.43	6,438.22	34.22	189.155	
4,000.00	3,148.47	4,310.50	4,226.47	43.43	17.96	40.71	-8,040.64	2,107.71	6,388.86	6,353.83	35.04	182.354	
4,100.00	3,209.31	4,310.50	4,226.47	45.05	17.96	40.71	-8,040.64	2,107.71	6,305.77	6,269.89	35.88	175.768	
4,200.00	3,270.14	4,348.33	4,263.70	46.68	18.13	41.01	-8,033.99	2,108.28	6,222.83	6,186.02	36.81	169.049	
4,300.00	3,330.98	4,364.88	4,280.02	48.31	18.20	41.14	-8,031.22	2,108.55	6,140.38	6,102.65	37.73	162.763	
4,400.00	3,391.82	4,405.50	4,320.12	49.93	18.38	41.47	-8,024.79	2,109.26	6,058.46	6,019.75	38.71	156.525	
4,500.00	3,452.66	4,405.50	4,320.12	51.56	18.38	41.47	-8,024.79	2,109.26	5,976.68	5,937.04	39.64	150.789	
4,600.00	3,513.49	4,405.50	4,320.12	53.19	18.38	41.47	-8,024.79	2,109.26	5,895.46	5,854.87	40.59	145.241	
4,700.00	3,574.33	4,405.50	4,320.12	54.82	18.38	41.47	-8,024.79	2,109.26	5,814.83	5,773.26	41.57	139.878	
4,800.00	3,635.17	4,448.78	4,362.95	56.45	18.56	41.83	-8,018.54	2,110.14	5,734.31	5,691.67	42.64	134.473	
4,900.00	3,696.01	4,465.92	4,379.92	58.08	18.64	41.98	-8,016.25	2,110.53	5,654.45	5,610.75	43.70	129.397	
5,000.00	3,756.84	4,501.50	4,415.21	59.71	18.78	42.28	-8,011.80	2,111.45	5,575.17	5,530.36	44.81	124.431	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-3340C - OWB - FINAL SURVEY												Offset Site Error: 0.00 usft	
Survey Program: 150-MWD OWSG												Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	4,501.50	4,415.21	61.34	18.78	42.28	-8,011.80	2,111.45	5,496.21	5,450.32	45.89	119.773	
5,200.00	3,878.52	4,501.50	4,415.21	62.97	18.78	42.28	-8,011.80	2,111.45	5,417.94	5,370.94	47.00	115.277	
5,300.00	3,939.36	4,538.34	4,451.81	64.61	18.92	42.59	-8,007.68	2,112.38	5,340.04	5,291.85	48.19	110.823	
5,400.00	4,000.19	4,557.32	4,470.68	66.24	19.00	42.76	-8,005.74	2,112.78	5,262.78	5,213.40	49.38	106.584	
5,500.00	4,061.03	4,596.50	4,509.69	67.87	19.15	43.11	-8,002.17	2,113.46	5,186.20	5,135.58	50.62	102.445	
5,600.00	4,121.87	4,596.50	4,509.69	69.51	19.15	43.11	-8,002.17	2,113.46	5,110.01	5,058.15	51.85	98.550	
5,700.00	4,182.71	4,630.82	4,543.89	71.14	19.27	43.42	-7,999.35	2,113.93	5,034.46	4,981.30	53.15	94.717	
5,800.00	4,243.54	4,666.04	4,579.01	72.77	19.40	43.75	-7,996.61	2,114.34	4,959.38	4,904.89	54.49	91.021	
5,900.00	4,304.38	4,701.92	4,614.79	74.41	19.53	44.09	-7,993.96	2,114.68	4,884.79	4,828.94	55.85	87.458	
6,000.00	4,365.22	4,739.07	4,651.85	76.04	19.66	44.45	-7,991.38	2,114.98	4,810.70	4,753.44	57.25	84.023	
6,100.00	4,426.06	4,776.56	4,689.25	77.68	19.79	44.81	-7,988.92	2,115.27	4,737.11	4,678.42	58.69	80.712	
6,200.00	4,486.90	4,810.40	4,723.03	79.31	19.90	45.15	-7,986.84	2,115.50	4,664.06	4,603.90	60.16	77.529	
6,300.00	4,547.73	4,843.00	4,755.58	80.95	20.01	45.47	-7,985.02	2,115.70	4,591.63	4,529.97	61.66	74.464	
6,400.00	4,608.57	4,883.50	4,796.03	82.58	20.15	45.89	-7,982.99	2,115.94	4,519.84	4,456.63	63.21	71.502	
6,500.00	4,669.41	4,915.40	4,827.89	84.22	20.26	46.22	-7,981.55	2,116.12	4,448.66	4,383.87	64.79	68.660	
6,600.00	4,730.25	4,956.85	4,869.30	85.86	20.39	46.65	-7,979.81	2,116.33	4,378.07	4,311.65	66.42	65.912	
6,700.00	4,791.08	4,995.81	4,908.24	87.49	20.52	47.07	-7,978.32	2,116.50	4,308.10	4,240.01	68.09	63.269	
6,800.00	4,851.92	5,032.11	4,944.51	89.13	20.64	47.46	-7,977.12	2,116.64	4,238.82	4,169.02	69.80	60.727	
6,900.00	4,912.76	5,074.50	4,986.89	90.76	20.77	47.92	-7,975.96	2,116.77	4,170.27	4,098.71	71.56	58.274	
7,000.00	4,973.60	5,115.23	5,027.61	92.40	20.90	48.38	-7,975.02	2,116.84	4,102.42	4,029.05	73.37	55.916	
7,100.00	5,034.43	5,163.49	5,075.86	94.04	21.05	48.92	-7,974.02	2,116.83	4,035.20	3,959.97	75.23	53.638	
7,200.00	5,095.27	5,215.94	5,128.30	95.67	21.21	49.53	-7,973.04	2,116.69	3,968.62	3,891.47	77.15	51.441	
7,300.00	5,156.11	5,268.64	5,180.99	97.31	21.37	50.16	-7,972.14	2,116.44	3,902.65	3,823.53	79.12	49.325	
7,400.00	5,216.95	5,316.46	5,228.80	98.95	21.52	50.73	-7,971.43	2,116.12	3,837.38	3,756.24	81.14	47.294	
7,500.00	5,277.78	5,364.65	5,276.99	100.59	21.67	51.33	-7,970.86	2,115.72	3,772.87	3,689.66	83.21	45.340	
7,600.00	5,338.62	5,934.50	5,834.56	102.22	23.67	58.19	-7,932.65	2,166.91	3,704.26	3,619.77	84.49	43.840	
7,700.00	5,399.46	5,934.50	5,834.56	103.86	23.67	58.19	-7,932.65	2,166.91	3,633.31	3,546.62	86.70	41.908	
7,800.00	5,460.30	5,984.37	5,876.51	105.50	23.82	58.41	-7,929.06	2,193.60	3,561.91	3,473.49	88.41	40.288	
7,900.00	5,521.24	6,030.50	5,914.02	107.13	23.97	55.28	-7,928.90	2,220.43	3,493.29	3,403.15	90.14	38.754	
8,000.00	5,584.83	6,030.50	5,914.02	108.61	23.97	38.13	-7,928.90	2,220.43	3,419.63	3,327.60	92.03	37.158	
8,100.00	5,650.69	6,030.50	5,914.02	109.85	23.97	18.01	-7,928.90	2,220.43	3,341.85	3,248.57	93.28	35.826	
8,200.00	5,716.83	6,575.46	6,149.53	110.82	27.16	-18.79	-7,937.93	2,686.38	3,259.84	3,173.51	86.34	37.757	
8,300.00	5,781.24	6,558.72	6,149.09	111.52	26.95	-39.74	-7,937.89	2,669.64	3,178.81	3,092.62	86.19	36.883	
8,400.00	5,841.96	8,400.00	6,141.69	111.98	51.10	-55.34	-7,937.86	2,589.73	3,102.88	2,993.06	109.82	28.255 SF	
8,500.00	5,897.14	6,379.44	6,122.77	112.25	25.25	-67.08	-7,937.58	2,492.87	3,034.03	2,947.61	86.42	35.107	
8,600.00	5,945.12	6,103.76	5,970.22	112.37	24.15	-71.74	-7,931.56	2,267.30	2,972.03	2,882.71	89.32	33.273	
8,700.00	5,984.42	6,086.66	5,957.51	112.39	24.11	-79.45	-7,930.85	2,255.89	2,920.55	2,832.92	87.63	33.327	
8,800.00	6,013.86	6,062.55	5,939.16	112.35	24.05	-84.42	-7,929.94	2,240.27	2,882.01	2,796.16	85.85	33.570	
8,900.00	6,032.54	6,030.50	5,914.02	112.30	23.97	-87.04	-7,928.90	2,220.43	2,857.87	2,773.77	84.10	33.980	
9,000.00	6,039.89	6,030.50	5,914.02	112.24	23.97	-88.20	-7,928.90	2,220.43	2,849.20	2,767.25	81.95	34.769 ES	
9,011.70	6,040.07	6,030.50	5,914.02	112.23	23.97	-88.20	-7,928.90	2,220.43	2,849.16	2,767.45	81.71	34.869 CC	
9,100.00	6,040.00	6,030.50	5,914.02	112.19	23.97	-88.20	-7,928.90	2,220.43	2,851.96	2,771.98	79.98	35.660	
9,200.00	6,040.00	6,030.50	5,914.02	112.16	23.97	-88.20	-7,928.90	2,220.43	2,858.33	2,780.07	78.27	36.521	
9,300.00	6,040.00	5,988.45	5,879.88	112.15	23.83	-87.52	-7,928.92	2,195.89	2,866.50	2,789.10	77.41	37.032	
9,400.00	6,040.00	5,978.29	5,871.46	112.15	23.80	-87.35	-7,929.31	2,190.21	2,878.85	2,802.45	76.40	37.683	
9,500.00	6,040.00	5,934.50	5,834.56	112.16	23.67	-86.61	-7,932.65	2,166.91	2,895.53	2,819.46	76.07	38.064	
9,600.00	6,040.00	5,934.50	5,834.56	112.19	23.67	-86.61	-7,932.65	2,166.91	2,913.73	2,838.17	75.56	38.564	
9,700.00	6,040.00	5,934.50	5,834.56	112.24	23.67	-86.61	-7,932.65	2,166.91	2,935.22	2,859.85	75.37	38.942	
9,800.00	6,040.00	5,934.50	5,834.56	112.31	23.67	-86.61	-7,932.65	2,166.91	2,959.94	2,884.42	75.52	39.196	
9,900.00	6,040.00	5,934.50	5,834.56	112.39	23.67	-86.61	-7,932.65	2,166.91	2,987.79	2,911.83	75.96	39.332	
10,000.00	6,040.00	5,934.50	5,834.56	112.49	23.67	-86.61	-7,932.65	2,166.91	3,018.71	2,942.02	76.69	39.363	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-3340C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	5,934.50	5,834.56	112.62	23.67	-86.61	-7,932.65	2,166.91	3,052.59	2,974.93	77.67	39.304	
10,200.00	6,040.00	5,894.02	5,799.01	112.77	23.51	-85.91	-7,937.06	2,148.09	3,088.25	3,009.21	79.04	39.072	
10,300.00	6,040.00	5,884.32	5,790.22	112.94	23.47	-85.73	-7,938.14	2,144.13	3,127.11	3,046.70	80.41	38.888	
10,400.00	6,040.00	5,875.61	5,782.25	113.14	23.44	-85.57	-7,939.10	2,140.76	3,168.54	3,086.62	81.92	38.678	
10,500.00	6,040.00	5,838.50	5,747.51	113.36	23.30	-84.89	-7,943.25	2,128.43	3,213.08	3,129.48	83.60	38.434	
10,600.00	6,040.00	5,838.50	5,747.51	113.62	23.30	-84.89	-7,943.25	2,128.43	3,259.12	3,173.86	85.27	38.223	
10,700.00	6,040.00	5,838.50	5,747.51	113.91	23.30	-84.89	-7,943.25	2,128.43	3,307.55	3,220.55	87.00	38.017	
10,800.00	6,040.00	5,838.50	5,747.51	114.24	23.30	-84.89	-7,943.25	2,128.43	3,358.25	3,269.47	88.78	37.827	
10,900.00	6,040.00	5,838.50	5,747.51	114.61	23.30	-84.89	-7,943.25	2,128.43	3,411.13	3,320.55	90.58	37.658	
11,000.00	6,040.00	5,838.50	5,747.51	115.02	23.30	-84.89	-7,943.25	2,128.43	3,466.10	3,373.70	92.39	37.514	
11,100.00	6,040.00	5,838.50	5,747.51	115.49	23.30	-84.89	-7,943.25	2,128.43	3,523.04	3,428.84	94.20	37.399	
11,200.00	6,040.00	5,838.50	5,747.51	116.00	23.30	-84.89	-7,943.25	2,128.43	3,581.87	3,485.88	95.99	37.314	
11,300.00	6,040.00	5,838.50	5,747.51	116.58	23.30	-84.89	-7,943.25	2,128.43	3,642.50	3,544.74	97.76	37.261	
11,400.00	6,040.00	5,838.50	5,747.51	117.22	23.30	-84.89	-7,943.25	2,128.43	3,704.83	3,605.34	99.49	37.239	
11,500.00	6,040.00	5,838.50	5,747.51	117.92	23.30	-84.89	-7,943.25	2,128.43	3,768.79	3,667.60	101.18	37.247	
11,600.00	6,040.00	5,838.50	5,747.51	118.70	23.30	-84.89	-7,943.25	2,128.43	3,834.28	3,731.45	102.83	37.286	
11,700.00	6,040.00	5,838.50	5,747.51	119.56	23.30	-84.89	-7,943.25	2,128.43	3,901.25	3,796.80	104.44	37.354	
11,800.00	6,040.00	5,838.50	5,747.51	120.51	23.30	-84.89	-7,943.25	2,128.43	3,969.60	3,863.60	106.00	37.449	
11,900.00	6,040.00	5,838.50	5,747.51	121.54	23.30	-84.89	-7,943.25	2,128.43	4,039.27	3,931.76	107.51	37.571	
12,000.00	6,040.00	5,838.50	5,747.51	122.66	23.30	-84.89	-7,943.25	2,128.43	4,110.19	4,001.22	108.97	37.718	
12,100.00	6,040.00	5,838.50	5,747.51	123.87	23.30	-84.89	-7,943.25	2,128.43	4,182.30	4,071.92	110.38	37.890	
12,200.00	6,040.00	5,838.50	5,747.51	125.17	23.30	-84.89	-7,943.25	2,128.43	4,255.54	4,143.80	111.74	38.083	
12,300.00	6,040.00	5,838.50	5,747.51	126.57	23.30	-84.89	-7,943.25	2,128.43	4,329.85	4,216.80	113.06	38.298	
12,400.00	6,040.00	5,838.50	5,747.51	128.06	23.30	-84.89	-7,943.25	2,128.43	4,405.18	4,290.86	114.32	38.534	
12,500.00	6,040.00	5,838.50	5,747.51	129.63	23.30	-84.89	-7,943.25	2,128.43	4,481.47	4,365.94	115.54	38.788	
12,600.00	6,040.00	5,838.50	5,747.51	131.29	23.30	-84.89	-7,943.25	2,128.43	4,558.68	4,441.97	116.71	39.060	
12,700.00	6,040.00	5,838.50	5,747.51	133.03	23.30	-84.89	-7,943.25	2,128.43	4,636.76	4,518.92	117.84	39.348	
12,800.00	6,040.00	5,838.50	5,747.51	134.84	23.30	-84.89	-7,943.25	2,128.43	4,715.67	4,596.75	118.92	39.653	
12,900.00	6,040.00	5,838.50	5,747.51	136.71	23.30	-84.89	-7,943.25	2,128.43	4,795.37	4,675.40	119.97	39.972	
13,000.00	6,040.00	5,838.50	5,747.51	138.66	23.30	-84.89	-7,943.25	2,128.43	4,875.81	4,754.84	120.97	40.305	
13,100.00	6,040.00	5,838.50	5,747.51	140.66	23.30	-84.89	-7,943.25	2,128.43	4,956.97	4,835.03	121.94	40.651	
13,200.00	6,040.00	5,838.50	5,747.51	142.71	23.30	-84.89	-7,943.25	2,128.43	5,038.80	4,915.93	122.87	41.010	
13,300.00	6,040.00	5,838.50	5,747.51	144.81	23.30	-84.89	-7,943.25	2,128.43	5,121.28	4,997.52	123.76	41.380	
13,400.00	6,040.00	5,793.77	5,704.37	146.96	23.11	-84.04	-7,949.13	2,118.30	5,201.37	5,076.77	124.60	41.744	
13,500.00	6,040.00	5,792.73	5,703.35	149.14	23.11	-84.03	-7,949.29	2,118.13	5,284.90	5,159.47	125.43	42.135	
13,600.00	6,040.00	5,791.72	5,702.37	151.36	23.10	-84.01	-7,949.44	2,117.97	5,368.99	5,242.76	126.23	42.535	
13,700.00	6,040.00	5,790.75	5,701.43	153.62	23.10	-83.99	-7,949.59	2,117.82	5,453.62	5,326.62	126.99	42.944	
13,800.00	6,040.00	5,789.81	5,700.51	155.91	23.10	-83.97	-7,949.73	2,117.67	5,538.75	5,411.02	127.73	43.362	
13,900.00	6,040.00	5,788.91	5,699.63	158.22	23.09	-83.95	-7,949.87	2,117.54	5,624.37	5,495.93	128.44	43.789	
14,000.00	6,040.00	5,788.03	5,698.77	160.56	23.09	-83.94	-7,950.01	2,117.40	5,710.46	5,581.33	129.13	44.223	
14,100.00	6,040.00	5,743.50	5,655.10	162.92	22.90	-83.09	-7,957.68	2,113.61	5,799.88	5,670.12	129.76	44.697	
14,200.00	6,040.00	5,743.50	5,655.10	165.30	22.90	-83.09	-7,957.68	2,113.61	5,886.73	5,756.33	130.40	45.144	
14,300.00	6,040.00	5,743.50	5,655.10	167.70	22.90	-83.09	-7,957.68	2,113.61	5,974.00	5,842.98	131.02	45.598	
14,400.00	6,040.00	5,743.50	5,655.10	170.12	22.90	-83.09	-7,957.68	2,113.61	6,061.65	5,930.04	131.61	46.058	
14,500.00	6,040.00	5,743.50	5,655.10	172.55	22.90	-83.09	-7,957.68	2,113.61	6,149.68	6,017.50	132.18	46.524	
14,600.00	6,040.00	5,743.50	5,655.10	175.00	22.90	-83.09	-7,957.68	2,113.61	6,238.08	6,105.34	132.74	46.996	
14,700.00	6,040.00	5,743.50	5,655.10	177.46	22.90	-83.09	-7,957.68	2,113.61	6,326.82	6,193.55	133.27	47.473	
14,800.00	6,040.00	5,743.50	5,655.10	179.94	22.90	-83.09	-7,957.68	2,113.61	6,415.89	6,282.10	133.79	47.956	
14,900.00	6,040.00	5,743.50	5,655.10	182.43	22.90	-83.09	-7,957.68	2,113.61	6,505.28	6,370.99	134.29	48.443	
15,000.00	6,040.00	5,743.50	5,655.10	184.92	22.90	-83.09	-7,957.68	2,113.61	6,594.97	6,460.20	134.77	48.935	
15,100.00	6,040.00	5,743.50	5,655.10	187.43	22.90	-83.09	-7,957.68	2,113.61	6,684.95	6,549.72	135.24	49.432	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-3340C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,743.50	5,655.10	189.95	22.90	-83.09	-7,957.68	2,113.61	6,775.22	6,639.53	135.69	49.933	
15,300.00	6,040.00	5,743.50	5,655.10	192.48	22.90	-83.09	-7,957.68	2,113.61	6,865.75	6,729.63	136.12	50.437	
15,400.00	6,040.00	5,743.50	5,655.10	195.01	22.90	-83.09	-7,957.68	2,113.61	6,956.55	6,820.00	136.55	50.946	
15,500.00	6,040.00	5,743.50	5,655.10	197.55	22.90	-83.09	-7,957.68	2,113.61	7,047.59	6,910.64	136.96	51.458	
15,600.00	6,040.00	5,743.50	5,655.10	200.10	22.90	-83.09	-7,957.68	2,113.61	7,138.88	7,001.52	137.35	51.974	
15,700.00	6,040.00	5,743.50	5,655.10	202.65	22.90	-83.09	-7,957.68	2,113.61	7,230.39	7,092.65	137.74	52.494	
15,800.00	6,040.00	5,743.50	5,655.10	205.22	22.90	-83.09	-7,957.68	2,113.61	7,322.13	7,184.02	138.11	53.016	
15,900.00	6,040.00	5,743.50	5,655.10	207.78	22.90	-83.09	-7,957.68	2,113.61	7,414.08	7,275.60	138.47	53.542	
16,000.00	6,040.00	5,743.50	5,655.10	210.36	22.90	-83.09	-7,957.68	2,113.61	7,506.23	7,367.41	138.82	54.070	
16,100.00	6,040.00	5,743.50	5,655.10	212.93	22.90	-83.09	-7,957.68	2,113.61	7,598.59	7,459.42	139.17	54.601	
16,200.00	6,040.00	5,743.50	5,655.10	215.52	22.90	-83.09	-7,957.68	2,113.61	7,691.13	7,551.64	139.50	55.135	
16,300.00	6,040.00	5,743.50	5,655.10	218.11	22.90	-83.09	-7,957.68	2,113.61	7,783.86	7,644.05	139.82	55.672	
16,400.00	6,040.00	5,743.50	5,655.10	220.70	22.90	-83.09	-7,957.68	2,113.61	7,876.77	7,736.64	140.13	56.211	
16,500.00	6,040.00	5,743.50	5,655.10	223.29	22.90	-83.09	-7,957.68	2,113.61	7,969.85	7,829.42	140.43	56.752	
16,600.00	6,040.00	5,743.50	5,655.10	225.89	22.90	-83.09	-7,957.68	2,113.61	8,063.10	7,922.37	140.73	57.296	
16,700.00	6,040.00	5,743.50	5,655.10	228.50	22.90	-83.09	-7,957.68	2,113.61	8,156.50	8,015.49	141.01	57.842	
16,800.00	6,040.00	5,743.50	5,655.10	231.11	22.90	-83.09	-7,957.68	2,113.61	8,250.06	8,108.77	141.29	58.389	
16,900.00	6,040.00	5,743.50	5,655.10	233.72	22.90	-83.09	-7,957.68	2,113.61	8,343.77	8,202.21	141.57	58.939	
17,000.00	6,040.00	5,743.50	5,655.10	236.33	22.90	-83.09	-7,957.68	2,113.61	8,437.62	8,295.79	141.83	59.491	
17,100.00	6,040.00	5,743.50	5,655.10	238.95	22.90	-83.09	-7,957.68	2,113.61	8,531.62	8,389.53	142.09	60.045	
17,200.00	6,040.00	5,743.50	5,655.10	241.57	22.90	-83.09	-7,957.68	2,113.61	8,625.75	8,483.41	142.34	60.600	
17,300.00	6,040.00	5,743.50	5,655.10	244.19	22.90	-83.09	-7,957.68	2,113.61	8,720.00	8,577.42	142.58	61.157	
17,400.00	6,040.00	5,743.50	5,655.10	246.82	22.90	-83.09	-7,957.68	2,113.61	8,814.39	8,671.57	142.82	61.716	
17,500.00	6,040.00	5,743.50	5,655.10	249.45	22.90	-83.09	-7,957.68	2,113.61	8,908.90	8,765.84	143.05	62.276	
17,600.00	6,040.00	5,743.50	5,655.10	252.08	22.90	-83.09	-7,957.68	2,113.61	9,003.53	8,860.24	143.28	62.838	
17,700.00	6,040.00	5,743.50	5,655.10	254.71	22.90	-83.09	-7,957.68	2,113.61	9,098.27	8,954.77	143.50	63.402	
17,800.00	6,040.00	5,743.50	5,655.10	257.35	22.90	-83.09	-7,957.68	2,113.61	9,193.12	9,049.40	143.72	63.966	
17,900.00	6,040.00	5,743.50	5,655.10	259.99	22.90	-83.09	-7,957.68	2,113.61	9,288.08	9,144.15	143.93	64.532	
18,000.00	6,040.00	5,743.50	5,655.10	262.63	22.90	-83.09	-7,957.68	2,113.61	9,383.15	9,239.01	144.14	65.100	
18,100.00	6,040.00	5,743.50	5,655.10	265.27	22.90	-83.09	-7,957.68	2,113.61	9,478.31	9,333.98	144.34	65.668	
18,200.00	6,040.00	5,743.50	5,655.10	267.91	22.90	-83.09	-7,957.68	2,113.61	9,573.58	9,429.05	144.53	66.238	
18,300.00	6,040.00	5,743.50	5,655.10	270.56	22.90	-83.09	-7,957.68	2,113.61	9,668.94	9,524.22	144.73	66.809	
18,400.00	6,040.00	5,743.50	5,655.10	273.21	22.90	-83.09	-7,957.68	2,113.61	9,764.40	9,619.48	144.91	67.381	
18,500.00	6,040.00	5,743.50	5,655.10	275.86	22.90	-83.09	-7,957.68	2,113.61	9,859.94	9,714.84	145.10	67.954	
18,600.00	6,040.00	5,743.50	5,655.10	278.51	22.90	-83.09	-7,957.68	2,113.61	9,955.57	9,810.30	145.28	68.528	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-4841CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	166.46	-8,677.35	2,089.29	8,925.40				
100.00	100.00	66.05	66.05	0.13	0.10	166.46	-8,677.34	2,089.29	8,925.32	8,925.08	0.23	N/A	
200.00	199.98	150.00	150.00	0.48	0.23	17.25	-8,677.30	2,089.27	8,923.62	8,922.91	0.71	N/A	
300.00	299.84	217.42	217.42	0.85	0.46	17.28	-8,677.47	2,089.51	8,918.95	8,917.65	1.30	6,841.492	
400.00	399.45	327.00	327.00	1.22	0.84	17.34	-8,677.78	2,090.08	8,911.02	8,908.96	2.05	4,337.508	
500.00	498.70	435.27	435.27	1.62	1.23	17.43	-8,678.17	2,090.75	8,899.88	8,897.07	2.81	3,165.788	
600.00	597.47	1,797.96	1,790.37	2.05	6.25	17.68	-8,575.91	2,114.59	8,876.69	8,868.62	8.07	1,099.708	
700.00	695.62	1,853.83	1,845.69	2.51	6.47	17.89	-8,568.13	2,114.34	8,845.24	8,836.59	8.64	1,023.401	
800.00	793.06	1,915.52	1,906.82	3.01	6.72	18.14	-8,559.83	2,113.96	8,811.04	8,801.80	9.24	953.264	
900.00	889.64	1,982.99	1,973.65	3.56	6.99	18.40	-8,550.64	2,114.98	8,774.04	8,764.17	9.87	888.745	
1,000.00	985.27	2,061.08	2,050.98	4.14	7.30	18.70	-8,539.96	2,116.99	8,734.18	8,723.63	10.55	827.795	
1,100.00	1,079.82	2,122.77	2,112.09	4.78	7.55	19.03	-8,531.66	2,118.66	8,691.53	8,680.35	11.18	777.500	
1,200.00	1,173.17	2,161.50	2,150.47	5.46	7.71	19.38	-8,526.57	2,119.63	8,646.26	8,634.53	11.73	736.925	
1,300.00	1,265.21	2,211.80	2,200.36	6.20	7.91	19.77	-8,520.25	2,120.78	8,598.51	8,586.17	12.34	696.913	
1,400.00	1,355.84	2,256.50	2,244.74	6.99	8.09	20.20	-8,515.01	2,121.68	8,548.43	8,535.50	12.93	660.936	
1,500.00	1,444.94	2,283.17	2,271.24	7.84	8.20	20.66	-8,512.05	2,122.18	8,496.03	8,482.55	13.48	630.415	
1,600.00	1,532.39	2,317.07	2,304.95	8.75	8.33	21.16	-8,508.45	2,122.84	8,441.38	8,427.32	14.06	600.487	
1,700.00	1,618.11	2,351.50	2,339.19	9.71	8.46	21.71	-8,505.01	2,123.54	8,384.52	8,369.87	14.65	572.220	
1,800.00	1,701.97	2,396.13	2,383.61	10.74	8.64	22.32	-8,500.76	2,124.44	8,325.43	8,310.13	15.29	544.325	
1,900.00	1,783.88	2,447.50	2,434.76	11.82	8.83	23.00	-8,496.09	2,125.46	8,264.10	8,248.13	15.97	517.393	
2,000.00	1,863.74	2,483.97	2,471.09	12.96	8.97	23.72	-8,492.95	2,126.09	8,200.58	8,183.97	16.61	493.666	
2,100.00	1,941.45	2,525.28	2,512.26	14.16	9.13	24.52	-8,489.60	2,126.58	8,134.96	8,117.68	17.28	470.770	
2,200.00	2,016.92	2,542.50	2,529.42	15.41	9.19	25.33	-8,488.26	2,126.72	8,067.35	8,049.46	17.88	451.102	
2,300.00	2,090.05	2,580.07	2,566.90	16.73	9.33	26.28	-8,485.60	2,126.83	7,997.81	7,979.24	18.57	430.793	
2,400.00	2,160.76	2,603.03	2,589.81	18.10	9.41	27.27	-8,484.17	2,126.75	7,926.51	7,907.29	19.22	412.500	
2,500.00	2,228.95	2,637.50	2,624.23	19.53	9.54	28.39	-8,482.32	2,126.41	7,853.51	7,833.59	19.92	394.303	
2,600.00	2,294.55	2,637.50	2,624.23	21.01	9.54	29.48	-8,482.32	2,126.41	7,778.81	7,758.28	20.53	378.924	
2,700.00	2,357.48	2,637.50	2,624.23	22.55	9.54	30.66	-8,482.32	2,126.41	7,702.66	7,681.50	21.16	364.062	
2,800.00	2,418.42	2,637.50	2,624.23	24.13	9.54	30.98	-8,482.32	2,126.41	7,625.64	7,603.83	21.80	349.749	
2,900.00	2,479.25	2,681.06	2,667.76	25.71	9.69	31.19	-8,480.64	2,125.89	7,548.51	7,525.92	22.59	334.158	
3,000.00	2,540.09	2,693.94	2,680.63	27.31	9.73	31.26	-8,480.31	2,125.77	7,472.12	7,448.81	23.31	320.603	
3,100.00	2,600.93	2,733.50	2,720.19	28.90	9.87	31.45	-8,479.79	2,125.48	7,396.40	7,372.29	24.12	306.691	
3,200.00	2,661.77	2,733.50	2,720.19	30.51	9.87	31.45	-8,479.79	2,125.48	7,320.78	7,295.95	24.83	294.783	
3,300.00	2,722.61	2,734.61	2,721.29	32.11	9.87	31.46	-8,479.79	2,125.47	7,245.76	7,220.18	25.57	283.326	
3,400.00	2,783.44	2,785.21	2,771.90	33.72	10.03	31.71	-8,479.62	2,125.22	7,171.11	7,144.65	26.46	270.975	
3,500.00	2,844.28	2,841.66	2,828.35	35.34	10.22	32.00	-8,479.49	2,125.03	7,096.66	7,069.27	27.39	259.137	
3,600.00	2,905.12	2,930.14	2,916.82	36.95	10.51	32.45	-8,479.06	2,124.98	7,022.20	6,993.79	28.41	247.185	
3,700.00	2,965.96	2,952.57	2,939.25	38.57	10.59	32.57	-8,478.98	2,125.01	6,947.91	6,918.64	29.27	237.359	
3,800.00	3,026.79	2,979.92	2,966.60	40.19	10.68	32.71	-8,479.00	2,125.05	6,874.04	6,843.87	30.17	227.880	
3,900.00	3,087.63	3,019.50	3,006.18	41.81	10.81	32.92	-8,479.27	2,125.12	6,800.61	6,769.50	31.11	218.624	
4,000.00	3,148.47	3,060.20	3,046.88	43.43	10.94	33.14	-8,479.67	2,125.17	6,727.50	6,695.44	32.06	209.820	
4,100.00	3,209.31	3,131.07	3,117.75	45.05	11.17	33.53	-8,480.31	2,125.18	6,654.49	6,621.39	33.11	201.000	
4,200.00	3,270.14	3,159.73	3,146.40	46.68	11.26	33.69	-8,480.68	2,125.11	6,581.78	6,547.71	34.07	193.183	
4,300.00	3,330.98	3,196.61	3,183.28	48.31	11.37	33.90	-8,481.27	2,124.93	6,509.43	6,474.36	35.07	185.608	
4,400.00	3,391.82	3,261.18	3,247.84	49.93	11.58	34.28	-8,482.49	2,124.48	6,437.38	6,401.23	36.15	178.058	
4,500.00	3,452.66	3,330.32	3,316.97	51.56	11.80	34.68	-8,483.64	2,124.00	6,365.36	6,328.10	37.26	170.821	
4,600.00	3,513.49	3,384.58	3,371.22	53.19	11.98	35.01	-8,484.59	2,123.54	6,293.53	6,255.17	38.36	164.069	
4,700.00	3,574.33	3,444.01	3,430.64	54.82	12.17	35.38	-8,485.69	2,122.94	6,221.93	6,182.44	39.49	157.573	
4,800.00	3,635.17	3,505.67	3,492.28	56.45	12.37	35.76	-8,486.85	2,122.20	6,150.50	6,109.86	40.64	151.351	
4,900.00	3,696.01	3,564.91	3,551.50	58.08	12.56	36.14	-8,487.98	2,121.41	6,079.26	6,037.46	41.80	145.421	
5,000.00	3,756.84	3,618.81	3,605.38	59.71	12.74	36.49	-8,489.05	2,120.62	6,008.25	5,965.27	42.98	139.788	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-4841CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	3,667.97	3,654.53	61.34	12.90	36.82	-8,490.13	2,119.83	5,937.56	5,893.39	44.17	134.426	
5,200.00	3,878.52	3,814.74	3,801.24	62.97	13.38	37.83	-8,492.52	2,116.57	5,866.69	5,821.10	45.59	128.676	
5,300.00	3,939.36	3,882.49	3,868.96	64.61	13.60	38.32	-8,493.13	2,114.61	5,795.56	5,748.69	46.87	123.649	
5,400.00	4,000.19	3,908.84	3,895.30	66.24	13.69	38.51	-8,493.43	2,113.92	5,724.80	5,676.72	48.08	119.059	
5,500.00	4,061.03	3,937.56	3,924.01	67.87	13.79	38.72	-8,493.90	2,113.38	5,654.63	5,605.30	49.32	114.641	
5,600.00	4,121.87	3,974.50	3,960.94	69.51	13.91	38.99	-8,494.72	2,112.99	5,585.05	5,534.45	50.61	110.365	
5,700.00	4,182.71	4,021.21	4,007.63	71.14	14.06	39.33	-8,495.92	2,112.67	5,515.95	5,464.03	51.93	106.221	
5,800.00	4,243.54	4,132.27	4,118.65	72.77	14.43	40.16	-8,498.51	2,111.37	5,447.06	5,393.66	53.41	101.990	
5,900.00	4,304.38	4,247.65	4,234.00	74.41	14.82	41.07	-8,499.82	2,108.75	5,377.52	5,322.59	54.93	97.899	
6,000.00	4,365.22	4,296.63	4,282.95	76.04	14.99	41.47	-8,500.21	2,107.41	5,308.10	5,251.75	56.35	94.201	
6,100.00	4,426.06	4,339.19	4,325.51	77.68	15.13	41.81	-8,500.67	2,106.94	5,239.18	5,181.40	57.78	90.677	
6,200.00	4,486.90	4,393.33	4,379.64	79.31	15.31	42.25	-8,501.39	2,107.04	5,170.72	5,111.47	59.25	87.268	
6,300.00	4,547.73	4,454.62	4,440.92	80.95	15.52	42.75	-8,502.23	2,107.02	5,102.58	5,041.81	60.77	83.969	
6,400.00	4,608.57	4,522.48	4,508.78	82.58	15.75	43.31	-8,503.12	2,106.98	5,034.71	4,972.38	62.33	80.781	
6,500.00	4,669.41	4,580.30	4,566.60	84.22	15.95	43.80	-8,503.85	2,107.06	4,967.12	4,903.22	63.90	77.736	
6,600.00	4,730.25	4,632.35	4,618.64	85.86	16.13	44.25	-8,504.60	2,107.07	4,899.97	4,834.47	65.49	74.815	
6,700.00	4,791.08	4,703.63	4,689.91	87.49	16.37	44.88	-8,505.64	2,107.07	4,833.19	4,766.03	67.16	71.970	
6,800.00	4,851.92	4,772.47	4,758.75	89.13	16.60	45.50	-8,506.49	2,107.20	4,766.62	4,697.77	68.85	69.235	
6,900.00	4,912.76	4,835.46	4,821.73	90.76	16.82	46.08	-8,507.24	2,107.39	4,700.39	4,629.83	70.56	66.612	
7,000.00	4,973.60	4,897.67	4,883.94	92.40	17.03	46.66	-8,507.96	2,107.61	4,634.54	4,562.22	72.32	64.088	
7,100.00	5,034.43	4,959.68	4,945.94	94.04	17.24	47.24	-8,508.68	2,107.87	4,569.09	4,494.98	74.11	61.657	
7,200.00	5,095.27	5,021.59	5,007.85	95.67	17.46	47.84	-8,509.41	2,108.25	4,504.05	4,428.12	75.93	59.317	
7,300.00	5,156.11	5,154.33	5,140.58	97.31	17.91	49.16	-8,509.50	2,109.09	4,438.56	4,360.67	77.89	56.986	
7,400.00	5,216.95	5,200.60	5,186.85	98.95	18.07	49.63	-8,509.38	2,109.39	4,373.55	4,293.77	79.78	54.820	
7,500.00	5,277.78	5,247.36	5,233.61	100.59	18.24	50.12	-8,509.41	2,109.70	4,309.21	4,227.49	81.71	52.735	
7,600.00	5,338.62	5,294.48	5,280.73	102.22	18.40	50.62	-8,509.60	2,109.99	4,245.57	4,161.88	83.69	50.728	
7,700.00	5,399.46	5,365.66	5,351.91	103.86	18.64	51.38	-8,509.98	2,110.32	4,182.56	4,096.81	85.75	48.778	
7,800.00	5,460.30	5,433.87	5,420.12	105.50	18.88	52.13	-8,510.05	2,110.45	4,119.85	4,032.00	87.85	46.897	
7,900.00	5,521.24	5,528.09	5,508.08	107.13	20.61	53.13	-8,497.22	2,212.00	4,052.72	3,964.31	88.40	45.844	
8,000.00	5,584.83	5,948.56	5,911.93	108.61	20.69	53.85	-8,496.96	2,223.62	3,979.40	3,889.48	89.92	44.254	
8,100.00	5,650.69	5,980.50	5,937.37	109.85	20.82	15.37	-8,497.26	2,242.92	3,901.95	3,811.26	90.70	43.023	
8,200.00	5,716.83	6,516.74	6,139.56	110.82	25.78	-18.88	-8,503.88	2,708.96	3,819.47	3,733.79	85.68	44.576	
8,300.00	5,781.24	6,499.01	6,140.77	111.52	25.52	-39.28	-8,503.75	2,691.28	3,739.83	3,654.32	85.51	43.738	
8,400.00	5,841.96	8,400.00	6,141.70	111.98	50.20	-54.71	-8,503.00	2,596.94	3,665.02	3,553.76	111.25	32.943 SF	
8,500.00	5,897.14	6,210.52	6,090.88	112.25	22.18	-64.94	-8,500.62	2,412.28	3,595.99	3,509.38	86.61	41.521	
8,600.00	5,945.12	6,140.85	6,051.97	112.37	21.66	-74.29	-8,499.74	2,354.57	3,535.43	3,449.34	86.08	41.071	
8,700.00	5,984.42	8,700.00	5,997.51	112.39	35.75	-80.64	-8,498.67	2,296.39	3,485.76	3,386.92	98.84	35.265	
8,800.00	6,013.86	6,021.04	5,968.42	112.35	20.99	-85.28	-8,498.09	2,268.97	3,448.72	3,364.56	84.16	40.980	
8,900.00	6,032.54	5,980.50	5,937.37	112.30	20.82	-87.78	-8,497.26	2,242.92	3,425.33	3,342.51	82.83	41.356	
9,000.00	6,039.89	5,980.50	5,937.37	112.24	20.82	-88.89	-8,497.26	2,242.92	3,417.16	3,336.09	81.07	42.151 ES	
9,006.96	6,040.00	5,980.50	5,937.37	112.24	20.82	-88.89	-8,497.26	2,242.92	3,417.15	3,336.19	80.96	42.210 CC	
9,100.00	6,040.00	5,980.50	5,937.37	112.19	20.82	-88.89	-8,497.26	2,242.92	3,419.93	3,340.45	79.48	43.029	
9,200.00	6,040.00	5,933.74	5,899.77	112.16	20.64	-88.26	-8,497.11	2,215.14	3,424.35	3,345.68	78.67	43.528	
9,300.00	6,040.00	5,921.28	5,889.39	112.15	20.59	-88.09	-8,497.39	2,208.27	3,432.16	3,354.50	77.67	44.192	
9,400.00	6,040.00	5,885.50	5,858.79	112.15	20.46	-87.58	-8,498.90	2,189.80	3,443.06	3,365.93	77.13	44.640	
9,500.00	6,040.00	5,885.50	5,858.79	112.16	20.46	-87.58	-8,498.90	2,189.80	3,455.99	3,379.50	76.48	45.185	
9,600.00	6,040.00	5,885.50	5,858.79	112.19	20.46	-87.58	-8,498.90	2,189.80	3,471.75	3,395.64	76.11	45.617	
9,700.00	6,040.00	5,885.50	5,858.79	112.24	20.46	-87.58	-8,498.90	2,189.80	3,490.30	3,414.30	75.99	45.928	
9,800.00	6,040.00	5,885.50	5,858.79	112.31	20.46	-87.58	-8,498.90	2,189.80	3,511.60	3,435.46	76.14	46.119	
9,900.00	6,040.00	5,847.22	5,824.79	112.39	20.32	-87.01	-8,501.25	2,172.39	3,534.89	3,458.08	76.81	46.020	
10,000.00	6,040.00	5,835.70	5,814.31	112.49	20.28	-86.84	-8,502.01	2,167.67	3,560.99	3,483.50	77.49	45.955	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-4841CN - OWB - FINAL SURVEY													Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.00	6,040.00	5,825.30	5,804.75	112.62	20.24	-86.68	-8,502.72	2,163.62	3,589.56	3,511.21	78.36	45.811		
10,200.00	6,040.00	5,789.50	5,771.27	112.77	20.12	-86.12	-8,505.30	2,151.25	3,620.96	3,541.44	79.52	45.537		
10,300.00	6,040.00	5,789.50	5,771.27	112.94	20.12	-86.12	-8,505.30	2,151.25	3,654.14	3,573.49	80.66	45.304		
10,400.00	6,040.00	5,789.50	5,771.27	113.14	20.12	-86.12	-8,505.30	2,151.25	3,689.74	3,607.80	81.94	45.028		
10,500.00	6,040.00	5,807.32	5,788.08	113.36	20.18	-86.40	-8,503.87	2,156.97	3,727.66	3,644.38	83.28	44.760		
10,600.00	6,040.00	5,766.15	5,749.04	113.62	20.04	-85.75	-8,506.90	2,144.27	3,767.85	3,682.93	84.92	44.371		
10,700.00	6,040.00	5,734.96	5,719.04	113.91	19.92	-85.26	-8,508.53	2,135.89	3,809.96	3,723.40	86.57	44.011		
10,800.00	6,040.00	5,710.58	5,695.38	114.24	19.84	-84.86	-8,509.39	2,130.10	3,854.03	3,765.79	88.24	43.677		
10,900.00	6,040.00	5,694.50	5,679.68	114.61	19.78	-84.60	-8,509.76	2,126.66	3,900.05	3,810.12	89.93	43.369		
11,000.00	6,040.00	5,694.50	5,679.68	115.02	19.78	-84.60	-8,509.76	2,126.66	3,948.02	3,856.41	91.61	43.095		
11,100.00	6,040.00	5,694.50	5,679.68	115.49	19.78	-84.60	-8,509.76	2,126.66	3,997.92	3,904.61	93.31	42.845		
11,200.00	6,040.00	5,694.50	5,679.68	116.00	19.78	-84.60	-8,509.76	2,126.66	4,049.68	3,954.66	95.02	42.620		
11,300.00	6,040.00	5,694.50	5,679.68	116.58	19.78	-84.60	-8,509.76	2,126.66	4,103.22	4,006.50	96.72	42.423		
11,400.00	6,040.00	5,694.50	5,679.68	117.22	19.78	-84.60	-8,509.76	2,126.66	4,158.48	4,060.07	98.41	42.255		
11,500.00	6,040.00	5,660.92	5,646.67	117.92	19.66	-84.06	-8,510.25	2,120.55	4,214.88	4,114.77	100.11	42.101		
11,600.00	6,040.00	5,656.90	5,642.69	118.70	19.65	-83.99	-8,510.30	2,119.92	4,273.22	4,171.46	101.76	41.993		
11,700.00	6,040.00	5,653.15	5,638.99	119.56	19.64	-83.93	-8,510.33	2,119.36	4,333.08	4,229.70	103.38	41.914		
11,800.00	6,040.00	5,649.66	5,635.53	120.51	19.63	-83.87	-8,510.36	2,118.86	4,394.38	4,289.41	104.97	41.865		
11,900.00	6,040.00	5,646.39	5,632.29	121.54	19.61	-83.82	-8,510.39	2,118.40	4,457.07	4,350.55	106.52	41.844		
12,000.00	6,040.00	5,643.33	5,629.26	122.66	19.60	-83.77	-8,510.41	2,117.98	4,521.09	4,413.06	108.03	41.850		
12,100.00	6,040.00	5,640.45	5,626.41	123.87	19.59	-83.72	-8,510.43	2,117.61	4,586.40	4,476.89	109.51	41.882		
12,200.00	6,040.00	5,637.75	5,623.73	125.17	19.58	-83.68	-8,510.45	2,117.26	4,652.93	4,541.98	110.94	41.939		
12,300.00	6,040.00	5,635.20	5,621.20	126.57	19.58	-83.64	-8,510.46	2,116.95	4,720.63	4,608.29	112.34	42.021		
12,400.00	6,040.00	5,598.50	5,584.67	128.06	19.45	-83.04	-8,510.50	2,113.43	4,790.08	4,676.39	113.68	42.135		
12,500.00	6,040.00	5,598.50	5,584.67	129.63	19.45	-83.04	-8,510.50	2,113.43	4,859.91	4,744.91	115.00	42.261		
12,600.00	6,040.00	5,598.50	5,584.67	131.29	19.45	-83.04	-8,510.50	2,113.43	4,930.78	4,814.51	116.27	42.407		
12,700.00	6,040.00	5,598.50	5,584.67	133.03	19.45	-83.04	-8,510.50	2,113.43	5,002.64	4,885.14	117.51	42.573		
12,800.00	6,040.00	5,598.50	5,584.67	134.84	19.45	-83.04	-8,510.50	2,113.43	5,075.46	4,956.76	118.70	42.757		
12,900.00	6,040.00	5,598.50	5,584.67	136.71	19.45	-83.04	-8,510.50	2,113.43	5,149.19	5,029.33	119.86	42.959		
13,000.00	6,040.00	5,598.50	5,584.67	138.66	19.45	-83.04	-8,510.50	2,113.43	5,223.80	5,102.82	120.98	43.178		
13,100.00	6,040.00	5,598.50	5,584.67	140.66	19.45	-83.04	-8,510.50	2,113.43	5,299.24	5,177.17	122.07	43.412		
13,200.00	6,040.00	5,598.50	5,584.67	142.71	19.45	-83.04	-8,510.50	2,113.43	5,375.48	5,252.37	123.12	43.662		
13,300.00	6,040.00	5,598.50	5,584.67	144.81	19.45	-83.04	-8,510.50	2,113.43	5,452.49	5,328.36	124.13	43.926		
13,400.00	6,040.00	5,598.50	5,584.67	146.96	19.45	-83.04	-8,510.50	2,113.43	5,530.24	5,405.13	125.11	44.203		
13,500.00	6,040.00	5,598.50	5,584.67	149.14	19.45	-83.04	-8,510.50	2,113.43	5,608.69	5,482.63	126.06	44.493		
13,600.00	6,040.00	5,598.50	5,584.67	151.36	19.45	-83.04	-8,510.50	2,113.43	5,687.82	5,560.85	126.97	44.795		
13,700.00	6,040.00	5,598.50	5,584.67	153.62	19.45	-83.04	-8,510.50	2,113.43	5,767.60	5,639.74	127.86	45.109		
13,800.00	6,040.00	5,598.50	5,584.67	155.91	19.45	-83.04	-8,510.50	2,113.43	5,848.00	5,719.28	128.72	45.433		
13,900.00	6,040.00	5,598.50	5,584.67	158.22	19.45	-83.04	-8,510.50	2,113.43	5,928.99	5,799.45	129.54	45.768		
14,000.00	6,040.00	5,598.50	5,584.67	160.56	19.45	-83.04	-8,510.50	2,113.43	6,010.56	5,880.21	130.34	46.113		
14,100.00	6,040.00	5,598.50	5,584.67	162.92	19.45	-83.04	-8,510.50	2,113.43	6,092.67	5,961.55	131.12	46.467		
14,200.00	6,040.00	5,598.50	5,584.67	165.30	19.45	-83.04	-8,510.50	2,113.43	6,175.32	6,043.45	131.87	46.830		
14,300.00	6,040.00	5,598.50	5,584.67	167.70	19.45	-83.04	-8,510.50	2,113.43	6,258.47	6,125.88	132.59	47.201		
14,400.00	6,040.00	5,598.50	5,584.67	170.12	19.45	-83.04	-8,510.50	2,113.43	6,342.10	6,208.81	133.29	47.581		
14,500.00	6,040.00	5,598.50	5,584.67	172.55	19.45	-83.04	-8,510.50	2,113.43	6,426.21	6,292.24	133.97	47.968		
14,600.00	6,040.00	5,598.50	5,584.67	175.00	19.45	-83.04	-8,510.50	2,113.43	6,510.76	6,376.14	134.63	48.362		
14,700.00	6,040.00	5,598.50	5,584.67	177.46	19.45	-83.04	-8,510.50	2,113.43	6,595.75	6,460.49	135.26	48.763		
14,800.00	6,040.00	5,598.50	5,584.67	179.94	19.45	-83.04	-8,510.50	2,113.43	6,681.15	6,545.28	135.88	49.171		
14,900.00	6,040.00	5,598.50	5,584.67	182.43	19.45	-83.04	-8,510.50	2,113.43	6,766.95	6,630.48	136.47	49.585		
15,000.00	6,040.00	5,598.50	5,584.67	184.92	19.45	-83.04	-8,510.50	2,113.43	6,853.14	6,716.09	137.05	50.006		
15,100.00	6,040.00	5,598.50	5,584.67	187.43	19.45	-83.04	-8,510.50	2,113.43	6,939.70	6,802.09	137.61	50.431		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-11-4841CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 150-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	5,598.50	5,584.67	189.95	19.45	-83.04	-8,510.50	2,113.43	7,026.61	6,888.46	138.15	50.863	
15,300.00	6,040.00	5,598.50	5,584.67	192.48	19.45	-83.04	-8,510.50	2,113.43	7,113.87	6,975.20	138.67	51.300	
15,400.00	6,040.00	5,598.50	5,584.67	195.01	19.45	-83.04	-8,510.50	2,113.43	7,201.46	7,062.28	139.18	51.741	
15,500.00	6,040.00	5,598.50	5,584.67	197.55	19.45	-83.04	-8,510.50	2,113.43	7,289.37	7,149.69	139.68	52.188	
15,600.00	6,040.00	5,598.50	5,584.67	200.10	19.45	-83.04	-8,510.50	2,113.43	7,377.59	7,237.43	140.15	52.639	
15,700.00	6,040.00	5,598.50	5,584.67	202.65	19.45	-83.04	-8,510.50	2,113.43	7,466.10	7,325.48	140.62	53.095	
15,800.00	6,040.00	5,598.50	5,584.67	205.22	19.45	-83.04	-8,510.50	2,113.43	7,554.90	7,413.83	141.07	53.554	
15,900.00	6,040.00	5,598.50	5,584.67	207.78	19.45	-83.04	-8,510.50	2,113.43	7,643.98	7,502.47	141.51	54.018	
16,000.00	6,040.00	5,598.50	5,584.67	210.36	19.45	-83.04	-8,510.50	2,113.43	7,733.32	7,591.39	141.93	54.486	
16,100.00	6,040.00	5,598.50	5,584.67	212.93	19.45	-83.04	-8,510.50	2,113.43	7,822.92	7,680.58	142.35	54.957	
16,200.00	6,040.00	5,598.50	5,584.67	215.52	19.45	-83.04	-8,510.50	2,113.43	7,912.78	7,770.03	142.75	55.432	
16,300.00	6,040.00	5,598.50	5,584.67	218.11	19.45	-83.04	-8,510.50	2,113.43	8,002.87	7,859.73	143.14	55.910	
16,400.00	6,040.00	5,598.50	5,584.67	220.70	19.45	-83.04	-8,510.50	2,113.43	8,093.19	7,949.67	143.52	56.392	
16,500.00	6,040.00	5,598.50	5,584.67	223.29	19.45	-83.04	-8,510.50	2,113.43	8,183.74	8,039.86	143.89	56.876	
16,600.00	6,040.00	5,598.50	5,584.67	225.89	19.45	-83.04	-8,510.50	2,113.43	8,274.51	8,130.26	144.25	57.364	
16,700.00	6,040.00	5,598.50	5,584.67	228.50	19.45	-83.04	-8,510.50	2,113.43	8,365.49	8,220.89	144.59	57.855	
16,800.00	6,040.00	5,598.50	5,584.67	231.11	19.45	-83.04	-8,510.50	2,113.43	8,456.67	8,311.73	144.93	58.348	
16,900.00	6,040.00	5,598.50	5,584.67	233.72	19.45	-83.04	-8,510.50	2,113.43	8,548.05	8,402.78	145.27	58.844	
17,000.00	6,040.00	5,598.50	5,584.67	236.33	19.45	-83.04	-8,510.50	2,113.43	8,639.62	8,494.03	145.59	59.343	
17,100.00	6,040.00	5,598.50	5,584.67	238.95	19.45	-83.04	-8,510.50	2,113.43	8,731.37	8,585.47	145.90	59.844	
17,200.00	6,040.00	5,598.50	5,584.67	241.57	19.45	-83.04	-8,510.50	2,113.43	8,823.31	8,677.10	146.21	60.348	
17,300.00	6,040.00	5,598.50	5,584.67	244.19	19.45	-83.04	-8,510.50	2,113.43	8,915.41	8,768.91	146.51	60.853	
17,400.00	6,040.00	5,598.50	5,584.67	246.82	19.45	-83.04	-8,510.50	2,113.43	9,007.69	8,860.89	146.80	61.362	
17,500.00	6,040.00	5,598.50	5,584.67	249.45	19.45	-83.04	-8,510.50	2,113.43	9,100.13	8,953.05	147.08	61.872	
17,600.00	6,040.00	5,598.50	5,584.67	252.08	19.45	-83.04	-8,510.50	2,113.43	9,192.73	9,045.37	147.36	62.384	
17,700.00	6,040.00	5,598.50	5,584.67	254.71	19.45	-83.04	-8,510.50	2,113.43	9,285.48	9,137.85	147.63	62.898	
17,800.00	6,040.00	5,598.50	5,584.67	257.35	19.45	-83.04	-8,510.50	2,113.43	9,378.38	9,230.49	147.89	63.414	
17,900.00	6,040.00	5,598.50	5,584.67	259.99	19.45	-83.04	-8,510.50	2,113.43	9,471.42	9,323.28	148.15	63.932	
18,000.00	6,040.00	5,598.50	5,584.67	262.63	19.45	-83.04	-8,510.50	2,113.43	9,564.61	9,416.21	148.40	64.452	
18,100.00	6,040.00	5,598.50	5,584.67	265.27	19.45	-83.04	-8,510.50	2,113.43	9,657.93	9,509.29	148.64	64.974	
18,200.00	6,040.00	5,598.50	5,584.67	267.91	19.45	-83.04	-8,510.50	2,113.43	9,751.38	9,602.50	148.88	65.497	
18,300.00	6,040.00	5,598.50	5,584.67	270.56	19.45	-83.04	-8,510.50	2,113.43	9,844.97	9,695.85	149.12	66.022	
18,400.00	6,040.00	5,598.50	5,584.67	273.21	19.45	-83.04	-8,510.50	2,113.43	9,938.67	9,789.33	149.35	66.548	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-0108C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 135-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	117.18	-1,493.49	2,909.05	3,270.04				
100.00	100.00	81.14	81.14	0.13	0.12	117.18	-1,493.65	2,909.11	3,270.17	3,269.91	0.26	N/A	
200.00	199.98	675.23	671.83	0.48	2.26	-32.72	-1,450.08	2,882.93	3,261.24	3,258.47	2.77	1,179.122	
300.00	299.84	817.92	812.28	0.85	2.90	-33.25	-1,428.59	2,869.84	3,242.08	3,238.41	3.67	883.718	
400.00	399.45	1,012.26	1,002.61	1.22	3.82	-34.05	-1,396.59	2,847.14	3,216.85	3,212.04	4.81	668.575	
500.00	498.70	1,154.62	1,141.19	1.62	4.54	-34.89	-1,369.64	2,828.83	3,187.00	3,181.23	5.77	552.762	
600.00	597.47	1,241.30	1,225.41	2.05	4.99	-35.65	-1,352.38	2,817.79	3,154.31	3,147.81	6.50	485.111	
700.00	695.62	1,349.25	1,330.10	2.51	5.55	-36.62	-1,329.85	2,804.14	3,118.79	3,111.44	7.35	424.110	
800.00	793.06	1,444.79	1,422.66	3.01	6.07	-37.65	-1,309.66	2,791.82	3,080.55	3,072.37	8.17	376.881	
900.00	889.64	1,555.51	1,529.88	3.56	6.67	-38.88	-1,286.29	2,777.08	3,039.70	3,030.62	9.08	334.664	
1,000.00	985.27	2,322.73	2,237.23	4.14	12.12	-46.96	-1,043.23	2,622.65	2,991.39	2,978.17	13.22	226.213	
1,100.00	1,079.82	2,505.24	2,390.47	4.78	13.90	-50.96	-957.03	2,573.93	2,927.95	2,913.10	14.86	197.097	
1,200.00	1,173.17	2,553.83	2,430.26	5.46	14.40	-53.18	-932.32	2,560.98	2,862.38	2,846.61	15.77	181.546	
1,300.00	1,265.21	2,727.24	2,570.19	6.20	16.26	-58.12	-842.06	2,512.65	2,795.51	2,777.91	17.60	158.875	
1,400.00	1,355.84	2,799.22	2,626.97	6.99	17.07	-61.36	-803.46	2,491.05	2,726.55	2,707.71	18.84	144.747	
1,500.00	1,444.94	2,840.44	2,659.30	7.84	17.54	-64.05	-781.07	2,478.69	2,657.47	2,637.52	19.95	133.222	
1,600.00	1,532.39	2,877.72	2,688.42	8.75	17.97	-66.73	-760.61	2,467.62	2,588.68	2,567.56	21.12	122.587	
1,700.00	1,618.11	2,912.03	2,715.20	9.71	18.37	-69.39	-741.70	2,457.47	2,520.42	2,498.06	22.36	112.710	
1,800.00	1,701.97	2,943.25	2,739.58	10.74	18.73	-71.99	-724.54	2,448.24	2,452.98	2,429.29	23.68	103.579	
1,900.00	1,783.88	2,971.30	2,761.51	11.82	19.05	-74.51	-709.13	2,439.93	2,386.62	2,361.53	25.08	95.150	
2,000.00	1,863.74	2,985.67	2,772.78	12.96	19.21	-76.60	-701.30	2,435.69	2,321.70	2,295.23	26.48	87.688	
2,100.00	1,941.45	2,999.82	2,783.95	14.16	19.37	-78.63	-693.67	2,431.54	2,258.56	2,230.58	27.98	80.722	
2,200.00	2,016.92	3,012.69	2,794.17	15.41	19.52	-80.55	-686.80	2,427.78	2,197.46	2,167.87	29.59	74.275	
2,300.00	2,090.05	3,024.14	2,803.30	16.73	19.65	-82.35	-680.74	2,424.46	2,138.71	2,107.42	31.29	68.341	
2,400.00	2,160.76	3,034.02	2,811.21	18.10	19.76	-84.01	-675.57	2,421.61	2,082.64	2,049.54	33.11	62.910	
2,500.00	2,228.95	3,042.12	2,817.73	19.53	19.85	-85.52	-671.35	2,419.28	2,029.58	1,994.57	35.01	57.968	
2,600.00	2,294.55	3,048.24	2,822.66	21.01	19.92	-86.87	-668.18	2,417.52	1,979.88	1,942.87	37.01	53.501	
2,700.00	2,357.48	3,052.12	2,825.80	22.55	19.96	-88.03	-666.18	2,416.41	1,933.88	1,894.80	39.08	49.491	
2,800.00	2,418.42	3,054.25	2,827.52	24.13	19.99	-88.36	-665.08	2,415.80	1,891.96	1,850.76	41.20	45.922	
2,900.00	2,479.25	3,056.47	2,829.31	25.71	20.01	-88.43	-663.94	2,415.17	1,854.48	1,811.12	43.35	42.775	
3,000.00	2,540.09	3,058.90	2,831.28	27.31	20.04	-88.51	-662.70	2,414.48	1,821.72	1,776.20	45.52	40.024	
3,100.00	2,600.93	3,061.57	2,833.45	28.90	20.07	-88.60	-661.34	2,413.72	1,793.94	1,746.28	47.66	37.640	
3,200.00	2,661.77	3,065.87	2,836.94	30.51	20.12	-88.74	-659.14	2,412.49	1,771.37	1,721.60	49.77	35.588	
3,300.00	2,722.61	3,072.00	2,841.92	32.11	20.18	-88.94	-656.03	2,410.74	1,754.22	1,702.38	51.83	33.843	
3,400.00	2,783.44	3,078.75	2,847.41	33.72	20.26	-89.16	-652.61	2,408.81	1,742.62	1,688.82	53.80	32.390	
3,500.00	2,844.28	3,086.23	2,853.50	35.34	20.34	-89.41	-648.85	2,406.66	1,736.71	1,681.06	55.65	31.207	
3,553.20	2,876.65	3,090.54	2,857.01	36.20	20.39	-89.55	-646.68	2,405.41	1,735.90	1,679.32	56.58	30.680 CC	
3,600.00	2,905.12	3,094.54	2,860.28	36.95	20.43	-89.69	-644.68	2,404.25	1,736.53	1,679.16	57.36	30.272 ES	
3,700.00	2,965.96	3,103.85	2,867.88	38.57	20.53	-89.99	-640.05	2,401.54	1,742.07	1,683.15	58.92	29.564	
3,800.00	3,026.79	3,114.33	2,876.46	40.19	20.65	-90.34	-634.86	2,398.48	1,753.29	1,692.97	60.32	29.065	
3,900.00	3,087.63	3,126.24	2,886.22	41.81	20.78	-90.73	-629.01	2,394.97	1,770.07	1,708.52	61.55	28.757	
4,000.00	3,148.47	3,139.87	2,897.43	43.43	20.92	-91.18	-622.37	2,390.93	1,792.25	1,729.63	62.62	28.621	
4,100.00	3,209.31	3,155.64	2,910.41	45.05	21.10	-91.70	-614.78	2,386.21	1,819.62	1,756.09	63.53	28.643	
4,200.00	3,270.14	3,174.08	2,925.64	46.68	21.30	-92.31	-606.00	2,380.64	1,851.94	1,787.65	64.29	28.805	
4,300.00	3,330.98	4,300.00	2,891.58	48.31	33.59	-90.94	-626.18	2,392.94	1,888.89	1,812.66	76.24	24.776 SF	
4,400.00	3,391.82	4,400.00	2,895.01	49.93	34.69	-91.08	-624.11	2,391.71	1,930.51	1,853.18	77.33	24.964	
4,500.00	3,452.66	3,186.46	2,935.87	51.56	21.43	-92.71	-600.09	2,376.94	1,976.21	1,910.97	65.24	30.291	
4,600.00	3,513.49	3,194.76	2,942.74	53.19	21.52	-92.99	-596.16	2,374.44	2,025.78	1,960.43	65.35	30.997	
4,700.00	3,574.33	3,203.41	2,949.91	54.82	21.61	-93.27	-592.07	2,371.84	2,078.96	2,013.59	65.38	31.800	
4,800.00	3,635.17	3,212.45	2,957.40	56.45	21.71	-93.57	-587.82	2,369.11	2,135.48	2,070.16	65.32	32.693	
4,900.00	3,696.01	3,221.90	2,965.24	58.08	21.81	-93.88	-583.38	2,366.27	2,195.07	2,129.87	65.20	33.668	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-0108C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 135-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	3,756.84	3,231.78	2,973.45	59.71	21.91	-94.20	-578.75	2,363.29	2,257.49	2,192.46	65.02	34.717	
5,100.00	3,817.68	3,242.13	2,982.05	61.34	22.02	-94.54	-573.92	2,360.17	2,322.51	2,257.70	64.81	35.834	
5,200.00	3,878.52	3,253.76	2,991.74	62.97	22.15	-94.93	-568.51	2,356.65	2,389.93	2,325.35	64.58	37.009	
5,300.00	3,939.36	3,275.83	3,010.16	64.61	22.38	-95.65	-558.34	2,350.00	2,459.51	2,395.10	64.41	38.187	
5,400.00	4,000.19	3,302.54	3,032.56	66.24	22.66	-96.52	-546.20	2,341.98	2,531.06	2,466.80	64.26	39.389	
5,500.00	4,061.03	3,335.52	3,060.37	67.87	23.00	-97.59	-531.47	2,332.11	2,604.39	2,540.24	64.15	40.600	
5,600.00	4,121.87	3,368.50	3,088.18	69.51	23.34	-98.75	-517.92	2,322.51	2,676.70	2,610.50	64.00	41.875	
5,700.00	4,182.71	3,401.55	3,116.00	71.14	23.77	-100.04	-498.76	2,309.68	2,755.72	2,691.76	63.96	43.084	
5,800.00	4,243.54	3,434.62	3,143.82	72.77	24.20	-101.36	-500.68	2,310.90	2,833.25	2,751.48	63.87	44.269	
5,900.00	4,304.38	3,467.69	3,171.64	74.41	24.63	-102.68	-476.54	2,294.00	2,912.37	2,848.79	63.58	45.809	
6,000.00	4,365.22	3,482.63	3,186.23	76.04	24.88	-102.32	-469.02	2,288.55	2,992.51	2,929.20	63.32	47.262	
6,100.00	4,426.06	3,500.80	3,201.85	77.68	24.66	-102.89	-461.56	2,283.05	3,073.75	3,010.69	63.06	48.741	
6,200.00	4,486.90	3,518.90	3,217.42	79.31	24.84	-103.47	-454.16	2,277.52	3,156.00	3,093.18	62.81	50.245	
6,300.00	4,547.73	3,536.96	3,232.94	80.95	25.02	-104.04	-446.81	2,271.94	3,239.17	3,176.60	62.57	51.770	
6,400.00	4,608.57	3,555.00	3,248.50	82.58	25.17	-103.87	-448.91	2,273.53	3,323.26	3,240.78	62.48	40.290	
6,500.00	4,669.41	3,573.00	3,264.00	84.22	24.98	-103.91	-448.42	2,273.17	3,408.21	3,346.39	61.81	55.136	
6,600.00	4,730.25	3,591.00	3,279.50	85.86	24.98	-103.91	-448.42	2,273.17	3,493.95	3,432.48	61.47	56.841	
6,700.00	4,791.08	3,609.00	3,295.00	87.49	24.98	-103.91	-448.42	2,273.17	3,580.43	3,519.30	61.13	58.566	
6,800.00	4,851.92	3,627.00	3,310.50	89.13	24.98	-103.91	-448.42	2,273.17	3,667.60	3,606.79	60.81	60.311	
6,900.00	4,912.76	3,645.00	3,326.00	90.76	25.26	-104.76	-437.31	2,264.78	3,755.14	3,694.44	60.70	61.861	
7,000.00	4,973.60	3,663.00	3,341.50	92.40	25.30	-104.88	-435.71	2,263.58	3,843.47	3,783.04	60.43	63.601	
7,100.00	5,034.43	3,681.00	3,357.00	94.04	25.34	-104.99	-434.16	2,262.42	3,932.34	3,872.17	60.17	65.354	
7,200.00	5,095.27	3,699.00	3,372.50	95.67	25.38	-105.11	-432.65	2,261.30	4,021.73	3,961.81	59.92	67.119	
7,300.00	5,156.11	3,717.00	3,388.00	97.31	25.41	-105.21	-431.19	2,260.21	4,111.60	4,051.92	59.68	68.896	
7,400.00	5,216.95	3,735.00	3,403.50	98.95	25.45	-105.32	-429.76	2,259.15	4,201.92	4,142.47	59.45	70.683	
7,500.00	5,277.78	3,753.00	3,419.00	100.59	25.48	-105.42	-428.37	2,258.13	4,292.66	4,233.43	59.23	72.478	
7,600.00	5,338.62	3,771.00	3,434.50	102.22	36.07	-137.91	-19.35	1,935.08	4,376.83	4,308.14	68.69	63.717	
7,700.00	5,399.46	3,789.00	3,450.00	103.86	36.19	-138.29	-15.20	1,931.67	4,459.69	4,390.98	68.71	64.902	
7,800.00	5,460.30	3,807.00	3,465.50	105.50	39.67	-140.60	45.51	2,718.55	4,525.67	4,430.05	95.61	47.334	
7,900.00	5,521.24	3,825.00	3,481.00	107.13	39.72	-143.46	45.31	2,734.75	4,583.51	4,487.12	96.38	47.554	
8,000.00	5,584.83	3,843.00	3,496.50	108.61	39.82	-158.65	45.17	2,762.91	4,645.55	4,548.05	97.51	47.643	
8,100.00	5,650.69	3,861.00	3,512.00	109.85	39.82	-176.01	45.17	2,762.91	4,711.30	4,613.56	97.74	48.201	
8,200.00	5,716.83	3,879.00	3,527.50	110.82	39.82	166.05	45.17	2,762.91	4,778.85	4,680.83	98.02	48.754	
8,300.00	5,781.24	3,897.00	3,543.00	111.52	39.82	148.89	45.17	2,762.91	4,846.12	4,747.73	98.39	49.255	
8,400.00	5,841.96	3,915.00	3,558.50	111.98	39.68	133.14	45.45	2,722.61	4,910.68	4,813.02	97.66	50.285	
8,500.00	5,897.14	3,933.00	3,574.00	112.25	39.61	120.25	45.82	2,701.50	4,970.99	4,873.26	97.73	50.865	
8,600.00	5,945.12	3,951.00	3,589.50	112.37	39.52	109.97	46.66	2,668.95	5,025.06	4,927.37	97.70	51.434	
8,700.00	5,984.42	3,969.00	3,605.00	112.39	39.46	102.25	47.58	2,642.50	5,071.26	4,973.08	98.17	51.656	
8,800.00	6,013.86	3,987.00	3,620.50	112.35	39.38	96.74	49.20	2,604.80	5,108.20	5,009.59	98.61	51.802	
8,900.00	6,032.54	3,995.00	3,627.00	112.30	39.28	93.23	52.45	2,544.07	5,134.74	5,036.03	98.71	52.019	
9,000.00	6,039.89	4,003.00	3,634.00	112.24	39.21	91.61	58.28	2,434.03	5,149.13	5,051.22	97.90	52.594	
9,100.00	6,040.00	4,011.00	3,641.00	112.19	39.24	90.72	67.65	2,172.76	5,152.11	5,058.11	94.01	54.806	
9,200.00	6,040.00	4,019.00	3,648.00	112.16	42.13	87.49	66.27	1,921.75	5,155.19	5,062.12	93.07	55.390	
9,300.00	6,040.00	4,027.00	3,655.00	112.15	39.33	87.20	65.17	1,911.00	5,156.39	5,063.28	93.11	55.381	
9,400.00	6,040.00	4,035.00	3,662.00	112.15	39.30	86.81	63.51	1,901.52	5,159.21	5,063.86	95.35	54.107	
9,500.00	6,040.00	4,043.00	3,669.00	112.16	39.29	86.65	62.80	1,898.54	5,163.85	5,066.02	97.83	52.782	
9,600.00	6,040.00	4,051.00	3,676.00	112.19	39.29	86.65	62.80	1,898.54	5,170.40	5,069.95	100.45	51.470	
9,700.00	6,040.00	4,059.00	3,683.00	112.24	39.29	86.65	62.80	1,898.54	5,178.88	5,075.78	103.10	50.231	
9,800.00	6,040.00	4,067.00	3,690.00	112.31	39.29	86.65	62.80	1,898.54	5,189.27	5,083.51	105.77	49.064	
9,900.00	6,040.00	4,075.00	3,697.00	112.39	39.29	86.65	62.80	1,898.54	5,201.56	5,093.13	108.44	47.968	
10,000.00	6,040.00	4,083.00	3,704.00	112.49	39.29	86.65	62.80	1,898.54	5,215.75	5,104.64	111.11	46.942	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-0108C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 135-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	6,040.00	6,165.00	5,730.05	112.62	39.29	86.65	62.80	1,898.54	5,231.80	5,118.02	113.78	45.983	
10,200.00	6,040.00	6,165.00	5,730.05	112.77	39.29	86.65	62.80	1,898.54	5,249.71	5,133.28	116.43	45.089	
10,300.00	6,040.00	6,128.32	5,693.89	112.94	39.24	86.25	61.20	1,892.59	5,268.91	5,150.06	118.84	44.334	
10,400.00	6,040.00	6,125.27	5,690.87	113.14	39.24	86.22	61.08	1,892.19	5,290.36	5,168.91	121.44	43.562	
10,500.00	6,040.00	6,122.41	5,688.03	113.36	39.23	86.19	60.98	1,891.82	5,313.60	5,189.58	124.02	42.846	
10,600.00	6,040.00	6,119.72	5,685.37	113.62	39.23	86.16	60.89	1,891.48	5,338.60	5,212.04	126.56	42.183	
10,700.00	6,040.00	6,117.20	5,682.87	113.91	39.23	86.13	60.80	1,891.18	5,365.35	5,236.28	129.07	41.571	
10,800.00	6,040.00	6,114.82	5,680.51	114.24	39.22	86.10	60.72	1,890.90	5,393.81	5,262.27	131.53	41.007	
10,900.00	6,040.00	6,112.58	5,678.28	114.61	39.22	86.08	60.65	1,890.64	5,423.96	5,290.00	133.96	40.489	
11,000.00	6,040.00	6,110.45	5,676.17	115.02	39.22	86.05	60.58	1,890.40	5,455.77	5,319.43	136.34	40.015	
11,100.00	6,040.00	6,108.45	5,674.18	115.49	39.21	86.03	60.52	1,890.19	5,489.22	5,350.54	138.68	39.582	
11,200.00	6,040.00	6,071.00	5,636.87	116.00	39.16	85.62	59.60	1,887.21	5,524.91	5,384.10	140.81	39.236	
11,300.00	6,040.00	6,071.00	5,636.87	116.58	39.16	85.62	59.60	1,887.21	5,561.48	5,418.42	143.06	38.875	
11,400.00	6,040.00	6,071.00	5,636.87	117.22	39.16	85.62	59.60	1,887.21	5,599.60	5,454.35	145.26	38.550	
11,500.00	6,040.00	6,071.00	5,636.87	117.92	39.16	85.62	59.60	1,887.21	5,639.24	5,491.84	147.40	38.259	
11,600.00	6,040.00	6,071.00	5,636.87	118.70	39.16	85.62	59.60	1,887.21	5,680.36	5,530.87	149.49	37.999	
11,700.00	6,040.00	6,071.00	5,636.87	119.56	39.16	85.62	59.60	1,887.21	5,722.93	5,571.41	151.52	37.770	
11,800.00	6,040.00	6,071.00	5,636.87	120.51	39.16	85.62	59.60	1,887.21	5,766.92	5,613.42	153.50	37.570	
11,900.00	6,040.00	6,071.00	5,636.87	121.54	39.16	85.62	59.60	1,887.21	5,812.30	5,656.88	155.42	37.396	
12,000.00	6,040.00	6,071.00	5,636.87	122.66	39.16	85.62	59.60	1,887.21	5,859.04	5,701.74	157.29	37.249	
12,100.00	6,040.00	6,071.00	5,636.87	123.87	39.16	85.62	59.60	1,887.21	5,907.09	5,747.99	159.11	37.126	
12,200.00	6,040.00	6,071.00	5,636.87	125.17	39.16	85.62	59.60	1,887.21	5,956.44	5,795.57	160.87	37.026	
12,300.00	6,040.00	6,071.00	5,636.87	126.57	39.16	85.62	59.60	1,887.21	6,007.05	5,844.47	162.58	36.949	
12,400.00	6,040.00	6,071.00	5,636.87	128.06	39.16	85.62	59.60	1,887.21	6,058.89	5,894.66	164.23	36.892	
12,500.00	6,040.00	6,071.00	5,636.87	129.63	39.16	85.62	59.60	1,887.21	6,111.92	5,946.09	165.84	36.855	
12,600.00	6,040.00	6,071.00	5,636.87	131.29	39.16	85.62	59.60	1,887.21	6,166.12	5,998.73	167.39	36.838	
12,700.00	6,040.00	6,071.00	5,636.87	133.03	39.16	85.62	59.60	1,887.21	6,221.45	6,052.57	168.89	36.838	
12,800.00	6,040.00	6,071.00	5,636.87	134.84	39.16	85.62	59.60	1,887.21	6,277.89	6,107.55	170.34	36.855	
12,900.00	6,040.00	6,071.00	5,636.87	136.71	39.16	85.62	59.60	1,887.21	6,335.41	6,163.67	171.74	36.889	
13,000.00	6,040.00	6,071.00	5,636.87	138.66	39.16	85.62	59.60	1,887.21	6,393.97	6,220.87	173.10	36.938	
13,100.00	6,040.00	6,071.00	5,636.87	140.66	39.16	85.62	59.60	1,887.21	6,453.55	6,279.14	174.41	37.002	
13,200.00	6,040.00	6,071.00	5,636.87	142.71	39.16	85.62	59.60	1,887.21	6,514.12	6,338.45	175.68	37.081	
13,300.00	6,040.00	6,071.00	5,636.87	144.81	39.16	85.62	59.60	1,887.21	6,575.66	6,398.76	176.90	37.172	
13,400.00	6,040.00	6,071.00	5,636.87	146.96	39.16	85.62	59.60	1,887.21	6,638.12	6,460.05	178.08	37.277	
13,500.00	6,040.00	6,071.00	5,636.87	149.14	39.16	85.62	59.60	1,887.21	6,701.50	6,522.29	179.21	37.394	
13,600.00	6,040.00	6,071.00	5,636.87	151.36	39.16	85.62	59.60	1,887.21	6,765.77	6,585.46	180.31	37.523	
13,700.00	6,040.00	6,071.00	5,636.87	153.62	39.16	85.62	59.60	1,887.21	6,830.89	6,649.52	181.37	37.663	
13,800.00	6,040.00	6,071.00	5,636.87	155.91	39.16	85.62	59.60	1,887.21	6,896.85	6,714.46	182.39	37.814	
13,900.00	6,040.00	6,071.00	5,636.87	158.22	39.16	85.62	59.60	1,887.21	6,963.62	6,780.25	183.37	37.976	
14,000.00	6,040.00	6,071.00	5,636.87	160.56	39.16	85.62	59.60	1,887.21	7,031.18	6,846.86	184.32	38.147	
14,100.00	6,040.00	6,071.00	5,636.87	162.92	39.16	85.62	59.60	1,887.21	7,099.50	6,914.27	185.23	38.328	
14,200.00	6,040.00	6,071.00	5,636.87	165.30	39.16	85.62	59.60	1,887.21	7,168.57	6,982.46	186.11	38.518	
14,300.00	6,040.00	6,071.00	5,636.87	167.70	39.16	85.62	59.60	1,887.21	7,238.36	7,051.40	186.96	38.716	
14,400.00	6,040.00	6,071.00	5,636.87	170.12	39.16	85.62	59.60	1,887.21	7,308.85	7,121.07	187.78	38.923	
14,500.00	6,040.00	6,071.00	5,636.87	172.55	39.16	85.62	59.60	1,887.21	7,380.02	7,191.46	188.56	39.138	
14,600.00	6,040.00	6,071.00	5,636.87	175.00	39.16	85.62	59.60	1,887.21	7,451.86	7,262.54	189.32	39.361	
14,700.00	6,040.00	6,071.00	5,636.87	177.46	39.16	85.62	59.60	1,887.21	7,524.34	7,334.29	190.05	39.591	
14,800.00	6,040.00	6,071.00	5,636.87	179.94	39.16	85.62	59.60	1,887.21	7,597.44	7,406.69	190.75	39.828	
14,900.00	6,040.00	6,071.00	5,636.87	182.43	39.16	85.62	59.60	1,887.21	7,671.15	7,479.72	191.43	40.073	
15,000.00	6,040.00	6,071.00	5,636.87	184.92	39.16	85.62	59.60	1,887.21	7,745.45	7,553.37	192.08	40.324	
15,100.00	6,040.00	6,071.00	5,636.87	187.43	39.16	85.62	59.60	1,887.21	7,820.32	7,627.61	192.71	40.581	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-0108C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 135-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,200.00	6,040.00	6,071.00	5,636.87	189.95	39.16	85.62	59.60	1,887.21	7,895.75	7,702.44	193.31	40.844	
15,300.00	6,040.00	6,071.00	5,636.87	192.48	39.16	85.62	59.60	1,887.21	7,971.72	7,777.83	193.90	41.113	
15,400.00	6,040.00	6,071.00	5,636.87	195.01	39.16	85.62	59.60	1,887.21	8,048.22	7,853.76	194.46	41.388	
15,500.00	6,040.00	6,071.00	5,636.87	197.55	39.16	85.62	59.60	1,887.21	8,125.23	7,930.23	195.00	41.669	
15,600.00	6,040.00	6,071.00	5,636.87	200.10	39.16	85.62	59.60	1,887.21	8,202.73	8,007.21	195.52	41.954	
15,700.00	6,040.00	6,071.00	5,636.87	202.65	39.16	85.62	59.60	1,887.21	8,280.71	8,084.70	196.02	42.245	
15,800.00	6,040.00	6,071.00	5,636.87	205.22	39.16	85.62	59.60	1,887.21	8,359.17	8,162.67	196.50	42.541	
15,900.00	6,040.00	6,071.00	5,636.87	207.78	39.16	85.62	59.60	1,887.21	8,438.08	8,241.11	196.96	42.841	
16,000.00	6,040.00	6,071.00	5,636.87	210.36	39.16	85.62	59.60	1,887.21	8,517.43	8,320.02	197.41	43.146	
16,100.00	6,040.00	6,071.00	5,636.87	212.93	39.16	85.62	59.60	1,887.21	8,597.21	8,399.37	197.84	43.456	
16,200.00	6,040.00	6,071.00	5,636.87	215.52	39.16	85.62	59.60	1,887.21	8,677.41	8,479.16	198.25	43.770	
16,300.00	6,040.00	6,071.00	5,636.87	218.11	39.16	85.62	59.60	1,887.21	8,758.02	8,559.37	198.65	44.087	
16,400.00	6,040.00	6,071.00	5,636.87	220.70	39.16	85.62	59.60	1,887.21	8,839.03	8,639.99	199.04	44.409	
16,500.00	6,040.00	6,071.00	5,636.87	223.29	39.16	85.62	59.60	1,887.21	8,920.42	8,721.01	199.40	44.735	
16,600.00	6,040.00	6,071.00	5,636.87	225.89	39.16	85.62	59.60	1,887.21	9,002.18	8,802.42	199.76	45.065	
16,700.00	6,040.00	6,071.00	5,636.87	228.50	39.16	85.62	59.60	1,887.21	9,084.31	8,884.21	200.10	45.398	
16,800.00	6,040.00	6,071.00	5,636.87	231.11	39.16	85.62	59.60	1,887.21	9,166.80	8,966.37	200.43	45.735	
16,900.00	6,040.00	6,071.00	5,636.87	233.72	39.16	85.62	59.60	1,887.21	9,249.63	9,048.88	200.75	46.075	
17,000.00	6,040.00	6,071.00	5,636.87	236.33	39.16	85.62	59.60	1,887.21	9,332.80	9,131.74	201.06	46.418	
17,100.00	6,040.00	6,071.00	5,636.87	238.95	39.16	85.62	59.60	1,887.21	9,416.29	9,214.94	201.35	46.765	
17,200.00	6,040.00	6,071.00	5,636.87	241.57	39.16	85.62	59.60	1,887.21	9,500.11	9,298.47	201.64	47.114	
17,300.00	6,040.00	6,071.00	5,636.87	244.19	39.16	85.62	59.60	1,887.21	9,584.23	9,382.32	201.91	47.467	
17,400.00	6,040.00	6,071.00	5,636.87	246.82	39.16	85.62	59.60	1,887.21	9,668.66	9,466.48	202.18	47.823	
17,500.00	6,040.00	6,071.00	5,636.87	249.45	39.16	85.62	59.60	1,887.21	9,753.38	9,550.95	202.43	48.181	
17,600.00	6,040.00	6,071.00	5,636.87	252.08	39.16	85.62	59.60	1,887.21	9,838.39	9,635.71	202.68	48.542	
17,700.00	6,040.00	6,071.00	5,636.87	254.71	39.16	85.62	59.60	1,887.21	9,923.68	9,720.76	202.91	48.906	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 780-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	117.41	-1,508.06	2,907.94	3,275.74				
100.00	100.00	218.43	218.37	0.13	0.47	117.38	-1,504.71	2,904.89	3,273.95	3,273.38	0.57	5,752.744	
200.00	199.98	456.91	456.34	0.48	0.98	-32.05	-1,493.40	2,894.62	3,266.47	3,265.09	1.38	2,371.921	
300.00	299.84	691.81	689.82	0.85	1.49	-32.49	-1,474.48	2,877.43	3,251.87	3,249.67	2.19	1,481.669	
400.00	399.45	866.06	862.23	1.22	2.05	-33.02	-1,456.00	2,860.25	3,230.86	3,227.81	3.06	1,056.097	
500.00	498.70	966.19	961.16	1.62	2.49	-33.52	-1,445.13	2,849.18	3,206.03	3,202.23	3.80	842.769	
600.00	597.47	2,331.94	2,220.51	2.05	12.28	-40.49	-1,099.21	2,512.25	3,160.81	3,150.43	10.37	304.726	
700.00	695.62	2,373.14	2,255.11	2.51	12.72	-41.91	-1,083.12	2,496.71	3,097.42	3,086.48	10.94	283.160	
800.00	793.06	2,417.70	2,292.72	3.01	13.18	-43.48	-1,065.81	2,480.25	3,032.94	3,021.39	11.56	262.438	
900.00	889.64	2,463.29	2,331.37	3.56	13.66	-45.18	-1,048.16	2,463.74	2,967.43	2,955.21	12.22	242.904	
1,000.00	985.27	2,512.22	2,372.93	4.14	14.17	-47.06	-1,028.94	2,446.48	2,900.88	2,887.94	12.94	224.247	
1,100.00	1,079.82	2,565.50	2,418.20	4.78	14.72	-49.16	-1,007.63	2,428.17	2,833.36	2,819.64	13.73	206.434	
1,200.00	1,173.17	2,627.05	2,470.51	5.46	15.35	-51.56	-982.98	2,407.09	2,764.77	2,750.16	14.61	189.226	
1,300.00	1,265.21	1,300.00	2,543.26	6.20	2.32	-54.62	-948.23	2,376.99	2,694.59	2,688.19	6.40	421.108	
1,400.00	1,355.84	2,803.38	2,619.11	6.99	17.23	-58.09	-911.53	2,344.60	2,623.12	2,606.26	16.86	155.616	
1,500.00	1,444.94	2,850.44	2,658.61	7.84	17.73	-60.91	-892.58	2,327.42	2,551.03	2,533.17	17.86	142.851	
1,600.00	1,532.39	2,887.72	2,690.00	8.75	18.13	-63.64	-877.71	2,313.88	2,478.87	2,459.99	18.89	131.259	
1,700.00	1,618.11	2,924.24	2,720.85	9.71	18.53	-66.45	-863.28	2,300.71	2,406.90	2,386.90	20.00	120.366	
1,800.00	1,701.97	2,981.02	2,768.87	10.74	19.13	-69.92	-841.13	2,280.04	2,335.10	2,313.79	21.31	109.583	
1,900.00	1,783.88	3,033.69	2,813.39	11.82	19.70	-73.42	-820.92	2,260.46	2,263.59	2,240.88	22.71	99.693	
2,000.00	1,863.74	3,045.09	2,823.07	12.96	19.81	-75.69	-816.50	2,256.36	2,193.13	2,169.13	24.00	91.367	
2,100.00	1,941.45	3,064.88	2,839.88	14.16	20.02	-78.20	-808.86	2,249.23	2,124.03	2,098.56	25.47	83.392	
2,200.00	2,016.92	3,083.03	2,855.32	15.41	20.21	-80.61	-801.83	2,242.79	2,056.64	2,029.58	27.06	75.998	
2,300.00	2,090.05	3,110.00	2,878.33	16.73	20.50	-83.26	-791.32	2,233.43	1,991.35	1,962.50	28.85	69.034	
2,400.00	2,160.76	3,110.00	2,878.33	18.10	20.50	-84.87	-791.32	2,233.43	1,928.39	1,897.77	30.62	62.983	
2,500.00	2,228.95	3,130.47	2,895.86	19.53	20.71	-87.12	-783.39	2,226.44	1,868.26	1,835.60	32.66	57.212	
2,600.00	2,294.55	3,144.26	2,907.71	21.01	20.84	-89.01	-778.11	2,221.77	1,811.36	1,776.56	34.80	52.050	
2,700.00	2,357.48	3,156.12	2,917.93	22.55	20.96	-90.71	-773.60	2,217.77	1,758.12	1,721.05	37.07	47.423	
2,800.00	2,418.42	3,166.64	2,927.01	24.13	21.07	-91.41	-769.64	2,214.25	1,709.02	1,669.56	39.46	43.314	
2,900.00	2,479.25	3,177.66	2,936.55	25.71	21.18	-91.83	-765.52	2,210.56	1,664.39	1,622.47	41.92	39.704	
3,000.00	2,540.09	3,189.33	2,946.67	27.31	21.30	-92.27	-761.20	2,206.69	1,624.60	1,580.16	44.44	36.561	
3,100.00	2,600.93	3,201.71	2,957.43	28.90	21.43	-92.73	-756.65	2,202.59	1,590.01	1,543.03	46.97	33.850	
3,200.00	2,661.77	3,214.78	2,968.82	30.51	21.55	-93.22	-751.91	2,198.30	1,560.94	1,511.45	49.49	31.542	
3,300.00	2,722.61	3,228.96	2,981.23	32.11	21.69	-93.75	-746.83	2,193.67	1,537.71	1,485.76	51.95	29.599	
3,400.00	2,783.44	3,244.45	2,994.83	33.72	21.83	-94.34	-741.37	2,188.66	1,520.55	1,466.23	54.32	27.991	
3,500.00	2,844.28	3,261.43	3,009.81	35.34	21.99	-94.97	-735.49	2,183.21	1,509.66	1,453.10	56.57	26.689	
3,600.00	2,905.12	3,280.14	3,026.38	36.95	22.17	-95.67	-729.15	2,177.28	1,505.14	1,446.50	58.64	25.666	
3,620.59	2,917.64	3,284.23	3,030.01	37.28	22.21	-95.83	-727.78	2,175.99	1,505.01	1,445.96	59.05	25.487 CC, ES	
3,700.00	2,965.96	3,301.80	3,045.65	38.57	22.37	-96.48	-721.98	2,170.48	1,507.02	1,446.48	60.54	24.894	
3,800.00	3,026.79	3,333.43	3,073.98	40.19	22.65	-97.66	-711.90	2,160.66	1,515.16	1,452.91	62.25	24.338	
3,900.00	3,087.63	3,370.73	3,107.64	41.81	22.98	-99.05	-700.67	2,149.18	1,529.34	1,465.57	63.77	23.982	
4,000.00	3,148.47	3,402.74	3,136.74	43.43	23.25	-100.23	-691.57	2,139.42	1,549.30	1,484.29	65.01	23.832 SF	
4,100.00	3,209.31	3,425.58	3,157.55	45.05	23.44	-101.07	-685.17	2,132.53	1,574.99	1,509.03	65.96	23.880	
4,200.00	3,270.14	3,448.92	3,178.85	46.68	23.64	-101.92	-678.67	2,125.55	1,606.15	1,539.47	66.68	24.086	
4,300.00	3,330.98	3,472.77	3,200.65	48.31	23.83	-102.79	-672.04	2,118.48	1,642.47	1,575.26	67.21	24.437	
4,400.00	3,391.82	3,485.00	3,211.84	49.93	23.94	-103.24	-668.66	2,114.89	1,683.64	1,616.15	67.49	24.947	
4,500.00	3,452.66	3,508.24	3,233.09	51.56	24.13	-104.08	-662.15	2,108.11	1,729.32	1,661.65	67.67	25.554	
4,600.00	3,513.49	3,523.39	3,246.93	53.19	24.25	-104.63	-657.83	2,103.74	1,779.28	1,711.61	67.67	26.294	
4,700.00	3,574.33	3,538.23	3,260.49	54.82	24.38	-105.17	-653.52	2,099.50	1,833.13	1,765.58	67.55	27.138	
4,800.00	3,635.17	3,552.78	3,273.77	56.45	24.50	-105.69	-649.23	2,095.37	1,890.55	1,823.22	67.33	28.077	
4,900.00	3,696.01	3,579.00	3,297.67	58.08	24.71	-106.63	-641.34	2,088.03	1,951.30	1,884.17	67.13	29.068	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 780-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	3,756.84	3,579.00	3,297.67	59.71	24.71	-106.63	-641.34	2,088.03	2,014.90	1,948.21	66.69	30.215	
5,100.00	3,817.68	3,595.43	3,312.63	61.34	24.85	-107.21	-636.29	2,083.48	2,081.25	2,014.94	66.32	31.384	
5,200.00	3,878.52	3,609.33	3,325.27	62.97	24.97	-107.71	-631.96	2,079.63	2,150.07	2,084.17	65.90	32.626	
5,300.00	3,939.36	3,622.84	3,337.53	64.61	25.08	-108.18	-627.70	2,075.90	2,221.11	2,155.65	65.46	33.931	
5,400.00	4,000.19	3,635.98	3,349.44	66.24	25.19	-108.64	-623.50	2,072.28	2,294.18	2,229.17	65.01	35.291	
5,500.00	4,061.03	3,648.75	3,361.01	67.87	25.30	-109.09	-619.37	2,068.76	2,369.10	2,304.55	64.55	36.702	
5,600.00	4,121.87	3,673.00	3,382.92	69.51	25.51	-109.94	-611.41	2,062.11	2,445.76	2,381.58	64.18	38.108	
5,700.00	4,182.71	3,673.00	3,382.92	71.14	25.51	-109.94	-611.41	2,062.11	2,523.84	2,460.21	63.63	39.663	
5,800.00	4,243.54	3,688.99	3,397.34	72.77	25.65	-110.49	-606.09	2,057.71	2,603.36	2,540.15	63.22	41.181	
5,900.00	4,304.38	4,437.14	4,111.81	74.41	29.93	-130.87	-455.16	1,927.26	2,679.95	2,612.50	67.45	39.735	
6,000.00	4,365.22	4,478.02	4,152.47	76.04	30.05	-131.68	-452.21	1,924.23	2,751.66	2,684.32	67.33	40.866	
6,100.00	4,426.06	4,519.97	4,194.22	77.68	30.18	-132.48	-449.00	1,921.68	2,824.32	2,757.07	67.25	41.998	
6,200.00	4,486.90	4,681.37	4,355.09	79.31	30.61	-135.36	-439.11	1,913.30	2,896.98	2,829.19	67.79	42.735	
6,300.00	4,547.73	4,779.96	4,453.49	80.95	30.86	-136.99	-435.93	1,908.13	2,968.40	2,900.39	68.01	43.648	
6,400.00	4,608.57	4,851.25	4,524.68	82.58	31.02	-138.11	-434.21	1,904.73	3,039.97	2,971.85	68.12	44.629	
6,500.00	4,669.41	4,924.13	4,597.48	84.22	31.19	-139.20	-432.73	1,901.65	3,111.83	3,043.57	68.26	45.590	
6,600.00	4,730.25	5,005.02	4,678.27	85.86	31.37	-140.37	-431.64	1,897.74	3,183.78	3,115.35	68.44	46.522	
6,700.00	4,791.08	5,027.15	4,700.38	87.49	31.42	-140.68	-431.18	1,896.86	3,256.41	3,188.05	68.36	47.637	
6,800.00	4,851.92	5,058.79	4,731.98	89.13	31.49	-141.11	-430.35	1,895.79	3,329.88	3,261.55	68.34	48.728	
6,900.00	4,912.76	5,101.34	4,774.50	90.76	31.59	-141.66	-428.85	1,894.83	3,404.16	3,335.77	68.39	49.777	
7,000.00	4,973.60	5,182.49	4,855.60	92.40	31.77	-142.66	-426.15	1,893.72	3,478.62	3,409.95	68.68	50.651	
7,100.00	5,034.43	5,262.83	4,935.90	94.04	31.94	-143.61	-423.96	1,892.89	3,553.02	3,484.04	68.98	51.510	
7,200.00	5,095.27	5,347.39	5,020.44	95.67	32.11	-144.56	-422.19	1,892.29	3,627.32	3,558.00	69.31	52.331	
7,300.00	5,156.11	5,437.63	5,110.67	97.31	32.29	-145.50	-420.87	1,892.48	3,701.42	3,631.72	69.70	53.102	
7,400.00	5,216.95	5,525.68	5,198.72	98.95	32.45	-146.38	-420.26	1,892.97	3,775.28	3,705.19	70.09	53.864	
7,500.00	5,277.78	5,636.04	5,309.07	100.59	32.65	-147.44	-420.60	1,893.27	3,848.81	3,778.22	70.59	54.522	
7,600.00	5,338.62	5,718.23	5,391.25	102.22	32.79	-148.19	-421.72	1,893.28	3,921.93	3,850.98	70.94	55.284	
7,700.00	5,399.46	5,785.64	5,458.66	103.86	32.90	-148.79	-422.85	1,893.37	3,995.05	3,923.82	71.23	56.090	
7,800.00	5,460.30	5,847.27	5,520.27	105.50	33.01	-149.32	-423.94	1,893.25	4,068.35	3,996.86	71.49	56.912	
7,900.00	5,521.24	5,905.16	5,578.16	107.13	33.11	-153.73	-424.95	1,893.04	4,141.92	4,070.19	71.74	57.738	
8,000.00	5,584.83	5,930.00	5,603.00	108.61	33.15	-173.11	-425.36	1,892.95	4,216.69	4,144.84	71.86	58.682	
8,100.00	5,650.69	6,774.13	6,224.42	109.85	33.87	176.84	-401.88	2,358.40	4,290.37	4,205.70	84.67	50.672	
8,200.00	5,716.83	6,770.38	6,224.09	110.82	33.87	159.56	-402.14	2,354.67	4,355.26	4,270.38	84.88	51.309	
8,300.00	5,781.24	6,757.47	6,222.65	111.52	33.84	143.30	-403.02	2,341.87	4,418.50	4,333.51	84.99	51.988	
8,400.00	5,841.96	6,738.89	6,219.74	111.98	33.81	129.06	-404.13	2,323.56	4,478.17	4,393.03	85.14	52.600	
8,500.00	5,897.14	6,725.00	6,216.93	112.25	33.79	117.37	-404.86	2,309.98	4,532.48	4,446.84	85.64	52.926	
8,600.00	5,945.12	6,704.95	6,211.91	112.37	33.76	108.10	-405.67	2,290.59	4,579.93	4,493.66	86.27	53.089	
8,700.00	5,984.42	6,681.00	6,204.41	112.39	33.72	101.11	-406.20	2,267.86	4,619.25	4,532.15	87.10	53.035	
8,800.00	6,013.86	6,493.00	6,098.32	112.35	33.55	94.57	-409.22	2,114.78	4,648.41	4,563.45	84.96	54.712	
8,900.00	6,032.54	6,493.00	6,098.32	112.30	33.55	91.88	-409.22	2,114.78	4,666.09	4,579.12	86.98	53.647	
9,000.00	6,039.89	6,493.00	6,098.32	112.24	33.55	90.84	-409.22	2,114.78	4,673.22	4,584.01	89.21	52.384	
9,100.00	6,040.00	6,055.37	5,727.96	112.19	33.36	86.28	-421.86	1,900.38	4,673.57	4,587.63	85.93	54.386	
9,200.00	6,040.00	6,024.00	5,696.85	112.16	33.31	85.90	-423.74	1,896.87	4,672.48	4,584.26	88.22	52.962	
9,217.80	6,040.00	6,024.00	5,696.85	112.16	33.31	85.90	-423.74	1,896.87	4,672.45	4,583.76	88.69	52.684	
9,300.00	6,040.00	6,024.00	5,696.85	112.15	33.31	85.90	-423.74	1,896.87	4,673.17	4,582.36	90.81	51.459	
9,400.00	6,040.00	6,024.00	5,696.85	112.15	33.31	85.90	-423.74	1,896.87	4,676.00	4,582.55	93.45	50.037	
9,500.00	6,040.00	6,024.00	5,696.85	112.16	33.31	85.90	-423.74	1,896.87	4,680.96	4,584.84	96.13	48.696	
9,600.00	6,040.00	6,024.00	5,696.85	112.19	33.31	85.90	-423.74	1,896.87	4,688.05	4,589.23	98.83	47.437	
9,700.00	6,040.00	6,024.00	5,696.85	112.24	33.31	85.90	-423.74	1,896.87	4,697.26	4,595.72	101.54	46.260	
9,800.00	6,040.00	6,024.00	5,696.85	112.31	33.31	85.90	-423.74	1,896.87	4,708.58	4,604.32	104.26	45.163	
9,900.00	6,040.00	6,024.00	5,696.85	112.39	33.31	85.90	-423.74	1,896.87	4,721.99	4,615.02	106.97	44.143	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 780-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.00	6,040.00	6,024.00	5,696.85	112.49	33.31	85.90	-423.74	1,896.87	4,737.47	4,627.80	109.67	43.197	
10,100.00	6,040.00	6,024.00	5,696.85	112.62	33.31	85.90	-423.74	1,896.87	4,755.00	4,642.65	112.35	42.322	
10,200.00	6,040.00	6,024.00	5,696.85	112.77	33.31	85.90	-423.74	1,896.87	4,774.57	4,659.56	115.01	41.516	
10,300.00	6,040.00	6,024.00	5,696.85	112.94	33.31	85.90	-423.74	1,896.87	4,796.14	4,678.51	117.63	40.774	
10,400.00	6,040.00	6,024.00	5,696.85	113.14	33.31	85.90	-423.74	1,896.87	4,819.69	4,699.48	120.21	40.094	
10,500.00	6,040.00	6,024.00	5,696.85	113.36	33.31	85.90	-423.74	1,896.87	4,845.18	4,722.43	122.75	39.472	
10,600.00	6,040.00	6,024.00	5,696.85	113.62	33.31	85.90	-423.74	1,896.87	4,872.60	4,747.36	125.24	38.905	
10,700.00	6,040.00	6,024.00	5,696.85	113.91	33.31	85.90	-423.74	1,896.87	4,901.91	4,774.22	127.69	38.389	
10,800.00	6,040.00	6,024.00	5,696.85	114.24	33.31	85.90	-423.74	1,896.87	4,933.06	4,802.98	130.08	37.923	
10,900.00	6,040.00	6,024.00	5,696.85	114.61	33.31	85.90	-423.74	1,896.87	4,966.04	4,833.63	132.42	37.503	
11,000.00	6,040.00	6,024.00	5,696.85	115.02	33.31	85.90	-423.74	1,896.87	5,000.80	4,866.11	134.69	37.127	
11,100.00	6,040.00	6,024.00	5,696.85	115.49	33.31	85.90	-423.74	1,896.87	5,037.31	4,900.39	136.91	36.792	
11,200.00	6,040.00	6,024.00	5,696.85	116.00	33.31	85.90	-423.74	1,896.87	5,075.52	4,936.45	139.07	36.496	
11,300.00	6,040.00	6,024.00	5,696.85	116.58	33.31	85.90	-423.74	1,896.87	5,115.40	4,974.23	141.17	36.236	
11,400.00	6,040.00	6,024.00	5,696.85	117.22	33.31	85.90	-423.74	1,896.87	5,156.91	5,013.71	143.20	36.011	
11,500.00	6,040.00	6,024.00	5,696.85	117.92	33.31	85.90	-423.74	1,896.87	5,200.02	5,054.84	145.17	35.819	
11,600.00	6,040.00	6,024.00	5,696.85	118.70	33.31	85.90	-423.74	1,896.87	5,244.68	5,097.59	147.09	35.657	
11,700.00	6,040.00	6,024.00	5,696.85	119.56	33.31	85.90	-423.74	1,896.87	5,290.85	5,141.92	148.93	35.525	
11,800.00	6,040.00	6,024.00	5,696.85	120.51	33.31	85.90	-423.74	1,896.87	5,338.49	5,187.77	150.72	35.420	
11,900.00	6,040.00	6,024.00	5,696.85	121.54	33.31	85.90	-423.74	1,896.87	5,387.57	5,235.13	152.45	35.341	
12,000.00	6,040.00	6,024.00	5,696.85	122.66	33.31	85.90	-423.74	1,896.87	5,438.05	5,283.94	154.11	35.287	
12,100.00	6,040.00	6,024.00	5,696.85	123.87	33.31	85.90	-423.74	1,896.87	5,489.89	5,334.17	155.72	35.256	
12,200.00	6,040.00	6,024.00	5,696.85	125.17	33.31	85.90	-423.74	1,896.87	5,543.04	5,385.78	157.26	35.247	
12,300.00	6,040.00	6,024.00	5,696.85	126.57	33.31	85.90	-423.74	1,896.87	5,597.47	5,438.72	158.75	35.259	
12,400.00	6,040.00	6,024.00	5,696.85	128.06	33.31	85.90	-423.74	1,896.87	5,653.16	5,492.97	160.19	35.291	
12,500.00	6,040.00	6,024.00	5,696.85	129.63	33.31	85.90	-423.74	1,896.87	5,710.04	5,548.47	161.57	35.341	
12,600.00	6,040.00	6,024.00	5,696.85	131.29	33.31	85.90	-423.74	1,896.87	5,768.11	5,605.21	162.90	35.410	
12,700.00	6,040.00	6,024.00	5,696.85	133.03	33.31	85.90	-423.74	1,896.87	5,827.30	5,663.13	164.17	35.495	
12,800.00	6,040.00	6,024.00	5,696.85	134.84	33.31	85.90	-423.74	1,896.87	5,887.61	5,722.21	165.40	35.597	
12,900.00	6,040.00	6,024.00	5,696.85	136.71	33.31	85.90	-423.74	1,896.87	5,948.98	5,782.41	166.57	35.714	
13,000.00	6,040.00	6,024.00	5,696.85	138.66	33.31	85.90	-423.74	1,896.87	6,011.39	5,843.69	167.70	35.846	
13,100.00	6,040.00	6,024.00	5,696.85	140.66	33.31	85.90	-423.74	1,896.87	6,074.80	5,906.02	168.78	35.991	
13,200.00	6,040.00	6,024.00	5,696.85	142.71	33.31	85.90	-423.74	1,896.87	6,139.19	5,969.37	169.82	36.150	
13,300.00	6,040.00	6,024.00	5,696.85	144.81	33.31	85.90	-423.74	1,896.87	6,204.52	6,033.70	170.82	36.322	
13,400.00	6,040.00	6,024.00	5,696.85	146.96	33.31	85.90	-423.74	1,896.87	6,270.77	6,098.99	171.78	36.506	
13,500.00	6,040.00	6,024.00	5,696.85	149.14	33.31	85.90	-423.74	1,896.87	6,337.90	6,165.21	172.69	36.701	
13,600.00	6,040.00	6,024.00	5,696.85	151.36	33.31	85.90	-423.74	1,896.87	6,405.89	6,232.32	173.57	36.907	
13,700.00	6,040.00	6,024.00	5,696.85	153.62	33.31	85.90	-423.74	1,896.87	6,474.71	6,300.30	174.41	37.124	
13,800.00	6,040.00	6,024.00	5,696.85	155.91	33.31	85.90	-423.74	1,896.87	6,544.34	6,369.12	175.21	37.350	
13,900.00	6,040.00	6,024.00	5,696.85	158.22	33.31	85.90	-423.74	1,896.87	6,614.74	6,438.75	175.99	37.587	
14,000.00	6,040.00	6,024.00	5,696.85	160.56	33.31	85.90	-423.74	1,896.87	6,685.90	6,509.17	176.72	37.832	
14,100.00	6,040.00	6,024.00	5,696.85	162.92	33.31	85.90	-423.74	1,896.87	6,757.78	6,580.35	177.43	38.087	
14,200.00	6,040.00	6,024.00	5,696.85	165.30	33.31	85.90	-423.74	1,896.87	6,830.38	6,652.27	178.11	38.350	
14,300.00	6,040.00	6,024.00	5,696.85	167.70	33.31	85.90	-423.74	1,896.87	6,903.66	6,724.91	178.75	38.621	
14,400.00	6,040.00	6,024.00	5,696.85	170.12	33.31	85.90	-423.74	1,896.87	6,977.60	6,798.23	179.37	38.900	
14,500.00	6,040.00	6,024.00	5,696.85	172.55	33.31	85.90	-423.74	1,896.87	7,052.19	6,872.22	179.97	39.186	
14,600.00	6,040.00	6,024.00	5,696.85	175.00	33.31	85.90	-423.74	1,896.87	7,127.40	6,946.87	180.54	39.479	
14,700.00	6,040.00	6,024.00	5,696.85	177.46	33.31	85.90	-423.74	1,896.87	7,203.21	7,022.13	181.08	39.779	
14,800.00	6,040.00	6,024.00	5,696.85	179.94	33.31	85.90	-423.74	1,896.87	7,279.61	7,098.01	181.60	40.086	
14,900.00	6,040.00	6,024.00	5,696.85	182.43	33.31	85.90	-423.74	1,896.87	7,356.57	7,174.48	182.10	40.400	
15,000.00	6,040.00	6,024.00	5,696.85	184.92	33.31	85.90	-423.74	1,896.87	7,434.08	7,251.51	182.57	40.719	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CN - OWB - FINAL SURVEY										Offset Site Error:		0.00 usft	
Survey Program: 780-MWD OWSG										Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,100.00	6,040.00	5,982.53	5,655.50	187.43	33.24	85.39	-425.24	1,894.09	7,510.97	7,328.06	182.91	41.064	
15,200.00	6,040.00	5,982.06	5,655.03	189.95	33.24	85.39	-425.25	1,894.06	7,589.51	7,406.16	183.35	41.395	
15,300.00	6,040.00	5,981.60	5,654.58	192.48	33.24	85.38	-425.26	1,894.04	7,668.54	7,484.78	183.76	41.731	
15,400.00	6,040.00	5,981.15	5,654.13	195.01	33.24	85.37	-425.27	1,894.02	7,748.05	7,563.90	184.16	42.073	
15,500.00	6,040.00	5,980.71	5,653.69	197.55	33.24	85.37	-425.28	1,894.00	7,828.04	7,643.50	184.54	42.419	
15,600.00	6,040.00	5,980.28	5,653.26	200.10	33.24	85.36	-425.28	1,893.98	7,908.48	7,723.58	184.90	42.771	
15,700.00	6,040.00	5,979.86	5,652.83	202.65	33.24	85.36	-425.29	1,893.96	7,989.36	7,804.11	185.25	43.127	
15,800.00	6,040.00	5,979.44	5,652.42	205.22	33.24	85.35	-425.30	1,893.95	8,070.67	7,885.09	185.59	43.488	
15,900.00	6,040.00	5,979.03	5,652.01	207.78	33.23	85.35	-425.31	1,893.93	8,152.40	7,966.50	185.90	43.853	
16,000.00	6,040.00	5,978.63	5,651.61	210.36	33.23	85.34	-425.32	1,893.91	8,234.53	8,048.32	186.21	44.222	
16,100.00	6,040.00	5,978.24	5,651.22	212.93	33.23	85.34	-425.32	1,893.89	8,317.05	8,130.55	186.50	44.595	
16,200.00	6,040.00	5,977.85	5,650.83	215.52	33.23	85.33	-425.33	1,893.88	8,399.95	8,213.17	186.78	44.973	
16,300.00	6,040.00	5,977.47	5,650.45	218.11	33.23	85.33	-425.34	1,893.86	8,483.22	8,296.17	187.05	45.354	
16,400.00	6,040.00	5,977.09	5,650.07	220.70	33.23	85.32	-425.34	1,893.84	8,566.84	8,379.54	187.30	45.739	
16,500.00	6,040.00	5,976.73	5,649.71	223.29	33.23	85.32	-425.35	1,893.83	8,650.82	8,463.27	187.54	46.127	
16,600.00	6,040.00	5,976.37	5,649.35	225.89	33.23	85.32	-425.36	1,893.81	8,735.13	8,547.35	187.78	46.519	
16,700.00	6,040.00	5,976.01	5,648.99	228.50	33.23	85.31	-425.36	1,893.80	8,819.77	8,631.77	188.00	46.914	
16,800.00	6,040.00	5,975.66	5,648.64	231.11	33.23	85.31	-425.37	1,893.79	8,904.73	8,716.51	188.21	47.312	
16,900.00	6,040.00	5,975.32	5,648.30	233.72	33.23	85.30	-425.37	1,893.77	8,989.99	8,801.58	188.42	47.713	
17,000.00	6,040.00	5,974.98	5,647.96	236.33	33.23	85.30	-425.38	1,893.76	9,075.56	8,886.95	188.61	48.118	
17,100.00	6,040.00	5,974.65	5,647.63	238.95	33.23	85.29	-425.38	1,893.74	9,161.42	8,972.62	188.80	48.525	
17,200.00	6,040.00	5,974.32	5,647.30	241.57	33.23	85.29	-425.39	1,893.73	9,247.56	9,058.59	188.97	48.935	
17,300.00	6,040.00	5,974.00	5,646.98	244.19	33.23	85.29	-425.39	1,893.72	9,333.98	9,144.84	189.15	49.348	
17,400.00	6,040.00	5,973.68	5,646.66	246.82	33.23	85.28	-425.40	1,893.71	9,420.67	9,231.36	189.31	49.764	
17,500.00	6,040.00	5,973.37	5,646.35	249.45	33.22	85.28	-425.40	1,893.69	9,507.62	9,318.15	189.46	50.182	
17,600.00	6,040.00	5,973.06	5,646.04	252.08	33.22	85.28	-425.41	1,893.68	9,594.82	9,405.21	189.61	50.603	
17,700.00	6,040.00	5,972.76	5,645.74	254.71	33.22	85.27	-425.41	1,893.67	9,682.27	9,492.52	189.75	51.026	
17,800.00	6,040.00	5,930.00	5,603.00	257.35	33.15	84.75	-425.36	1,892.95	9,771.14	9,581.34	189.80	51.483	
17,900.00	6,040.00	5,930.00	5,603.00	259.99	33.15	84.75	-425.36	1,892.95	9,859.04	9,669.12	189.93	51.910	
18,000.00	6,040.00	5,930.00	5,603.00	262.63	33.15	84.75	-425.36	1,892.95	9,947.18	9,757.13	190.05	52.339	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 759-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	117.66	-1,523.36	2,906.55	3,281.58				
100.00	100.00	262.75	262.63	0.13	0.57	117.66	-1,519.99	2,900.56	3,279.18	3,278.52	0.66	4,955.925	
200.00	199.98	548.94	547.85	0.48	1.20	-31.73	-1,508.63	2,880.42	3,269.62	3,268.06	1.56	2,101.973	
300.00	299.84	829.35	825.58	0.85	1.81	-32.09	-1,489.78	2,846.99	3,251.54	3,249.08	2.46	1,322.580	
400.00	399.45	1,299.49	1,284.31	1.22	4.36	-32.78	-1,445.91	2,757.06	3,226.11	3,221.26	4.85	665.397	
500.00	498.70	1,458.36	1,436.30	1.62	5.33	-33.46	-1,424.41	2,716.12	3,187.03	3,181.20	5.83	546.405	
600.00	597.47	1,505.80	1,481.69	2.05	5.62	-34.04	-1,418.34	2,703.75	3,145.64	3,139.27	6.36	494.232	
700.00	695.62	2,150.89	2,079.64	2.51	10.43	-36.71	-1,296.80	2,498.87	3,093.64	3,084.23	9.41	328.886	
800.00	793.06	2,319.04	2,228.65	3.01	12.00	-38.42	-1,257.35	2,431.74	3,031.91	3,021.44	10.47	289.617	
900.00	889.64	2,382.85	2,284.62	3.56	12.60	-39.89	-1,240.45	2,406.18	2,966.78	2,955.68	11.11	267.075	
1,000.00	985.27	2,424.94	2,321.72	4.14	13.00	-41.35	-1,229.29	2,389.72	2,900.43	2,888.75	11.68	248.249	
1,100.00	1,079.82	2,529.45	2,413.95	4.78	13.99	-43.53	-1,201.50	2,349.20	2,832.65	2,820.11	12.53	225.997	
1,200.00	1,173.17	2,575.00	2,453.96	5.46	14.43	-45.37	-1,189.16	2,331.28	2,762.58	2,749.40	13.18	209.624	
1,300.00	1,265.21	2,611.96	2,486.65	6.20	14.78	-47.25	-1,179.57	2,316.92	2,691.71	2,677.89	13.83	194.677	
1,400.00	1,355.84	2,706.74	2,570.66	6.99	15.68	-50.09	-1,155.70	2,280.09	2,619.88	2,605.15	14.72	177.951	
1,500.00	1,444.94	2,770.44	2,626.70	7.84	16.29	-52.81	-1,139.25	2,254.66	2,545.85	2,530.31	15.55	163.768	
1,600.00	1,532.39	2,817.02	2,667.77	8.75	16.74	-55.46	-1,127.52	2,236.09	2,471.08	2,454.72	16.36	151.053	
1,700.00	1,618.11	2,850.52	2,697.42	9.71	17.05	-58.04	-1,119.27	2,222.85	2,395.85	2,378.66	17.19	139.392	
1,800.00	1,701.97	2,881.47	2,724.94	10.74	17.34	-60.70	-1,111.80	2,210.82	2,320.50	2,302.42	18.08	128.359	
1,900.00	1,783.88	2,917.00	2,756.70	11.82	17.68	-63.60	-1,103.40	2,197.29	2,245.24	2,226.17	19.06	117.793	
2,000.00	1,863.74	2,917.00	2,756.70	12.96	17.68	-65.64	-1,103.40	2,197.29	2,170.42	2,150.38	20.03	108.336	
2,100.00	1,941.45	2,948.78	2,785.36	14.16	17.94	-68.58	-1,096.20	2,185.61	2,096.07	2,074.88	21.19	98.906	
2,200.00	2,016.92	2,965.94	2,800.98	15.41	18.09	-71.14	-1,092.48	2,179.56	2,022.79	2,000.36	22.43	90.190	
2,300.00	2,090.05	2,982.83	2,816.45	16.73	18.23	-73.67	-1,088.94	2,173.78	1,950.70	1,926.91	23.79	81.996	
2,400.00	2,160.76	3,011.00	2,842.46	18.10	18.47	-76.58	-1,083.32	2,164.54	1,880.16	1,854.84	25.32	74.260	
2,500.00	2,228.95	3,011.00	2,842.46	19.53	18.47	-78.44	-1,083.32	2,164.54	1,811.25	1,784.31	26.94	67.241	
2,600.00	2,294.55	3,037.76	2,867.35	21.01	18.67	-81.21	-1,078.22	2,156.12	1,744.46	1,715.68	28.77	60.630	
2,700.00	2,357.48	3,057.48	2,885.77	22.55	18.81	-83.64	-1,074.57	2,150.10	1,680.14	1,649.36	30.77	54.601	
2,800.00	2,418.42	3,076.77	2,903.85	24.13	18.95	-84.84	-1,071.09	2,144.34	1,618.80	1,585.86	32.94	49.140	
2,900.00	2,479.25	3,105.00	2,930.41	25.71	19.16	-85.98	-1,066.15	2,136.17	1,561.07	1,525.78	35.28	44.244	
3,000.00	2,540.09	3,118.14	2,942.82	27.31	19.25	-86.51	-1,063.93	2,132.48	1,507.23	1,469.50	37.73	39.948	
3,100.00	2,600.93	3,140.62	2,964.12	28.90	19.40	-87.42	-1,060.27	2,126.30	1,457.79	1,417.47	40.31	36.162	
3,200.00	2,661.77	3,164.62	2,986.97	30.51	19.55	-88.40	-1,056.56	2,119.93	1,413.10	1,370.11	43.00	32.865	
3,300.00	2,722.61	3,190.31	3,011.52	32.11	19.72	-89.45	-1,052.83	2,113.35	1,373.59	1,327.83	45.75	30.022	
3,400.00	2,783.44	3,217.02	3,037.15	33.72	19.88	-90.54	-1,049.19	2,106.80	1,339.62	1,291.10	48.53	27.606	
3,500.00	2,844.28	3,244.98	3,064.09	35.34	20.04	-91.68	-1,045.58	2,100.25	1,311.59	1,260.32	51.28	25.579	
3,600.00	2,905.12	3,274.67	3,092.81	36.95	20.21	-92.90	-1,041.97	2,093.66	1,289.81	1,235.85	53.96	23.904	
3,700.00	2,965.96	3,316.99	3,133.91	38.57	20.45	-94.62	-1,037.19	2,084.73	1,274.43	1,217.90	56.53	22.546	
3,800.00	3,026.79	3,375.80	3,191.00	40.19	20.76	-97.03	-1,031.06	2,072.02	1,264.95	1,206.01	58.94	21.463	
3,900.00	3,087.63	3,423.49	3,237.23	41.81	21.03	-98.98	-1,026.29	2,061.35	1,261.47	1,200.34	61.13	20.636	
3,904.50	3,090.37	3,425.47	3,239.15	41.88	21.04	-99.06	-1,026.08	2,060.89	1,261.46	1,200.24	61.22	20.605 CC, ES	
4,000.00	3,148.47	3,466.62	3,278.94	43.43	21.27	-100.76	-1,021.64	2,051.38	1,264.41	1,201.34	63.07	20.047	
4,100.00	3,209.31	3,505.55	3,316.49	45.05	21.49	-102.36	-1,017.15	2,042.15	1,273.86	1,209.12	64.74	19.677	
4,200.00	3,270.14	3,541.93	3,351.52	46.68	21.71	-103.87	-1,012.68	2,033.43	1,289.83	1,223.72	66.11	19.510 SF	
4,300.00	3,330.98	3,578.05	3,386.26	48.31	21.92	-105.36	-1,008.00	2,024.67	1,312.15	1,244.96	67.19	19.530	
4,400.00	3,391.82	3,627.63	3,433.84	49.93	22.23	-107.40	-1,001.51	2,012.37	1,340.29	1,272.27	68.02	19.704	
4,500.00	3,452.66	3,676.58	3,480.73	51.56	22.53	-109.39	-995.25	1,999.80	1,373.74	1,305.15	68.59	20.027	
4,600.00	3,513.49	3,704.02	3,507.08	53.19	22.69	-110.50	-991.76	1,992.94	1,412.48	1,343.60	68.88	20.505	
4,700.00	3,574.33	3,735.79	3,537.66	54.82	22.88	-111.76	-987.71	1,985.35	1,456.21	1,387.22	68.99	21.106	
4,800.00	3,635.17	3,769.10	3,569.82	56.45	23.07	-113.06	-983.45	1,977.81	1,504.45	1,435.49	68.95	21.818	
4,900.00	3,696.01	3,804.96	3,604.51	58.08	23.27	-114.44	-978.83	1,970.00	1,556.70	1,487.91	68.79	22.630	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 759-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	3,756.84	3,841.25	3,639.67	59.71	23.48	-115.81	-974.11	1,962.34	1,612.54	1,544.00	68.54	23.527	
5,100.00	3,817.68	3,965.97	3,761.74	61.34	24.07	-120.23	-962.11	1,940.11	1,670.24	1,601.65	68.59	24.350	
5,200.00	3,878.52	3,997.04	3,792.47	62.97	24.19	-121.25	-960.02	1,936.03	1,729.80	1,661.54	68.26	25.341	
5,300.00	3,939.36	4,028.74	3,823.88	64.61	24.31	-122.25	-957.66	1,932.52	1,792.08	1,724.17	67.91	26.389	
5,400.00	4,000.19	4,165.16	3,959.75	66.24	24.71	-126.18	-950.63	1,923.20	1,855.53	1,787.44	68.09	27.250	
5,500.00	4,061.03	4,243.63	4,038.20	67.87	24.89	-128.17	-949.47	1,921.81	1,918.69	1,850.64	68.05	28.196	
5,600.00	4,121.87	4,304.76	4,099.33	69.51	25.01	-129.63	-948.96	1,921.59	1,982.80	1,914.87	67.93	29.191	
5,700.00	4,182.71	4,365.88	4,160.45	71.14	25.13	-131.02	-948.56	1,921.47	2,047.93	1,980.11	67.82	30.198	
5,800.00	4,243.54	4,426.81	4,221.37	72.77	25.25	-132.34	-948.15	1,921.53	2,114.07	2,046.34	67.73	31.215	
5,900.00	4,304.38	4,497.91	4,292.47	74.41	25.38	-133.81	-947.89	1,921.84	2,180.94	2,113.24	67.70	32.213	
6,000.00	4,365.22	4,545.89	4,340.46	76.04	25.47	-134.76	-947.77	1,922.16	2,248.59	2,181.01	67.58	33.275	
6,100.00	4,426.06	4,586.25	4,380.81	77.68	25.55	-135.53	-947.31	1,922.42	2,317.49	2,250.07	67.41	34.377	
6,200.00	4,486.90	4,653.97	4,448.51	79.31	25.69	-136.79	-946.15	1,922.72	2,387.43	2,320.00	67.44	35.402	
6,300.00	4,547.73	4,758.49	4,553.04	80.95	25.90	-138.64	-945.83	1,922.57	2,457.14	2,389.46	67.68	36.303	
6,400.00	4,608.57	4,848.18	4,642.72	82.58	26.07	-140.12	-946.93	1,922.53	2,526.48	2,458.63	67.85	37.235	
6,500.00	4,669.41	4,934.82	4,729.34	84.22	26.22	-141.48	-948.81	1,922.34	2,595.81	2,527.80	68.01	38.166	
6,600.00	4,730.25	5,011.89	4,806.37	85.86	26.36	-142.62	-951.18	1,922.24	2,665.04	2,596.89	68.15	39.108	
6,700.00	4,791.08	5,069.81	4,864.26	87.49	26.47	-143.44	-952.98	1,922.22	2,734.72	2,666.52	68.19	40.102	
6,800.00	4,851.92	5,118.62	4,913.05	89.13	26.56	-144.11	-954.35	1,922.19	2,805.01	2,736.81	68.21	41.124	
6,900.00	4,912.76	5,165.09	4,959.51	90.76	26.65	-144.74	-955.40	1,922.03	2,876.05	2,807.83	68.22	42.159	
7,000.00	4,973.60	5,220.77	5,015.18	92.40	26.76	-145.46	-956.44	1,921.80	2,947.72	2,879.41	68.30	43.158	
7,100.00	5,034.43	5,278.28	5,072.69	94.04	26.87	-146.17	-957.39	1,921.77	3,019.81	2,951.40	68.41	44.142	
7,200.00	5,095.27	5,335.15	5,129.55	95.67	26.98	-146.85	-958.21	1,922.02	3,092.31	3,023.78	68.54	45.119	
7,300.00	5,156.11	5,387.15	5,181.54	97.31	27.08	-147.44	-958.80	1,922.51	3,165.23	3,096.58	68.65	46.107	
7,400.00	5,216.95	5,434.75	5,229.13	98.95	27.18	-147.96	-959.13	1,923.07	3,238.65	3,169.90	68.75	47.108	
7,500.00	5,277.78	5,490.11	5,284.49	100.59	27.29	-148.54	-959.28	1,923.81	3,312.55	3,243.63	68.92	48.066	
7,600.00	5,338.62	5,551.47	5,345.85	102.22	27.42	-149.17	-959.42	1,924.65	3,386.69	3,317.55	69.14	48.983	
7,700.00	5,399.46	5,593.66	5,388.03	103.86	27.51	-149.58	-959.39	1,925.20	3,461.22	3,391.98	69.24	49.988	
7,800.00	5,460.30	5,643.00	5,437.37	105.50	27.61	-150.05	-959.08	1,925.82	3,536.28	3,466.87	69.40	50.952	
7,900.00	5,521.24	5,693.80	5,488.20	107.13	32.52	-144.89	-958.91	2,717.36	3,593.31	3,499.00	94.31	38.102	
8,000.00	5,584.83	5,750.00	5,545.00	108.61	32.97	-159.34	-959.15	2,752.56	3,652.61	3,556.93	95.68	38.174	
8,100.00	5,650.69	5,810.00	5,605.00	109.85	32.97	-176.14	-959.15	2,752.56	3,715.78	3,619.91	95.87	38.759	
8,200.00	5,716.83	5,870.00	5,670.00	110.82	32.97	-166.44	-959.15	2,752.56	3,781.13	3,685.00	96.14	39.331	
8,300.00	5,781.24	5,931.15	5,736.15	111.52	32.62	-149.18	-959.00	2,724.71	3,846.39	3,750.82	95.57	40.249	
8,400.00	5,841.96	5,991.33	5,796.33	111.98	32.42	-133.98	-958.78	2,708.89	3,909.73	3,814.12	95.61	40.894	
8,500.00	5,897.14	6,051.42	5,851.42	112.25	32.15	-121.13	-958.34	2,686.99	3,969.08	3,873.40	95.68	41.484	
8,600.00	5,945.12	6,105.00	5,900.00	112.37	31.80	-110.83	-957.51	2,658.58	4,022.61	3,926.81	95.81	41.987	
8,700.00	5,984.42	6,159.20	5,949.20	112.39	31.31	-102.90	-955.76	2,612.82	4,068.58	3,972.86	95.72	42.503	
8,800.00	6,013.86	6,163.75	5,983.75	112.35	30.73	-97.21	-953.09	2,556.47	4,105.39	4,009.77	95.63	42.931	
8,900.00	6,032.54	6,177.00	6,001.00	112.30	29.99	-93.50	-948.99	2,470.93	4,131.12	4,036.08	95.03	43.470	
9,000.00	6,039.89	6,113.00	5,893.00	112.24	28.30	-88.10	-940.66	2,009.63	4,146.08	4,061.17	84.91	48.829	
9,100.00	6,040.00	6,113.00	5,893.00	112.19	28.30	-88.10	-940.66	2,009.63	4,144.76	4,057.33	87.43	47.409	
9,124.25	6,040.00	9,124.25	5,860.33	112.19	30.50	-87.64	-942.18	1,995.51	4,144.61	4,054.67	89.94	46.080	
9,200.00	6,040.00	5,964.21	5,755.61	112.16	28.20	-86.19	-947.84	1,955.53	4,145.15	4,056.93	88.22	46.989	
9,300.00	6,040.00	5,925.00	5,717.82	112.15	28.16	-85.67	-950.48	1,945.44	4,147.05	4,056.57	90.47	45.838	
9,400.00	6,040.00	5,925.00	5,717.82	112.15	28.16	-85.67	-950.48	1,945.44	4,151.28	4,058.10	93.18	44.551	
9,500.00	6,040.00	5,925.00	5,717.82	112.16	28.16	-85.67	-950.48	1,945.44	4,157.91	4,062.00	95.91	43.352	
9,600.00	6,040.00	5,925.00	5,717.82	112.19	28.16	-85.67	-950.48	1,945.44	4,166.93	4,068.29	98.65	42.241	
9,700.00	6,040.00	5,891.88	5,685.47	112.24	28.11	-85.22	-952.67	1,938.70	4,177.94	4,076.86	101.07	41.335	
9,800.00	6,040.00	5,886.25	5,679.94	112.31	28.10	-85.14	-953.01	1,937.73	4,191.52	4,087.77	103.75	40.399	
9,900.00	6,040.00	5,881.16	5,674.93	112.39	28.09	-85.07	-953.31	1,936.89	4,207.41	4,101.00	106.42	39.537	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNLRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNLRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 759-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,000.00	6,040.00	5,876.53	5,670.36	112.49	28.09	85.01	-953.58	1,936.17	4,225.59	4,116.54	109.05	38.748	
10,100.00	6,040.00	5,872.31	5,666.20	112.62	28.08	84.95	-953.82	1,935.53	4,246.04	4,134.38	111.66	38.027	
10,200.00	6,040.00	5,868.44	5,662.37	112.77	28.07	84.90	-954.03	1,934.98	4,268.71	4,154.49	114.22	37.372	
10,300.00	6,040.00	5,864.89	5,658.86	112.94	28.07	84.85	-954.23	1,934.49	4,293.59	4,176.85	116.74	36.780	
10,400.00	6,040.00	5,831.00	5,625.21	113.14	28.02	84.38	-955.90	1,930.85	4,321.07	4,202.08	118.99	36.315	
10,500.00	6,040.00	5,831.00	5,625.21	113.36	28.02	84.38	-955.90	1,930.85	4,350.15	4,228.73	121.42	35.827	
10,600.00	6,040.00	5,831.00	5,625.21	113.62	28.02	84.38	-955.90	1,930.85	4,381.32	4,257.54	123.79	35.394	
10,700.00	6,040.00	5,831.00	5,625.21	113.91	28.02	84.38	-955.90	1,930.85	4,414.54	4,288.45	126.09	35.012	
10,800.00	6,040.00	5,831.00	5,625.21	114.24	28.02	84.38	-955.90	1,930.85	4,449.76	4,321.44	128.32	34.677	
10,900.00	6,040.00	5,831.00	5,625.21	114.61	28.02	84.38	-955.90	1,930.85	4,486.93	4,356.45	130.48	34.387	
11,000.00	6,040.00	5,831.00	5,625.21	115.02	28.02	84.38	-955.90	1,930.85	4,526.01	4,393.44	132.57	34.140	
11,100.00	6,040.00	5,831.00	5,625.21	115.49	28.02	84.38	-955.90	1,930.85	4,566.94	4,432.35	134.59	33.932	
11,200.00	6,040.00	5,831.00	5,625.21	116.00	28.02	84.38	-955.90	1,930.85	4,609.68	4,473.14	136.54	33.762	
11,300.00	6,040.00	5,831.00	5,625.21	116.58	28.02	84.38	-955.90	1,930.85	4,654.17	4,515.76	138.41	33.626	
11,400.00	6,040.00	5,831.00	5,625.21	117.22	28.02	84.38	-955.90	1,930.85	4,700.37	4,560.16	140.21	33.524	
11,500.00	6,040.00	5,831.00	5,625.21	117.92	28.02	84.38	-955.90	1,930.85	4,748.23	4,606.29	141.94	33.452	
11,600.00	6,040.00	5,831.00	5,625.21	118.70	28.02	84.38	-955.90	1,930.85	4,797.70	4,654.09	143.60	33.409	
11,700.00	6,040.00	5,831.00	5,625.21	119.56	28.02	84.38	-955.90	1,930.85	4,848.72	4,703.52	145.20	33.394	
11,800.00	6,040.00	5,831.00	5,625.21	120.51	28.02	84.38	-955.90	1,930.85	4,901.25	4,754.53	146.72	33.405	
11,900.00	6,040.00	5,831.00	5,625.21	121.54	28.02	84.38	-955.90	1,930.85	4,955.25	4,807.07	148.18	33.440	
12,000.00	6,040.00	5,831.00	5,625.21	122.66	28.02	84.38	-955.90	1,930.85	5,010.65	4,861.08	149.58	33.499	
12,100.00	6,040.00	5,831.00	5,625.21	123.87	28.02	84.38	-955.90	1,930.85	5,067.43	4,916.52	150.91	33.579	
12,200.00	6,040.00	5,831.00	5,625.21	125.17	28.02	84.38	-955.90	1,930.85	5,125.53	4,973.34	152.19	33.679	
12,300.00	6,040.00	5,831.00	5,625.21	126.57	28.02	84.38	-955.90	1,930.85	5,184.90	5,031.50	153.40	33.800	
12,400.00	6,040.00	5,831.00	5,625.21	128.06	28.02	84.38	-955.90	1,930.85	5,245.51	5,090.95	154.56	33.938	
12,500.00	6,040.00	5,831.00	5,625.21	129.63	28.02	84.38	-955.90	1,930.85	5,307.32	5,151.65	155.67	34.094	
12,600.00	6,040.00	5,831.00	5,625.21	131.29	28.02	84.38	-955.90	1,930.85	5,370.27	5,213.55	156.72	34.267	
12,700.00	6,040.00	5,831.00	5,625.21	133.03	28.02	84.38	-955.90	1,930.85	5,434.33	5,276.61	157.72	34.455	
12,800.00	6,040.00	5,831.00	5,625.21	134.84	28.02	84.38	-955.90	1,930.85	5,499.47	5,340.79	158.68	34.658	
12,900.00	6,040.00	5,831.00	5,625.21	136.71	28.02	84.38	-955.90	1,930.85	5,565.64	5,406.06	159.59	34.875	
13,000.00	6,040.00	5,831.00	5,625.21	138.66	28.02	84.38	-955.90	1,930.85	5,632.81	5,472.36	160.45	35.106	
13,100.00	6,040.00	5,831.00	5,625.21	140.66	28.02	84.38	-955.90	1,930.85	5,700.94	5,539.67	161.27	35.350	
13,200.00	6,040.00	5,831.00	5,625.21	142.71	28.02	84.38	-955.90	1,930.85	5,770.00	5,607.95	162.05	35.605	
13,300.00	6,040.00	5,831.00	5,625.21	144.81	28.02	84.38	-955.90	1,930.85	5,839.96	5,677.16	162.80	35.873	
13,400.00	6,040.00	5,831.00	5,625.21	146.96	28.02	84.38	-955.90	1,930.85	5,910.78	5,747.28	163.50	36.151	
13,500.00	6,040.00	5,831.00	5,625.21	149.14	28.02	84.38	-955.90	1,930.85	5,982.43	5,818.26	164.17	36.440	
13,600.00	6,040.00	5,831.00	5,625.21	151.36	28.02	84.38	-955.90	1,930.85	6,054.89	5,890.08	164.81	36.739	
13,700.00	6,040.00	5,831.00	5,625.21	153.62	28.02	84.38	-955.90	1,930.85	6,128.12	5,962.71	165.41	37.047	
13,800.00	6,040.00	5,831.00	5,625.21	155.91	28.02	84.38	-955.90	1,930.85	6,202.10	6,036.11	165.99	37.365	
13,900.00	6,040.00	5,831.00	5,625.21	158.22	28.02	84.38	-955.90	1,930.85	6,276.80	6,110.27	166.53	37.691	
14,000.00	6,040.00	5,831.00	5,625.21	160.56	28.02	84.38	-955.90	1,930.85	6,352.20	6,185.15	167.05	38.026	
14,100.00	6,040.00	5,831.00	5,625.21	162.92	28.02	84.38	-955.90	1,930.85	6,428.27	6,260.73	167.54	38.368	
14,200.00	6,040.00	5,831.00	5,625.21	165.30	28.02	84.38	-955.90	1,930.85	6,504.99	6,336.98	168.01	38.719	
14,300.00	6,040.00	5,831.00	5,625.21	167.70	28.02	84.38	-955.90	1,930.85	6,582.33	6,413.88	168.45	39.076	
14,400.00	6,040.00	5,831.00	5,625.21	170.12	28.02	84.38	-955.90	1,930.85	6,660.27	6,491.41	168.87	39.441	
14,500.00	6,040.00	5,831.00	5,625.21	172.55	28.02	84.38	-955.90	1,930.85	6,738.80	6,569.54	169.26	39.813	
14,600.00	6,040.00	5,831.00	5,625.21	175.00	28.02	84.38	-955.90	1,930.85	6,817.89	6,648.25	169.64	40.190	
14,700.00	6,040.00	5,831.00	5,625.21	177.46	28.02	84.38	-955.90	1,930.85	6,897.52	6,727.52	170.00	40.575	
14,800.00	6,040.00	5,831.00	5,625.21	179.94	28.02	84.38	-955.90	1,930.85	6,977.68	6,807.34	170.33	40.965	
14,900.00	6,040.00	5,831.00	5,625.21	182.43	28.02	84.38	-955.90	1,930.85	7,058.34	6,887.69	170.65	41.360	
15,000.00	6,040.00	5,831.00	5,625.21	184.92	28.02	84.38	-955.90	1,930.85	7,139.49	6,968.53	170.96	41.761	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-1609CS - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 759-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,100.00	6,040.00	5,831.00	5,625.21	187.43	28.02	84.38	-955.90	1,930.85	7,221.12	7,049.87	171.25	42.168	
15,200.00	6,040.00	5,831.00	5,625.21	189.95	28.02	84.38	-955.90	1,930.85	7,303.20	7,131.68	171.52	42.579	
15,300.00	6,040.00	5,831.00	5,625.21	192.48	28.02	84.38	-955.90	1,930.85	7,385.72	7,213.95	171.78	42.996	
15,400.00	6,040.00	5,831.00	5,625.21	195.01	28.02	84.38	-955.90	1,930.85	7,468.68	7,296.65	172.02	43.417	
15,500.00	6,040.00	5,831.00	5,625.21	197.55	28.02	84.38	-955.90	1,930.85	7,552.04	7,379.79	172.25	43.842	
15,600.00	6,040.00	5,831.00	5,625.21	200.10	28.02	84.38	-955.90	1,930.85	7,635.80	7,463.33	172.47	44.272	
15,700.00	6,040.00	5,831.00	5,625.21	202.65	28.02	84.38	-955.90	1,930.85	7,719.95	7,547.27	172.68	44.707	
15,800.00	6,040.00	5,831.00	5,625.21	205.22	28.02	84.38	-955.90	1,930.85	7,804.48	7,631.60	172.88	45.145	
15,900.00	6,040.00	5,790.64	5,584.96	207.78	27.93	83.83	-957.37	1,928.24	7,888.55	7,715.62	172.93	45.617	
16,000.00	6,040.00	5,790.02	5,584.35	210.36	27.93	83.82	-957.39	1,928.21	7,973.76	7,800.66	173.11	46.063	
16,100.00	6,040.00	5,789.42	5,583.74	212.93	27.93	83.81	-957.40	1,928.18	8,059.31	7,886.04	173.27	46.513	
16,200.00	6,040.00	5,788.82	5,583.15	215.52	27.93	83.80	-957.42	1,928.15	8,145.19	7,971.77	173.43	46.966	
16,300.00	6,040.00	5,788.24	5,582.57	218.11	27.93	83.80	-957.44	1,928.12	8,231.39	8,057.82	173.57	47.423	
16,400.00	6,040.00	5,787.67	5,582.00	220.70	27.93	83.79	-957.45	1,928.10	8,317.90	8,144.19	173.71	47.883	
16,500.00	6,040.00	5,787.11	5,581.44	223.29	27.93	83.78	-957.47	1,928.07	8,404.71	8,230.86	173.85	48.346	
16,600.00	6,040.00	5,786.56	5,580.89	225.89	27.92	83.77	-957.48	1,928.05	8,491.80	8,317.83	173.97	48.812	
16,700.00	6,040.00	5,786.02	5,580.35	228.50	27.92	83.77	-957.50	1,928.02	8,579.18	8,405.09	174.09	49.281	
16,800.00	6,040.00	5,785.48	5,579.82	231.11	27.92	83.76	-957.51	1,928.00	8,666.83	8,492.63	174.20	49.753	
16,900.00	6,040.00	5,784.96	5,579.30	233.72	27.92	83.75	-957.52	1,927.97	8,754.75	8,580.44	174.30	50.227	
17,000.00	6,040.00	5,784.45	5,578.79	236.33	27.92	83.74	-957.54	1,927.95	8,842.92	8,668.52	174.40	50.705	
17,100.00	6,040.00	5,783.95	5,578.28	238.95	27.92	83.74	-957.55	1,927.93	8,931.34	8,756.85	174.49	51.184	
17,200.00	6,040.00	5,783.45	5,577.79	241.57	27.92	83.73	-957.56	1,927.91	9,020.00	8,845.42	174.58	51.667	
17,300.00	6,040.00	5,782.97	5,577.30	244.19	27.92	83.72	-957.58	1,927.89	9,108.90	8,934.23	174.66	52.151	
17,400.00	6,040.00	5,782.49	5,576.83	246.82	27.92	83.72	-957.59	1,927.87	9,198.02	9,023.28	174.74	52.638	
17,500.00	6,040.00	5,782.02	5,576.36	249.45	27.92	83.71	-957.60	1,927.85	9,287.37	9,112.55	174.81	53.127	
17,600.00	6,040.00	5,781.56	5,575.90	252.08	27.91	83.70	-957.61	1,927.83	9,376.93	9,202.05	174.88	53.619	
17,700.00	6,040.00	5,781.11	5,575.45	254.71	27.91	83.70	-957.62	1,927.81	9,466.70	9,291.75	174.95	54.112	
17,800.00	6,040.00	5,780.66	5,575.00	257.35	27.91	83.69	-957.63	1,927.79	9,556.67	9,381.66	175.01	54.608	
17,900.00	6,040.00	5,780.23	5,574.57	259.99	27.91	83.69	-957.64	1,927.77	9,646.84	9,471.78	175.06	55.105	
18,000.00	6,040.00	5,779.80	5,574.13	262.63	27.91	83.68	-957.65	1,927.75	9,737.20	9,562.09	175.11	55.605	
18,100.00	6,040.00	5,779.37	5,573.71	265.27	27.91	83.67	-957.66	1,927.74	9,827.75	9,652.59	175.16	56.106	
18,200.00	6,040.00	5,778.95	5,573.29	267.91	27.91	83.67	-957.67	1,927.72	9,918.48	9,743.27	175.21	56.609	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 127-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	117.86	-1,533.20	2,900.97	3,281.22				
100.00	100.00	148.54	148.52	0.13	0.23	117.89	-1,534.02	2,899.07	3,280.41	3,280.05	0.36	9,119.611	
200.00	199.98	221.50	221.43	0.48	0.53	-31.34	-1,535.90	2,896.95	3,277.57	3,276.55	1.02	3,218.490	
300.00	299.84	305.52	305.39	0.85	0.84	-31.37	-1,538.48	2,895.02	3,272.50	3,270.81	1.68	1,942.825	
400.00	399.45	380.50	380.33	1.22	1.11	-31.47	-1,540.44	2,893.78	3,264.85	3,262.53	2.32	1,404.574	
500.00	498.70	546.97	546.72	1.62	1.71	-31.69	-1,544.47	2,891.27	3,254.60	3,251.28	3.31	982.774	
600.00	597.47	632.24	631.95	2.05	2.02	-31.94	-1,545.93	2,889.14	3,239.83	3,235.82	4.01	808.258	
700.00	695.62	748.70	748.35	2.51	2.44	-32.29	-1,547.59	2,885.76	3,221.64	3,216.81	4.83	666.745	
800.00	793.06	828.62	828.25	3.01	2.73	-32.66	-1,548.76	2,883.85	3,201.07	3,195.53	5.54	578.184	
900.00	889.64	948.29	947.83	3.56	3.17	-33.16	-1,551.13	2,880.39	3,177.50	3,171.10	6.41	495.978	
1,000.00	985.27	1,109.20	1,107.68	4.14	3.79	-33.65	-1,563.96	2,867.93	3,149.54	3,142.06	7.48	421.339	
1,100.00	1,079.82	1,196.86	1,194.10	4.78	4.16	-34.05	-1,574.97	2,858.20	3,118.01	3,109.70	8.30	375.474	
1,200.00	1,173.17	1,270.75	1,266.86	5.46	4.47	-34.50	-1,584.94	2,850.12	3,084.27	3,075.16	9.11	338.578	
1,300.00	1,265.21	1,350.78	1,345.74	6.20	4.82	-35.03	-1,595.68	2,841.86	3,048.33	3,038.36	9.97	305.810	
1,400.00	1,355.84	1,431.75	1,425.60	6.99	5.17	-35.65	-1,606.40	2,833.94	3,010.12	2,999.26	10.86	277.205	
1,500.00	1,444.94	1,512.18	1,504.65	7.84	5.53	-36.32	-1,618.62	2,825.61	2,969.66	2,957.87	11.79	251.886	
1,600.00	1,532.39	1,579.20	1,569.93	8.75	5.85	-36.97	-1,631.54	2,817.69	2,927.12	2,914.41	12.71	230.274	
1,700.00	1,618.11	1,643.65	1,632.39	9.71	6.16	-37.67	-1,645.46	2,810.00	2,882.90	2,869.23	13.66	210.972	
1,800.00	1,701.97	1,714.00	1,700.41	10.74	6.52	-38.44	-1,661.45	2,801.81	2,836.90	2,822.21	14.69	193.155	
1,900.00	1,783.88	1,802.12	1,785.53	11.82	6.97	-39.35	-1,681.86	2,791.67	2,788.78	2,772.95	15.83	176.170	
2,000.00	1,863.74	2,076.63	2,048.27	12.96	8.51	-40.90	-1,747.81	2,748.20	2,735.29	2,717.44	17.85	153.255	
2,100.00	1,941.45	2,215.87	2,177.85	14.16	9.42	-42.12	-1,787.24	2,716.00	2,675.66	2,656.30	19.35	138.245	
2,200.00	2,016.92	2,309.07	2,262.81	15.41	10.08	-43.33	-1,816.92	2,691.81	2,613.26	2,592.56	20.70	126.243	
2,300.00	2,090.05	2,391.18	2,336.31	16.73	10.71	-44.61	-1,845.48	2,668.90	2,548.48	2,526.43	22.05	115.595	
2,400.00	2,160.76	2,448.00	2,386.63	18.10	11.16	-45.97	-1,866.25	2,652.65	2,481.94	2,458.63	23.31	106.462	
2,500.00	2,228.95	2,503.58	2,435.43	19.53	11.62	-47.44	-1,887.59	2,636.73	2,414.15	2,389.52	24.63	98.002	
2,600.00	2,294.55	2,553.23	2,478.60	21.01	12.03	-49.00	-1,907.69	2,622.68	2,345.44	2,319.47	25.97	90.314	
2,700.00	2,357.48	2,612.20	2,530.02	22.55	12.53	-50.76	-1,931.54	2,606.44	2,275.61	2,248.21	27.40	83.049	
2,800.00	2,418.42	2,635.00	2,550.01	24.13	12.73	-51.31	-1,940.63	2,600.31	2,205.37	2,176.64	28.73	76.752	
2,900.00	2,479.25	2,688.50	2,597.08	25.71	13.17	-51.66	-1,962.11	2,586.70	2,135.91	2,105.68	30.23	70.651	
3,000.00	2,540.09	3,000.00	2,673.49	27.31	15.84	-52.25	-1,997.95	2,565.56	2,067.46	2,033.67	33.79	61.186	
3,100.00	2,600.93	2,969.24	2,843.09	28.90	15.60	-53.77	-2,073.40	2,510.39	1,994.62	1,960.88	33.74	59.113	
3,200.00	2,661.77	3,026.21	2,893.20	30.51	16.09	-54.31	-2,094.47	2,493.36	1,921.58	1,886.29	35.29	54.453	
3,300.00	2,722.61	3,073.53	2,935.22	32.11	16.49	-54.82	-2,111.50	2,479.81	1,849.24	1,812.37	36.87	50.155	
3,400.00	2,783.44	3,135.37	2,990.75	33.72	17.01	-55.58	-2,132.93	2,463.06	1,777.69	1,739.19	38.51	46.163	
3,500.00	2,844.28	3,227.21	3,072.78	35.34	17.79	-56.78	-2,165.16	2,437.23	1,705.81	1,665.67	40.15	42.489	
3,600.00	2,905.12	3,319.03	3,153.27	36.95	18.61	-57.96	-2,199.32	2,409.25	1,633.11	1,591.33	41.78	39.092	
3,700.00	2,965.96	3,405.05	3,227.44	38.57	19.41	-59.09	-2,232.77	2,381.32	1,559.68	1,516.28	43.40	35.934	
3,800.00	3,026.79	3,462.48	3,276.58	40.19	19.96	-59.87	-2,255.68	2,362.40	1,486.32	1,441.14	45.18	32.897	
3,900.00	3,087.63	3,528.79	3,333.06	41.81	20.60	-60.83	-2,282.63	2,340.47	1,413.22	1,366.27	46.95	30.098	
4,000.00	3,148.47	3,595.74	3,389.83	43.43	21.26	-61.86	-2,310.23	2,318.14	1,340.27	1,291.51	48.76	27.486	
4,100.00	3,209.31	3,660.75	3,444.60	45.05	21.91	-62.93	-2,337.63	2,296.34	1,267.58	1,216.95	50.63	25.038	
4,200.00	3,270.14	3,720.79	3,495.08	46.68	22.51	-64.00	-2,363.23	2,276.31	1,195.34	1,142.74	52.60	22.726	
4,300.00	3,330.98	3,784.81	3,549.24	48.31	23.14	-65.30	-2,390.19	2,255.38	1,123.77	1,069.18	54.59	20.584	
4,400.00	3,391.82	3,857.56	3,611.63	49.93	23.85	-67.11	-2,419.16	2,231.71	1,052.40	995.86	56.54	18.615	
4,500.00	3,452.66	3,916.25	3,662.79	51.56	24.38	-68.88	-2,440.94	2,212.95	981.64	922.86	58.78	16.700	
4,600.00	3,513.49	3,973.49	3,713.48	53.19	24.90	-70.94	-2,460.84	2,195.30	912.19	850.99	61.21	14.904	
4,700.00	3,574.33	4,029.45	3,763.56	54.82	25.38	-73.26	-2,479.48	2,178.69	844.55	780.73	63.82	13.234	
4,800.00	3,635.17	4,083.39	3,812.29	56.45	25.83	-75.80	-2,496.82	2,163.37	779.24	712.58	66.66	11.690	
4,900.00	3,696.01	4,137.04	3,861.23	58.08	26.27	-78.65	-2,513.43	2,148.98	717.05	647.35	69.70	10.288	
5,000.00	3,756.84	4,194.41	3,914.03	59.71	26.71	-82.09	-2,530.45	2,134.41	658.63	585.85	72.77	9.050	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 127-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	4,252.91	3,968.31	61.34	27.15	-86.02	-2,547.01	2,120.21	604.84	528.96	75.88	7.971	
5,200.00	3,878.52	4,313.67	4,024.98	62.97	27.60	-90.53	-2,563.73	2,105.99	556.74	477.94	78.80	7.065	
5,300.00	3,939.36	4,374.48	4,081.93	64.61	28.03	-95.46	-2,579.92	2,092.17	515.81	434.46	81.35	6.341	
5,400.00	4,000.19	4,432.09	4,136.20	66.24	28.42	-100.50	-2,594.42	2,079.39	484.00	400.68	83.32	5.809	
5,500.00	4,061.03	4,480.96	4,182.72	67.87	28.73	-105.01	-2,605.58	2,069.39	464.35	379.83	84.52	5.494	
5,587.90	4,114.51	4,525.38	4,225.44	69.31	29.01	-109.21	-2,614.61	2,061.25	458.81	374.31	84.50	5.430	CC, ES, SF
5,600.00	4,121.87	4,532.46	4,232.27	69.51	29.05	-109.89	-2,615.99	2,060.01	458.91	374.51	84.40	5.437	
5,700.00	4,182.71	4,591.12	4,289.01	71.14	29.38	-115.42	-2,627.14	2,050.13	467.22	384.15	83.08	5.624	
5,800.00	4,243.54	4,644.99	4,341.34	72.77	29.66	-120.35	-2,636.92	2,041.94	488.43	407.27	81.17	6.018	
5,900.00	4,304.38	4,697.91	4,393.13	74.41	29.93	-124.89	-2,645.89	2,035.74	521.47	442.52	78.95	6.605	
6,000.00	4,365.22	4,756.82	4,451.04	76.04	30.19	-129.54	-2,655.13	2,030.19	563.78	487.12	76.66	7.355	
6,100.00	4,426.06	4,816.27	4,509.61	77.68	30.45	-133.87	-2,663.71	2,024.74	613.12	538.66	74.46	8.234	
6,200.00	4,486.90	4,877.66	4,570.20	79.31	30.71	-137.92	-2,672.10	2,019.49	667.82	595.30	72.52	9.209	
6,300.00	4,547.73	4,940.10	4,631.91	80.95	30.97	-141.61	-2,680.28	2,014.53	726.57	655.71	70.86	10.254	
6,400.00	4,608.57	4,998.77	4,689.92	82.58	31.21	-144.73	-2,687.70	2,009.97	788.46	719.01	69.45	11.353	
6,500.00	4,669.41	5,045.49	4,736.22	84.22	31.39	-146.99	-2,692.79	2,006.30	853.65	785.50	68.15	12.526	
6,600.00	4,730.25	5,090.12	4,780.53	85.86	31.55	-148.97	-2,696.72	2,002.73	921.92	854.90	67.02	13.756	
6,700.00	4,791.08	5,133.11	4,823.33	87.49	31.69	-150.69	-2,699.52	1,999.82	992.82	926.76	66.06	15.029	
6,800.00	4,851.92	5,174.00	4,864.13	89.13	31.82	-152.13	-2,701.25	1,997.78	1,065.91	1,000.65	65.26	16.333	
6,900.00	4,912.76	5,216.71	4,906.78	90.76	31.92	-153.50	-2,702.24	1,995.81	1,140.84	1,076.22	64.63	17.653	
7,000.00	4,973.60	5,256.33	4,946.34	92.40	32.03	-154.69	-2,702.55	1,993.59	1,217.39	1,153.35	64.05	19.008	
7,100.00	5,034.43	5,344.62	5,034.53	94.04	32.24	-157.00	-2,702.90	1,989.65	1,294.61	1,230.13	64.47	20.080	
7,200.00	5,095.27	5,418.53	5,108.43	95.67	32.41	-158.55	-2,704.20	1,988.81	1,370.70	1,305.94	64.76	21.165	
7,300.00	5,156.11	5,482.95	5,172.83	97.31	32.56	-159.75	-2,705.56	1,988.21	1,446.86	1,381.92	64.94	22.281	
7,400.00	5,216.95	5,544.36	5,234.22	98.95	32.70	-160.78	-2,706.83	1,987.77	1,523.25	1,458.13	65.12	23.393	
7,500.00	5,277.78	5,610.30	5,300.15	100.59	32.86	-161.78	-2,708.24	1,987.38	1,599.78	1,534.36	65.42	24.454	
7,600.00	5,338.62	5,676.06	5,365.89	102.22	33.02	-162.70	-2,709.83	1,986.96	1,676.32	1,610.57	65.76	25.493	
7,700.00	5,399.46	5,741.17	5,430.97	103.86	33.17	-163.53	-2,711.53	1,986.54	1,752.91	1,686.80	66.11	26.514	
7,800.00	5,460.30	5,786.70	5,476.50	105.50	33.27	-164.05	-2,712.40	1,986.54	1,829.89	1,763.72	66.17	27.655	
7,900.00	5,521.24	5,832.00	5,521.79	107.13	33.36	-168.75	-2,712.67	1,987.06	1,907.49	1,841.22	66.27	28.784	
8,000.00	5,584.83	5,882.33	5,572.08	108.61	33.44	-171.57	-2,712.08	1,988.83	1,984.39	1,917.84	66.55	29.816	
8,100.00	5,650.69	6,068.11	5,754.11	109.85	33.58	-156.14	-2,704.85	2,021.52	2,056.43	1,987.03	69.40	29.630	
8,200.00	5,716.83	6,148.45	5,828.28	110.82	33.57	-141.83	-2,698.59	2,051.65	2,121.72	2,050.91	70.81	29.964	
8,300.00	5,781.24	6,572.33	6,147.01	111.52	33.41	-140.09	-2,670.36	2,320.96	2,178.47	2,097.72	80.75	26.979	
8,400.00	5,841.96	6,574.33	6,148.19	111.98	33.41	-127.59	-2,670.30	2,322.57	2,229.92	2,148.29	81.63	27.317	
8,500.00	5,897.14	6,560.91	6,140.24	112.25	33.41	-116.69	-2,670.75	2,311.77	2,277.29	2,194.87	82.42	27.631	
8,600.00	5,945.12	6,364.56	6,009.94	112.37	33.48	-103.31	-2,682.42	2,165.95	2,317.95	2,239.28	78.67	29.465	
8,700.00	5,984.42	6,333.85	5,986.51	112.39	33.49	-96.59	-2,684.80	2,146.24	2,350.60	2,270.79	79.81	29.453	
8,800.00	6,013.86	6,297.46	5,957.64	112.35	33.51	-91.64	-2,687.52	2,124.27	2,374.68	2,293.42	81.26	29.222	
8,900.00	6,032.54	6,250.24	5,918.38	112.30	33.54	-88.17	-2,690.96	2,098.27	2,389.28	2,306.39	82.90	28.823	
9,000.00	6,039.89	6,204.96	5,878.96	112.24	33.55	-86.35	-2,694.24	2,076.24	2,393.81	2,308.86	84.95	28.179	
9,091.97	6,040.68	6,145.42	5,825.53	112.20	33.57	-85.06	-2,698.83	2,050.39	2,393.66	2,307.01	86.66	27.623	
9,100.00	6,040.00	6,139.89	5,820.51	112.19	33.57	-84.95	-2,699.29	2,048.13	2,392.87	2,306.06	86.81	27.566	
9,200.00	6,040.00	6,114.00	5,796.86	112.16	33.58	-84.38	-2,701.47	2,037.82	2,395.09	2,305.51	89.58	26.738	
9,300.00	6,040.00	6,114.00	5,796.86	112.15	33.58	-84.38	-2,701.47	2,037.82	2,401.37	2,308.48	92.89	25.851	
9,400.00	6,040.00	6,079.59	5,764.92	112.15	33.58	-83.62	-2,704.11	2,025.31	2,411.09	2,315.58	95.51	25.245	
9,500.00	6,040.00	6,068.31	5,754.30	112.16	33.58	-83.36	-2,704.83	2,021.58	2,425.00	2,326.45	98.55	24.607	
9,600.00	6,040.00	6,058.08	5,744.61	112.19	33.58	-83.13	-2,705.43	2,018.36	2,442.79	2,341.24	101.54	24.057	
9,700.00	6,040.00	6,020.00	5,708.09	112.24	33.57	-82.26	-2,707.12	2,007.72	2,464.93	2,360.96	103.98	23.706	
9,800.00	6,040.00	6,020.00	5,708.09	112.31	33.57	-82.26	-2,707.12	2,007.72	2,489.98	2,383.01	106.97	23.277	
9,900.00	6,040.00	6,020.00	5,708.09	112.39	33.57	-82.26	-2,707.12	2,007.72	2,518.76	2,408.92	109.84	22.931	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 127-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.00	6,040.00	6,020.00	5,708.09	112.49	33.57	82.26	-2,707.12	2,007.72	2,551.13	2,438.55	112.58	22.660	
10,100.00	6,040.00	6,020.00	5,708.09	112.62	33.57	82.26	-2,707.12	2,007.72	2,586.97	2,471.77	115.19	22.458	
10,200.00	6,040.00	6,020.00	5,708.09	112.77	33.57	82.26	-2,707.12	2,007.72	2,626.12	2,508.46	117.67	22.319	
10,300.00	6,040.00	6,020.00	5,708.09	112.94	33.57	82.26	-2,707.12	2,007.72	2,668.45	2,548.45	120.00	22.237	
10,400.00	6,040.00	6,020.00	5,708.09	113.14	33.57	82.26	-2,707.12	2,007.72	2,713.81	2,591.61	122.20	22.208	
10,500.00	6,040.00	5,987.47	5,676.41	113.36	33.55	81.51	-2,708.26	2,000.47	2,761.42	2,637.58	123.84	22.298	
10,600.00	6,040.00	5,981.82	5,670.86	113.62	33.54	81.37	-2,708.47	1,999.40	2,812.12	2,686.39	125.72	22.367	
10,700.00	6,040.00	5,976.71	5,665.84	113.91	33.54	81.26	-2,708.66	1,998.48	2,865.37	2,737.88	127.49	22.475	
10,800.00	6,040.00	5,972.08	5,661.28	114.24	33.54	81.15	-2,708.83	1,997.68	2,921.05	2,791.90	129.15	22.617	
10,900.00	6,040.00	5,967.86	5,657.12	114.61	33.53	81.05	-2,708.99	1,996.99	2,979.03	2,848.32	130.71	22.792	
11,000.00	6,040.00	5,964.00	5,653.31	115.02	33.53	80.96	-2,709.14	1,996.39	3,039.16	2,907.00	132.16	22.996	
11,100.00	6,040.00	5,960.46	5,649.81	115.49	33.53	80.88	-2,709.28	1,995.86	3,101.34	2,967.83	133.51	23.229	
11,200.00	6,040.00	5,926.00	5,615.62	116.00	33.50	80.07	-2,710.67	1,991.86	3,166.13	3,031.68	134.46	23.547	
11,300.00	6,040.00	5,926.00	5,615.62	116.58	33.50	80.07	-2,710.67	1,991.86	3,231.93	3,096.25	135.67	23.822	
11,400.00	6,040.00	5,926.00	5,615.62	117.22	33.50	80.07	-2,710.67	1,991.86	3,299.44	3,162.64	136.80	24.119	
11,500.00	6,040.00	5,926.00	5,615.62	117.92	33.50	80.07	-2,710.67	1,991.86	3,368.57	3,230.72	137.84	24.438	
11,600.00	6,040.00	5,926.00	5,615.62	118.70	33.50	80.07	-2,710.67	1,991.86	3,439.21	3,300.40	138.81	24.776	
11,700.00	6,040.00	5,926.00	5,615.62	119.56	33.50	80.07	-2,710.67	1,991.86	3,511.29	3,371.58	139.71	25.133	
11,800.00	6,040.00	5,926.00	5,615.62	120.51	33.50	80.07	-2,710.67	1,991.86	3,584.70	3,444.16	140.54	25.507	
11,900.00	6,040.00	5,926.00	5,615.62	121.54	33.50	80.07	-2,710.67	1,991.86	3,659.38	3,518.07	141.31	25.897	
12,000.00	6,040.00	5,926.00	5,615.62	122.66	33.50	80.07	-2,710.67	1,991.86	3,735.23	3,593.22	142.02	26.301	
12,100.00	6,040.00	5,926.00	5,615.62	123.87	33.50	80.07	-2,710.67	1,991.86	3,812.21	3,669.53	142.67	26.720	
12,200.00	6,040.00	5,926.00	5,615.62	125.17	33.50	80.07	-2,710.67	1,991.86	3,890.23	3,746.95	143.28	27.151	
12,300.00	6,040.00	5,926.00	5,615.62	126.57	33.50	80.07	-2,710.67	1,991.86	3,969.23	3,825.39	143.84	27.595	
12,400.00	6,040.00	5,926.00	5,615.62	128.06	33.50	80.07	-2,710.67	1,991.86	4,049.17	3,904.81	144.36	28.049	
12,500.00	6,040.00	5,926.00	5,615.62	129.63	33.50	80.07	-2,710.67	1,991.86	4,129.98	3,985.14	144.84	28.514	
12,600.00	6,040.00	5,926.00	5,615.62	131.29	33.50	80.07	-2,710.67	1,991.86	4,211.61	4,066.33	145.28	28.990	
12,700.00	6,040.00	5,926.00	5,615.62	133.03	33.50	80.07	-2,710.67	1,991.86	4,294.02	4,148.33	145.69	29.474	
12,800.00	6,040.00	5,926.00	5,615.62	134.84	33.50	80.07	-2,710.67	1,991.86	4,377.16	4,231.10	146.07	29.967	
12,900.00	6,040.00	5,926.00	5,615.62	136.71	33.50	80.07	-2,710.67	1,991.86	4,461.00	4,314.58	146.41	30.469	
13,000.00	6,040.00	5,926.00	5,615.62	138.66	33.50	80.07	-2,710.67	1,991.86	4,545.49	4,398.75	146.73	30.978	
13,100.00	6,040.00	5,926.00	5,615.62	140.66	33.50	80.07	-2,710.67	1,991.86	4,630.59	4,483.56	147.03	31.494	
13,200.00	6,040.00	5,926.00	5,615.62	142.71	33.50	80.07	-2,710.67	1,991.86	4,716.29	4,568.98	147.30	32.017	
13,300.00	6,040.00	5,926.00	5,615.62	144.81	33.50	80.07	-2,710.67	1,991.86	4,802.53	4,654.97	147.56	32.547	
13,400.00	6,040.00	5,926.00	5,615.62	146.96	33.50	80.07	-2,710.67	1,991.86	4,889.30	4,741.51	147.79	33.083	
13,500.00	6,040.00	5,926.00	5,615.62	149.14	33.50	80.07	-2,710.67	1,991.86	4,976.56	4,828.56	148.00	33.625	
13,600.00	6,040.00	5,926.00	5,615.62	151.36	33.50	80.07	-2,710.67	1,991.86	5,064.30	4,916.10	148.20	34.172	
13,700.00	6,040.00	5,926.00	5,615.62	153.62	33.50	80.07	-2,710.67	1,991.86	5,152.48	5,004.10	148.38	34.724	
13,800.00	6,040.00	5,926.00	5,615.62	155.91	33.50	80.07	-2,710.67	1,991.86	5,241.09	5,092.54	148.55	35.281	
13,900.00	6,040.00	5,926.00	5,615.62	158.22	33.50	80.07	-2,710.67	1,991.86	5,330.10	5,181.39	148.71	35.843	
14,000.00	6,040.00	5,926.00	5,615.62	160.56	33.50	80.07	-2,710.67	1,991.86	5,419.49	5,270.65	148.85	36.409	
14,100.00	6,040.00	5,926.00	5,615.62	162.92	33.50	80.07	-2,710.67	1,991.86	5,509.25	5,360.27	148.98	36.980	
14,200.00	6,040.00	5,926.00	5,615.62	165.30	33.50	80.07	-2,710.67	1,991.86	5,599.36	5,450.26	149.10	37.554	
14,300.00	6,040.00	5,926.00	5,615.62	167.70	33.50	80.07	-2,710.67	1,991.86	5,689.79	5,540.58	149.21	38.132	
14,400.00	6,040.00	5,926.00	5,615.62	170.12	33.50	80.07	-2,710.67	1,991.86	5,780.55	5,631.23	149.31	38.714	
14,500.00	6,040.00	5,926.00	5,615.62	172.55	33.50	80.07	-2,710.67	1,991.86	5,871.60	5,722.19	149.41	39.299	
14,600.00	6,040.00	5,926.00	5,615.62	175.00	33.50	80.07	-2,710.67	1,991.86	5,962.94	5,813.44	149.49	39.888	
14,700.00	6,040.00	5,926.00	5,615.62	177.46	33.50	80.07	-2,710.67	1,991.86	6,054.55	5,904.98	149.57	40.479	
14,800.00	6,040.00	5,926.00	5,615.62	179.94	33.50	80.07	-2,710.67	1,991.86	6,146.42	5,996.78	149.64	41.074	
14,900.00	6,040.00	5,926.00	5,615.62	182.43	33.50	80.07	-2,710.67	1,991.86	6,238.55	6,088.84	149.71	41.671	
15,000.00	6,040.00	5,926.00	5,615.62	184.92	33.50	80.07	-2,710.67	1,991.86	6,330.91	6,181.14	149.77	42.271	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 127-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,100.00	6,040.00	5,926.00	5,615.62	187.43	33.50	80.07	-2,710.67	1,991.86	6,423.50	6,273.68	149.82	42.874	
15,200.00	6,040.00	5,926.00	5,615.62	189.95	33.50	80.07	-2,710.67	1,991.86	6,516.31	6,366.44	149.87	43.479	
15,300.00	6,040.00	5,926.00	5,615.62	192.48	33.50	80.07	-2,710.67	1,991.86	6,609.33	6,459.41	149.92	44.086	
15,400.00	6,040.00	5,926.00	5,615.62	195.01	33.50	80.07	-2,710.67	1,991.86	6,702.55	6,552.59	149.96	44.696	
15,500.00	6,040.00	5,926.00	5,615.62	197.55	33.50	80.07	-2,710.67	1,991.86	6,795.96	6,645.97	150.00	45.308	
15,600.00	6,040.00	5,926.00	5,615.62	200.10	33.50	80.07	-2,710.67	1,991.86	6,889.56	6,739.53	150.03	45.922	
15,700.00	6,040.00	5,926.00	5,615.62	202.65	33.50	80.07	-2,710.67	1,991.86	6,983.34	6,833.28	150.06	46.537	
15,800.00	6,040.00	5,926.00	5,615.62	205.22	33.50	80.07	-2,710.67	1,991.86	7,077.29	6,927.20	150.09	47.155	
15,900.00	6,040.00	5,926.00	5,615.62	207.78	33.50	80.07	-2,710.67	1,991.86	7,171.40	7,021.29	150.11	47.775	
16,000.00	6,040.00	5,926.00	5,615.62	210.36	33.50	80.07	-2,710.67	1,991.86	7,265.66	7,115.53	150.13	48.396	
16,100.00	6,040.00	5,886.76	5,576.50	212.93	33.44	79.15	-2,711.97	1,989.07	7,359.34	7,209.30	150.04	49.051	
16,200.00	6,040.00	5,885.97	5,575.71	215.52	33.44	79.13	-2,711.99	1,989.03	7,453.87	7,303.82	150.05	49.676	
16,300.00	6,040.00	5,885.19	5,574.94	218.11	33.44	79.11	-2,712.01	1,988.99	7,548.55	7,398.48	150.06	50.302	
16,400.00	6,040.00	5,884.43	5,574.18	220.70	33.44	79.09	-2,712.03	1,988.94	7,643.36	7,493.28	150.08	50.930	
16,500.00	6,040.00	5,883.69	5,573.44	223.29	33.44	79.08	-2,712.04	1,988.90	7,738.30	7,588.22	150.09	51.559	
16,600.00	6,040.00	5,882.95	5,572.71	225.89	33.44	79.06	-2,712.06	1,988.86	7,833.37	7,683.27	150.10	52.189	
16,700.00	6,040.00	5,882.24	5,571.99	228.50	33.44	79.04	-2,712.08	1,988.83	7,928.56	7,778.45	150.10	52.821	
16,800.00	6,040.00	5,881.53	5,571.29	231.11	33.44	79.03	-2,712.09	1,988.79	8,023.86	7,873.75	150.11	53.454	
16,900.00	6,040.00	5,880.84	5,570.60	233.72	33.43	79.01	-2,712.11	1,988.75	8,119.28	7,969.17	150.11	54.088	
17,000.00	6,040.00	5,880.17	5,569.92	236.33	33.43	78.99	-2,712.12	1,988.72	8,214.80	8,064.69	150.12	54.723	
17,100.00	6,040.00	5,879.50	5,569.26	238.95	33.43	78.98	-2,712.14	1,988.68	8,310.43	8,160.32	150.12	55.360	
17,200.00	6,040.00	5,878.85	5,568.61	241.57	33.43	78.96	-2,712.15	1,988.65	8,406.16	8,256.05	150.12	55.997	
17,300.00	6,040.00	5,878.21	5,567.97	244.19	33.43	78.95	-2,712.17	1,988.62	8,501.99	8,351.88	150.12	56.635	
17,400.00	6,040.00	5,877.58	5,567.34	246.82	33.43	78.93	-2,712.18	1,988.58	8,597.92	8,447.80	150.12	57.275	
17,500.00	6,040.00	5,876.96	5,566.72	249.45	33.43	78.92	-2,712.19	1,988.55	8,693.93	8,543.82	150.12	57.915	
17,600.00	6,040.00	5,876.36	5,566.12	252.08	33.43	78.91	-2,712.20	1,988.52	8,790.04	8,639.92	150.11	58.556	
17,700.00	6,040.00	5,875.76	5,565.52	254.71	33.43	78.89	-2,712.22	1,988.49	8,886.23	8,736.12	150.11	59.198	
17,800.00	6,040.00	5,875.18	5,564.94	257.35	33.43	78.88	-2,712.23	1,988.47	8,982.50	8,832.39	150.11	59.840	
17,900.00	6,040.00	5,874.60	5,564.37	259.99	33.43	78.86	-2,712.24	1,988.44	9,078.85	8,928.75	150.10	60.484	
18,000.00	6,040.00	5,874.04	5,563.80	262.63	33.42	78.85	-2,712.25	1,988.41	9,175.28	9,025.18	150.10	61.128	
18,100.00	6,040.00	5,873.48	5,563.25	265.27	33.42	78.84	-2,712.26	1,988.38	9,271.79	9,121.69	150.09	61.773	
18,200.00	6,040.00	5,872.94	5,562.70	267.91	33.42	78.83	-2,712.27	1,988.36	9,368.37	9,218.28	150.09	62.419	
18,300.00	6,040.00	5,832.00	5,521.79	270.56	33.36	77.88	-2,712.67	1,987.06	9,465.77	9,315.77	150.00	63.105	
18,400.00	6,040.00	5,832.00	5,521.79	273.21	33.36	77.88	-2,712.67	1,987.06	9,562.47	9,412.47	150.00	63.751	
18,500.00	6,040.00	5,832.00	5,521.79	275.86	33.36	77.88	-2,712.67	1,987.06	9,659.23	9,509.24	149.99	64.398	
18,600.00	6,040.00	5,832.00	5,521.79	278.51	33.36	77.88	-2,712.67	1,987.06	9,756.06	9,606.07	149.99	65.045	
18,700.00	6,040.00	5,832.00	5,521.79	281.16	33.36	77.88	-2,712.67	1,987.06	9,852.96	9,702.97	149.98	65.693	
18,800.00	6,040.00	5,832.00	5,521.79	283.81	33.36	77.88	-2,712.67	1,987.06	9,949.91	9,799.93	149.98	66.342	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 127-MWD OWSG, 5738-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	117.86	-1,533.20	2,900.97	3,281.22				
100.00	100.00	148.54	148.52	0.13	0.23	117.89	-1,534.02	2,899.07	3,280.41	3,280.05	0.36	9,119.611	
200.00	199.98	221.50	221.43	0.48	0.53	-31.34	-1,535.90	2,896.95	3,277.57	3,276.55	1.02	3,218.490	
300.00	299.84	305.52	305.39	0.85	0.84	-31.37	-1,538.48	2,895.02	3,272.50	3,270.81	1.68	1,942.825	
400.00	399.45	380.50	380.33	1.22	1.11	-31.47	-1,540.44	2,893.78	3,264.85	3,262.53	2.32	1,404.574	
500.00	498.70	546.97	546.72	1.62	1.71	-31.69	-1,544.47	2,891.27	3,254.60	3,251.28	3.31	982.774	
600.00	597.47	632.24	631.95	2.05	2.02	-31.94	-1,545.93	2,889.14	3,239.83	3,235.82	4.01	808.258	
700.00	695.62	748.70	748.35	2.51	2.44	-32.29	-1,547.59	2,885.76	3,221.64	3,216.81	4.83	666.745	
800.00	793.06	828.62	828.25	3.01	2.73	-32.66	-1,548.76	2,883.85	3,201.07	3,195.53	5.54	578.184	
900.00	889.64	948.29	947.83	3.56	3.17	-33.16	-1,551.13	2,880.39	3,177.50	3,171.10	6.41	495.978	
1,000.00	985.27	1,109.20	1,107.68	4.14	3.79	-33.65	-1,563.96	2,867.93	3,149.54	3,142.06	7.48	421.339	
1,100.00	1,079.82	1,196.86	1,194.10	4.78	4.16	-34.05	-1,574.97	2,858.20	3,118.01	3,109.70	8.30	375.474	
1,200.00	1,173.17	1,270.75	1,266.86	5.46	4.47	-34.50	-1,584.94	2,850.12	3,084.27	3,075.16	9.11	338.578	
1,300.00	1,265.21	1,350.78	1,345.74	6.20	4.82	-35.03	-1,595.68	2,841.86	3,048.33	3,038.36	9.97	305.810	
1,400.00	1,355.84	1,431.75	1,425.60	6.99	5.17	-35.65	-1,606.40	2,833.94	3,010.12	2,999.26	10.86	277.205	
1,500.00	1,444.94	1,512.18	1,504.65	7.84	5.53	-36.32	-1,618.62	2,825.61	2,969.66	2,957.87	11.79	251.886	
1,600.00	1,532.39	1,579.20	1,569.93	8.75	5.85	-36.97	-1,631.54	2,817.69	2,927.12	2,914.41	12.71	230.274	
1,700.00	1,618.11	1,643.65	1,632.39	9.71	6.16	-37.67	-1,645.46	2,810.00	2,882.90	2,869.23	13.66	210.972	
1,800.00	1,701.97	1,714.00	1,700.41	10.74	6.52	-38.44	-1,661.45	2,801.81	2,836.90	2,822.21	14.69	193.155	
1,900.00	1,783.88	1,802.12	1,785.53	11.82	6.97	-39.35	-1,681.86	2,791.67	2,788.78	2,772.95	15.83	176.170	
2,000.00	1,863.74	2,076.63	2,048.27	12.96	8.51	-40.90	-1,747.81	2,748.20	2,735.29	2,717.44	17.85	153.255	
2,100.00	1,941.45	2,215.87	2,177.85	14.16	9.42	-42.12	-1,787.24	2,716.00	2,675.66	2,656.30	19.35	138.245	
2,200.00	2,016.92	2,309.07	2,262.81	15.41	10.08	-43.33	-1,816.92	2,691.81	2,613.26	2,592.56	20.70	126.243	
2,300.00	2,090.05	2,391.18	2,336.31	16.73	10.71	-44.61	-1,845.48	2,668.90	2,548.48	2,526.43	22.05	115.595	
2,400.00	2,160.76	2,448.00	2,386.63	18.10	11.16	-45.97	-1,866.25	2,652.65	2,481.94	2,458.63	23.31	106.462	
2,500.00	2,228.95	2,503.58	2,435.43	19.53	11.62	-47.44	-1,887.59	2,636.73	2,414.15	2,389.52	24.63	98.002	
2,600.00	2,294.55	2,553.23	2,478.60	21.01	12.03	-49.00	-1,907.69	2,622.68	2,345.44	2,319.47	25.97	90.314	
2,700.00	2,357.48	2,612.20	2,530.02	22.55	12.53	-50.76	-1,931.54	2,606.44	2,275.61	2,248.21	27.40	83.049	
2,800.00	2,418.42	2,635.00	2,550.01	24.13	12.73	-51.31	-1,940.63	2,600.31	2,205.37	2,176.64	28.73	76.752	
2,900.00	2,479.25	2,688.50	2,597.08	25.71	13.17	-51.66	-1,962.11	2,586.70	2,135.91	2,105.68	30.23	70.651	
3,000.00	2,540.09	3,000.00	2,673.49	27.31	15.84	-52.25	-1,997.95	2,565.56	2,067.46	2,033.67	33.79	61.186	
3,100.00	2,600.93	2,969.24	2,843.09	28.90	15.60	-53.77	-2,073.40	2,510.39	1,994.62	1,960.88	33.74	59.113	
3,200.00	2,661.77	3,026.21	2,893.20	30.51	16.09	-54.31	-2,094.47	2,493.36	1,921.58	1,886.29	35.29	54.453	
3,300.00	2,722.61	3,073.53	2,935.22	32.11	16.49	-54.82	-2,111.50	2,479.81	1,849.24	1,812.37	36.87	50.155	
3,400.00	2,783.44	3,135.37	2,990.75	33.72	17.01	-55.58	-2,132.93	2,463.06	1,777.69	1,739.19	38.51	46.163	
3,500.00	2,844.28	3,227.21	3,072.78	35.34	17.79	-56.78	-2,165.16	2,437.23	1,705.81	1,665.67	40.15	42.489	
3,600.00	2,905.12	3,319.03	3,153.27	36.95	18.61	-57.96	-2,199.32	2,409.25	1,633.11	1,591.33	41.78	39.092	
3,700.00	2,965.96	3,405.05	3,227.44	38.57	19.41	-59.09	-2,232.77	2,381.32	1,559.68	1,516.28	43.40	35.934	
3,800.00	3,026.79	3,462.48	3,276.58	40.19	19.96	-59.87	-2,255.68	2,362.40	1,486.32	1,441.14	45.18	32.897	
3,900.00	3,087.63	3,528.79	3,333.06	41.81	20.60	-60.83	-2,282.63	2,340.47	1,413.22	1,366.27	46.95	30.098	
4,000.00	3,148.47	3,595.74	3,389.83	43.43	21.26	-61.86	-2,310.23	2,318.14	1,340.27	1,291.51	48.76	27.486	
4,100.00	3,209.31	3,660.75	3,444.60	45.05	21.91	-62.93	-2,337.63	2,296.34	1,267.58	1,216.95	50.63	25.038	
4,200.00	3,270.14	3,720.79	3,495.08	46.68	22.51	-64.00	-2,363.23	2,276.31	1,195.34	1,142.74	52.60	22.726	
4,300.00	3,330.98	3,784.81	3,549.24	48.31	23.14	-65.30	-2,390.19	2,255.38	1,123.77	1,069.18	54.59	20.584	
4,400.00	3,391.82	3,857.56	3,611.63	49.93	23.85	-67.11	-2,419.16	2,231.71	1,052.40	995.86	56.54	18.615	
4,500.00	3,452.66	3,916.25	3,662.79	51.56	24.38	-68.88	-2,440.94	2,212.95	981.64	922.86	58.78	16.700	
4,600.00	3,513.49	3,973.49	3,713.48	53.19	24.90	-70.94	-2,460.84	2,195.30	912.19	850.99	61.21	14.904	
4,700.00	3,574.33	4,029.45	3,763.56	54.82	25.38	-73.26	-2,479.48	2,178.69	844.55	780.73	63.82	13.234	
4,800.00	3,635.17	4,083.39	3,812.29	56.45	25.83	-75.80	-2,496.82	2,163.37	779.24	712.58	66.66	11.690	
4,900.00	3,696.01	4,137.04	3,861.23	58.08	26.27	-78.65	-2,513.43	2,148.98	717.05	647.35	69.70	10.288	
5,000.00	3,756.84	4,194.41	3,914.03	59.71	26.71	-82.09	-2,530.45	2,134.41	658.63	585.85	72.77	9.050	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 127-MWD OWSG, 5738-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	4,252.91	3,968.31	61.34	27.15	-86.02	-2,547.01	2,120.21	604.84	528.96	75.88	7.971	
5,200.00	3,878.52	4,313.67	4,024.98	62.97	27.60	-90.53	-2,563.73	2,105.99	556.74	477.94	78.80	7.065	
5,300.00	3,939.36	4,374.48	4,081.93	64.61	28.03	-95.46	-2,579.92	2,092.17	515.81	434.46	81.35	6.341	
5,400.00	4,000.19	4,432.09	4,136.20	66.24	28.42	-100.50	-2,594.42	2,079.39	484.00	400.68	83.32	5.809	
5,500.00	4,061.03	4,480.96	4,182.72	67.87	28.73	-105.01	-2,605.58	2,069.39	464.35	379.83	84.52	5.494	
5,587.90	4,114.51	4,525.38	4,225.44	69.31	29.01	-109.21	-2,614.61	2,061.25	458.81	374.31	84.50	5.430	CC, ES, SF
5,600.00	4,121.87	4,532.46	4,232.27	69.51	29.05	-109.89	-2,615.99	2,060.01	458.91	374.51	84.40	5.437	
5,700.00	4,182.71	4,591.12	4,289.01	71.14	29.38	-115.42	-2,627.14	2,050.13	467.22	384.15	83.08	5.624	
5,800.00	4,243.54	4,644.99	4,341.34	72.77	29.66	-120.35	-2,636.92	2,041.94	488.43	407.27	81.17	6.018	
5,900.00	4,304.38	4,697.91	4,393.13	74.41	29.93	-124.89	-2,645.89	2,035.74	521.47	442.52	78.95	6.605	
6,000.00	4,365.22	4,756.82	4,451.04	76.04	30.19	-129.54	-2,655.13	2,030.19	563.78	487.12	76.66	7.355	
6,100.00	4,426.06	4,816.27	4,509.61	77.68	30.45	-133.87	-2,663.71	2,024.74	613.12	538.66	74.46	8.234	
6,200.00	4,486.90	4,877.66	4,570.20	79.31	30.71	-137.92	-2,672.10	2,019.49	667.82	595.30	72.52	9.209	
6,300.00	4,547.73	4,940.10	4,631.91	80.95	30.97	-141.61	-2,680.28	2,014.53	726.57	655.71	70.86	10.254	
6,400.00	4,608.57	4,998.77	4,689.92	82.58	31.21	-144.73	-2,687.70	2,009.97	788.46	719.01	69.45	11.353	
6,500.00	4,669.41	5,045.49	4,736.22	84.22	31.39	-146.99	-2,692.79	2,006.30	853.65	785.50	68.15	12.526	
6,600.00	4,730.25	5,090.12	4,780.53	85.86	31.55	-148.97	-2,696.72	2,002.73	921.92	854.90	67.02	13.756	
6,700.00	4,791.08	5,133.11	4,823.33	87.49	31.69	-150.69	-2,699.52	1,999.82	992.82	926.76	66.06	15.029	
6,800.00	4,851.92	5,174.00	4,864.13	89.13	31.82	-152.13	-2,701.25	1,997.78	1,065.91	1,000.65	65.26	16.333	
6,900.00	4,912.76	5,216.71	4,906.78	90.76	31.92	-153.50	-2,702.24	1,995.81	1,140.84	1,076.22	64.63	17.653	
7,000.00	4,973.60	5,256.33	4,946.34	92.40	32.03	-154.69	-2,702.55	1,993.59	1,217.39	1,153.35	64.05	19.008	
7,100.00	5,034.43	5,344.62	5,034.53	94.04	32.24	-157.00	-2,702.90	1,989.65	1,294.61	1,230.13	64.47	20.080	
7,200.00	5,095.27	5,418.53	5,108.43	95.67	32.41	-158.55	-2,704.20	1,988.81	1,370.70	1,305.94	64.76	21.165	
7,300.00	5,156.11	5,482.95	5,172.83	97.31	32.56	-159.75	-2,705.56	1,988.21	1,446.86	1,381.92	64.94	22.281	
7,400.00	5,216.95	5,544.36	5,234.22	98.95	32.70	-160.78	-2,706.83	1,987.77	1,523.25	1,458.13	65.12	23.393	
7,500.00	5,277.78	5,610.30	5,300.15	100.59	32.86	-161.78	-2,708.24	1,987.38	1,599.78	1,534.36	65.42	24.454	
7,600.00	5,338.62	5,699.06	5,388.83	102.22	33.03	-163.06	-2,711.19	1,985.76	1,676.10	1,610.04	66.06	25.371	
7,700.00	5,399.46	5,754.39	5,443.95	103.86	33.12	-163.92	-2,714.71	1,982.45	1,751.70	1,685.58	66.12	26.492	
7,800.00	5,460.30	5,781.40	5,470.88	105.50	33.14	-164.30	-2,715.87	1,980.83	1,828.62	1,762.82	65.80	27.789	
7,900.00	5,521.24	5,844.88	5,538.88	107.13	32.94	-168.99	-2,721.32	2,023.65	1,902.46	1,833.16	69.30	27.453	
8,000.00	5,584.83	5,899.00	5,599.00	108.61	30.70	-166.80	-2,688.81	2,576.34	1,963.08	1,878.23	84.84	23.138	
8,100.00	5,650.69	5,965.00	5,665.00	109.85	30.70	178.04	-2,688.81	2,576.34	2,017.34	1,932.35	84.99	23.736	
8,200.00	5,716.83	6,031.00	5,731.00	110.82	30.70	162.38	-2,688.81	2,576.34	2,074.22	1,988.87	85.35	24.303	
8,300.00	5,781.24	6,096.00	5,796.00	111.52	30.72	147.03	-2,689.20	2,568.05	2,131.79	2,046.14	85.65	24.889	
8,400.00	5,841.96	6,161.00	5,856.00	111.98	30.75	133.07	-2,689.60	2,555.44	2,188.20	2,102.09	86.11	25.412	
8,500.00	5,897.14	6,226.00	5,912.00	112.25	30.75	121.45	-2,689.60	2,555.44	2,241.77	2,154.38	87.39	25.652	
8,600.00	5,945.12	6,291.00	5,960.00	112.37	30.84	111.22	-2,689.86	2,516.11	2,290.33	2,202.69	87.64	26.132	
8,700.00	5,984.42	6,356.00	5,999.00	112.39	32.37	94.77	-2,709.65	2,114.88	2,330.74	2,254.05	76.70	30.388	
8,800.00	6,013.86	6,421.00	6,002.00	112.35	32.45	90.26	-2,711.72	2,102.72	2,354.38	2,275.76	78.62	29.946	
8,900.00	6,032.54	6,486.00	6,021.00	112.30	32.58	87.11	-2,714.91	2,083.12	2,368.69	2,288.03	80.66	29.367	
9,000.00	6,039.89	6,500.00	6,030.00	112.24	32.58	86.28	-2,714.91	2,083.12	2,373.08	2,289.33	83.75	28.336	
9,081.35	6,040.66	6,178.41	5,851.79	112.20	32.67	85.65	-2,717.14	2,068.07	2,373.11	2,287.30	85.81	27.656	
9,100.00	6,040.00	6,174.16	5,848.09	112.19	32.68	85.58	-2,717.43	2,065.99	2,372.49	2,286.15	86.34	27.479	
9,200.00	6,040.00	6,153.85	5,830.27	112.16	32.74	85.14	-2,718.67	2,056.35	2,375.60	2,286.34	89.25	26.616	
9,300.00	6,040.00	6,114.00	5,794.52	112.15	32.86	84.28	-2,720.53	2,038.85	2,382.77	2,290.93	91.84	25.945	
9,400.00	6,040.00	6,114.00	5,794.52	112.15	32.86	84.28	-2,720.53	2,038.85	2,393.31	2,298.17	95.13	25.157	
9,500.00	6,040.00	6,114.00	5,794.52	112.16	32.86	84.28	-2,720.53	2,038.85	2,407.95	2,309.58	98.37	24.478	
9,600.00	6,040.00	6,114.00	5,794.52	112.19	32.86	84.28	-2,720.53	2,038.85	2,426.64	2,325.11	101.53	23.902	
9,700.00	6,040.00	6,114.00	5,794.52	112.24	32.86	84.28	-2,720.53	2,038.85	2,449.26	2,344.68	104.58	23.420	
9,800.00	6,040.00	6,076.33	5,759.83	112.31	32.93	83.45	-2,721.31	2,024.18	2,474.56	2,367.62	106.94	23.140	
9,900.00	6,040.00	6,067.70	5,751.78	112.39	32.95	83.26	-2,721.32	2,021.09	2,504.10	2,394.44	109.65	22.836	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 127-MWD OWSG, 5738-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,000.00	6,040.00	6,059.62	5,744.20	112.49	32.97	83.07	-2,721.27	2,018.29	2,537.12	2,424.87	112.26	22.601	
10,100.00	6,040.00	6,020.00	5,706.59	112.62	33.04	82.18	-2,720.22	2,005.89	2,574.41	2,460.10	114.30	22.523	
10,200.00	6,040.00	6,020.00	5,706.59	112.77	33.04	82.18	-2,720.22	2,005.89	2,613.67	2,496.90	116.77	22.383	
10,300.00	6,040.00	6,020.00	5,706.59	112.94	33.04	82.18	-2,720.22	2,005.89	2,656.13	2,537.02	119.11	22.300	
10,400.00	6,040.00	6,020.00	5,706.59	113.14	33.04	82.18	-2,720.22	2,005.89	2,701.62	2,580.31	121.31	22.271	
10,500.00	6,040.00	6,020.00	5,706.59	113.36	33.04	82.18	-2,720.22	2,005.89	2,750.00	2,626.62	123.38	22.290	
10,600.00	6,040.00	6,020.00	5,706.59	113.62	33.04	82.18	-2,720.22	2,005.89	2,801.11	2,675.80	125.31	22.353	
10,700.00	6,040.00	6,020.00	5,706.59	113.91	33.04	82.18	-2,720.22	2,005.89	2,854.81	2,727.69	127.13	22.456	
10,800.00	6,040.00	5,994.40	5,681.95	114.24	33.07	81.60	-2,719.27	1,999.02	2,910.72	2,782.16	128.56	22.641	
10,900.00	6,040.00	5,983.38	5,671.27	114.61	33.08	81.35	-2,718.95	1,996.33	2,968.90	2,838.85	130.05	22.829	
11,000.00	6,040.00	5,973.56	5,661.72	115.02	33.09	81.12	-2,718.71	1,994.06	3,029.18	2,897.74	131.44	23.045	
11,100.00	6,040.00	5,964.75	5,653.12	115.49	33.10	80.92	-2,718.54	1,992.14	3,091.46	2,958.70	132.76	23.287	
11,200.00	6,040.00	5,956.81	5,645.35	116.00	33.11	80.74	-2,718.42	1,990.49	3,155.62	3,021.64	133.98	23.552	
11,300.00	6,040.00	5,926.00	5,615.06	116.58	33.14	80.02	-2,718.22	1,984.89	3,221.81	3,086.87	134.94	23.876	
11,400.00	6,040.00	5,926.00	5,615.06	117.22	33.14	80.02	-2,718.22	1,984.89	3,289.31	3,153.24	136.07	24.174	
11,500.00	6,040.00	5,926.00	5,615.06	117.92	33.14	80.02	-2,718.22	1,984.89	3,358.44	3,221.32	137.12	24.493	
11,600.00	6,040.00	5,926.00	5,615.06	118.70	33.14	80.02	-2,718.22	1,984.89	3,429.09	3,291.00	138.09	24.832	
11,700.00	6,040.00	5,926.00	5,615.06	119.56	33.14	80.02	-2,718.22	1,984.89	3,501.17	3,362.18	138.99	25.190	
11,800.00	6,040.00	5,926.00	5,615.06	120.51	33.14	80.02	-2,718.22	1,984.89	3,574.59	3,434.77	139.83	25.564	
11,900.00	6,040.00	5,926.00	5,615.06	121.54	33.14	80.02	-2,718.22	1,984.89	3,649.28	3,508.68	140.60	25.955	
12,000.00	6,040.00	5,926.00	5,615.06	122.66	33.14	80.02	-2,718.22	1,984.89	3,725.16	3,583.84	141.32	26.361	
12,100.00	6,040.00	5,926.00	5,615.06	123.87	33.14	80.02	-2,718.22	1,984.89	3,802.15	3,660.17	141.98	26.780	
12,200.00	6,040.00	5,926.00	5,615.06	125.17	33.14	80.02	-2,718.22	1,984.89	3,880.19	3,737.60	142.59	27.213	
12,300.00	6,040.00	5,926.00	5,615.06	126.57	33.14	80.02	-2,718.22	1,984.89	3,959.22	3,816.07	143.15	27.657	
12,400.00	6,040.00	5,926.00	5,615.06	128.06	33.14	80.02	-2,718.22	1,984.89	4,039.18	3,895.50	143.68	28.113	
12,500.00	6,040.00	5,926.00	5,615.06	129.63	33.14	80.02	-2,718.22	1,984.89	4,120.01	3,975.85	144.16	28.580	
12,600.00	6,040.00	5,926.00	5,615.06	131.29	33.14	80.02	-2,718.22	1,984.89	4,201.67	4,057.07	144.60	29.057	
12,700.00	6,040.00	5,926.00	5,615.06	133.03	33.14	80.02	-2,718.22	1,984.89	4,284.11	4,139.09	145.01	29.543	
12,800.00	6,040.00	5,926.00	5,615.06	134.84	33.14	80.02	-2,718.22	1,984.89	4,367.28	4,221.88	145.40	30.037	
12,900.00	6,040.00	5,926.00	5,615.06	136.71	33.14	80.02	-2,718.22	1,984.89	4,451.14	4,305.39	145.75	30.540	
13,000.00	6,040.00	5,926.00	5,615.06	138.66	33.14	80.02	-2,718.22	1,984.89	4,535.66	4,389.59	146.07	31.051	
13,100.00	6,040.00	5,926.00	5,615.06	140.66	33.14	80.02	-2,718.22	1,984.89	4,620.79	4,474.42	146.37	31.569	
13,200.00	6,040.00	5,926.00	5,615.06	142.71	33.14	80.02	-2,718.22	1,984.89	4,706.51	4,559.87	146.65	32.094	
13,300.00	6,040.00	5,926.00	5,615.06	144.81	33.14	80.02	-2,718.22	1,984.89	4,792.79	4,645.88	146.90	32.626	
13,400.00	6,040.00	5,926.00	5,615.06	146.96	33.14	80.02	-2,718.22	1,984.89	4,879.58	4,732.45	147.14	33.164	
13,500.00	6,040.00	5,926.00	5,615.06	149.14	33.14	80.02	-2,718.22	1,984.89	4,966.88	4,819.52	147.35	33.707	
13,600.00	6,040.00	5,926.00	5,615.06	151.36	33.14	80.02	-2,718.22	1,984.89	5,054.64	4,907.09	147.55	34.256	
13,700.00	6,040.00	5,926.00	5,615.06	153.62	33.14	80.02	-2,718.22	1,984.89	5,142.85	4,995.12	147.74	34.811	
13,800.00	6,040.00	5,926.00	5,615.06	155.91	33.14	80.02	-2,718.22	1,984.89	5,231.49	5,083.58	147.91	35.370	
13,900.00	6,040.00	5,926.00	5,615.06	158.22	33.14	80.02	-2,718.22	1,984.89	5,320.53	5,172.46	148.07	35.934	
14,000.00	6,040.00	5,926.00	5,615.06	160.56	33.14	80.02	-2,718.22	1,984.89	5,409.95	5,261.74	148.21	36.502	
14,100.00	6,040.00	5,926.00	5,615.06	162.92	33.14	80.02	-2,718.22	1,984.89	5,499.74	5,351.39	148.34	37.075	
14,200.00	6,040.00	5,926.00	5,615.06	165.30	33.14	80.02	-2,718.22	1,984.89	5,589.87	5,441.40	148.47	37.651	
14,300.00	6,040.00	5,926.00	5,615.06	167.70	33.14	80.02	-2,718.22	1,984.89	5,680.33	5,531.76	148.58	38.231	
14,400.00	6,040.00	5,926.00	5,615.06	170.12	33.14	80.02	-2,718.22	1,984.89	5,771.11	5,622.43	148.68	38.815	
14,500.00	6,040.00	5,926.00	5,615.06	172.55	33.14	80.02	-2,718.22	1,984.89	5,862.19	5,713.41	148.78	39.403	
14,600.00	6,040.00	5,926.00	5,615.06	175.00	33.14	80.02	-2,718.22	1,984.89	5,953.55	5,804.69	148.86	39.993	
14,700.00	6,040.00	5,926.00	5,615.06	177.46	33.14	80.02	-2,718.22	1,984.89	6,045.19	5,896.25	148.94	40.587	
14,800.00	6,040.00	5,926.00	5,615.06	179.94	33.14	80.02	-2,718.22	1,984.89	6,137.09	5,988.07	149.02	41.184	
14,900.00	6,040.00	5,926.00	5,615.06	182.43	33.14	80.02	-2,718.22	1,984.89	6,229.24	6,080.15	149.08	41.784	
15,000.00	6,040.00	5,926.00	5,615.06	184.92	33.14	80.02	-2,718.22	1,984.89	6,321.63	6,172.48	149.14	42.386	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ RSU ANSCHUTZ FED 4-62-2-3340C - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 127-MWD OWSG, 5738-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,100.00	6,040.00	5,926.00	5,615.06	187.43	33.14	80.02	-2,718.22	1,984.89	6,414.24	6,265.04	149.20	42.991	
15,200.00	6,040.00	5,926.00	5,615.06	189.95	33.14	80.02	-2,718.22	1,984.89	6,507.08	6,357.82	149.25	43.598	
15,300.00	6,040.00	5,926.00	5,615.06	192.48	33.14	80.02	-2,718.22	1,984.89	6,600.12	6,450.82	149.30	44.208	
15,400.00	6,040.00	5,926.00	5,615.06	195.01	33.14	80.02	-2,718.22	1,984.89	6,693.36	6,544.02	149.34	44.820	
15,500.00	6,040.00	5,926.00	5,615.06	197.55	33.14	80.02	-2,718.22	1,984.89	6,786.80	6,637.42	149.38	45.434	
15,600.00	6,040.00	5,926.00	5,615.06	200.10	33.14	80.02	-2,718.22	1,984.89	6,880.42	6,731.01	149.41	46.050	
15,700.00	6,040.00	5,926.00	5,615.06	202.65	33.14	80.02	-2,718.22	1,984.89	6,974.22	6,824.78	149.44	46.668	
15,800.00	6,040.00	5,882.33	5,571.71	205.22	33.15	79.01	-2,718.03	1,979.78	7,066.15	6,916.70	149.45	47.283	
15,900.00	6,040.00	5,881.85	5,571.23	207.78	33.15	79.00	-2,718.03	1,979.75	7,160.24	7,010.76	149.47	47.904	
16,000.00	6,040.00	5,881.39	5,570.77	210.36	33.15	78.99	-2,718.02	1,979.72	7,254.48	7,104.99	149.50	48.526	
16,100.00	6,040.00	5,880.94	5,570.32	212.93	33.15	78.98	-2,718.02	1,979.68	7,348.88	7,199.36	149.52	49.151	
16,200.00	6,040.00	5,880.50	5,569.88	215.52	33.15	78.97	-2,718.01	1,979.65	7,443.42	7,293.88	149.54	49.777	
16,300.00	6,040.00	5,880.07	5,569.46	218.11	33.15	78.96	-2,718.01	1,979.62	7,538.10	7,388.55	149.55	50.404	
16,400.00	6,040.00	5,879.66	5,569.04	220.70	33.15	78.95	-2,718.00	1,979.60	7,632.92	7,483.35	149.57	51.033	
16,500.00	6,040.00	5,879.25	5,568.63	223.29	33.15	78.94	-2,718.00	1,979.57	7,727.87	7,578.29	149.58	51.664	
16,600.00	6,040.00	5,878.85	5,568.24	225.89	33.15	78.93	-2,718.00	1,979.54	7,822.94	7,673.35	149.59	52.295	
16,700.00	6,040.00	5,878.46	5,567.85	228.50	33.15	78.92	-2,717.99	1,979.52	7,918.14	7,768.53	149.60	52.928	
16,800.00	6,040.00	5,878.09	5,567.47	231.11	33.15	78.91	-2,717.99	1,979.49	8,013.45	7,863.84	149.61	53.562	
16,900.00	6,040.00	5,877.72	5,567.11	233.72	33.15	78.90	-2,717.98	1,979.47	8,108.87	7,959.26	149.62	54.198	
17,000.00	6,040.00	5,877.36	5,566.75	236.33	33.15	78.89	-2,717.98	1,979.45	8,204.40	8,054.78	149.62	54.834	
17,100.00	6,040.00	5,877.00	5,566.39	238.95	33.15	78.89	-2,717.98	1,979.42	8,300.04	8,150.42	149.63	55.472	
17,200.00	6,040.00	5,876.66	5,566.05	241.57	33.15	78.88	-2,717.97	1,979.40	8,395.78	8,246.15	149.63	56.111	
17,300.00	6,040.00	5,876.32	5,565.71	244.19	33.15	78.87	-2,717.97	1,979.38	8,491.62	8,341.99	149.63	56.750	
17,400.00	6,040.00	5,875.99	5,565.38	246.82	33.15	78.86	-2,717.96	1,979.36	8,587.55	8,437.92	149.63	57.391	
17,500.00	6,040.00	5,832.00	5,521.42	249.45	33.17	77.84	-2,717.24	1,978.70	8,685.61	8,535.99	149.62	58.050	
17,600.00	6,040.00	5,832.00	5,521.42	252.08	33.17	77.84	-2,717.24	1,978.70	8,781.69	8,632.07	149.63	58.691	
17,700.00	6,040.00	5,832.00	5,521.42	254.71	33.17	77.84	-2,717.24	1,978.70	8,877.86	8,728.24	149.63	59.334	
17,800.00	6,040.00	5,832.00	5,521.42	257.35	33.17	77.84	-2,717.24	1,978.70	8,974.11	8,824.49	149.63	59.977	
17,900.00	6,040.00	5,832.00	5,521.42	259.99	33.17	77.84	-2,717.24	1,978.70	9,070.45	8,920.82	149.62	60.621	
18,000.00	6,040.00	5,832.00	5,521.42	262.63	33.17	77.84	-2,717.24	1,978.70	9,166.86	9,017.24	149.62	61.266	
18,100.00	6,040.00	5,832.00	5,521.42	265.27	33.17	77.84	-2,717.24	1,978.70	9,263.35	9,113.73	149.62	61.912	
18,200.00	6,040.00	5,832.00	5,521.42	267.91	33.17	77.84	-2,717.24	1,978.70	9,359.91	9,210.29	149.62	62.558	
18,300.00	6,040.00	5,832.00	5,521.42	270.56	33.17	77.84	-2,717.24	1,978.70	9,456.54	9,306.93	149.62	63.206	
18,400.00	6,040.00	5,832.00	5,521.42	273.21	33.17	77.84	-2,717.24	1,978.70	9,553.25	9,403.63	149.61	63.853	
18,500.00	6,040.00	5,832.00	5,521.42	275.86	33.17	77.84	-2,717.24	1,978.70	9,650.02	9,500.41	149.61	64.502	
18,600.00	6,040.00	5,832.00	5,521.42	278.51	33.17	77.84	-2,717.24	1,978.70	9,746.85	9,597.25	149.61	65.150	
18,700.00	6,040.00	5,832.00	5,521.42	281.16	33.17	77.84	-2,717.24	1,978.70	9,843.75	9,694.15	149.60	65.800	
18,800.00	6,040.00	5,832.00	5,521.42	283.81	33.17	77.84	-2,717.24	1,978.70	9,940.71	9,791.11	149.60	66.450	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference				Offset				Semi Major Axis				Distance	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-92.80	-120.10	-2,452.88	2,455.92				
100.00	100.00	75.35	75.35	0.13	0.21	-92.80	-120.08	-2,452.90	2,455.84	2,455.49	0.34	7,147.604	
200.00	199.98	172.58	172.58	0.48	0.56	117.99	-119.96	-2,453.02	2,456.78	2,455.74	1.04	2,360.019	
300.00	299.84	269.75	269.75	0.85	0.90	118.05	-119.75	-2,453.26	2,459.48	2,457.73	1.75	1,407.364	
400.00	399.45	366.97	366.96	1.22	1.25	118.15	-119.80	-2,453.59	2,463.93	2,461.47	2.47	999.488	
500.00	498.70	462.03	462.03	1.62	1.58	118.27	-120.21	-2,454.00	2,470.18	2,466.98	3.19	773.416	
600.00	597.47	555.60	555.59	2.05	1.91	118.41	-120.67	-2,454.61	2,478.35	2,474.41	3.94	628.879	
700.00	695.62	651.25	651.24	2.51	2.25	118.60	-121.10	-2,455.38	2,488.41	2,483.68	4.72	526.677	
800.00	793.06	747.47	747.45	3.01	2.59	118.82	-121.48	-2,456.23	2,500.34	2,494.80	5.54	451.316	
900.00	889.64	845.91	845.89	3.56	2.94	119.08	-121.85	-2,457.08	2,514.08	2,507.69	6.40	393.059	
1,000.00	985.27	951.51	951.48	4.14	3.32	119.42	-122.06	-2,457.83	2,529.60	2,522.29	7.31	346.135	
1,100.00	1,079.82	1,053.86	1,053.83	4.78	3.67	119.82	-120.60	-2,457.98	2,546.53	2,538.29	8.24	309.212	
1,200.00	1,173.17	1,159.71	1,159.59	5.46	4.04	120.33	-116.45	-2,457.92	2,565.44	2,556.23	9.21	278.617	
1,300.00	1,265.21	1,260.65	1,260.30	6.20	4.39	120.88	-109.65	-2,457.07	2,585.91	2,575.71	10.20	253.530	
1,400.00	1,355.84	1,331.13	1,330.44	6.99	4.64	121.19	-102.92	-2,456.43	2,608.87	2,597.75	11.12	234.617	
1,500.00	1,444.94	1,391.28	1,390.25	7.84	4.85	121.39	-96.47	-2,456.40	2,635.14	2,623.11	12.03	218.981	
1,600.00	1,532.39	1,452.11	1,450.65	8.75	5.08	121.57	-89.28	-2,456.84	2,664.74	2,651.76	12.98	205.297	
1,700.00	1,618.11	1,528.13	1,525.98	9.71	5.36	121.93	-79.06	-2,457.73	2,697.52	2,683.51	14.01	192.507	
1,800.00	1,701.97	1,613.91	1,610.66	10.74	5.69	122.44	-65.42	-2,458.25	2,732.91	2,717.79	15.11	180.844	
1,900.00	1,783.88	1,698.34	1,693.93	11.82	6.02	122.93	-51.53	-2,458.34	2,770.89	2,754.66	16.23	170.720	
2,000.00	1,863.74	1,780.01	1,774.47	12.96	6.34	123.36	-37.95	-2,458.07	2,811.53	2,794.18	17.35	162.022	
2,100.00	1,941.45	1,829.76	1,823.48	14.16	6.55	123.29	-29.41	-2,457.98	2,855.29	2,836.92	18.37	155.465	
2,200.00	2,016.92	1,881.60	1,874.50	15.41	6.76	123.20	-20.22	-2,458.03	2,902.29	2,882.90	19.39	149.671	
2,300.00	2,090.05	1,930.45	1,922.52	16.73	6.96	123.01	-11.28	-2,458.22	2,952.51	2,932.10	20.41	144.691	
2,400.00	2,160.76	2,007.52	1,998.27	18.10	7.28	123.23	2.95	-2,458.56	3,005.71	2,984.16	21.55	139.492	
2,500.00	2,228.95	2,111.54	2,100.77	19.53	7.71	123.85	20.66	-2,458.05	3,061.02	3,038.21	22.81	134.189	
2,600.00	2,294.55	2,177.79	2,166.19	21.01	7.99	123.79	31.12	-2,457.19	3,118.49	3,094.58	23.91	130.452	
2,700.00	2,357.48	2,225.65	2,213.43	22.55	8.19	123.36	38.73	-2,456.57	3,178.73	3,153.82	24.91	127.608	
2,800.00	2,418.42	2,271.16	2,258.34	24.13	8.38	123.82	46.07	-2,456.01	3,241.30	3,215.41	25.89	125.207	
2,900.00	2,479.25	2,316.23	2,302.81	25.71	8.57	124.61	53.42	-2,455.49	3,305.08	3,278.25	26.83	123.166	
3,000.00	2,540.09	2,357.88	2,343.88	27.31	8.74	125.32	60.31	-2,455.04	3,369.98	3,342.24	27.74	121.485	
3,100.00	2,600.93	2,397.35	2,382.78	28.90	8.91	126.00	66.97	-2,454.67	3,436.00	3,407.39	28.61	120.103	
3,200.00	2,661.77	2,436.30	2,421.14	30.51	9.08	126.65	73.67	-2,454.38	3,503.08	3,473.63	29.45	118.958	
3,300.00	2,722.61	2,474.73	2,458.98	32.11	9.25	127.29	80.41	-2,454.14	3,571.18	3,540.92	30.26	118.023	
3,400.00	2,783.44	2,512.65	2,496.29	33.72	9.41	127.92	87.18	-2,453.97	3,640.25	3,609.21	31.04	117.272	
3,500.00	2,844.28	2,576.86	2,559.45	35.34	9.69	128.96	98.78	-2,453.61	3,710.11	3,678.18	31.93	116.196	
3,600.00	2,905.12	2,650.89	2,632.26	36.95	10.01	130.13	112.07	-2,452.70	3,780.41	3,747.57	32.84	115.100	
3,700.00	2,965.96	2,732.74	2,712.78	38.57	10.37	131.39	126.66	-2,451.08	3,851.08	3,817.31	33.77	114.023	
3,800.00	3,026.79	2,848.75	2,827.10	40.19	10.87	133.11	146.10	-2,447.69	3,921.76	3,886.91	34.85	112.533	
3,900.00	3,087.63	3,900.00	2,852.59	41.81	15.43	133.48	149.87	-2,446.55	3,992.34	3,952.46	39.89	100.092	
4,000.00	3,148.47	2,964.58	2,941.47	43.43	11.37	134.75	163.92	-2,443.40	4,063.58	4,027.18	36.40	111.646	
4,100.00	3,209.31	3,004.48	2,980.90	45.05	11.54	135.29	169.93	-2,442.12	4,135.49	4,098.44	37.06	111.591	
4,200.00	3,270.14	3,044.26	3,020.21	46.68	11.70	135.82	175.90	-2,440.99	4,208.08	4,170.37	37.71	111.604	
4,300.00	3,330.98	3,083.93	3,059.42	48.31	11.87	136.34	181.81	-2,440.00	4,281.29	4,242.95	38.34	111.678	
4,400.00	3,391.82	3,146.75	3,121.57	49.93	12.13	137.15	190.94	-2,438.61	4,355.00	4,315.93	39.07	111.478	
4,500.00	3,452.66	3,216.21	3,190.36	51.56	12.42	138.01	200.44	-2,437.15	4,428.94	4,389.12	39.82	111.221	
4,600.00	3,513.49	3,287.46	3,261.01	53.19	12.72	138.86	209.52	-2,435.73	4,503.07	4,462.50	40.58	110.970	
4,700.00	3,574.33	3,358.29	3,331.77	54.82	13.01	139.52	218.63	-2,434.35	4,577.20	4,535.62	41.34	110.726	
4,800.00	3,635.17	3,429.12	3,402.60	56.45	13.30	140.18	227.74	-2,433.00	4,651.33	4,608.75	42.10	110.482	
4,900.00	3,696.01	3,500.00	3,473.48	58.08	13.59	140.84	236.85	-2,431.65	4,725.46	4,681.88	42.86	110.238	
5,000.00	3,756.84	3,570.84	3,544.32	59.71	13.88	141.50	245.96	-2,430.30	4,799.59	4,756.01	43.62	110.000	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES 11-14-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	8,940.57	6,168.36	61.34	54.90	131.39	-2,775.30	-2,265.24	4,487.23	4,389.39	97.83	45.866	
5,148.11	3,846.95	8,964.65	6,168.36	62.13	55.29	131.17	-2,799.36	-2,264.05	4,487.06	4,387.95	99.11	45.275	
5,200.00	3,878.52	8,976.00	6,168.37	62.97	55.48	131.07	-2,810.69	-2,263.50	4,487.29	4,387.09	100.19	44.787	
5,300.00	3,939.36	9,027.47	6,168.39	64.61	56.33	130.60	-2,862.11	-2,261.34	4,488.86	4,385.99	102.87	43.638	
5,400.00	4,000.19	9,071.00	6,168.29	66.24	57.04	130.20	-2,905.63	-2,259.97	4,492.08	4,386.70	105.38	42.627	
5,500.00	4,061.03	9,179.83	6,168.49	67.87	58.84	129.20	-3,014.38	-2,256.05	4,496.31	4,387.06	109.25	41.155	
5,600.00	4,121.87	9,243.46	6,168.53	69.51	59.90	128.62	-3,077.96	-2,253.51	4,501.42	4,389.21	112.20	40.118	
5,700.00	4,182.71	9,319.97	6,168.31	71.14	61.17	127.92	-3,154.41	-2,250.63	4,507.69	4,392.25	115.44	39.048	
5,800.00	4,243.54	9,400.00	6,168.47	72.77	62.21	126.94	-3,263.14	-2,245.45	4,514.52	4,450.81	63.70	70.867	
5,900.00	4,304.38	9,500.71	6,168.53	74.41	64.20	126.29	-3,334.93	-2,241.61	4,522.14	4,399.60	122.54	36.903	
6,000.00	4,365.22	9,768.19	6,168.52	76.04	68.75	123.90	-3,601.70	-2,223.03	4,530.64	4,400.70	129.93	34.869	
6,100.00	4,426.06	9,826.88	6,168.72	77.68	69.76	123.39	-3,660.11	-2,217.29	4,537.62	4,404.75	132.87	34.151	
6,200.00	4,486.90	9,904.20	6,168.78	79.31	71.09	122.71	-3,737.08	-2,209.91	4,545.74	4,409.53	136.21	33.374	
6,300.00	4,547.73	9,963.74	6,168.74	80.95	72.12	122.19	-3,796.35	-2,204.25	4,554.90	4,415.75	139.15	32.733	
6,400.00	4,608.57	10,021.00	6,168.55	82.58	73.11	121.68	-3,853.38	-2,199.14	4,565.41	4,423.37	142.04	32.141	
6,500.00	4,669.41	6,500.00	6,167.67	84.22	19.78	120.88	-3,943.76	-2,190.90	4,576.69	4,490.39	86.30	53.035	
6,600.00	4,730.25	10,147.92	6,167.24	85.86	75.30	120.56	-3,979.78	-2,187.67	4,589.22	4,441.15	148.07	30.994	
6,700.00	4,791.08	10,171.93	6,167.05	87.49	75.72	120.35	-4,003.71	-2,185.79	4,603.54	4,453.40	150.14	30.662	
6,800.00	4,851.92	10,211.00	6,166.91	89.13	76.39	120.01	-4,042.69	-2,183.23	4,619.68	4,467.16	152.52	30.288	
6,900.00	4,912.76	10,283.30	6,166.81	90.76	77.64	119.37	-4,114.85	-2,178.69	4,637.24	4,481.57	155.68	29.788	
7,000.00	4,973.60	10,332.41	6,166.68	92.40	78.49	118.94	-4,163.85	-2,175.35	4,655.49	4,497.24	158.25	29.418	
7,100.00	5,034.43	10,361.96	6,166.60	94.04	79.00	118.69	-4,193.35	-2,173.63	4,675.34	4,515.02	160.32	29.163	
7,200.00	5,095.27	10,401.00	6,166.50	95.67	79.67	118.34	-4,232.34	-2,171.76	4,696.82	4,534.24	162.58	28.890	
7,300.00	5,156.11	10,457.86	6,165.91	97.31	80.65	117.84	-4,289.15	-2,169.41	4,719.66	4,554.40	165.26	28.559	
7,400.00	5,216.95	10,496.00	6,165.03	98.95	81.30	117.51	-4,327.25	-2,167.87	4,743.51	4,576.08	167.43	28.331	
7,500.00	5,277.78	10,536.87	6,164.19	100.59	82.01	117.15	-4,368.08	-2,166.45	4,768.78	4,599.14	169.64	28.112	
7,600.00	5,338.62	10,563.69	6,163.97	102.22	82.47	116.91	-4,394.89	-2,165.76	4,795.67	4,624.24	171.43	27.974	
7,700.00	5,399.46	10,591.00	6,164.03	103.86	82.93	116.68	-4,422.20	-2,165.25	4,824.09	4,650.91	173.19	27.855	
7,800.00	5,460.30	10,681.29	6,164.26	105.50	84.48	115.90	-4,512.48	-2,163.75	4,853.58	4,676.97	176.61	27.481	
7,900.00	5,521.24	10,742.36	6,164.17	107.13	85.53	113.72	-4,573.54	-2,162.67	4,883.46	4,704.24	179.23	27.247	
8,000.00	5,584.83	10,809.20	6,164.22	108.61	86.68	105.00	-4,640.37	-2,161.59	4,902.69	4,720.78	181.91	26.951	
8,100.00	5,650.69	10,828.00	6,164.24	109.85	87.00	96.12	-4,659.16	-2,161.29	4,905.92	4,722.81	183.11	26.792	
8,200.00	5,716.83	10,828.00	6,164.24	110.82	87.00	87.43	-4,659.16	-2,161.29	4,893.80	4,710.24	183.56	26.661	
8,300.00	5,781.24	10,828.00	6,164.24	111.52	87.00	79.44	-4,659.16	-2,161.29	4,866.63	4,682.88	183.76	26.484	
8,400.00	5,841.96	10,828.00	6,164.24	111.98	87.00	72.67	-4,659.16	-2,161.29	4,824.99	4,641.27	183.72	26.263	
8,500.00	5,897.14	10,828.00	6,164.24	112.25	87.00	67.42	-4,659.16	-2,161.29	4,769.78	4,586.29	183.49	25.995	
8,600.00	5,945.12	10,828.00	6,164.24	112.37	87.00	63.86	-4,659.16	-2,161.29	4,702.23	4,519.10	183.13	25.677	
8,700.00	5,984.42	10,828.00	6,164.24	112.39	87.00	62.23	-4,659.16	-2,161.29	4,623.91	4,441.21	182.70	25.309	
8,800.00	6,013.86	10,828.00	6,164.24	112.35	87.00	63.26	-4,659.16	-2,161.29	4,536.71	4,354.43	182.28	24.889	
8,900.00	6,032.54	10,828.00	6,164.24	112.30	87.00	69.74	-4,659.16	-2,161.29	4,442.84	4,260.91	181.93	24.421	
9,000.00	6,039.89	10,828.00	6,164.24	112.24	87.00	98.28	-4,659.16	-2,161.29	4,344.81	4,163.10	181.70	23.911	
9,100.00	6,040.00	10,828.00	6,164.24	112.19	87.00	107.57	-4,659.16	-2,161.29	4,245.46	4,063.89	181.57	23.382	
9,200.00	6,040.00	10,828.00	6,164.24	112.16	87.00	107.57	-4,659.16	-2,161.29	4,146.14	3,964.70	181.44	22.852	
9,300.00	6,040.00	10,828.00	6,164.24	112.15	87.00	107.57	-4,659.16	-2,161.29	4,046.85	3,865.56	181.30	22.322	
9,400.00	6,040.00	10,828.00	6,164.24	112.15	87.00	107.57	-4,659.16	-2,161.29	3,947.60	3,766.45	181.15	21.792	
9,500.00	6,040.00	10,828.00	6,164.24	112.16	87.00	107.57	-4,659.16	-2,161.29	3,848.39	3,667.39	180.99	21.263	
9,600.00	6,040.00	10,828.00	6,164.24	112.19	87.00	107.57	-4,659.16	-2,161.29	3,749.22	3,568.39	180.83	20.733	
9,700.00	6,040.00	10,828.00	6,164.24	112.24	87.00	107.57	-4,659.16	-2,161.29	3,650.09	3,469.43	180.66	20.204	
9,800.00	6,040.00	10,828.00	6,164.24	112.31	87.00	107.57	-4,659.16	-2,161.29	3,551.01	3,370.53	180.48	19.675	
9,900.00	6,040.00	10,828.00	6,164.24	112.39	87.00	107.57	-4,659.16	-2,161.29	3,451.99	3,271.70	180.29	19.147	
10,000.00	6,040.00	10,828.00	6,164.24	112.49	87.00	107.57	-4,659.16	-2,161.29	3,353.02	3,172.93	180.09	18.618	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES 11-14-3HNB - OWB - FINAL SURVEY													Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.00	6,040.00	10,828.00	6,164.24	112.62	87.00	107.57	-4,659.16	-2,161.29	3,254.12	3,074.23	179.88	18.090		
10,200.00	6,040.00	10,828.00	6,164.24	112.77	87.00	107.57	-4,659.16	-2,161.29	3,155.28	2,975.62	179.66	17.562		
10,300.00	6,040.00	10,828.00	6,164.24	112.94	87.00	107.57	-4,659.16	-2,161.29	3,056.52	2,877.10	179.43	17.035		
10,400.00	6,040.00	10,828.00	6,164.24	113.14	87.00	107.57	-4,659.16	-2,161.29	2,957.85	2,778.67	179.18	16.508		
10,500.00	6,040.00	10,828.00	6,164.24	113.36	87.00	107.57	-4,659.16	-2,161.29	2,859.27	2,680.35	178.91	15.981		
10,600.00	6,040.00	10,828.00	6,164.24	113.62	87.00	107.57	-4,659.16	-2,161.29	2,760.78	2,582.16	178.63	15.455		
10,700.00	6,040.00	10,828.00	6,164.24	113.91	87.00	107.57	-4,659.16	-2,161.29	2,662.42	2,484.09	178.33	14.930		
10,800.00	6,040.00	10,828.00	6,164.24	114.24	87.00	107.57	-4,659.16	-2,161.29	2,564.18	2,386.17	178.01	14.405		
10,900.00	6,040.00	10,828.00	6,164.24	114.61	87.00	107.57	-4,659.16	-2,161.29	2,466.08	2,288.41	177.67	13.880		
11,000.00	6,040.00	10,828.00	6,164.24	115.02	87.00	107.57	-4,659.16	-2,161.29	2,368.13	2,190.84	177.30	13.357		
11,100.00	6,040.00	10,828.00	6,164.24	115.49	87.00	107.57	-4,659.16	-2,161.29	2,270.37	2,093.47	176.90	12.834		
11,200.00	6,040.00	10,828.00	6,164.24	116.00	87.00	107.57	-4,659.16	-2,161.29	2,172.81	1,996.34	176.48	12.312		
11,300.00	6,040.00	10,828.00	6,164.24	116.58	87.00	107.57	-4,659.16	-2,161.29	2,075.49	1,899.47	176.02	11.792		
11,400.00	6,040.00	10,828.00	6,164.24	117.22	87.00	107.57	-4,659.16	-2,161.29	1,978.43	1,802.91	175.52	11.272		
11,500.00	6,040.00	10,828.00	6,164.24	117.92	87.00	107.57	-4,659.16	-2,161.29	1,881.68	1,706.70	174.98	10.754		
11,600.00	6,040.00	10,828.00	6,164.24	118.70	87.00	107.57	-4,659.16	-2,161.29	1,785.29	1,610.89	174.40	10.237		
11,700.00	6,040.00	10,828.00	6,164.24	119.56	87.00	107.57	-4,659.16	-2,161.29	1,689.31	1,515.55	173.76	9.722		
11,800.00	6,040.00	10,828.00	6,164.24	120.51	87.00	107.57	-4,659.16	-2,161.29	1,593.84	1,420.76	173.07	9.209		
11,900.00	6,040.00	10,828.00	6,164.24	121.54	87.00	107.57	-4,659.16	-2,161.29	1,498.95	1,326.63	172.32	8.699		
12,000.00	6,040.00	10,828.00	6,164.24	122.66	87.00	107.57	-4,659.16	-2,161.29	1,404.77	1,233.26	171.51	8.191		
12,100.00	6,040.00	10,828.00	6,164.24	123.87	87.00	107.57	-4,659.16	-2,161.29	1,311.45	1,140.83	170.62	7.686		
12,200.00	6,040.00	10,828.00	6,164.24	125.17	87.00	107.57	-4,659.16	-2,161.29	1,219.20	1,049.53	169.67	7.186		
12,300.00	6,040.00	10,828.00	6,164.24	126.57	87.00	107.57	-4,659.16	-2,161.29	1,128.26	959.62	168.64	6.690		
12,400.00	6,040.00	10,828.00	6,164.24	128.06	87.00	107.57	-4,659.16	-2,161.29	1,038.99	871.43	167.56	6.201		
12,500.00	6,040.00	10,828.00	6,164.24	129.63	87.00	107.57	-4,659.16	-2,161.29	951.86	785.42	166.44	5.719		
12,600.00	6,040.00	10,828.00	6,164.24	131.29	87.00	107.57	-4,659.16	-2,161.29	867.51	702.21	165.30	5.248		
12,700.00	6,040.00	10,828.00	6,164.24	133.03	87.00	107.57	-4,659.16	-2,161.29	786.83	622.64	164.19	4.792		
12,800.00	6,040.00	10,828.00	6,164.24	134.84	87.00	107.57	-4,659.16	-2,161.29	711.08	547.94	163.14	4.359		
12,900.00	6,040.00	10,828.00	6,164.24	136.71	87.00	107.57	-4,659.16	-2,161.29	642.00	479.85	162.15	3.959		
13,000.00	6,040.00	10,828.00	6,164.24	138.66	87.00	107.57	-4,659.16	-2,161.29	581.97	420.88	161.10	3.613		
13,100.00	6,040.00	10,828.00	6,164.24	140.66	87.00	107.57	-4,659.16	-2,161.29	534.07	374.20	159.86	3.341		
13,200.00	6,040.00	10,828.00	6,164.24	142.71	87.00	107.57	-4,659.16	-2,161.29	501.76	342.70	159.06	3.155		
13,300.00	6,040.00	10,828.00	6,164.24	144.81	87.00	107.57	-4,659.16	-2,161.29	488.15	325.55	162.60	3.002		
13,317.34	6,040.00	10,828.00	6,164.24	145.18	87.00	107.57	-4,659.16	-2,161.29	487.84	323.73	164.11	2.973 CC		
13,400.00	6,040.00	10,828.00	6,164.24	146.96	87.00	107.57	-4,659.16	-2,161.29	494.79	320.67	174.13	2.842 ES		
13,500.00	6,040.00	10,828.00	6,164.24	149.14	87.00	107.57	-4,659.16	-2,161.29	520.92	333.79	187.12	2.784 SF		
13,600.00	6,040.00	10,828.00	6,164.24	151.36	87.00	107.57	-4,659.16	-2,161.29	563.81	367.10	196.71	2.866		
13,700.00	6,040.00	10,828.00	6,164.24	153.62	87.00	107.57	-4,659.16	-2,161.29	620.01	417.51	202.50	3.062		
13,800.00	6,040.00	10,828.00	6,164.24	155.91	87.00	107.57	-4,659.16	-2,161.29	686.26	480.77	205.49	3.340		
13,900.00	6,040.00	10,828.00	6,164.24	158.22	87.00	107.57	-4,659.16	-2,161.29	759.92	553.22	206.70	3.677		
14,000.00	6,040.00	10,828.00	6,164.24	160.56	87.00	107.57	-4,659.16	-2,161.29	839.05	632.18	206.88	4.056		
14,100.00	6,040.00	10,828.00	6,164.24	162.92	87.00	107.57	-4,659.16	-2,161.29	922.25	715.75	206.49	4.466		
14,200.00	6,040.00	10,828.00	6,164.24	165.30	87.00	107.57	-4,659.16	-2,161.29	1,008.50	802.68	205.83	4.900		
14,300.00	6,040.00	10,828.00	6,164.24	167.70	87.00	107.57	-4,659.16	-2,161.29	1,097.09	892.06	205.03	5.351		
14,400.00	6,040.00	10,828.00	6,164.24	170.12	87.00	107.57	-4,659.16	-2,161.29	1,187.49	983.30	204.19	5.816		
14,500.00	6,040.00	10,828.00	6,164.24	172.55	87.00	107.57	-4,659.16	-2,161.29	1,279.32	1,075.96	203.36	6.291		
14,600.00	6,040.00	10,828.00	6,164.24	175.00	87.00	107.57	-4,659.16	-2,161.29	1,372.30	1,169.73	202.57	6.774		
14,700.00	6,040.00	10,828.00	6,164.24	177.46	87.00	107.57	-4,659.16	-2,161.29	1,466.20	1,264.38	201.82	7.265		
14,800.00	6,040.00	10,828.00	6,164.24	179.94	87.00	107.57	-4,659.16	-2,161.29	1,560.85	1,359.74	201.12	7.761		
14,900.00	6,040.00	10,828.00	6,164.24	182.43	87.00	107.57	-4,659.16	-2,161.29	1,656.14	1,455.67	200.47	8.261		
15,000.00	6,040.00	10,828.00	6,164.24	184.92	87.00	107.57	-4,659.16	-2,161.29	1,751.95	1,552.09	199.86	8.766		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES 11-14-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,100.00	6,040.00	10,828.00	6,164.24	187.43	87.00	107.57	-4,659.16	-2,161.29	1,848.21	1,648.90	199.31	9.273	
15,200.00	6,040.00	10,828.00	6,164.24	189.95	87.00	107.57	-4,659.16	-2,161.29	1,944.84	1,746.05	198.79	9.783	
15,300.00	6,040.00	10,828.00	6,164.24	192.48	87.00	107.57	-4,659.16	-2,161.29	2,041.79	1,843.48	198.31	10.296	
15,400.00	6,040.00	10,828.00	6,164.24	195.01	87.00	107.57	-4,659.16	-2,161.29	2,139.03	1,941.16	197.87	10.810	
15,500.00	6,040.00	10,828.00	6,164.24	197.55	87.00	107.57	-4,659.16	-2,161.29	2,236.51	2,039.05	197.46	11.326	
15,600.00	6,040.00	10,828.00	6,164.24	200.10	87.00	107.57	-4,659.16	-2,161.29	2,334.21	2,137.12	197.08	11.844	
15,700.00	6,040.00	10,828.00	6,164.24	202.65	87.00	107.57	-4,659.16	-2,161.29	2,432.09	2,235.36	196.73	12.362	
15,800.00	6,040.00	10,828.00	6,164.24	205.22	87.00	107.57	-4,659.16	-2,161.29	2,530.14	2,333.73	196.40	12.882	
15,900.00	6,040.00	10,828.00	6,164.24	207.78	87.00	107.57	-4,659.16	-2,161.29	2,628.33	2,432.23	196.10	13.403	
16,000.00	6,040.00	10,828.00	6,164.24	210.36	87.00	107.57	-4,659.16	-2,161.29	2,726.66	2,530.84	195.81	13.925	
16,100.00	6,040.00	10,828.00	6,164.24	212.93	87.00	107.57	-4,659.16	-2,161.29	2,825.10	2,629.55	195.55	14.447	
16,200.00	6,040.00	10,828.00	6,164.24	215.52	87.00	107.57	-4,659.16	-2,161.29	2,923.65	2,728.35	195.30	14.970	
16,300.00	6,040.00	10,828.00	6,164.24	218.11	87.00	107.57	-4,659.16	-2,161.29	3,022.29	2,827.23	195.06	15.494	
16,400.00	6,040.00	10,828.00	6,164.24	220.70	87.00	107.57	-4,659.16	-2,161.29	3,121.02	2,926.18	194.84	16.018	
16,500.00	6,040.00	10,828.00	6,164.24	223.29	87.00	107.57	-4,659.16	-2,161.29	3,219.83	3,025.20	194.63	16.543	
16,600.00	6,040.00	10,828.00	6,164.24	225.89	87.00	107.57	-4,659.16	-2,161.29	3,318.71	3,124.27	194.44	17.068	
16,700.00	6,040.00	10,828.00	6,164.24	228.50	87.00	107.57	-4,659.16	-2,161.29	3,417.66	3,223.40	194.26	17.594	
16,800.00	6,040.00	10,828.00	6,164.24	231.11	87.00	107.57	-4,659.16	-2,161.29	3,516.66	3,322.58	194.08	18.119	
16,900.00	6,040.00	10,828.00	6,164.24	233.72	87.00	107.57	-4,659.16	-2,161.29	3,615.72	3,421.80	193.92	18.645	
17,000.00	6,040.00	10,828.00	6,164.24	236.33	87.00	107.57	-4,659.16	-2,161.29	3,714.83	3,521.06	193.77	19.172	
17,100.00	6,040.00	10,828.00	6,164.24	238.95	87.00	107.57	-4,659.16	-2,161.29	3,813.99	3,620.37	193.62	19.698	
17,200.00	6,040.00	10,828.00	6,164.24	241.57	87.00	107.57	-4,659.16	-2,161.29	3,913.19	3,719.71	193.48	20.225	
17,300.00	6,040.00	10,828.00	6,164.24	244.19	87.00	107.57	-4,659.16	-2,161.29	4,012.43	3,819.08	193.35	20.752	
17,400.00	6,040.00	10,828.00	6,164.24	246.82	87.00	107.57	-4,659.16	-2,161.29	4,111.70	3,918.48	193.23	21.279	
17,500.00	6,040.00	10,828.00	6,164.24	249.45	87.00	107.57	-4,659.16	-2,161.29	4,211.01	4,017.90	193.11	21.806	
17,600.00	6,040.00	10,828.00	6,164.24	252.08	87.00	107.57	-4,659.16	-2,161.29	4,310.35	4,117.36	193.00	22.334	
17,700.00	6,040.00	10,828.00	6,164.24	254.71	87.00	107.57	-4,659.16	-2,161.29	4,409.73	4,216.84	192.89	22.861	
17,800.00	6,040.00	10,828.00	6,164.24	257.35	87.00	107.57	-4,659.16	-2,161.29	4,509.13	4,316.34	192.79	23.389	
17,900.00	6,040.00	10,828.00	6,164.24	259.99	87.00	107.57	-4,659.16	-2,161.29	4,608.55	4,415.86	192.69	23.916	
18,000.00	6,040.00	10,828.00	6,164.24	262.63	87.00	107.57	-4,659.16	-2,161.29	4,708.00	4,515.40	192.60	24.444	
18,100.00	6,040.00	10,828.00	6,164.24	265.27	87.00	107.57	-4,659.16	-2,161.29	4,807.48	4,614.96	192.52	24.972	
18,200.00	6,040.00	10,828.00	6,164.24	267.91	87.00	107.57	-4,659.16	-2,161.29	4,906.97	4,714.54	192.43	25.500	
18,300.00	6,040.00	10,828.00	6,164.24	270.56	87.00	107.57	-4,659.16	-2,161.29	5,006.48	4,814.13	192.35	26.027	
18,400.00	6,040.00	10,828.00	6,164.24	273.21	87.00	107.57	-4,659.16	-2,161.29	5,106.02	4,913.74	192.28	26.555	
18,500.00	6,040.00	10,828.00	6,164.24	275.86	87.00	107.57	-4,659.16	-2,161.29	5,205.57	5,013.36	192.21	27.083	
18,600.00	6,040.00	10,828.00	6,164.24	278.51	87.00	107.57	-4,659.16	-2,161.29	5,305.14	5,113.00	192.14	27.611	
18,700.00	6,040.00	10,828.00	6,164.24	281.16	87.00	107.57	-4,659.16	-2,161.29	5,404.72	5,212.65	192.08	28.139	
18,800.00	6,040.00	10,828.00	6,164.24	283.81	87.00	107.57	-4,659.16	-2,161.29	5,504.32	5,312.31	192.01	28.666	
18,900.00	6,040.00	10,828.00	6,164.24	286.47	87.00	107.57	-4,659.16	-2,161.29	5,603.93	5,411.98	191.95	29.194	
18,919.70	6,040.00	10,828.00	6,164.24	286.99	87.00	107.57	-4,659.16	-2,161.29	5,623.56	5,431.62	191.94	29.298	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference				Offset			Semi Major Axis		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-94.68	-200.25	-2,447.31	2,455.60				
100.00	100.00	79.87	79.87	0.13	0.23	-94.68	-200.22	-2,447.28	2,455.46	2,455.10	0.36	6,824.540	
108.71	108.71	89.00	89.00	0.16	0.26	116.10	-200.21	-2,447.27	2,455.45	2,455.03	0.42	5,806.055	
200.00	199.98	184.63	184.63	0.48	0.60	116.13	-200.06	-2,447.07	2,456.01	2,454.93	1.08	2,266.224	
300.00	299.84	289.25	289.25	0.85	0.98	116.22	-199.74	-2,446.66	2,457.91	2,456.09	1.82	1,352.043	
400.00	399.45	393.61	393.61	1.22	1.35	116.36	-199.29	-2,446.07	2,461.18	2,458.61	2.57	958.240	
500.00	498.70	485.29	485.29	1.62	1.68	116.51	-198.87	-2,445.63	2,466.13	2,462.84	3.29	748.941	
600.00	597.47	583.01	583.01	2.05	2.03	116.72	-198.48	-2,445.35	2,472.89	2,468.83	4.06	608.829	
700.00	695.62	685.41	685.40	2.51	2.40	116.98	-198.03	-2,444.94	2,481.20	2,476.33	4.87	509.071	
800.00	793.06	784.81	784.80	3.01	2.75	117.27	-197.58	-2,444.40	2,491.09	2,485.39	5.71	436.626	
900.00	889.64	882.22	882.20	3.56	3.10	117.59	-197.30	-2,443.82	2,502.73	2,496.16	6.56	381.395	
1,000.00	985.27	975.85	975.83	4.14	3.43	117.91	-197.10	-2,443.27	2,516.21	2,508.77	7.44	338.216	
1,100.00	1,079.82	1,067.04	1,067.02	4.78	3.76	118.24	-196.78	-2,442.84	2,531.72	2,523.38	8.34	303.414	
1,200.00	1,173.17	1,158.64	1,158.62	5.46	4.09	118.60	-196.37	-2,442.52	2,549.33	2,540.04	9.29	274.552	
1,300.00	1,265.21	1,250.10	1,250.08	6.20	4.41	118.97	-196.16	-2,442.23	2,569.02	2,558.76	10.26	250.342	
1,400.00	1,355.84	1,343.57	1,343.55	6.99	4.74	119.36	-196.16	-2,441.92	2,590.83	2,579.55	11.28	229.676	
1,500.00	1,444.94	1,438.44	1,438.42	7.84	5.08	119.78	-196.30	-2,441.43	2,614.67	2,602.33	12.34	211.927	
1,600.00	1,532.39	1,512.63	1,512.60	8.75	5.34	120.01	-196.36	-2,441.01	2,640.76	2,627.41	13.35	197.809	
1,700.00	1,618.11	1,568.67	1,568.64	9.71	5.53	120.06	-195.65	-2,441.21	2,670.03	2,655.71	14.32	186.431	
1,800.00	1,701.97	1,622.23	1,622.18	10.74	5.72	120.06	-194.21	-2,441.93	2,702.63	2,687.33	15.31	176.551	
1,900.00	1,783.88	1,671.00	1,670.89	11.82	5.89	119.97	-192.25	-2,443.03	2,738.58	2,722.29	16.30	168.053	
2,000.00	1,863.74	1,729.71	1,729.50	12.96	6.09	119.98	-189.22	-2,444.81	2,777.76	2,760.42	17.34	160.198	
2,100.00	1,941.45	1,783.07	1,782.72	14.16	6.28	119.89	-185.95	-2,446.75	2,820.05	2,801.68	18.38	153.459	
2,200.00	2,016.92	1,833.55	1,833.04	15.41	6.46	119.71	-182.39	-2,448.87	2,865.46	2,846.05	19.41	147.607	
2,300.00	2,090.05	1,862.00	1,861.37	16.73	6.55	119.16	-180.19	-2,450.19	2,914.04	2,893.67	20.36	143.092	
2,400.00	2,160.76	1,905.13	1,904.28	18.10	6.71	118.76	-176.63	-2,452.58	2,965.79	2,944.40	21.38	138.705	
2,500.00	2,228.95	1,933.38	1,932.35	19.53	6.81	118.05	-174.17	-2,454.50	3,020.81	2,998.48	22.33	135.253	
2,600.00	2,294.55	1,957.00	1,955.81	21.01	6.89	117.18	-172.03	-2,456.33	3,078.92	3,055.66	23.26	132.359	
2,700.00	2,357.48	1,981.23	1,979.83	22.55	6.98	116.22	-169.67	-2,458.40	3,139.98	3,115.80	24.19	129.828	
2,800.00	2,418.42	2,001.32	1,999.72	24.13	7.05	116.20	-167.53	-2,460.28	3,203.54	3,178.47	25.07	127.768	
2,900.00	2,479.25	2,020.61	2,018.79	25.71	7.12	116.55	-165.31	-2,462.22	3,268.67	3,242.74	25.93	126.081	
3,000.00	2,540.09	2,052.00	2,049.74	27.31	7.24	117.11	-161.37	-2,465.66	3,335.32	3,308.51	26.80	124.432	
3,100.00	2,600.93	2,065.46	2,062.99	28.90	7.29	117.35	-159.60	-2,467.21	3,403.21	3,375.64	27.57	123.448	
3,200.00	2,661.77	2,112.89	2,109.70	30.51	7.47	118.19	-153.51	-2,472.72	3,472.18	3,443.70	28.47	121.942	
3,300.00	2,722.61	2,157.88	2,154.03	32.11	7.64	118.97	-147.92	-2,478.00	3,542.01	3,512.67	29.34	120.708	
3,400.00	2,783.44	2,195.02	2,190.60	33.72	7.78	119.60	-143.15	-2,482.37	3,612.74	3,582.59	30.15	119.825	
3,500.00	2,844.28	2,231.28	2,226.27	35.34	7.92	120.22	-138.22	-2,486.63	3,684.37	3,653.44	30.93	119.128	
3,600.00	2,905.12	2,355.70	2,348.85	36.95	8.41	122.27	-121.62	-2,499.99	3,756.16	3,724.01	32.15	116.836	
3,700.00	2,965.96	2,389.58	2,382.23	38.57	8.54	122.82	-116.88	-2,503.25	3,828.40	3,795.52	32.88	116.449	
3,800.00	3,026.79	2,422.15	2,414.28	40.19	8.67	123.35	-111.90	-2,506.32	3,901.47	3,867.90	33.57	116.211	
3,900.00	3,087.63	2,448.45	2,440.11	41.81	8.78	123.77	-107.62	-2,508.78	3,975.37	3,941.15	34.21	116.189	
4,000.00	3,148.47	2,472.34	2,463.56	43.43	8.88	124.15	-103.70	-2,511.14	4,050.12	4,015.29	34.82	116.300	
4,100.00	3,209.31	2,495.89	2,486.65	45.05	8.98	124.52	-99.81	-2,513.58	4,125.69	4,090.27	35.41	116.499	
4,200.00	3,270.14	2,527.00	2,517.14	46.68	9.11	125.01	-94.63	-2,516.99	4,202.04	4,166.02	36.03	116.638	
4,300.00	3,330.98	2,571.75	2,560.99	48.31	9.29	125.70	-87.22	-2,521.99	4,279.01	4,242.31	36.70	116.594	
4,400.00	3,391.82	2,643.02	2,630.90	49.93	9.59	126.76	-75.75	-2,529.74	4,356.26	4,318.75	37.51	116.140	
4,500.00	3,452.66	2,720.56	2,707.10	51.56	9.92	127.88	-63.91	-2,537.92	4,433.66	4,395.32	38.34	115.629	
4,600.00	3,513.49	2,768.11	2,753.89	53.19	10.12	128.55	-57.18	-2,543.04	4,511.33	4,472.33	39.00	115.670	
4,700.00	3,574.33	2,820.35	2,805.35	54.82	10.34	129.25	-50.41	-2,548.97	4,589.36	4,549.68	39.68	115.656	
4,800.00	3,635.17	2,879.31	2,863.45	56.45	10.59	130.03	-42.91	-2,555.61	4,667.66	4,627.27	40.39	115.565	
4,900.00	3,696.01	3,078.40	3,060.20	58.08	11.41	132.51	-19.54	-2,574.99	4,745.32	4,703.41	41.91	113.236	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES A11-E14-3HNC - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	3,756.84	9,141.89	6,231.12	59.71	55.69	129.61	-2,883.12	-2,587.70	4,802.02	4,704.44	97.58	49.212	
5,100.00	3,817.68	5,100.00	6,231.15	61.34	42.35	128.69	-2,993.62	-2,576.89	4,799.65	4,730.15	69.50	69.057	
5,200.00	3,878.52	9,267.00	6,231.16	62.97	57.77	128.57	-3,007.63	-2,575.48	4,798.59	4,695.23	103.36	46.425	
5,238.75	3,902.09	9,299.07	6,231.18	63.61	58.30	128.31	-3,039.54	-2,572.38	4,798.35	4,693.72	104.63	45.859	
5,300.00	3,939.36	9,311.36	6,231.19	64.61	58.51	128.20	-3,051.80	-2,571.35	4,798.86	4,692.94	105.93	45.303	
5,400.00	4,000.19	9,362.00	6,231.21	66.24	59.35	127.77	-3,102.33	-2,568.12	4,801.49	4,692.87	108.62	44.205	
5,500.00	4,061.03	9,362.00	6,231.21	67.87	59.35	127.77	-3,102.33	-2,568.12	4,805.25	4,694.94	110.31	43.561	
5,600.00	4,121.87	9,398.67	6,231.15	69.51	59.96	127.46	-3,138.95	-2,566.34	4,810.97	4,698.27	112.70	42.688	
5,700.00	4,182.71	9,481.54	6,230.74	71.14	61.34	126.76	-3,221.73	-2,562.26	4,817.73	4,701.70	116.03	41.522	
5,800.00	4,243.54	9,561.40	6,231.42	72.77	62.67	126.09	-3,301.45	-2,557.64	4,825.38	4,706.08	119.30	40.448	
5,900.00	4,304.38	9,620.97	6,232.49	74.41	63.67	125.59	-3,360.89	-2,553.98	4,834.08	4,711.92	122.16	39.573	
6,000.00	4,365.22	9,679.48	6,233.67	76.04	64.66	125.11	-3,419.29	-2,550.45	4,843.92	4,718.93	124.99	38.755	
6,100.00	4,426.06	9,735.11	6,234.72	77.68	65.60	124.65	-3,474.82	-2,547.32	4,854.97	4,727.21	127.75	38.003	
6,200.00	4,486.90	9,820.43	6,236.17	79.31	67.04	123.95	-3,559.99	-2,542.64	4,867.04	4,735.88	131.16	37.108	
6,300.00	4,547.73	9,911.99	6,237.00	80.95	68.59	123.19	-3,651.40	-2,537.51	4,879.81	4,745.11	134.71	36.225	
6,400.00	4,608.57	9,977.11	6,236.80	82.58	69.69	122.64	-3,716.43	-2,534.00	4,893.43	4,755.74	137.69	35.540	
6,500.00	4,669.41	10,035.41	6,237.14	84.22	70.69	122.16	-3,774.64	-2,530.83	4,908.20	4,767.70	140.50	34.933	
6,600.00	4,730.25	10,091.87	6,237.09	85.86	71.65	121.69	-3,831.04	-2,528.04	4,924.14	4,780.87	143.27	34.370	
6,700.00	4,791.08	10,224.79	6,235.92	87.49	73.91	120.58	-3,963.78	-2,521.45	4,941.03	4,793.26	147.77	33.437	
6,800.00	4,851.92	10,270.26	6,235.92	89.13	74.69	120.21	-4,009.17	-2,518.81	4,958.35	4,808.07	150.28	32.994	
6,900.00	4,912.76	10,320.87	6,235.66	90.76	75.56	119.79	-4,059.72	-2,516.15	4,976.90	4,824.02	152.88	32.554	
7,000.00	4,973.60	10,374.28	6,235.27	92.40	76.47	119.35	-4,113.06	-2,513.56	4,996.66	4,841.13	155.53	32.126	
7,100.00	5,034.43	10,424.68	6,234.86	94.04	77.33	118.94	-4,163.41	-2,511.31	5,017.60	4,859.51	158.09	31.739	
7,200.00	5,095.27	10,469.78	6,234.32	95.67	78.10	118.56	-4,208.47	-2,509.54	5,039.79	4,879.30	160.49	31.402	
7,300.00	5,156.11	10,647.50	6,232.19	97.31	81.16	117.11	-4,385.96	-2,501.09	5,062.38	4,896.29	166.09	30.480	
7,400.00	5,216.95	10,716.38	6,232.84	98.95	82.35	116.57	-4,454.70	-2,496.74	5,085.11	4,916.05	169.05	30.080	
7,500.00	5,277.78	10,785.49	6,234.02	100.59	83.55	116.03	-4,523.66	-2,492.29	5,108.72	4,936.71	172.01	29.701	
7,600.00	5,338.62	10,850.60	6,234.76	102.22	84.68	115.52	-4,588.64	-2,488.23	5,133.24	4,958.39	174.85	29.358	
7,700.00	5,399.46	10,918.90	6,234.58	103.86	85.86	114.98	-4,656.81	-2,484.21	5,158.67	4,980.92	177.75	29.022	
7,800.00	5,460.30	10,925.00	6,234.56	105.50	85.96	114.93	-4,662.91	-2,483.85	5,185.36	5,006.28	179.08	28.955	
7,900.00	5,521.24	10,925.00	6,234.56	107.13	85.96	113.28	-4,662.91	-2,483.85	5,213.43	5,033.24	180.19	28.932	
8,000.00	5,584.83	10,925.00	6,234.56	108.61	85.96	105.11	-4,662.91	-2,483.85	5,231.58	5,050.41	181.18	28.875	
8,100.00	5,650.69	10,925.00	6,234.56	109.85	85.96	96.39	-4,662.91	-2,483.85	5,234.37	5,052.39	181.98	28.764	
8,200.00	5,716.83	10,925.00	6,234.56	110.82	85.96	87.71	-4,662.91	-2,483.85	5,221.72	5,039.18	182.54	28.606	
8,300.00	5,781.24	10,925.00	6,234.56	111.52	85.96	79.74	-4,662.91	-2,483.85	5,193.93	5,011.07	182.86	28.404	
8,400.00	5,841.96	10,925.00	6,234.56	111.98	85.96	73.01	-4,662.91	-2,483.85	5,151.59	4,968.63	182.95	28.158	
8,500.00	5,897.14	10,925.00	6,234.56	112.25	85.96	67.81	-4,662.91	-2,483.85	5,095.64	4,912.79	182.85	27.868	
8,600.00	5,945.12	10,925.00	6,234.56	112.37	85.96	64.35	-4,662.91	-2,483.85	5,027.38	4,844.77	182.61	27.531	
8,700.00	5,984.42	10,925.00	6,234.56	112.39	85.96	62.88	-4,662.91	-2,483.85	4,948.40	4,766.11	182.29	27.146	
8,800.00	6,013.86	10,925.00	6,234.56	112.35	85.96	64.26	-4,662.91	-2,483.85	4,860.65	4,678.69	181.97	26.712	
8,900.00	6,032.54	10,925.00	6,234.56	112.30	85.96	71.75	-4,662.91	-2,483.85	4,766.39	4,584.70	181.69	26.234	
9,000.00	6,039.89	10,925.00	6,234.56	112.24	85.96	104.75	-4,662.91	-2,483.85	4,668.19	4,486.67	181.51	25.718	
9,100.00	6,040.00	10,925.00	6,234.56	112.19	85.96	115.10	-4,662.91	-2,483.85	4,568.81	4,387.40	181.41	25.185	
9,200.00	6,040.00	10,925.00	6,234.56	112.16	85.96	115.10	-4,662.91	-2,483.85	4,469.46	4,288.16	181.30	24.652	
9,300.00	6,040.00	10,925.00	6,234.56	112.15	85.96	115.10	-4,662.91	-2,483.85	4,370.13	4,188.94	181.19	24.119	
9,400.00	6,040.00	10,925.00	6,234.56	112.15	85.96	115.10	-4,662.91	-2,483.85	4,270.84	4,089.76	181.08	23.585	
9,500.00	6,040.00	10,925.00	6,234.56	112.16	85.96	115.10	-4,662.91	-2,483.85	4,171.58	3,990.62	180.96	23.052	
9,600.00	6,040.00	10,925.00	6,234.56	112.19	85.96	115.10	-4,662.91	-2,483.85	4,072.36	3,891.52	180.84	22.519	
9,700.00	6,040.00	10,925.00	6,234.56	112.24	85.96	115.10	-4,662.91	-2,483.85	3,973.18	3,792.47	180.71	21.987	
9,800.00	6,040.00	10,925.00	6,234.56	112.31	85.96	115.10	-4,662.91	-2,483.85	3,874.04	3,693.46	180.57	21.454	
9,900.00	6,040.00	10,925.00	6,234.56	112.39	85.96	115.10	-4,662.91	-2,483.85	3,774.94	3,594.51	180.43	20.922	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES A11-E14-3HNC - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.00	6,040.00	10,925.00	6,234.56	112.49	85.96	115.10	-4,662.91	-2,483.85	3,675.89	3,495.61	180.29	20.389	
10,100.00	6,040.00	10,925.00	6,234.56	112.62	85.96	115.10	-4,662.91	-2,483.85	3,576.90	3,396.77	180.13	19.857	
10,200.00	6,040.00	10,925.00	6,234.56	112.77	85.96	115.10	-4,662.91	-2,483.85	3,477.96	3,297.99	179.97	19.325	
10,300.00	6,040.00	10,925.00	6,234.56	112.94	85.96	115.10	-4,662.91	-2,483.85	3,379.09	3,199.29	179.80	18.794	
10,400.00	6,040.00	10,925.00	6,234.56	113.14	85.96	115.10	-4,662.91	-2,483.85	3,280.28	3,100.66	179.62	18.262	
10,500.00	6,040.00	10,925.00	6,234.56	113.36	85.96	115.10	-4,662.91	-2,483.85	3,181.55	3,002.12	179.43	17.731	
10,600.00	6,040.00	10,925.00	6,234.56	113.62	85.96	115.10	-4,662.91	-2,483.85	3,082.90	2,903.67	179.23	17.201	
10,700.00	6,040.00	10,925.00	6,234.56	113.91	85.96	115.10	-4,662.91	-2,483.85	2,984.34	2,805.32	179.02	16.670	
10,800.00	6,040.00	10,925.00	6,234.56	114.24	85.96	115.10	-4,662.91	-2,483.85	2,885.88	2,707.08	178.80	16.141	
10,900.00	6,040.00	10,925.00	6,234.56	114.61	85.96	115.10	-4,662.91	-2,483.85	2,787.53	2,608.97	178.56	15.611	
11,000.00	6,040.00	10,925.00	6,234.56	115.02	85.96	115.10	-4,662.91	-2,483.85	2,689.30	2,510.99	178.31	15.082	
11,100.00	6,040.00	10,925.00	6,234.56	115.49	85.96	115.10	-4,662.91	-2,483.85	2,591.20	2,413.16	178.04	14.554	
11,200.00	6,040.00	10,925.00	6,234.56	116.00	85.96	115.10	-4,662.91	-2,483.85	2,493.26	2,315.50	177.76	14.026	
11,300.00	6,040.00	10,925.00	6,234.56	116.58	85.96	115.10	-4,662.91	-2,483.85	2,395.49	2,218.03	177.46	13.499	
11,400.00	6,040.00	10,925.00	6,234.56	117.22	85.96	115.10	-4,662.91	-2,483.85	2,297.91	2,120.77	177.14	12.973	
11,500.00	6,040.00	10,925.00	6,234.56	117.92	85.96	115.10	-4,662.91	-2,483.85	2,200.54	2,023.75	176.79	12.447	
11,600.00	6,040.00	10,925.00	6,234.56	118.70	85.96	115.10	-4,662.91	-2,483.85	2,103.43	1,927.01	176.42	11.923	
11,700.00	6,040.00	10,925.00	6,234.56	119.56	85.96	115.10	-4,662.91	-2,483.85	2,006.60	1,830.57	176.03	11.399	
11,800.00	6,040.00	10,925.00	6,234.56	120.51	85.96	115.10	-4,662.91	-2,483.85	1,910.09	1,734.48	175.61	10.877	
11,900.00	6,040.00	10,925.00	6,234.56	121.54	85.96	115.10	-4,662.91	-2,483.85	1,813.96	1,638.81	175.15	10.356	
12,000.00	6,040.00	10,925.00	6,234.56	122.66	85.96	115.10	-4,662.91	-2,483.85	1,718.27	1,543.60	174.67	9.837	
12,100.00	6,040.00	10,925.00	6,234.56	123.87	85.96	115.10	-4,662.91	-2,483.85	1,623.11	1,448.96	174.15	9.320	
12,200.00	6,040.00	10,925.00	6,234.56	125.17	85.96	115.10	-4,662.91	-2,483.85	1,528.56	1,354.96	173.60	8.805	
12,300.00	6,040.00	10,925.00	6,234.56	126.57	85.96	115.10	-4,662.91	-2,483.85	1,434.75	1,261.74	173.01	8.293	
12,400.00	6,040.00	10,925.00	6,234.56	128.06	85.96	115.10	-4,662.91	-2,483.85	1,341.84	1,169.44	172.40	7.783	
12,500.00	6,040.00	10,925.00	6,234.56	129.63	85.96	115.10	-4,662.91	-2,483.85	1,250.02	1,078.27	171.75	7.278	
12,600.00	6,040.00	10,925.00	6,234.56	131.29	85.96	115.10	-4,662.91	-2,483.85	1,159.55	988.46	171.09	6.777	
12,700.00	6,040.00	10,925.00	6,234.56	133.03	85.96	115.10	-4,662.91	-2,483.85	1,070.78	900.35	170.43	6.283	
12,800.00	6,040.00	10,925.00	6,234.56	134.84	85.96	115.10	-4,662.91	-2,483.85	984.17	814.38	169.79	5.796	
12,900.00	6,040.00	10,925.00	6,234.56	136.71	85.96	115.10	-4,662.91	-2,483.85	900.33	731.13	169.20	5.321	
13,000.00	6,040.00	10,925.00	6,234.56	138.66	85.96	115.10	-4,662.91	-2,483.85	820.13	651.43	168.70	4.861	
13,100.00	6,040.00	10,925.00	6,234.56	140.66	85.96	115.10	-4,662.91	-2,483.85	744.73	576.44	168.30	4.425	
13,200.00	6,040.00	10,925.00	6,234.56	142.71	85.96	115.10	-4,662.91	-2,483.85	675.75	507.80	167.96	4.023	
13,300.00	6,040.00	10,925.00	6,234.56	144.81	85.96	115.10	-4,662.91	-2,483.85	615.35	447.82	167.53	3.673	
13,400.00	6,040.00	10,925.00	6,234.56	146.96	85.96	115.10	-4,662.91	-2,483.85	566.28	399.48	166.80	3.395	
13,500.00	6,040.00	10,925.00	6,234.56	149.14	85.96	115.10	-4,662.91	-2,483.85	531.68	365.75	165.93	3.204	
13,600.00	6,040.00	10,925.00	6,234.56	151.36	85.96	115.10	-4,662.91	-2,483.85	514.49	347.37	167.13	3.078	
13,639.93	6,040.00	10,925.00	6,234.56	152.26	85.96	115.10	-4,662.91	-2,483.85	512.94	343.73	169.21	3.031 CC	
13,700.00	6,040.00	10,925.00	6,234.56	153.62	85.96	115.10	-4,662.91	-2,483.85	516.45	342.10	174.35	2.962 ES	
13,800.00	6,040.00	10,925.00	6,234.56	155.91	85.96	115.10	-4,662.91	-2,483.85	537.34	352.22	185.12	2.903 SF	
13,900.00	6,040.00	10,925.00	6,234.56	158.22	85.96	115.10	-4,662.91	-2,483.85	575.11	380.89	194.21	2.961	
14,000.00	6,040.00	10,925.00	6,234.56	160.56	85.96	115.10	-4,662.91	-2,483.85	626.71	426.55	200.15	3.131	
14,100.00	6,040.00	10,925.00	6,234.56	162.92	85.96	115.10	-4,662.91	-2,483.85	689.04	485.62	203.42	3.387	
14,200.00	6,040.00	10,925.00	6,234.56	165.30	85.96	115.10	-4,662.91	-2,483.85	759.47	554.58	204.88	3.707	
14,300.00	6,040.00	10,925.00	6,234.56	167.70	85.96	115.10	-4,662.91	-2,483.85	835.95	630.70	205.24	4.073	
14,400.00	6,040.00	10,925.00	6,234.56	170.12	85.96	115.10	-4,662.91	-2,483.85	916.96	711.98	204.98	4.473	
14,500.00	6,040.00	10,925.00	6,234.56	172.55	85.96	115.10	-4,662.91	-2,483.85	1,001.42	797.03	204.38	4.900	
14,600.00	6,040.00	10,925.00	6,234.56	175.00	85.96	115.10	-4,662.91	-2,483.85	1,088.51	884.88	203.63	5.346	
14,700.00	6,040.00	10,925.00	6,234.56	177.46	85.96	115.10	-4,662.91	-2,483.85	1,177.65	974.83	202.82	5.806	
14,800.00	6,040.00	10,925.00	6,234.56	179.94	85.96	115.10	-4,662.91	-2,483.85	1,268.42	1,066.41	202.01	6.279	
14,900.00	6,040.00	10,925.00	6,234.56	182.43	85.96	115.10	-4,662.91	-2,483.85	1,360.48	1,159.26	201.22	6.761	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES A11-E14-3HNC - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,000.00	6,040.00	10,925.00	6,234.56	184.92	85.96	115.10	-4,662.91	-2,483.85	1,453.58	1,253.11	200.47	7.251	
15,100.00	6,040.00	10,925.00	6,234.56	187.43	85.96	115.10	-4,662.91	-2,483.85	1,547.55	1,347.78	199.78	7.746	
15,200.00	6,040.00	10,925.00	6,234.56	189.95	85.96	115.10	-4,662.91	-2,483.85	1,642.24	1,443.11	199.13	8.247	
15,300.00	6,040.00	10,925.00	6,234.56	192.48	85.96	115.10	-4,662.91	-2,483.85	1,737.51	1,538.99	198.53	8.752	
15,400.00	6,040.00	10,925.00	6,234.56	195.01	85.96	115.10	-4,662.91	-2,483.85	1,833.29	1,635.32	197.97	9.260	
15,500.00	6,040.00	10,925.00	6,234.56	197.55	85.96	115.10	-4,662.91	-2,483.85	1,929.50	1,732.04	197.46	9.772	
15,600.00	6,040.00	10,925.00	6,234.56	200.10	85.96	115.10	-4,662.91	-2,483.85	2,026.08	1,829.09	196.99	10.285	
15,700.00	6,040.00	10,925.00	6,234.56	202.65	85.96	115.10	-4,662.91	-2,483.85	2,122.97	1,926.42	196.55	10.801	
15,800.00	6,040.00	10,925.00	6,234.56	205.22	85.96	115.10	-4,662.91	-2,483.85	2,220.14	2,024.00	196.14	11.319	
15,900.00	6,040.00	10,925.00	6,234.56	207.78	85.96	115.10	-4,662.91	-2,483.85	2,317.55	2,121.78	195.77	11.838	
16,000.00	6,040.00	10,925.00	6,234.56	210.36	85.96	115.10	-4,662.91	-2,483.85	2,415.17	2,219.75	195.42	12.359	
16,100.00	6,040.00	10,925.00	6,234.56	212.93	85.96	115.10	-4,662.91	-2,483.85	2,512.98	2,317.89	195.09	12.881	
16,200.00	6,040.00	10,925.00	6,234.56	215.52	85.96	115.10	-4,662.91	-2,483.85	2,610.95	2,416.16	194.79	13.404	
16,300.00	6,040.00	10,925.00	6,234.56	218.11	85.96	115.10	-4,662.91	-2,483.85	2,709.08	2,514.56	194.51	13.928	
16,400.00	6,040.00	10,925.00	6,234.56	220.70	85.96	115.10	-4,662.91	-2,483.85	2,807.33	2,613.08	194.25	14.452	
16,500.00	6,040.00	10,925.00	6,234.56	223.29	85.96	115.10	-4,662.91	-2,483.85	2,905.71	2,711.70	194.00	14.978	
16,600.00	6,040.00	10,925.00	6,234.56	225.89	85.96	115.10	-4,662.91	-2,483.85	3,004.19	2,810.41	193.77	15.504	
16,700.00	6,040.00	10,925.00	6,234.56	228.50	85.96	115.10	-4,662.91	-2,483.85	3,102.77	2,909.21	193.56	16.030	
16,800.00	6,040.00	10,925.00	6,234.56	231.11	85.96	115.10	-4,662.91	-2,483.85	3,201.43	3,008.08	193.36	16.557	
16,900.00	6,040.00	10,925.00	6,234.56	233.72	85.96	115.10	-4,662.91	-2,483.85	3,300.18	3,107.01	193.17	17.085	
17,000.00	6,040.00	10,925.00	6,234.56	236.33	85.96	115.10	-4,662.91	-2,483.85	3,399.00	3,206.01	192.99	17.612	
17,100.00	6,040.00	10,925.00	6,234.56	238.95	85.96	115.10	-4,662.91	-2,483.85	3,497.89	3,305.07	192.82	18.141	
17,200.00	6,040.00	10,925.00	6,234.56	241.57	85.96	115.10	-4,662.91	-2,483.85	3,596.84	3,404.17	192.66	18.669	
17,300.00	6,040.00	10,925.00	6,234.56	244.19	85.96	115.10	-4,662.91	-2,483.85	3,695.84	3,503.33	192.51	19.198	
17,400.00	6,040.00	10,925.00	6,234.56	246.82	85.96	115.10	-4,662.91	-2,483.85	3,794.90	3,602.53	192.37	19.727	
17,500.00	6,040.00	10,925.00	6,234.56	249.45	85.96	115.10	-4,662.91	-2,483.85	3,894.01	3,701.77	192.24	20.256	
17,600.00	6,040.00	10,925.00	6,234.56	252.08	85.96	115.10	-4,662.91	-2,483.85	3,993.16	3,801.05	192.11	20.786	
17,700.00	6,040.00	10,925.00	6,234.56	254.71	85.96	115.10	-4,662.91	-2,483.85	4,092.35	3,900.36	191.99	21.315	
17,800.00	6,040.00	10,925.00	6,234.56	257.35	85.96	115.10	-4,662.91	-2,483.85	4,191.58	3,999.70	191.88	21.845	
17,900.00	6,040.00	10,925.00	6,234.56	259.99	85.96	115.10	-4,662.91	-2,483.85	4,290.84	4,099.07	191.77	22.375	
18,000.00	6,040.00	10,925.00	6,234.56	262.63	85.96	115.10	-4,662.91	-2,483.85	4,390.14	4,198.47	191.67	22.905	
18,100.00	6,040.00	10,925.00	6,234.56	265.27	85.96	115.10	-4,662.91	-2,483.85	4,489.47	4,297.90	191.57	23.435	
18,200.00	6,040.00	10,925.00	6,234.56	267.91	85.96	115.10	-4,662.91	-2,483.85	4,588.83	4,397.35	191.48	23.965	
18,300.00	6,040.00	10,925.00	6,234.56	270.56	85.96	115.10	-4,662.91	-2,483.85	4,688.22	4,496.83	191.39	24.495	
18,400.00	6,040.00	10,925.00	6,234.56	273.21	85.96	115.10	-4,662.91	-2,483.85	4,787.63	4,596.32	191.31	25.026	
18,500.00	6,040.00	10,925.00	6,234.56	275.86	85.96	115.10	-4,662.91	-2,483.85	4,887.07	4,695.84	191.23	25.556	
18,600.00	6,040.00	10,925.00	6,234.56	278.51	85.96	115.10	-4,662.91	-2,483.85	4,986.53	4,795.37	191.15	26.086	
18,700.00	6,040.00	10,925.00	6,234.56	281.16	85.96	115.10	-4,662.91	-2,483.85	5,086.01	4,894.92	191.08	26.617	
18,800.00	6,040.00	10,925.00	6,234.56	283.81	85.96	115.10	-4,662.91	-2,483.85	5,185.51	4,994.49	191.02	27.147	
18,900.00	6,040.00	10,925.00	6,234.56	286.47	85.96	115.10	-4,662.91	-2,483.85	5,285.02	5,094.07	190.95	27.677	
18,919.70	6,040.00	10,925.00	6,234.56	286.99	85.96	115.10	-4,662.91	-2,483.85	5,304.64	5,113.70	190.94	27.782	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-94.16	-178.39	-2,450.10	2,456.69				
100.00	100.00	79.73	79.73	0.13	0.22	-94.16	-178.30	-2,450.07	2,456.55	2,456.19	0.36	6,837.304	
108.07	108.07	88.17	88.17	0.16	0.26	116.61	-178.28	-2,450.06	2,456.54	2,456.13	0.42	5,881.222	
200.00	199.98	184.26	184.25	0.48	0.60	116.65	-177.79	-2,449.89	2,457.13	2,456.05	1.08	2,270.154	
300.00	299.84	295.47	295.46	0.85	1.00	116.76	-176.78	-2,449.45	2,459.03	2,457.19	1.84	1,337.027	
400.00	399.45	414.26	414.24	1.22	1.42	116.95	-175.58	-2,448.17	2,461.83	2,459.19	2.64	932.844	
500.00	498.70	504.57	504.54	1.62	1.75	117.13	-174.65	-2,446.97	2,466.02	2,462.66	3.36	734.416	
600.00	597.47	578.12	578.08	2.05	2.00	117.26	-174.19	-2,446.43	2,472.49	2,468.45	4.03	613.040	
700.00	695.62	651.03	650.98	2.51	2.25	117.36	-174.96	-2,446.74	2,481.83	2,477.10	4.73	525.073	
800.00	793.06	739.39	739.33	3.01	2.54	117.53	-176.23	-2,447.61	2,493.48	2,487.98	5.50	453.568	
900.00	889.64	827.32	827.25	3.56	2.84	117.73	-177.44	-2,448.81	2,507.25	2,500.95	6.30	397.984	
1,000.00	985.27	917.31	917.22	4.14	3.15	117.97	-177.79	-2,450.32	2,523.11	2,515.96	7.15	352.845	
1,100.00	1,079.82	1,012.17	1,012.07	4.78	3.48	118.29	-177.36	-2,452.00	2,540.96	2,532.90	8.06	315.300	
1,200.00	1,173.17	1,105.80	1,105.68	5.46	3.81	118.63	-176.63	-2,453.65	2,560.77	2,551.77	9.00	284.574	
1,300.00	1,265.21	1,201.06	1,200.92	6.20	4.15	119.00	-175.70	-2,455.23	2,582.55	2,572.57	9.98	258.692	
1,400.00	1,355.84	1,294.77	1,294.61	6.99	4.48	119.38	-174.68	-2,456.64	2,606.33	2,595.34	11.00	237.000	
1,500.00	1,444.94	1,360.86	1,360.68	7.84	4.72	119.52	-173.61	-2,457.88	2,632.65	2,620.71	11.94	220.428	
1,600.00	1,532.39	1,412.70	1,412.49	8.75	4.90	119.50	-172.47	-2,459.28	2,662.08	2,649.21	12.86	206.930	
1,700.00	1,618.11	1,455.06	1,454.80	9.71	5.05	119.33	-171.75	-2,461.11	2,695.11	2,681.33	13.77	195.657	
1,800.00	1,701.97	1,481.00	1,480.70	10.74	5.14	118.92	-171.43	-2,462.57	2,731.80	2,717.16	14.64	186.608	
1,900.00	1,783.88	1,533.28	1,532.84	11.82	5.33	118.76	-170.72	-2,466.27	2,771.87	2,756.24	15.63	177.342	
2,000.00	1,863.74	1,576.00	1,575.39	12.96	5.49	118.43	-169.92	-2,470.08	2,815.52	2,798.92	16.60	169.630	
2,100.00	1,941.45	1,603.21	1,602.45	14.16	5.59	117.85	-169.25	-2,472.87	2,862.50	2,844.98	17.51	163.463	
2,200.00	2,016.92	1,635.09	1,634.10	15.41	5.71	117.25	-168.25	-2,476.49	2,912.77	2,894.31	18.45	157.842	
2,300.00	2,090.05	1,672.00	1,670.69	16.73	5.84	116.66	-166.79	-2,481.15	2,966.22	2,946.79	19.43	152.699	
2,400.00	2,160.76	1,696.18	1,694.62	18.10	5.93	115.80	-165.72	-2,484.46	3,022.63	3,002.29	20.34	148.599	
2,500.00	2,228.95	1,726.59	1,724.67	19.53	6.05	114.95	-164.35	-2,488.88	3,081.88	3,060.59	21.29	144.777	
2,600.00	2,294.55	1,766.00	1,763.56	21.01	6.20	114.17	-162.57	-2,495.03	3,143.84	3,121.56	22.28	141.101	
2,700.00	2,357.48	1,791.93	1,789.11	22.55	6.30	113.08	-161.24	-2,499.21	3,208.21	3,185.01	23.20	138.267	
2,800.00	2,418.42	1,832.53	1,829.10	24.13	6.46	113.38	-158.58	-2,505.71	3,274.52	3,250.33	24.19	135.371	
2,900.00	2,479.25	1,861.00	1,857.12	25.71	6.57	113.89	-156.31	-2,510.21	3,341.99	3,316.90	25.08	133.229	
3,000.00	2,540.09	1,896.83	1,892.34	27.31	6.72	114.52	-153.02	-2,515.93	3,410.59	3,384.60	25.99	131.218	
3,100.00	2,600.93	1,924.00	1,919.00	28.90	6.83	115.01	-150.25	-2,520.35	3,480.35	3,453.53	26.83	129.742	
3,200.00	2,661.77	1,955.00	1,949.38	30.51	6.96	115.56	-146.81	-2,525.49	3,551.23	3,523.58	27.65	128.423	
3,300.00	2,722.61	1,974.44	1,968.40	32.11	7.04	115.90	-144.48	-2,528.76	3,623.15	3,594.76	28.39	127.616	
3,400.00	2,783.44	1,997.47	1,990.90	33.72	7.13	116.30	-141.52	-2,532.69	3,696.10	3,666.98	29.12	126.913	
3,500.00	2,844.28	2,019.66	2,012.54	35.34	7.23	116.69	-138.48	-2,536.53	3,770.04	3,740.21	29.83	126.404	
3,600.00	2,905.12	2,050.00	2,042.07	36.95	7.35	117.22	-134.00	-2,541.86	3,844.93	3,814.38	30.55	125.859	
3,700.00	2,965.96	2,050.00	2,042.07	38.57	7.35	117.22	-134.00	-2,541.86	3,920.71	3,889.64	31.08	126.156	
3,800.00	3,026.79	2,087.08	2,078.09	40.19	7.52	117.87	-128.18	-2,548.52	3,997.26	3,965.46	31.80	125.700	
3,900.00	3,087.63	2,110.03	2,100.34	41.81	7.62	118.26	-124.47	-2,552.73	4,074.63	4,042.21	32.42	125.685	
4,000.00	3,148.47	2,144.00	2,133.23	43.43	7.77	118.84	-118.82	-2,559.08	4,152.78	4,119.69	33.08	125.521	
4,100.00	3,209.31	2,144.00	2,133.23	45.05	7.77	118.84	-118.82	-2,559.08	4,231.60	4,198.07	33.53	126.202	
4,200.00	3,270.14	2,144.00	2,133.23	46.68	7.77	118.84	-118.82	-2,559.08	4,311.30	4,277.35	33.96	126.968	
4,300.00	3,330.98	2,176.79	2,164.88	48.31	7.92	119.40	-113.14	-2,565.48	4,391.47	4,356.90	34.57	127.047	
4,400.00	3,391.82	2,189.42	2,177.03	49.93	7.98	119.61	-110.88	-2,568.05	4,472.45	4,437.42	35.04	127.654	
4,500.00	3,452.66	2,201.72	2,188.85	51.56	8.04	119.82	-108.63	-2,570.61	4,554.09	4,518.60	35.49	128.327	
4,600.00	3,513.49	2,239.00	2,224.56	53.19	8.21	120.43	-101.59	-2,578.68	4,636.56	4,600.48	36.08	128.495	
4,700.00	3,574.33	2,239.00	2,224.56	54.82	8.21	120.43	-101.59	-2,578.68	4,719.26	4,682.83	36.43	129.540	
4,800.00	3,635.17	2,239.00	2,224.56	56.45	8.21	120.43	-101.59	-2,578.68	4,802.62	4,765.85	36.76	130.634	
4,900.00	3,696.01	2,352.58	2,333.43	58.08	8.77	122.25	-80.46	-2,603.18	4,886.02	4,848.19	37.83	129.167	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES A-E-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	3,756.84	2,378.10	2,357.94	59.71	8.90	122.64	-75.85	-2,608.61	4,969.66	4,931.35	38.31	129.719	
5,100.00	3,817.68	8,975.00	6,163.01	61.34	54.28	128.92	-2,771.33	-2,913.57	5,045.79	4,947.19	98.60	51.172	
5,200.00	3,878.52	9,023.00	6,163.95	62.97	55.06	128.54	-2,819.27	-2,911.29	5,051.27	4,950.11	101.16	49.936	
5,300.00	3,939.36	9,089.41	6,164.93	64.61	56.14	128.01	-2,885.60	-2,908.30	5,057.78	4,953.73	104.05	48.607	
5,400.00	4,000.19	9,146.98	6,165.21	66.24	57.09	127.54	-2,943.13	-2,906.12	5,065.42	4,958.62	106.80	47.430	
5,500.00	4,061.03	9,190.28	6,165.15	67.87	57.79	127.19	-2,986.40	-2,904.76	5,074.30	4,965.03	109.27	46.439	
5,600.00	4,121.87	9,228.28	6,165.42	69.51	58.42	126.88	-3,024.39	-2,903.69	5,084.60	4,972.98	111.62	45.552	
5,700.00	4,182.71	9,375.95	6,167.16	71.14	60.85	125.70	-3,171.97	-2,898.79	5,095.84	4,979.68	116.16	43.868	
5,800.00	4,243.54	9,421.11	6,167.04	72.77	61.60	125.33	-3,217.10	-2,897.22	5,107.42	4,988.74	118.68	43.036	
5,900.00	4,304.38	9,631.44	6,165.47	74.41	65.10	123.64	-3,427.19	-2,887.65	5,119.12	4,994.56	124.56	41.098	
6,000.00	4,365.22	9,679.63	6,164.95	76.04	65.91	123.25	-3,475.29	-2,884.90	5,131.03	5,003.86	127.17	40.348	
6,100.00	4,426.06	9,955.79	6,163.19	77.68	70.59	121.08	-3,750.55	-2,863.77	5,142.81	5,008.39	134.42	38.259	
6,200.00	4,486.90	9,977.18	6,163.25	79.31	70.96	120.91	-3,771.83	-2,861.70	5,154.31	5,017.78	136.53	37.751	
6,300.00	4,547.73	10,020.00	6,163.53	80.95	71.69	120.58	-3,814.51	-2,858.19	5,167.58	5,028.52	139.06	37.161	
6,400.00	4,608.57	10,020.00	6,163.53	82.58	71.69	120.58	-3,814.51	-2,858.19	5,182.15	5,041.48	140.67	36.840	
6,500.00	4,669.41	10,064.95	6,163.72	84.22	72.46	120.23	-3,859.35	-2,855.10	5,198.30	5,055.11	143.18	36.305	
6,600.00	4,730.25	10,115.00	6,163.50	85.86	73.31	119.84	-3,909.31	-2,852.07	5,215.70	5,069.90	145.79	35.774	
6,700.00	4,791.08	10,160.21	6,163.44	87.49	74.08	119.49	-3,954.44	-2,849.49	5,234.32	5,086.04	148.28	35.300	
6,800.00	4,851.92	10,213.85	6,164.26	89.13	75.00	119.08	-4,007.99	-2,846.38	5,254.08	5,103.15	150.93	34.811	
6,900.00	4,912.76	10,283.22	6,165.75	90.76	76.18	118.55	-4,077.23	-2,842.37	5,274.82	5,120.90	153.92	34.271	
7,000.00	4,973.60	10,364.58	6,167.13	92.40	77.58	117.94	-4,158.44	-2,837.73	5,296.37	5,139.21	157.16	33.700	
7,100.00	5,034.43	10,449.06	6,167.94	94.04	79.03	117.29	-4,242.78	-2,832.83	5,318.57	5,158.10	160.47	33.143	
7,200.00	5,095.27	10,514.68	6,168.15	95.67	80.16	116.80	-4,308.29	-2,829.00	5,341.51	5,178.16	163.35	32.700	
7,300.00	5,156.11	10,558.66	6,168.11	97.31	80.91	116.46	-4,352.20	-2,826.65	5,365.55	5,199.84	165.71	32.379	
7,400.00	5,216.95	10,609.65	6,167.88	98.95	81.79	116.07	-4,403.13	-2,824.21	5,390.75	5,222.54	168.21	32.048	
7,500.00	5,277.78	10,679.16	6,167.18	100.59	82.98	115.54	-4,472.56	-2,821.03	5,416.88	5,245.75	171.13	31.654	
7,600.00	5,338.62	10,836.99	6,164.79	102.22	85.71	114.34	-4,630.16	-2,812.69	5,443.32	5,267.21	176.12	30.907	
7,700.00	5,399.46	10,870.00	6,164.26	103.86	86.28	114.09	-4,663.11	-2,810.77	5,470.20	5,292.04	178.16	30.704	
7,800.00	5,460.30	10,870.00	6,164.26	105.50	86.28	114.09	-4,663.11	-2,810.77	5,498.56	5,319.20	179.36	30.656	
7,900.00	5,521.24	10,870.00	6,164.26	107.13	86.28	112.45	-4,663.11	-2,810.77	5,528.20	5,347.69	180.50	30.626	
8,000.00	5,584.83	10,870.00	6,164.26	108.61	86.28	104.30	-4,663.11	-2,810.77	5,547.82	5,366.29	181.53	30.561	
8,100.00	5,650.69	10,870.00	6,164.26	109.85	86.28	95.56	-4,663.11	-2,810.77	5,551.98	5,369.60	182.38	30.442	
8,200.00	5,716.83	10,870.00	6,164.26	110.82	86.28	86.85	-4,663.11	-2,810.77	5,540.56	5,357.56	183.00	30.276	
8,300.00	5,781.24	10,870.00	6,164.26	111.52	86.28	78.83	-4,663.11	-2,810.77	5,513.84	5,330.45	183.39	30.067	
8,400.00	5,841.96	10,870.00	6,164.26	111.98	86.28	72.01	-4,663.11	-2,810.77	5,472.40	5,288.85	183.55	29.815	
8,500.00	5,897.14	10,870.00	6,164.26	112.25	86.28	66.68	-4,663.11	-2,810.77	5,417.18	5,233.67	183.51	29.519	
8,600.00	5,945.12	10,870.00	6,164.26	112.37	86.28	63.00	-4,663.11	-2,810.77	5,349.47	5,166.13	183.34	29.178	
8,700.00	5,984.42	10,870.00	6,164.26	112.39	86.28	61.17	-4,663.11	-2,810.77	5,270.88	5,087.79	183.09	28.788	
8,800.00	6,013.86	10,870.00	6,164.26	112.35	86.28	61.87	-4,663.11	-2,810.77	5,183.37	5,000.54	182.82	28.352	
8,900.00	6,032.54	10,870.00	6,164.26	112.30	86.28	67.79	-4,663.11	-2,810.77	5,089.20	4,906.61	182.59	27.872	
9,000.00	6,039.89	10,870.00	6,164.26	112.24	86.28	97.03	-4,663.11	-2,810.77	4,990.95	4,808.50	182.45	27.356	
9,100.00	6,040.00	10,870.00	6,164.26	112.19	86.28	107.48	-4,663.11	-2,810.77	4,891.45	4,709.09	182.37	26.822	
9,200.00	6,040.00	10,870.00	6,164.26	112.16	86.28	107.48	-4,663.11	-2,810.77	4,791.97	4,609.69	182.28	26.289	
9,300.00	6,040.00	10,870.00	6,164.26	112.15	86.28	107.48	-4,663.11	-2,810.77	4,692.50	4,510.31	182.20	25.755	
9,400.00	6,040.00	10,870.00	6,164.26	112.15	86.28	107.48	-4,663.11	-2,810.77	4,593.06	4,410.96	182.11	25.222	
9,500.00	6,040.00	10,870.00	6,164.26	112.16	86.28	107.48	-4,663.11	-2,810.77	4,493.65	4,311.63	182.01	24.689	
9,600.00	6,040.00	10,870.00	6,164.26	112.19	86.28	107.48	-4,663.11	-2,810.77	4,394.26	4,212.34	181.92	24.155	
9,700.00	6,040.00	10,870.00	6,164.26	112.24	86.28	107.48	-4,663.11	-2,810.77	4,294.90	4,113.08	181.82	23.622	
9,800.00	6,040.00	10,870.00	6,164.26	112.31	86.28	107.48	-4,663.11	-2,810.77	4,195.56	4,013.85	181.71	23.089	
9,900.00	6,040.00	10,870.00	6,164.26	112.39	86.28	107.48	-4,663.11	-2,810.77	4,096.27	3,914.66	181.61	22.556	
10,000.00	6,040.00	10,870.00	6,164.26	112.49	86.28	107.48	-4,663.11	-2,810.77	3,997.00	3,815.51	181.50	22.023	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES A-E-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	10,870.00	6,164.26	112.62	86.28	107.48	-4,663.11	-2,810.77	3,897.78	3,716.40	181.38	21.490	
10,200.00	6,040.00	10,870.00	6,164.26	112.77	86.28	107.48	-4,663.11	-2,810.77	3,798.59	3,617.33	181.26	20.957	
10,300.00	6,040.00	10,870.00	6,164.26	112.94	86.28	107.48	-4,663.11	-2,810.77	3,699.45	3,518.32	181.13	20.424	
10,400.00	6,040.00	10,870.00	6,164.26	113.14	86.28	107.48	-4,663.11	-2,810.77	3,600.36	3,419.36	181.00	19.891	
10,500.00	6,040.00	10,870.00	6,164.26	113.36	86.28	107.48	-4,663.11	-2,810.77	3,501.31	3,320.45	180.86	19.359	
10,600.00	6,040.00	10,870.00	6,164.26	113.62	86.28	107.48	-4,663.11	-2,810.77	3,402.33	3,221.61	180.72	18.827	
10,700.00	6,040.00	10,870.00	6,164.26	113.91	86.28	107.48	-4,663.11	-2,810.77	3,303.40	3,122.83	180.57	18.295	
10,800.00	6,040.00	10,870.00	6,164.26	114.24	86.28	107.48	-4,663.11	-2,810.77	3,204.54	3,024.13	180.41	17.763	
10,900.00	6,040.00	10,870.00	6,164.26	114.61	86.28	107.48	-4,663.11	-2,810.77	3,105.76	2,925.51	180.24	17.231	
11,000.00	6,040.00	10,870.00	6,164.26	115.02	86.28	107.48	-4,663.11	-2,810.77	3,007.05	2,826.98	180.07	16.699	
11,100.00	6,040.00	10,870.00	6,164.26	115.49	86.28	107.48	-4,663.11	-2,810.77	2,908.44	2,728.55	179.89	16.168	
11,200.00	6,040.00	10,870.00	6,164.26	116.00	86.28	107.48	-4,663.11	-2,810.77	2,809.92	2,630.22	179.70	15.637	
11,300.00	6,040.00	10,870.00	6,164.26	116.58	86.28	107.48	-4,663.11	-2,810.77	2,711.51	2,532.01	179.49	15.106	
11,400.00	6,040.00	10,870.00	6,164.26	117.22	86.28	107.48	-4,663.11	-2,810.77	2,613.22	2,433.94	179.28	14.576	
11,500.00	6,040.00	10,870.00	6,164.26	117.92	86.28	107.48	-4,663.11	-2,810.77	2,515.06	2,336.00	179.06	14.046	
11,600.00	6,040.00	10,870.00	6,164.26	118.70	86.28	107.48	-4,663.11	-2,810.77	2,417.06	2,238.24	178.82	13.517	
11,700.00	6,040.00	10,870.00	6,164.26	119.56	86.28	107.48	-4,663.11	-2,810.77	2,319.22	2,140.65	178.57	12.988	
11,800.00	6,040.00	10,870.00	6,164.26	120.51	86.28	107.48	-4,663.11	-2,810.77	2,221.58	2,043.27	178.31	12.459	
11,900.00	6,040.00	10,870.00	6,164.26	121.54	86.28	107.48	-4,663.11	-2,810.77	2,124.16	1,946.13	178.03	11.931	
12,000.00	6,040.00	10,870.00	6,164.26	122.66	86.28	107.48	-4,663.11	-2,810.77	2,026.99	1,849.25	177.74	11.404	
12,100.00	6,040.00	10,870.00	6,164.26	123.87	86.28	107.48	-4,663.11	-2,810.77	1,930.11	1,752.67	177.44	10.878	
12,200.00	6,040.00	10,870.00	6,164.26	125.17	86.28	107.48	-4,663.11	-2,810.77	1,833.57	1,656.44	177.12	10.352	
12,300.00	6,040.00	10,870.00	6,164.26	126.57	86.28	107.48	-4,663.11	-2,810.77	1,737.41	1,560.61	176.80	9.827	
12,400.00	6,040.00	10,870.00	6,164.26	128.06	86.28	107.48	-4,663.11	-2,810.77	1,641.72	1,465.26	176.46	9.304	
12,500.00	6,040.00	10,870.00	6,164.26	129.63	86.28	107.48	-4,663.11	-2,810.77	1,546.57	1,370.45	176.12	8.781	
12,600.00	6,040.00	10,870.00	6,164.26	131.29	86.28	107.48	-4,663.11	-2,810.77	1,452.07	1,276.29	175.78	8.261	
12,700.00	6,040.00	10,870.00	6,164.26	133.03	86.28	107.48	-4,663.11	-2,810.77	1,358.36	1,182.90	175.45	7.742	
12,800.00	6,040.00	10,870.00	6,164.26	134.84	86.28	107.48	-4,663.11	-2,810.77	1,265.61	1,090.45	175.16	7.226	
12,900.00	6,040.00	10,870.00	6,164.26	136.71	86.28	107.48	-4,663.11	-2,810.77	1,174.05	999.14	174.91	6.712	
13,000.00	6,040.00	10,870.00	6,164.26	138.66	86.28	107.48	-4,663.11	-2,810.77	1,083.99	909.24	174.75	6.203	
13,100.00	6,040.00	10,870.00	6,164.26	140.66	86.28	107.48	-4,663.11	-2,810.77	995.82	821.10	174.72	5.699	
13,200.00	6,040.00	10,870.00	6,164.26	142.71	86.28	107.48	-4,663.11	-2,810.77	910.11	735.23	174.88	5.204	
13,300.00	6,040.00	10,870.00	6,164.26	144.81	86.28	107.48	-4,663.11	-2,810.77	827.61	652.31	175.29	4.721	
13,400.00	6,040.00	10,870.00	6,164.26	146.96	86.28	107.48	-4,663.11	-2,810.77	749.38	573.37	176.01	4.258	
13,500.00	6,040.00	10,870.00	6,164.26	149.14	86.28	107.48	-4,663.11	-2,810.77	676.91	499.90	177.01	3.824	
13,600.00	6,040.00	10,870.00	6,164.26	151.36	86.28	107.48	-4,663.11	-2,810.77	612.24	434.11	178.13	3.437	
13,700.00	6,040.00	10,870.00	6,164.26	153.62	86.28	107.48	-4,663.11	-2,810.77	558.09	379.14	178.96	3.119	
13,800.00	6,040.00	10,870.00	6,164.26	155.91	86.28	107.48	-4,663.11	-2,810.77	517.78	338.77	179.01	2.892	
13,900.00	6,040.00	10,870.00	6,164.26	158.22	86.28	107.48	-4,663.11	-2,810.77	494.71	315.75	178.96	2.764	
13,966.83	6,040.00	10,870.00	6,164.26	159.78	86.28	107.48	-4,663.11	-2,810.77	490.17	309.36	180.82	2.711 CC	
14,000.00	6,040.00	10,870.00	6,164.26	160.56	86.28	107.48	-4,663.11	-2,810.77	491.29	308.44	182.86	2.687 ES	
14,100.00	6,040.00	10,870.00	6,164.26	162.92	86.28	107.48	-4,663.11	-2,810.77	507.94	315.81	192.13	2.644 SF	
14,200.00	6,040.00	10,870.00	6,164.26	165.30	86.28	107.48	-4,663.11	-2,810.77	542.80	341.82	200.99	2.701	
14,300.00	6,040.00	10,870.00	6,164.26	167.70	86.28	107.48	-4,663.11	-2,810.77	592.68	386.07	206.61	2.869	
14,400.00	6,040.00	10,870.00	6,164.26	170.12	86.28	107.48	-4,663.11	-2,810.77	654.14	444.83	209.31	3.125	
14,500.00	6,040.00	10,870.00	6,164.26	172.55	86.28	107.48	-4,663.11	-2,810.77	724.25	514.16	210.09	3.447	
14,600.00	6,040.00	10,870.00	6,164.26	175.00	86.28	107.48	-4,663.11	-2,810.77	800.73	590.96	209.77	3.817	
14,700.00	6,040.00	10,870.00	6,164.26	177.46	86.28	107.48	-4,663.11	-2,810.77	881.93	673.04	208.89	4.222	
14,800.00	6,040.00	10,870.00	6,164.26	179.94	86.28	107.48	-4,663.11	-2,810.77	966.66	758.90	207.77	4.653	
14,900.00	6,040.00	10,870.00	6,164.26	182.43	86.28	107.48	-4,663.11	-2,810.77	1,054.07	847.50	206.57	5.103	
15,000.00	6,040.00	10,870.00	6,164.26	184.92	86.28	107.48	-4,663.11	-2,810.77	1,143.55	938.16	205.39	5.568	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,100.00	6,040.00	10,870.00	6,164.26	187.43	86.28	107.48	-4,663.11	-2,810.77	1,234.64	1,030.38	204.26	6.044	
15,200.00	6,040.00	10,870.00	6,164.26	189.95	86.28	107.48	-4,663.11	-2,810.77	1,327.02	1,123.80	203.22	6.530	
15,300.00	6,040.00	10,870.00	6,164.26	192.48	86.28	107.48	-4,663.11	-2,810.77	1,420.42	1,218.16	202.26	7.023	
15,400.00	6,040.00	10,870.00	6,164.26	195.01	86.28	107.48	-4,663.11	-2,810.77	1,514.67	1,313.29	201.38	7.521	
15,500.00	6,040.00	10,870.00	6,164.26	197.55	86.28	107.48	-4,663.11	-2,810.77	1,609.62	1,409.04	200.58	8.025	
15,600.00	6,040.00	10,870.00	6,164.26	200.10	86.28	107.48	-4,663.11	-2,810.77	1,705.14	1,505.29	199.85	8.532	
15,700.00	6,040.00	10,870.00	6,164.26	202.65	86.28	107.48	-4,663.11	-2,810.77	1,801.15	1,601.96	199.19	9.042	
15,800.00	6,040.00	10,870.00	6,164.26	205.22	86.28	107.48	-4,663.11	-2,810.77	1,897.57	1,698.99	198.58	9.556	
15,900.00	6,040.00	10,870.00	6,164.26	207.78	86.28	107.48	-4,663.11	-2,810.77	1,994.34	1,796.32	198.03	10.071	
16,000.00	6,040.00	10,870.00	6,164.26	210.36	86.28	107.48	-4,663.11	-2,810.77	2,091.42	1,893.90	197.52	10.588	
16,100.00	6,040.00	10,870.00	6,164.26	212.93	86.28	107.48	-4,663.11	-2,810.77	2,188.76	1,991.71	197.05	11.107	
16,200.00	6,040.00	10,870.00	6,164.26	215.52	86.28	107.48	-4,663.11	-2,810.77	2,286.33	2,089.71	196.62	11.628	
16,300.00	6,040.00	10,870.00	6,164.26	218.11	86.28	107.48	-4,663.11	-2,810.77	2,384.10	2,187.87	196.23	12.150	
16,400.00	6,040.00	10,870.00	6,164.26	220.70	86.28	107.48	-4,663.11	-2,810.77	2,482.05	2,286.19	195.86	12.672	
16,500.00	6,040.00	10,870.00	6,164.26	223.29	86.28	107.48	-4,663.11	-2,810.77	2,580.16	2,384.63	195.53	13.196	
16,600.00	6,040.00	10,870.00	6,164.26	225.89	86.28	107.48	-4,663.11	-2,810.77	2,678.40	2,483.19	195.21	13.720	
16,700.00	6,040.00	10,870.00	6,164.26	228.50	86.28	107.48	-4,663.11	-2,810.77	2,776.77	2,581.85	194.92	14.246	
16,800.00	6,040.00	10,870.00	6,164.26	231.11	86.28	107.48	-4,663.11	-2,810.77	2,875.26	2,680.61	194.65	14.771	
16,900.00	6,040.00	10,870.00	6,164.26	233.72	86.28	107.48	-4,663.11	-2,810.77	2,973.84	2,779.44	194.40	15.298	
17,000.00	6,040.00	10,870.00	6,164.26	236.33	86.28	107.48	-4,663.11	-2,810.77	3,072.52	2,878.36	194.16	15.824	
17,100.00	6,040.00	10,870.00	6,164.26	238.95	86.28	107.48	-4,663.11	-2,810.77	3,171.28	2,977.34	193.94	16.352	
17,200.00	6,040.00	10,870.00	6,164.26	241.57	86.28	107.48	-4,663.11	-2,810.77	3,270.11	3,076.38	193.74	16.879	
17,300.00	6,040.00	10,870.00	6,164.26	244.19	86.28	107.48	-4,663.11	-2,810.77	3,369.02	3,175.48	193.54	17.407	
17,400.00	6,040.00	10,870.00	6,164.26	246.82	86.28	107.48	-4,663.11	-2,810.77	3,467.98	3,274.62	193.36	17.935	
17,500.00	6,040.00	10,870.00	6,164.26	249.45	86.28	107.48	-4,663.11	-2,810.77	3,567.01	3,373.82	193.19	18.464	
17,600.00	6,040.00	10,870.00	6,164.26	252.08	86.28	107.48	-4,663.11	-2,810.77	3,666.08	3,473.06	193.03	18.992	
17,700.00	6,040.00	10,870.00	6,164.26	254.71	86.28	107.48	-4,663.11	-2,810.77	3,765.21	3,572.33	192.88	19.521	
17,800.00	6,040.00	10,870.00	6,164.26	257.35	86.28	107.48	-4,663.11	-2,810.77	3,864.38	3,671.65	192.73	20.050	
17,900.00	6,040.00	10,870.00	6,164.26	259.99	86.28	107.48	-4,663.11	-2,810.77	3,963.59	3,771.00	192.60	20.580	
18,000.00	6,040.00	10,870.00	6,164.26	262.63	86.28	107.48	-4,663.11	-2,810.77	4,062.85	3,870.37	192.47	21.109	
18,100.00	6,040.00	10,870.00	6,164.26	265.27	86.28	107.48	-4,663.11	-2,810.77	4,162.13	3,969.78	192.35	21.638	
18,200.00	6,040.00	10,870.00	6,164.26	267.91	86.28	107.48	-4,663.11	-2,810.77	4,261.45	4,069.22	192.24	22.168	
18,300.00	6,040.00	10,870.00	6,164.26	270.56	86.28	107.48	-4,663.11	-2,810.77	4,360.80	4,168.67	192.13	22.697	
18,400.00	6,040.00	10,870.00	6,164.26	273.21	86.28	107.48	-4,663.11	-2,810.77	4,460.18	4,268.16	192.03	23.227	
18,500.00	6,040.00	10,870.00	6,164.26	275.86	86.28	107.48	-4,663.11	-2,810.77	4,559.59	4,367.66	191.93	23.757	
18,600.00	6,040.00	10,870.00	6,164.26	278.51	86.28	107.48	-4,663.11	-2,810.77	4,659.03	4,467.19	191.84	24.286	
18,700.00	6,040.00	10,870.00	6,164.26	281.16	86.28	107.48	-4,663.11	-2,810.77	4,758.48	4,566.73	191.75	24.816	
18,800.00	6,040.00	10,870.00	6,164.26	283.81	86.28	107.48	-4,663.11	-2,810.77	4,857.96	4,666.29	191.67	25.346	
18,900.00	6,040.00	10,870.00	6,164.26	286.47	86.28	107.48	-4,663.11	-2,810.77	4,957.46	4,765.87	191.59	25.875	
18,919.70	6,040.00	10,870.00	6,164.26	286.99	86.28	107.48	-4,663.11	-2,810.77	4,977.07	4,785.49	191.58	25.980	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference				Offset			Semi Major Axis		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-93.74	-160.17	-2,450.09	2,455.43				
100.00	100.00	71.52	71.52	0.13	0.20	-93.74	-160.26	-2,450.15	2,455.39	2,455.06	0.33	7,434.281	
200.00	199.98	162.36	162.36	0.48	0.52	117.03	-160.80	-2,450.49	2,456.59	2,455.59	1.01	2,442.616	
300.00	299.84	258.17	258.16	0.85	0.87	117.06	-161.87	-2,451.16	2,459.74	2,458.03	1.71	1,438.744	
400.00	399.45	369.56	369.55	1.22	1.26	117.16	-162.80	-2,451.54	2,464.10	2,461.62	2.48	991.681	
500.00	498.70	456.98	456.96	1.62	1.58	117.26	-163.18	-2,451.90	2,470.17	2,466.97	3.19	773.484	
600.00	597.47	540.47	540.45	2.05	1.87	117.37	-163.63	-2,452.84	2,478.56	2,474.65	3.91	634.046	
700.00	695.62	672.81	672.78	2.51	2.33	117.71	-164.00	-2,453.73	2,488.20	2,483.39	4.81	517.778	
800.00	793.06	781.08	781.05	3.01	2.70	118.03	-163.81	-2,453.33	2,498.54	2,492.89	5.65	442.395	
900.00	889.64	875.55	875.52	3.56	3.01	118.31	-163.64	-2,452.96	2,510.69	2,504.21	6.47	387.818	
1,000.00	985.27	965.89	965.86	4.14	3.32	118.60	-163.47	-2,452.72	2,524.83	2,517.50	7.32	344.750	
1,100.00	1,079.82	1,053.22	1,053.19	4.78	3.62	118.88	-163.15	-2,452.72	2,541.16	2,532.96	8.20	309.891	
1,200.00	1,173.17	1,151.38	1,151.35	5.46	3.96	119.28	-162.28	-2,452.89	2,559.68	2,550.53	9.15	279.719	
1,300.00	1,265.21	1,254.65	1,254.62	6.20	4.32	119.78	-159.34	-2,452.52	2,579.83	2,569.67	10.16	254.012	
1,400.00	1,355.84	1,423.63	1,423.33	6.99	4.91	120.96	-152.13	-2,448.77	2,600.50	2,589.07	11.43	227.540	
1,500.00	1,444.94	1,515.50	1,514.94	7.84	5.24	121.51	-146.01	-2,445.42	2,622.50	2,610.03	12.47	210.371	
1,600.00	1,532.39	1,834.22	1,832.02	8.75	6.39	124.43	-128.70	-2,420.26	2,644.11	2,629.81	14.30	184.914	
1,700.00	1,618.11	1,700.00	2,032.25	9.71	5.88	126.43	-110.57	-2,388.70	2,660.83	2,646.32	14.51	183.334	
1,800.00	1,701.97	2,093.18	2,086.60	10.74	7.41	126.77	-105.76	-2,379.06	2,679.65	2,662.87	16.78	159.708	
1,900.00	1,783.88	2,145.00	2,137.56	11.82	7.62	127.03	-100.49	-2,371.26	2,703.21	2,685.39	17.81	151.775	
2,000.00	1,863.74	2,162.33	2,154.62	12.96	7.69	126.80	-98.51	-2,368.90	2,730.95	2,712.20	18.75	145.680	
2,100.00	1,941.45	2,202.75	2,194.36	14.16	7.86	126.81	-93.36	-2,363.68	2,763.08	2,743.32	19.77	139.780	
2,200.00	2,016.92	2,240.62	2,231.55	15.41	8.01	126.74	-87.85	-2,359.13	2,799.36	2,778.58	20.78	134.688	
2,300.00	2,090.05	2,299.40	2,289.18	16.73	8.26	126.94	-78.50	-2,352.34	2,839.44	2,817.56	21.88	129.758	
2,400.00	2,160.76	2,437.01	2,423.50	18.10	8.86	128.38	-54.20	-2,334.91	2,882.73	2,859.45	23.27	123.858	
2,500.00	2,228.95	2,469.37	2,454.97	19.53	9.00	128.10	-48.20	-2,330.40	2,928.39	2,904.10	24.28	120.607	
2,600.00	2,294.55	2,506.18	2,490.84	21.01	9.16	127.82	-41.53	-2,325.55	2,977.83	2,952.53	25.29	117.733	
2,700.00	2,357.48	2,556.46	2,539.94	22.55	9.39	127.70	-32.65	-2,319.28	3,030.84	3,004.49	26.35	115.035	
2,800.00	2,418.42	2,624.61	2,606.51	24.13	9.69	128.61	-20.89	-2,310.63	3,086.37	3,058.92	27.45	112.423	
2,900.00	2,479.25	2,693.82	2,674.13	25.71	10.01	129.79	-9.24	-2,301.58	3,143.01	3,114.48	28.53	110.151	
3,000.00	2,540.09	2,750.87	2,729.85	27.31	10.27	130.74	0.24	-2,293.93	3,200.68	3,171.14	29.54	108.349	
3,100.00	2,600.93	2,801.72	2,779.48	28.90	10.50	131.58	8.93	-2,287.05	3,259.54	3,229.05	30.49	106.893	
3,200.00	2,661.77	2,851.91	2,828.41	30.51	10.74	132.40	17.75	-2,280.20	3,319.57	3,288.16	31.41	105.671	
3,300.00	2,722.61	2,901.43	2,876.65	32.11	10.97	133.20	26.69	-2,273.39	3,380.71	3,348.41	32.30	104.657	
3,400.00	2,783.44	2,948.47	2,922.48	33.72	11.19	133.95	35.14	-2,267.01	3,442.94	3,409.78	33.15	103.849	
3,500.00	2,844.28	2,996.17	2,969.07	35.34	11.41	134.69	43.29	-2,260.81	3,506.20	3,472.21	33.98	103.173	
3,600.00	2,905.12	3,044.81	3,016.69	36.95	11.63	135.43	51.16	-2,254.78	3,570.42	3,535.62	34.80	102.607	
3,700.00	2,965.96	3,094.41	3,065.35	38.57	11.86	136.15	58.72	-2,248.94	3,635.53	3,599.94	35.60	102.135	
3,800.00	3,026.79	3,178.48	3,148.00	40.19	12.24	137.35	70.67	-2,239.17	3,701.23	3,664.71	36.52	101.347	
3,900.00	3,087.63	3,266.71	3,234.83	41.81	12.63	138.56	82.21	-2,228.60	3,767.16	3,729.71	37.45	100.593	
4,000.00	3,148.47	3,319.61	3,286.91	43.43	12.87	139.26	88.85	-2,222.11	3,833.46	3,795.25	38.21	100.327	
4,100.00	3,209.31	3,359.17	3,325.77	45.05	13.06	139.78	94.31	-2,217.14	3,900.59	3,861.71	38.89	100.301	
4,200.00	3,270.14	3,397.52	3,363.36	46.68	13.24	140.29	100.06	-2,212.24	3,968.58	3,929.04	39.54	100.367	
4,300.00	3,330.98	3,434.69	3,399.73	48.31	13.41	140.79	106.07	-2,207.41	4,037.39	3,997.22	40.17	100.517	
4,400.00	3,391.82	3,474.00	3,438.09	49.93	13.59	141.31	112.89	-2,202.21	4,107.00	4,066.22	40.78	100.709	
4,500.00	3,452.66	3,516.93	3,479.89	51.56	13.80	141.87	120.74	-2,196.42	4,177.34	4,135.93	41.41	100.883	
4,600.00	3,513.49	3,563.40	3,525.07	53.19	14.03	142.48	129.56	-2,190.01	4,248.29	4,206.26	42.03	101.067	
4,700.00	3,574.33	3,610.31	3,571.96	54.82	14.24	143.15	-2,442.14	-1,948.76	4,264.91	4,181.84	83.08	51.336	
4,800.00	3,635.17	3,665.21	3,621.08	56.45	14.45	143.82	-2,526.92	-1,944.37	4,256.88	4,170.61	86.27	49.343	
4,900.00	3,696.01	3,726.05	3,681.93	58.08	14.66	144.49	-2,622.91	-1,939.10	4,249.64	4,159.92	89.72	47.365	
5,000.00	3,756.84	3,786.89	3,742.81	59.71	14.87	145.16	-2,745.50	-1,932.81	4,242.98	4,149.23	93.75	45.257	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F11-J14-3HNC - OWB - FINAL SURVEY												Offset Site Error: 0.00 usft	
Survey Program: 17-MWD OWSG												Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	9,032.43	6,219.96	61.34	54.94	133.14	-2,793.75	-1,930.20	4,237.23	4,140.85	96.38	43.963	
5,200.00	3,878.52	9,099.84	6,219.94	62.97	56.04	132.50	-2,861.04	-1,926.29	4,232.99	4,133.59	99.39	42.588	
5,300.00	3,939.36	9,196.88	6,220.40	64.61	57.65	131.57	-2,957.84	-1,919.46	4,229.31	4,126.28	103.02	41.052	
5,400.00	4,000.19	9,236.03	6,220.82	66.24	58.30	131.20	-2,996.89	-1,916.72	4,227.14	4,121.64	105.49	40.070	
5,478.66	4,048.05	9,268.00	6,221.32	67.52	58.83	130.90	-3,028.79	-1,914.66	4,226.62	4,119.17	107.46	39.333	
5,500.00	4,061.03	9,290.28	6,221.67	67.87	59.20	130.69	-3,051.03	-1,913.27	4,226.64	4,118.36	108.28	39.035	
5,600.00	4,121.87	9,392.20	6,222.19	69.51	60.90	129.71	-3,152.74	-1,906.91	4,227.01	4,114.92	112.09	37.710	
5,700.00	4,182.71	9,474.02	6,222.44	71.14	62.27	128.93	-3,234.38	-1,901.55	4,228.33	4,112.83	115.51	36.607	
5,800.00	4,243.54	9,580.00	6,222.67	72.77	20.96	128.14	-3,317.40	-1,895.61	4,230.42	4,164.32	66.10	64.001	
5,900.00	4,304.38	9,584.48	6,222.70	74.41	64.13	127.88	-3,344.57	-1,893.82	4,234.06	4,112.87	121.19	34.936	
6,000.00	4,365.22	9,607.97	6,222.72	76.04	64.52	127.65	-3,368.04	-1,892.60	4,239.69	4,116.38	123.31	34.383	
6,100.00	4,426.06	9,648.00	6,222.73	77.68	65.19	127.26	-3,408.04	-1,891.21	4,247.38	4,121.60	125.78	33.769	
6,200.00	4,486.90	9,661.15	6,222.72	79.31	65.41	127.14	-3,421.18	-1,890.90	4,256.81	4,129.24	127.57	33.367	
6,300.00	4,547.73	10,036.52	6,218.33	80.95	71.77	123.51	-3,795.70	-1,870.13	4,265.85	4,127.88	137.97	30.919	
6,400.00	4,608.57	10,119.80	6,219.64	82.58	73.21	122.75	-3,878.49	-1,861.26	4,273.10	4,131.61	141.49	30.200	
6,500.00	4,669.41	10,155.00	6,220.35	84.22	73.83	122.43	-3,913.45	-1,857.25	4,281.26	4,137.35	143.90	29.751	
6,600.00	4,730.25	10,203.72	6,221.24	85.86	74.67	121.99	-3,961.90	-1,852.11	4,290.92	4,144.32	146.60	29.269	
6,700.00	4,791.08	10,249.00	6,221.83	87.49	75.45	121.57	-4,007.00	-1,848.28	4,302.65	4,153.45	149.20	28.838	
6,800.00	4,851.92	10,276.63	6,222.10	89.13	75.93	121.32	-4,034.56	-1,846.22	4,315.96	4,164.63	151.34	28.519	
6,900.00	4,912.76	10,384.76	6,222.89	90.76	77.80	120.32	-4,142.36	-1,837.91	4,330.45	4,175.01	155.44	27.859	
7,000.00	4,973.60	10,464.33	6,223.40	92.40	79.18	119.58	-4,221.62	-1,830.93	4,345.16	4,186.33	158.83	27.357	
7,100.00	5,034.43	10,504.00	6,223.86	94.04	79.87	119.22	-4,261.16	-1,827.75	4,361.52	4,200.32	161.20	27.057	
7,200.00	5,095.27	10,529.83	6,224.24	95.67	80.31	118.99	-4,286.92	-1,825.90	4,379.53	4,216.36	163.17	26.840	
7,300.00	5,156.11	10,565.16	6,224.83	97.31	80.92	118.67	-4,322.17	-1,823.62	4,399.19	4,233.85	165.34	26.607	
7,400.00	5,216.95	10,602.90	6,225.54	98.95	81.58	118.32	-4,359.85	-1,821.48	4,420.46	4,252.93	167.53	26.386	
7,500.00	5,277.78	10,706.57	6,226.93	100.59	83.37	117.38	-4,463.35	-1,815.73	4,442.72	4,271.27	171.46	25.911	
7,600.00	5,338.62	10,815.54	6,227.95	102.22	85.26	116.40	-4,572.10	-1,808.84	4,465.37	4,289.85	175.52	25.441	
7,700.00	5,399.46	10,891.93	6,228.36	103.86	86.59	115.72	-4,648.31	-1,803.70	4,488.68	4,309.99	178.69	25.120	
7,800.00	5,460.30	10,897.00	6,228.39	105.50	86.67	115.67	-4,653.37	-1,803.36	4,513.43	4,333.54	179.89	25.090	
7,900.00	5,521.24	10,897.00	6,228.39	107.13	86.67	114.02	-4,653.37	-1,803.36	4,539.86	4,358.99	180.86	25.101	
8,000.00	5,584.83	10,897.00	6,228.39	108.61	86.67	105.84	-4,653.37	-1,803.36	4,556.62	4,374.93	181.68	25.080	
8,100.00	5,650.69	10,897.00	6,228.39	109.85	86.67	97.12	-4,653.37	-1,803.36	4,558.29	4,376.01	182.29	25.006	
8,200.00	5,716.83	10,897.00	6,228.39	110.82	86.67	88.47	-4,653.37	-1,803.36	4,544.85	4,362.21	182.64	24.884	
8,300.00	5,781.24	10,897.00	6,228.39	111.52	86.67	80.55	-4,653.37	-1,803.36	4,516.57	4,333.84	182.73	24.718	
8,400.00	5,841.96	10,897.00	6,228.39	111.98	86.67	73.89	-4,653.37	-1,803.36	4,474.03	4,291.46	182.58	24.505	
8,500.00	5,897.14	10,897.00	6,228.39	112.25	86.67	68.80	-4,653.37	-1,803.36	4,418.15	4,235.92	182.23	24.245	
8,600.00	5,945.12	10,897.00	6,228.39	112.37	86.67	65.50	-4,653.37	-1,803.36	4,350.13	4,168.39	181.75	23.935	
8,700.00	5,984.42	10,897.00	6,228.39	112.39	86.67	64.29	-4,653.37	-1,803.36	4,271.53	4,090.32	181.21	23.572	
8,800.00	6,013.86	10,897.00	6,228.39	112.35	86.67	66.09	-4,653.37	-1,803.36	4,184.21	4,003.52	180.69	23.157	
8,900.00	6,032.54	10,897.00	6,228.39	112.30	86.67	74.20	-4,653.37	-1,803.36	4,090.35	3,910.09	180.26	22.692	
9,000.00	6,039.89	10,897.00	6,228.39	112.24	86.67	105.45	-4,653.37	-1,803.36	3,992.45	3,812.48	179.97	22.183	
9,100.00	6,040.00	10,897.00	6,228.39	112.19	86.67	114.34	-4,653.37	-1,803.36	3,893.31	3,713.51	179.80	21.654	
9,200.00	6,040.00	10,897.00	6,228.39	112.16	86.67	114.34	-4,653.37	-1,803.36	3,794.20	3,614.59	179.62	21.124	
9,300.00	6,040.00	10,897.00	6,228.39	112.15	86.67	114.34	-4,653.37	-1,803.36	3,695.15	3,515.72	179.43	20.594	
9,400.00	6,040.00	10,897.00	6,228.39	112.15	86.67	114.34	-4,653.37	-1,803.36	3,596.14	3,416.91	179.23	20.064	
9,500.00	6,040.00	10,897.00	6,228.39	112.16	86.67	114.34	-4,653.37	-1,803.36	3,497.19	3,318.18	179.02	19.535	
9,600.00	6,040.00	10,897.00	6,228.39	112.19	86.67	114.34	-4,653.37	-1,803.36	3,398.31	3,219.51	178.80	19.007	
9,700.00	6,040.00	10,897.00	6,228.39	112.24	86.67	114.34	-4,653.37	-1,803.36	3,299.49	3,120.93	178.56	18.478	
9,800.00	6,040.00	10,897.00	6,228.39	112.31	86.67	114.34	-4,653.37	-1,803.36	3,200.74	3,022.43	178.31	17.950	
9,900.00	6,040.00	10,897.00	6,228.39	112.39	86.67	114.34	-4,653.37	-1,803.36	3,102.08	2,924.03	178.05	17.423	
10,000.00	6,040.00	10,897.00	6,228.39	112.49	86.67	114.34	-4,653.37	-1,803.36	3,003.50	2,825.73	177.77	16.896	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	10,897.00	6,228.39	112.62	86.67	114.34	-4,653.37	-1,803.36	2,905.02	2,727.55	177.47	16.369	
10,200.00	6,040.00	10,897.00	6,228.39	112.77	86.67	114.34	-4,653.37	-1,803.36	2,806.64	2,629.50	177.15	15.843	
10,300.00	6,040.00	10,897.00	6,228.39	112.94	86.67	114.34	-4,653.37	-1,803.36	2,708.39	2,531.58	176.81	15.318	
10,400.00	6,040.00	10,897.00	6,228.39	113.14	86.67	114.34	-4,653.37	-1,803.36	2,610.27	2,433.83	176.44	14.794	
10,500.00	6,040.00	10,897.00	6,228.39	113.36	86.67	114.34	-4,653.37	-1,803.36	2,512.30	2,336.25	176.05	14.270	
10,600.00	6,040.00	10,897.00	6,228.39	113.62	86.67	114.34	-4,653.37	-1,803.36	2,414.49	2,238.86	175.63	13.748	
10,700.00	6,040.00	10,897.00	6,228.39	113.91	86.67	114.34	-4,653.37	-1,803.36	2,316.87	2,141.70	175.17	13.227	
10,800.00	6,040.00	10,897.00	6,228.39	114.24	86.67	114.34	-4,653.37	-1,803.36	2,219.46	2,044.79	174.67	12.706	
10,900.00	6,040.00	10,897.00	6,228.39	114.61	86.67	114.34	-4,653.37	-1,803.36	2,122.29	1,948.16	174.14	12.187	
11,000.00	6,040.00	10,897.00	6,228.39	115.02	86.67	114.34	-4,653.37	-1,803.36	2,025.40	1,851.85	173.55	11.670	
11,100.00	6,040.00	10,897.00	6,228.39	115.49	86.67	114.34	-4,653.37	-1,803.36	1,928.83	1,755.91	172.92	11.155	
11,200.00	6,040.00	10,897.00	6,228.39	116.00	86.67	114.34	-4,653.37	-1,803.36	1,832.62	1,660.40	172.22	10.641	
11,300.00	6,040.00	10,897.00	6,228.39	116.58	86.67	114.34	-4,653.37	-1,803.36	1,736.85	1,565.39	171.46	10.130	
11,400.00	6,040.00	10,897.00	6,228.39	117.22	86.67	114.34	-4,653.37	-1,803.36	1,641.57	1,470.96	170.62	9.621	
11,500.00	6,040.00	10,897.00	6,228.39	117.92	86.67	114.34	-4,653.37	-1,803.36	1,546.90	1,377.21	169.69	9.116	
11,600.00	6,040.00	10,897.00	6,228.39	118.70	86.67	114.34	-4,653.37	-1,803.36	1,452.93	1,284.27	168.66	8.615	
11,700.00	6,040.00	10,897.00	6,228.39	119.56	86.67	114.34	-4,653.37	-1,803.36	1,359.83	1,192.31	167.52	8.117	
11,800.00	6,040.00	10,897.00	6,228.39	120.51	86.67	114.34	-4,653.37	-1,803.36	1,267.78	1,101.51	166.26	7.625	
11,900.00	6,040.00	10,897.00	6,228.39	121.54	86.67	114.34	-4,653.37	-1,803.36	1,177.03	1,012.16	164.87	7.139	
12,000.00	6,040.00	10,897.00	6,228.39	122.66	86.67	114.34	-4,653.37	-1,803.36	1,087.89	924.57	163.33	6.661	
12,100.00	6,040.00	10,897.00	6,228.39	123.87	86.67	114.34	-4,653.37	-1,803.36	1,000.82	839.19	161.63	6.192	
12,200.00	6,040.00	10,897.00	6,228.39	125.17	86.67	114.34	-4,653.37	-1,803.36	916.39	756.60	159.79	5.735	
12,300.00	6,040.00	10,897.00	6,228.39	126.57	86.67	114.34	-4,653.37	-1,803.36	835.40	677.59	157.81	5.294	
12,400.00	6,040.00	10,897.00	6,228.39	128.06	86.67	114.34	-4,653.37	-1,803.36	758.96	603.23	155.73	4.874	
12,500.00	6,040.00	10,897.00	6,228.39	129.63	86.67	114.34	-4,653.37	-1,803.36	688.58	534.99	153.59	4.483	
12,600.00	6,040.00	10,897.00	6,228.39	131.29	86.67	114.34	-4,653.37	-1,803.36	626.31	474.87	151.45	4.136	
12,700.00	6,040.00	10,897.00	6,228.39	133.03	86.67	114.34	-4,653.37	-1,803.36	574.80	425.36	149.44	3.846	
12,800.00	6,040.00	10,897.00	6,228.39	134.84	86.67	114.34	-4,653.37	-1,803.36	537.14	388.82	148.32	3.622	
12,900.00	6,040.00	10,897.00	6,228.39	136.71	86.67	114.34	-4,653.37	-1,803.36	516.38	365.47	150.91	3.422	
12,959.37	6,040.00	10,897.00	6,228.39	137.86	86.67	114.34	-4,653.37	-1,803.36	512.96	357.01	155.95	3.289 CC	
13,000.00	6,040.00	10,897.00	6,228.39	138.66	86.67	114.34	-4,653.37	-1,803.36	514.56	353.77	160.79	3.200 ES	
13,100.00	6,040.00	10,897.00	6,228.39	140.66	86.67	114.34	-4,653.37	-1,803.36	531.88	357.62	174.26	3.052	
13,200.00	6,040.00	10,897.00	6,228.39	142.71	86.67	114.34	-4,653.37	-1,803.36	566.59	380.71	185.88	3.048 SF	
13,300.00	6,040.00	10,897.00	6,228.39	144.81	86.67	114.34	-4,653.37	-1,803.36	615.75	421.78	193.98	3.174	
13,400.00	6,040.00	10,897.00	6,228.39	146.96	86.67	114.34	-4,653.37	-1,803.36	676.22	477.27	198.96	3.399	
13,500.00	6,040.00	10,897.00	6,228.39	149.14	86.67	114.34	-4,653.37	-1,803.36	745.25	543.54	201.71	3.695	
13,600.00	6,040.00	10,897.00	6,228.39	151.36	86.67	114.34	-4,653.37	-1,803.36	820.69	617.66	203.03	4.042	
13,700.00	6,040.00	10,897.00	6,228.39	153.62	86.67	114.34	-4,653.37	-1,803.36	900.92	697.44	203.47	4.428	
13,800.00	6,040.00	10,897.00	6,228.39	155.91	86.67	114.34	-4,653.37	-1,803.36	984.77	781.37	203.41	4.841	
13,900.00	6,040.00	10,897.00	6,228.39	158.22	86.67	114.34	-4,653.37	-1,803.36	1,071.40	868.36	203.05	5.277	
14,000.00	6,040.00	10,897.00	6,228.39	160.56	86.67	114.34	-4,653.37	-1,803.36	1,160.19	957.65	202.54	5.728	
14,100.00	6,040.00	10,897.00	6,228.39	162.92	86.67	114.34	-4,653.37	-1,803.36	1,250.66	1,048.71	201.95	6.193	
14,200.00	6,040.00	10,897.00	6,228.39	165.30	86.67	114.34	-4,653.37	-1,803.36	1,342.49	1,141.15	201.34	6.668	
14,300.00	6,040.00	10,897.00	6,228.39	167.70	86.67	114.34	-4,653.37	-1,803.36	1,435.41	1,234.68	200.73	7.151	
14,400.00	6,040.00	10,897.00	6,228.39	170.12	86.67	114.34	-4,653.37	-1,803.36	1,529.23	1,329.09	200.14	7.641	
14,500.00	6,040.00	10,897.00	6,228.39	172.55	86.67	114.34	-4,653.37	-1,803.36	1,623.78	1,424.21	199.57	8.136	
14,600.00	6,040.00	10,897.00	6,228.39	175.00	86.67	114.34	-4,653.37	-1,803.36	1,718.95	1,519.91	199.04	8.636	
14,700.00	6,040.00	10,897.00	6,228.39	177.46	86.67	114.34	-4,653.37	-1,803.36	1,814.64	1,616.11	198.53	9.140	
14,800.00	6,040.00	10,897.00	6,228.39	179.94	86.67	114.34	-4,653.37	-1,803.36	1,910.77	1,712.71	198.06	9.647	
14,900.00	6,040.00	10,897.00	6,228.39	182.43	86.67	114.34	-4,653.37	-1,803.36	2,007.28	1,809.66	197.62	10.157	
15,000.00	6,040.00	10,897.00	6,228.39	184.92	86.67	114.34	-4,653.37	-1,803.36	2,104.11	1,906.91	197.20	10.670	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F11-J14-3HNC - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,100.00	6,040.00	10,897.00	6,228.39	187.43	86.67	114.34	-4,653.37	-1,803.36	2,201.23	2,004.41	196.82	11.184	
15,200.00	6,040.00	10,897.00	6,228.39	189.95	86.67	114.34	-4,653.37	-1,803.36	2,298.60	2,102.14	196.46	11.700	
15,300.00	6,040.00	10,897.00	6,228.39	192.48	86.67	114.34	-4,653.37	-1,803.36	2,396.18	2,200.06	196.12	12.218	
15,400.00	6,040.00	10,897.00	6,228.39	195.01	86.67	114.34	-4,653.37	-1,803.36	2,493.95	2,298.15	195.80	12.737	
15,500.00	6,040.00	10,897.00	6,228.39	197.55	86.67	114.34	-4,653.37	-1,803.36	2,591.90	2,396.39	195.50	13.258	
15,600.00	6,040.00	10,897.00	6,228.39	200.10	86.67	114.34	-4,653.37	-1,803.36	2,689.99	2,494.76	195.23	13.779	
15,700.00	6,040.00	10,897.00	6,228.39	202.65	86.67	114.34	-4,653.37	-1,803.36	2,788.22	2,593.26	194.96	14.301	
15,800.00	6,040.00	10,897.00	6,228.39	205.22	86.67	114.34	-4,653.37	-1,803.36	2,886.57	2,691.85	194.72	14.824	
15,900.00	6,040.00	10,897.00	6,228.39	207.78	86.67	114.34	-4,653.37	-1,803.36	2,985.03	2,790.55	194.49	15.348	
16,000.00	6,040.00	10,897.00	6,228.39	210.36	86.67	114.34	-4,653.37	-1,803.36	3,083.59	2,889.32	194.27	15.873	
16,100.00	6,040.00	10,897.00	6,228.39	212.93	86.67	114.34	-4,653.37	-1,803.36	3,182.24	2,988.18	194.06	16.398	
16,200.00	6,040.00	10,897.00	6,228.39	215.52	86.67	114.34	-4,653.37	-1,803.36	3,280.98	3,087.11	193.87	16.924	
16,300.00	6,040.00	10,897.00	6,228.39	218.11	86.67	114.34	-4,653.37	-1,803.36	3,379.78	3,186.09	193.69	17.450	
16,400.00	6,040.00	10,897.00	6,228.39	220.70	86.67	114.34	-4,653.37	-1,803.36	3,478.66	3,285.14	193.51	17.976	
16,500.00	6,040.00	10,897.00	6,228.39	223.29	86.67	114.34	-4,653.37	-1,803.36	3,577.59	3,384.24	193.35	18.503	
16,600.00	6,040.00	10,897.00	6,228.39	225.89	86.67	114.34	-4,653.37	-1,803.36	3,676.59	3,483.39	193.20	19.030	
16,700.00	6,040.00	10,897.00	6,228.39	228.50	86.67	114.34	-4,653.37	-1,803.36	3,775.64	3,582.59	193.05	19.558	
16,800.00	6,040.00	10,897.00	6,228.39	231.11	86.67	114.34	-4,653.37	-1,803.36	3,874.73	3,681.82	192.91	20.086	
16,900.00	6,040.00	10,897.00	6,228.39	233.72	86.67	114.34	-4,653.37	-1,803.36	3,973.88	3,781.10	192.78	20.614	
17,000.00	6,040.00	10,897.00	6,228.39	236.33	86.67	114.34	-4,653.37	-1,803.36	4,073.06	3,880.41	192.65	21.142	
17,100.00	6,040.00	10,897.00	6,228.39	238.95	86.67	114.34	-4,653.37	-1,803.36	4,172.28	3,979.75	192.53	21.671	
17,200.00	6,040.00	10,897.00	6,228.39	241.57	86.67	114.34	-4,653.37	-1,803.36	4,271.54	4,079.12	192.42	22.199	
17,300.00	6,040.00	10,897.00	6,228.39	244.19	86.67	114.34	-4,653.37	-1,803.36	4,370.83	4,178.52	192.31	22.728	
17,400.00	6,040.00	10,897.00	6,228.39	246.82	86.67	114.34	-4,653.37	-1,803.36	4,470.16	4,277.95	192.21	23.257	
17,500.00	6,040.00	10,897.00	6,228.39	249.45	86.67	114.34	-4,653.37	-1,803.36	4,569.51	4,377.40	192.11	23.786	
17,600.00	6,040.00	10,897.00	6,228.39	252.08	86.67	114.34	-4,653.37	-1,803.36	4,668.89	4,476.88	192.02	24.315	
17,700.00	6,040.00	10,897.00	6,228.39	254.71	86.67	114.34	-4,653.37	-1,803.36	4,768.30	4,576.37	191.93	24.844	
17,800.00	6,040.00	10,897.00	6,228.39	257.35	86.67	114.34	-4,653.37	-1,803.36	4,867.73	4,675.89	191.84	25.374	
17,900.00	6,040.00	10,897.00	6,228.39	259.99	86.67	114.34	-4,653.37	-1,803.36	4,967.19	4,775.43	191.76	25.903	
18,000.00	6,040.00	10,897.00	6,228.39	262.63	86.67	114.34	-4,653.37	-1,803.36	5,066.66	4,874.98	191.68	26.432	
18,100.00	6,040.00	10,897.00	6,228.39	265.27	86.67	114.34	-4,653.37	-1,803.36	5,166.16	4,974.55	191.61	26.962	
18,200.00	6,040.00	10,897.00	6,228.39	267.91	86.67	114.34	-4,653.37	-1,803.36	5,265.67	5,074.14	191.54	27.491	
18,300.00	6,040.00	10,897.00	6,228.39	270.56	86.67	114.34	-4,653.37	-1,803.36	5,365.21	5,173.74	191.47	28.021	
18,400.00	6,040.00	10,897.00	6,228.39	273.21	86.67	114.34	-4,653.37	-1,803.36	5,464.76	5,273.35	191.41	28.550	
18,500.00	6,040.00	10,897.00	6,228.39	275.86	86.67	114.34	-4,653.37	-1,803.36	5,564.32	5,372.98	191.35	29.080	
18,600.00	6,040.00	10,897.00	6,228.39	278.51	86.67	114.34	-4,653.37	-1,803.36	5,663.91	5,472.62	191.29	29.609	
18,700.00	6,040.00	10,897.00	6,228.39	281.16	86.67	114.34	-4,653.37	-1,803.36	5,763.50	5,572.27	191.23	30.139	
18,800.00	6,040.00	10,897.00	6,228.39	283.81	86.67	114.34	-4,653.37	-1,803.36	5,863.11	5,671.93	191.18	30.668	
18,900.00	6,040.00	10,897.00	6,228.39	286.47	86.67	114.34	-4,653.37	-1,803.36	5,962.73	5,771.61	191.13	31.198	
18,919.70	6,040.00	10,897.00	6,228.39	286.99	86.67	114.34	-4,653.37	-1,803.36	5,982.37	5,791.25	191.12	31.302	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-3HNB - OWB - FINAL SURVEY													Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-93.23	-138.32	-2,450.09	2,454.10					
100.00	100.00	74.92	74.92	0.13	0.21	-93.23	-138.32	-2,450.12	2,454.02	2,453.68	0.34	7,173.871		
200.00	199.98	171.42	171.42	0.48	0.55	117.56	-138.37	-2,450.26	2,454.98	2,453.95	1.04	2,367.392		
300.00	299.84	273.60	273.60	0.85	0.91	117.62	-138.46	-2,450.52	2,457.67	2,455.91	1.76	1,398.232		
400.00	399.45	387.30	387.30	1.22	1.31	117.75	-138.58	-2,450.34	2,461.57	2,459.05	2.53	974.765		
500.00	498.70	484.08	484.08	1.62	1.64	117.90	-138.80	-2,449.98	2,466.93	2,463.67	3.26	757.364		
600.00	597.47	581.57	581.57	2.05	1.98	118.07	-139.20	-2,449.65	2,474.03	2,470.01	4.01	616.354		
700.00	695.62	685.69	685.69	2.51	2.35	118.31	-139.79	-2,449.27	2,482.82	2,478.00	4.82	514.760		
800.00	793.06	794.90	794.89	3.01	2.73	118.62	-140.36	-2,448.42	2,492.99	2,487.31	5.68	438.711		
900.00	889.64	900.56	900.55	3.56	3.11	118.96	-140.90	-2,447.16	2,504.58	2,498.02	6.56	381.675		
1,000.00	985.27	1,004.79	1,004.76	4.14	3.48	119.32	-141.57	-2,445.56	2,517.75	2,510.28	7.47	337.011		
1,100.00	1,079.82	1,099.69	1,099.63	4.78	3.81	119.70	-140.59	-2,443.96	2,532.73	2,524.36	8.38	302.358		
1,200.00	1,173.17	1,404.70	1,403.67	5.46	4.88	121.90	-127.04	-2,425.61	2,545.53	2,535.50	10.03	253.813		
1,300.00	1,265.21	1,552.41	1,550.03	6.20	5.43	123.05	-117.02	-2,408.52	2,555.66	2,544.47	11.19	228.454		
1,400.00	1,355.84	1,713.23	1,708.56	6.99	6.07	124.50	-101.18	-2,386.63	2,566.93	2,554.50	12.43	206.524		
1,500.00	1,444.94	1,500.00	1,893.77	7.84	5.18	126.37	-80.80	-2,352.13	2,575.78	2,563.52	12.26	210.056		
1,600.00	1,532.39	2,187.93	2,168.45	8.75	8.26	129.54	-46.37	-2,284.19	2,582.22	2,566.70	15.52	166.389		
1,700.00	1,618.11	2,280.25	2,256.60	9.71	8.75	130.52	-34.90	-2,259.29	2,590.94	2,574.28	16.66	155.515		
1,800.00	1,701.97	2,406.42	2,376.82	10.74	9.44	131.94	-19.31	-2,224.34	2,602.59	2,584.65	17.94	145.094		
1,900.00	1,783.88	1,900.00	2,464.46	11.82	6.69	132.92	-9.08	-2,196.59	2,615.48	2,598.94	16.53	158.182		
2,000.00	1,863.74	2,600.03	2,560.30	12.96	10.56	133.99	1.73	-2,166.22	2,631.94	2,611.56	20.38	129.149		
2,100.00	1,941.45	2,655.63	2,613.16	14.16	10.88	134.44	7.38	-2,149.92	2,652.75	2,631.25	21.50	123.395		
2,200.00	2,016.92	2,712.00	2,666.90	15.41	11.22	134.84	13.00	-2,133.88	2,677.91	2,655.28	22.63	118.342		
2,300.00	2,090.05	2,300.00	2,753.52	16.73	8.77	135.73	23.39	-2,107.33	2,706.52	2,684.99	21.53	125.708		
2,400.00	2,160.76	2,865.84	2,812.78	18.10	12.14	136.20	31.53	-2,088.72	2,738.90	2,713.85	25.05	109.334		
2,500.00	2,228.95	2,911.08	2,855.64	19.53	12.42	136.35	37.66	-2,075.61	2,775.74	2,749.58	26.15	106.129		
2,600.00	2,294.55	2,954.20	2,896.57	21.01	12.68	136.42	43.64	-2,063.41	2,816.90	2,789.66	27.24	103.414		
2,700.00	2,357.48	2,998.00	2,938.20	22.55	12.95	136.43	49.86	-2,051.31	2,862.29	2,833.98	28.31	101.102		
2,800.00	2,418.42	2,998.00	2,938.20	24.13	12.95	136.23	49.86	-2,051.31	2,911.53	2,882.34	29.19	99.745		
2,900.00	2,479.25	3,058.08	2,995.46	25.71	13.30	137.24	58.69	-2,035.43	2,962.23	2,931.97	30.26	97.877		
3,000.00	2,540.09	3,088.51	3,024.55	27.31	13.48	137.74	63.30	-2,027.77	3,015.08	2,983.89	31.19	96.664		
3,100.00	2,600.93	3,118.47	3,053.23	28.90	13.66	138.23	67.94	-2,020.48	3,069.71	3,037.63	32.08	95.682		
3,200.00	2,661.77	3,147.96	3,081.52	30.51	13.83	138.71	72.59	-2,013.55	3,126.03	3,093.10	32.94	94.906		
3,300.00	2,722.61	3,188.00	3,119.99	32.11	14.06	139.35	79.05	-2,004.54	3,184.02	3,150.21	33.81	94.176		
3,400.00	2,783.44	3,232.46	3,162.74	33.72	14.32	140.05	86.29	-1,994.72	3,243.33	3,208.66	34.67	93.548		
3,500.00	2,844.28	3,305.09	3,232.55	35.34	14.73	141.17	98.02	-1,978.40	3,303.46	3,267.83	35.63	92.709		
3,600.00	2,905.12	3,378.39	3,302.92	36.95	15.15	142.28	109.73	-1,961.60	3,364.26	3,327.68	36.58	91.982		
3,700.00	2,965.96	3,452.85	3,374.25	38.57	15.59	143.38	121.83	-1,944.00	3,425.67	3,388.16	37.51	91.316		
3,800.00	3,026.79	3,526.43	3,444.46	40.19	16.03	144.46	134.34	-1,925.88	3,487.66	3,449.24	38.42	90.766		
3,900.00	3,087.63	3,599.10	3,513.51	41.81	16.46	145.52	147.24	-1,907.26	3,550.23	3,510.93	39.31	90.321		
4,000.00	3,148.47	3,668.54	3,579.84	43.43	16.88	146.48	158.29	-1,889.94	3,613.39	3,573.23	40.16	89.969		
4,100.00	3,209.31	3,742.53	3,650.76	45.05	17.33	147.46	169.04	-1,871.77	3,677.04	3,636.01	41.03	89.613		
4,200.00	3,270.14	3,784.62	3,691.26	46.68	17.56	148.00	174.59	-1,861.76	3,741.33	3,699.62	41.71	89.690		
4,300.00	3,330.98	3,821.68	3,727.09	48.31	17.76	148.46	179.13	-1,853.44	3,806.58	3,764.23	42.35	89.880		
4,400.00	3,391.82	3,859.11	3,763.42	49.93	17.96	148.91	183.41	-1,845.53	3,872.74	3,829.76	42.98	90.109		
4,500.00	3,452.66	3,896.90	3,800.25	51.56	18.16	149.35	187.39	-1,838.03	3,939.75	3,896.16	43.59	90.372		
4,600.00	3,513.49	8,596.00	6,129.82	53.19	49.38	138.19	-2,406.72	-1,612.14	3,959.55	3,879.16	80.38	49.258		
4,700.00	3,574.33	8,640.64	6,130.25	54.82	50.09	137.74	-2,451.25	-1,609.13	3,946.97	3,864.15	82.82	47.656		
4,800.00	3,635.17	8,691.00	6,131.50	56.45	50.89	137.23	-2,501.52	-1,606.33	3,936.64	3,851.26	85.38	46.106		
4,900.00	3,696.01	8,723.30	6,132.56	58.08	51.40	136.90	-2,533.76	-1,604.65	3,927.94	3,840.34	87.60	44.838		
5,000.00	3,756.84	8,810.85	6,135.35	59.71	52.81	136.02	-2,621.10	-1,599.37	3,920.18	3,829.25	90.93	43.111		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	8,852.92	6,136.62	61.34	53.49	135.60	-2,663.09	-1,597.14	3,914.01	3,820.64	93.38	41.917	
5,200.00	3,878.52	8,923.95	6,138.13	62.97	54.63	134.86	-2,734.05	-1,594.40	3,909.53	3,813.09	96.44	40.537	
5,300.00	3,939.36	9,009.66	6,136.96	64.61	56.00	133.94	-2,819.74	-1,592.59	3,905.91	3,806.02	99.89	39.100	
5,400.00	4,000.19	9,070.70	6,136.19	66.24	56.98	133.29	-2,880.75	-1,591.28	3,903.70	3,800.88	102.82	37.966	
5,500.00	4,061.03	9,194.95	6,134.06	67.87	59.00	131.96	-3,004.94	-1,587.98	3,902.37	3,795.17	107.21	36.400	
5,600.00	4,121.87	9,285.75	6,131.84	69.51	60.48	130.98	-3,095.66	-1,584.87	3,901.72	3,790.84	110.88	35.188	
5,607.21	4,126.25	9,290.80	6,131.76	69.62	60.57	130.93	-3,100.70	-1,584.66	3,901.72	3,790.61	111.11	35.115	
5,700.00	4,182.71	9,357.84	6,131.41	71.14	61.67	130.22	-3,167.66	-1,581.39	3,902.28	3,788.15	114.13	34.193	
5,800.00	4,243.54	9,436.34	6,131.74	72.77	62.98	129.40	-3,246.04	-1,577.00	3,904.02	3,786.50	117.53	33.219	
5,900.00	4,304.38	9,510.92	6,132.00	74.41	64.22	128.63	-3,320.49	-1,572.73	3,906.94	3,786.10	120.85	32.330	
6,000.00	4,365.22	9,575.44	6,132.37	76.04	65.30	127.96	-3,384.90	-1,568.94	3,911.13	3,787.19	123.93	31.558	
6,100.00	4,426.06	9,631.30	6,132.75	77.68	66.24	127.38	-3,440.67	-1,565.83	3,916.81	3,790.01	126.81	30.888	
6,200.00	4,486.90	9,716.59	6,132.93	79.31	67.67	126.50	-3,525.84	-1,561.33	3,923.81	3,793.40	130.41	30.089	
6,300.00	4,547.73	9,830.48	6,131.86	80.95	69.59	125.31	-3,639.55	-1,554.98	3,931.57	3,796.83	134.74	29.178	
6,400.00	4,608.57	9,901.59	6,131.31	82.58	70.79	124.57	-3,710.52	-1,550.48	3,940.16	3,802.16	138.01	28.550	
6,500.00	4,669.41	9,953.30	6,131.23	84.22	71.67	124.04	-3,762.12	-1,547.14	3,950.12	3,809.35	140.76	28.062	
6,600.00	4,730.25	9,994.20	6,131.10	85.86	72.36	123.62	-3,802.95	-1,544.84	3,961.81	3,818.59	143.21	27.664	
6,700.00	4,791.08	10,092.86	6,130.38	87.49	74.04	122.59	-3,901.49	-1,539.81	3,975.08	3,827.91	147.17	27.010	
6,800.00	4,851.92	10,262.67	6,129.50	89.13	76.95	120.87	-4,070.78	-1,526.73	3,987.38	3,834.40	152.98	26.064	
6,900.00	4,912.76	10,325.88	6,129.43	90.76	78.04	120.23	-4,133.76	-1,521.32	4,000.83	3,844.83	156.00	25.646	
7,000.00	4,973.60	10,394.78	6,129.36	92.40	79.23	119.54	-4,202.40	-1,515.50	4,015.54	3,856.39	159.15	25.232	
7,100.00	5,034.43	10,451.75	6,129.22	94.04	80.22	118.97	-4,259.19	-1,510.82	4,031.55	3,869.60	161.95	24.893	
7,200.00	5,095.27	10,505.54	6,128.93	95.67	81.15	118.43	-4,312.82	-1,506.67	4,049.00	3,884.35	164.65	24.592	
7,300.00	5,156.11	10,553.03	6,128.58	97.31	81.97	117.96	-4,360.18	-1,503.28	4,067.96	3,900.83	167.13	24.341	
7,400.00	5,216.95	10,605.37	6,128.15	98.95	82.87	117.44	-4,412.41	-1,499.86	4,088.46	3,918.75	169.70	24.092	
7,500.00	5,277.78	10,681.21	6,128.54	100.59	84.18	116.69	-4,488.08	-1,494.75	4,110.15	3,937.24	172.91	23.771	
7,600.00	5,338.62	10,759.83	6,129.87	102.22	85.55	115.93	-4,566.48	-1,489.13	4,132.81	3,956.65	176.16	23.460	
7,700.00	5,399.46	10,833.66	6,131.13	103.86	86.83	115.23	-4,640.10	-1,483.76	4,156.42	3,977.17	179.25	23.187	
7,800.00	5,460.30	10,837.00	6,131.19	105.50	86.89	115.20	-4,643.43	-1,483.52	4,181.61	4,001.34	180.28	23.196	
7,900.00	5,521.24	10,837.00	6,131.19	107.13	86.89	113.55	-4,643.43	-1,483.52	4,208.63	4,027.53	181.10	23.239	
8,000.00	5,584.83	10,837.00	6,131.19	108.61	86.89	105.38	-4,643.43	-1,483.52	4,226.16	4,044.40	181.76	23.252	
8,100.00	5,650.69	10,837.00	6,131.19	109.85	86.89	96.65	-4,643.43	-1,483.52	4,228.76	4,046.58	182.18	23.212	
8,200.00	5,716.83	10,837.00	6,131.19	110.82	86.89	87.97	-4,643.43	-1,483.52	4,216.39	4,034.06	182.33	23.125	
8,300.00	5,781.24	10,837.00	6,131.19	111.52	86.89	80.02	-4,643.43	-1,483.52	4,189.30	4,007.08	182.22	22.990	
8,400.00	5,841.96	10,837.00	6,131.19	111.98	86.89	73.29	-4,643.43	-1,483.52	4,148.03	3,966.17	181.86	22.809	
8,500.00	5,897.14	10,837.00	6,131.19	112.25	86.89	68.10	-4,643.43	-1,483.52	4,093.43	3,912.13	181.31	22.577	
8,600.00	5,945.12	10,837.00	6,131.19	112.37	86.89	64.63	-4,643.43	-1,483.52	4,026.66	3,846.03	180.63	22.293	
8,700.00	5,984.42	10,837.00	6,131.19	112.39	86.89	63.12	-4,643.43	-1,483.52	3,949.18	3,769.27	179.91	21.951	
8,800.00	6,013.86	10,837.00	6,131.19	112.35	86.89	64.31	-4,643.43	-1,483.52	3,862.78	3,683.55	179.23	21.553	
8,900.00	6,032.54	10,837.00	6,131.19	112.30	86.89	70.80	-4,643.43	-1,483.52	3,769.57	3,590.90	178.66	21.099	
9,000.00	6,039.89	10,837.00	6,131.19	112.24	86.89	96.00	-4,643.43	-1,483.52	3,671.97	3,493.68	178.29	20.595	
9,100.00	6,040.00	10,837.00	6,131.19	112.19	86.89	103.54	-4,643.43	-1,483.52	3,572.89	3,394.84	178.06	20.066	
9,200.00	6,040.00	10,837.00	6,131.19	112.16	86.89	103.54	-4,643.43	-1,483.52	3,473.86	3,296.05	177.81	19.537	
9,300.00	6,040.00	10,837.00	6,131.19	112.15	86.89	103.54	-4,643.43	-1,483.52	3,374.88	3,197.32	177.55	19.008	
9,400.00	6,040.00	10,837.00	6,131.19	112.15	86.89	103.54	-4,643.43	-1,483.52	3,275.96	3,098.68	177.28	18.479	
9,500.00	6,040.00	10,837.00	6,131.19	112.16	86.89	103.54	-4,643.43	-1,483.52	3,177.11	3,000.12	176.99	17.951	
9,600.00	6,040.00	10,837.00	6,131.19	112.19	86.89	103.54	-4,643.43	-1,483.52	3,078.33	2,901.65	176.68	17.423	
9,700.00	6,040.00	10,837.00	6,131.19	112.24	86.89	103.54	-4,643.43	-1,483.52	2,979.64	2,803.29	176.35	16.896	
9,800.00	6,040.00	10,837.00	6,131.19	112.31	86.89	103.54	-4,643.43	-1,483.52	2,881.03	2,705.03	176.00	16.370	
9,900.00	6,040.00	10,837.00	6,131.19	112.39	86.89	103.54	-4,643.43	-1,483.52	2,782.53	2,606.90	175.62	15.844	
10,000.00	6,040.00	10,837.00	6,131.19	112.49	86.89	103.54	-4,643.43	-1,483.52	2,684.13	2,508.91	175.22	15.319	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-3HNB - OWB - FINAL SURVEY													Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.00	6,040.00	10,837.00	6,131.19	112.62	86.89	103.54	-4,643.43	-1,483.52	2,585.86	2,411.07	174.79	14.794		
10,200.00	6,040.00	10,837.00	6,131.19	112.77	86.89	103.54	-4,643.43	-1,483.52	2,487.73	2,313.40	174.32	14.271		
10,300.00	6,040.00	10,837.00	6,131.19	112.94	86.89	103.54	-4,643.43	-1,483.52	2,389.75	2,215.93	173.82	13.748		
10,400.00	6,040.00	10,837.00	6,131.19	113.14	86.89	103.54	-4,643.43	-1,483.52	2,291.94	2,118.67	173.28	13.227		
10,500.00	6,040.00	10,837.00	6,131.19	113.36	86.89	103.54	-4,643.43	-1,483.52	2,194.34	2,021.65	172.68	12.707		
10,600.00	6,040.00	10,837.00	6,131.19	113.62	86.89	103.54	-4,643.43	-1,483.52	2,096.96	1,924.92	172.04	12.189		
10,700.00	6,040.00	10,837.00	6,131.19	113.91	86.89	103.54	-4,643.43	-1,483.52	1,999.83	1,828.50	171.34	11.672		
10,800.00	6,040.00	10,837.00	6,131.19	114.24	86.89	103.54	-4,643.43	-1,483.52	1,903.01	1,732.45	170.56	11.157		
10,900.00	6,040.00	10,837.00	6,131.19	114.61	86.89	103.54	-4,643.43	-1,483.52	1,806.53	1,636.82	169.71	10.645		
11,000.00	6,040.00	10,837.00	6,131.19	115.02	86.89	103.54	-4,643.43	-1,483.52	1,710.46	1,541.68	168.78	10.134		
11,100.00	6,040.00	10,837.00	6,131.19	115.49	86.89	103.54	-4,643.43	-1,483.52	1,614.86	1,447.13	167.74	9.627		
11,200.00	6,040.00	10,837.00	6,131.19	116.00	86.89	103.54	-4,643.43	-1,483.52	1,519.83	1,353.25	166.58	9.124		
11,300.00	6,040.00	10,837.00	6,131.19	116.58	86.89	103.54	-4,643.43	-1,483.52	1,425.48	1,260.19	165.29	8.624		
11,400.00	6,040.00	10,837.00	6,131.19	117.22	86.89	103.54	-4,643.43	-1,483.52	1,331.96	1,168.10	163.85	8.129		
11,500.00	6,040.00	10,837.00	6,131.19	117.92	86.89	103.54	-4,643.43	-1,483.52	1,239.44	1,077.21	162.24	7.640		
11,600.00	6,040.00	10,837.00	6,131.19	118.70	86.89	103.54	-4,643.43	-1,483.52	1,148.19	987.76	160.43	7.157		
11,700.00	6,040.00	10,837.00	6,131.19	119.56	86.89	103.54	-4,643.43	-1,483.52	1,058.51	900.11	158.40	6.683		
11,800.00	6,040.00	10,837.00	6,131.19	120.51	86.89	103.54	-4,643.43	-1,483.52	970.85	814.71	156.14	6.218		
11,900.00	6,040.00	10,837.00	6,131.19	121.54	86.89	103.54	-4,643.43	-1,483.52	885.81	732.16	153.65	5.765		
12,000.00	6,040.00	10,837.00	6,131.19	122.66	86.89	103.54	-4,643.43	-1,483.52	804.22	653.26	150.96	5.328		
12,100.00	6,040.00	10,837.00	6,131.19	123.87	86.89	103.54	-4,643.43	-1,483.52	727.24	579.12	148.12	4.910		
12,200.00	6,040.00	10,837.00	6,131.19	125.17	86.89	103.54	-4,643.43	-1,483.52	656.50	511.22	145.28	4.519		
12,300.00	6,040.00	10,837.00	6,131.19	126.57	86.89	103.54	-4,643.43	-1,483.52	594.22	451.59	142.63	4.166		
12,400.00	6,040.00	10,837.00	6,131.19	128.06	86.89	103.54	-4,643.43	-1,483.52	543.33	402.69	140.65	3.863		
12,500.00	6,040.00	10,837.00	6,131.19	129.63	86.89	103.54	-4,643.43	-1,483.52	507.27	366.36	140.91	3.600		
12,600.00	6,040.00	10,837.00	6,131.19	131.29	86.89	103.54	-4,643.43	-1,483.52	489.32	341.45	147.87	3.309		
12,639.45	6,040.00	10,837.00	6,131.19	131.97	86.89	103.54	-4,643.43	-1,483.52	487.72	334.58	153.15	3.185 CC		
12,700.00	6,040.00	10,837.00	6,131.19	133.03	86.89	103.54	-4,643.43	-1,483.52	491.47	328.64	162.83	3.018 ES		
12,800.00	6,040.00	10,837.00	6,131.19	134.84	86.89	103.54	-4,643.43	-1,483.52	513.47	334.83	178.64	2.874 SF		
12,900.00	6,040.00	10,837.00	6,131.19	136.71	86.89	103.54	-4,643.43	-1,483.52	552.96	362.27	190.69	2.900		
13,000.00	6,040.00	10,837.00	6,131.19	138.66	86.89	103.54	-4,643.43	-1,483.52	606.52	408.09	198.43	3.057		
13,100.00	6,040.00	10,837.00	6,131.19	140.66	86.89	103.54	-4,643.43	-1,483.52	670.81	467.96	202.84	3.307		
13,200.00	6,040.00	10,837.00	6,131.19	142.71	86.89	103.54	-4,643.43	-1,483.52	743.03	537.98	205.04	3.624		
13,300.00	6,040.00	10,837.00	6,131.19	144.81	86.89	103.54	-4,643.43	-1,483.52	821.10	615.20	205.90	3.988		
13,400.00	6,040.00	10,837.00	6,131.19	146.96	86.89	103.54	-4,643.43	-1,483.52	903.50	697.53	205.97	4.386		
13,500.00	6,040.00	10,837.00	6,131.19	149.14	86.89	103.54	-4,643.43	-1,483.52	989.15	783.54	205.61	4.811		
13,600.00	6,040.00	10,837.00	6,131.19	151.36	86.89	103.54	-4,643.43	-1,483.52	1,077.28	872.26	205.02	5.254		
13,700.00	6,040.00	10,837.00	6,131.19	153.62	86.89	103.54	-4,643.43	-1,483.52	1,167.32	963.00	204.32	5.713		
13,800.00	6,040.00	10,837.00	6,131.19	155.91	86.89	103.54	-4,643.43	-1,483.52	1,258.87	1,055.29	203.58	6.184		
13,900.00	6,040.00	10,837.00	6,131.19	158.22	86.89	103.54	-4,643.43	-1,483.52	1,351.62	1,148.77	202.84	6.663		
14,000.00	6,040.00	10,837.00	6,131.19	160.56	86.89	103.54	-4,643.43	-1,483.52	1,445.33	1,243.21	202.12	7.151		
14,100.00	6,040.00	10,837.00	6,131.19	162.92	86.89	103.54	-4,643.43	-1,483.52	1,539.83	1,338.40	201.44	7.644		
14,200.00	6,040.00	10,837.00	6,131.19	165.30	86.89	103.54	-4,643.43	-1,483.52	1,634.99	1,434.20	200.79	8.143		
14,300.00	6,040.00	10,837.00	6,131.19	167.70	86.89	103.54	-4,643.43	-1,483.52	1,730.69	1,530.52	200.18	8.646		
14,400.00	6,040.00	10,837.00	6,131.19	170.12	86.89	103.54	-4,643.43	-1,483.52	1,826.86	1,627.25	199.61	9.152		
14,500.00	6,040.00	10,837.00	6,131.19	172.55	86.89	103.54	-4,643.43	-1,483.52	1,923.41	1,724.34	199.08	9.662		
14,600.00	6,040.00	10,837.00	6,131.19	175.00	86.89	103.54	-4,643.43	-1,483.52	2,020.31	1,821.72	198.58	10.174		
14,700.00	6,040.00	10,837.00	6,131.19	177.46	86.89	103.54	-4,643.43	-1,483.52	2,117.49	1,919.36	198.12	10.688		
14,800.00	6,040.00	10,837.00	6,131.19	179.94	86.89	103.54	-4,643.43	-1,483.52	2,214.92	2,017.23	197.69	11.204		
14,900.00	6,040.00	10,837.00	6,131.19	182.43	86.89	103.54	-4,643.43	-1,483.52	2,312.57	2,115.28	197.29	11.722		
15,000.00	6,040.00	10,837.00	6,131.19	184.92	86.89	103.54	-4,643.43	-1,483.52	2,410.41	2,213.50	196.91	12.241		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 17-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,100.00	6,040.00	10,837.00	6,131.19	187.43	86.89	103.54	-4,643.43	-1,483.52	2,508.42	2,311.86	196.56	12.762	
15,200.00	6,040.00	10,837.00	6,131.19	189.95	86.89	103.54	-4,643.43	-1,483.52	2,606.59	2,410.36	196.23	13.283	
15,300.00	6,040.00	10,837.00	6,131.19	192.48	86.89	103.54	-4,643.43	-1,483.52	2,704.89	2,508.96	195.92	13.806	
15,400.00	6,040.00	10,837.00	6,131.19	195.01	86.89	103.54	-4,643.43	-1,483.52	2,803.30	2,607.67	195.63	14.329	
15,500.00	6,040.00	10,837.00	6,131.19	197.55	86.89	103.54	-4,643.43	-1,483.52	2,901.83	2,706.47	195.36	14.854	
15,600.00	6,040.00	10,837.00	6,131.19	200.10	86.89	103.54	-4,643.43	-1,483.52	3,000.46	2,805.35	195.10	15.379	
15,700.00	6,040.00	10,837.00	6,131.19	202.65	86.89	103.54	-4,643.43	-1,483.52	3,099.17	2,904.31	194.86	15.904	
15,800.00	6,040.00	10,837.00	6,131.19	205.22	86.89	103.54	-4,643.43	-1,483.52	3,197.96	3,003.33	194.63	16.431	
15,900.00	6,040.00	10,837.00	6,131.19	207.78	86.89	103.54	-4,643.43	-1,483.52	3,296.83	3,102.41	194.42	16.957	
16,000.00	6,040.00	10,837.00	6,131.19	210.36	86.89	103.54	-4,643.43	-1,483.52	3,395.76	3,201.54	194.22	17.484	
16,100.00	6,040.00	10,837.00	6,131.19	212.93	86.89	103.54	-4,643.43	-1,483.52	3,494.75	3,300.73	194.02	18.012	
16,200.00	6,040.00	10,837.00	6,131.19	215.52	86.89	103.54	-4,643.43	-1,483.52	3,593.80	3,399.96	193.84	18.540	
16,300.00	6,040.00	10,837.00	6,131.19	218.11	86.89	103.54	-4,643.43	-1,483.52	3,692.90	3,499.23	193.67	19.068	
16,400.00	6,040.00	10,837.00	6,131.19	220.70	86.89	103.54	-4,643.43	-1,483.52	3,792.05	3,598.54	193.51	19.597	
16,500.00	6,040.00	10,837.00	6,131.19	223.29	86.89	103.54	-4,643.43	-1,483.52	3,891.24	3,697.89	193.35	20.125	
16,600.00	6,040.00	10,837.00	6,131.19	225.89	86.89	103.54	-4,643.43	-1,483.52	3,990.47	3,797.27	193.20	20.654	
16,700.00	6,040.00	10,837.00	6,131.19	228.50	86.89	103.54	-4,643.43	-1,483.52	4,089.74	3,896.68	193.06	21.184	
16,800.00	6,040.00	10,837.00	6,131.19	231.11	86.89	103.54	-4,643.43	-1,483.52	4,189.04	3,996.11	192.93	21.713	
16,900.00	6,040.00	10,837.00	6,131.19	233.72	86.89	103.54	-4,643.43	-1,483.52	4,288.38	4,095.57	192.80	22.243	
17,000.00	6,040.00	10,837.00	6,131.19	236.33	86.89	103.54	-4,643.43	-1,483.52	4,387.74	4,195.06	192.68	22.772	
17,100.00	6,040.00	10,837.00	6,131.19	238.95	86.89	103.54	-4,643.43	-1,483.52	4,487.14	4,294.57	192.56	23.302	
17,200.00	6,040.00	10,837.00	6,131.19	241.57	86.89	103.54	-4,643.43	-1,483.52	4,586.56	4,394.10	192.45	23.832	
17,300.00	6,040.00	10,837.00	6,131.19	244.19	86.89	103.54	-4,643.43	-1,483.52	4,686.00	4,493.65	192.35	24.362	
17,400.00	6,040.00	10,837.00	6,131.19	246.82	86.89	103.54	-4,643.43	-1,483.52	4,785.47	4,593.22	192.25	24.892	
17,500.00	6,040.00	10,837.00	6,131.19	249.45	86.89	103.54	-4,643.43	-1,483.52	4,884.96	4,692.81	192.15	25.422	
17,600.00	6,040.00	10,837.00	6,131.19	252.08	86.89	103.54	-4,643.43	-1,483.52	4,984.47	4,792.41	192.06	25.952	
17,700.00	6,040.00	10,837.00	6,131.19	254.71	86.89	103.54	-4,643.43	-1,483.52	5,084.00	4,892.03	191.97	26.483	
17,800.00	6,040.00	10,837.00	6,131.19	257.35	86.89	103.54	-4,643.43	-1,483.52	5,183.55	4,991.66	191.89	27.013	
17,900.00	6,040.00	10,837.00	6,131.19	259.99	86.89	103.54	-4,643.43	-1,483.52	5,283.11	5,091.30	191.81	27.543	
18,000.00	6,040.00	10,837.00	6,131.19	262.63	86.89	103.54	-4,643.43	-1,483.52	5,382.69	5,190.96	191.73	28.074	
18,100.00	6,040.00	10,837.00	6,131.19	265.27	86.89	103.54	-4,643.43	-1,483.52	5,482.29	5,290.63	191.66	28.604	
18,200.00	6,040.00	10,837.00	6,131.19	267.91	86.89	103.54	-4,643.43	-1,483.52	5,581.90	5,390.31	191.59	29.134	
18,300.00	6,040.00	10,837.00	6,131.19	270.56	86.89	103.54	-4,643.43	-1,483.52	5,681.52	5,490.00	191.52	29.665	
18,400.00	6,040.00	10,837.00	6,131.19	273.21	86.89	103.54	-4,643.43	-1,483.52	5,781.16	5,589.70	191.46	30.195	
18,500.00	6,040.00	10,837.00	6,131.19	275.86	86.89	103.54	-4,643.43	-1,483.52	5,880.81	5,689.41	191.40	30.725	
18,600.00	6,040.00	10,837.00	6,131.19	278.51	86.89	103.54	-4,643.43	-1,483.52	5,980.47	5,789.13	191.34	31.256	
18,700.00	6,040.00	10,837.00	6,131.19	281.16	86.89	103.54	-4,643.43	-1,483.52	6,080.14	5,888.86	191.28	31.786	
18,800.00	6,040.00	10,837.00	6,131.19	283.81	86.89	103.54	-4,643.43	-1,483.52	6,179.83	5,988.60	191.23	32.316	
18,900.00	6,040.00	10,837.00	6,131.19	286.47	86.89	103.54	-4,643.43	-1,483.52	6,279.52	6,088.34	191.18	32.846	
18,919.70	6,040.00	10,837.00	6,131.19	286.99	86.89	103.54	-4,643.43	-1,483.52	6,299.16	6,108.00	191.17	32.951	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES K-O-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 120-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-143.75	-174.87	-128.22	217.07				
100.00	100.00	89.32	89.32	0.13	0.14	-143.78	-175.04	-128.22	216.98	216.70	0.28	782.104	
200.00	199.98	188.91	188.91	0.48	0.44	67.36	-175.53	-128.27	216.73	215.81	0.92	235.166	
300.00	299.84	288.78	288.78	0.85	0.79	68.67	-175.93	-128.56	215.26	213.63	1.63	131.744	
400.00	399.45	388.37	388.36	1.22	1.15	70.98	-176.13	-129.10	212.74	210.38	2.36	90.025	
500.00	498.70	487.26	487.26	1.62	1.50	74.23	-176.39	-129.71	209.68	206.57	3.11	67.350	
600.00	597.47	586.02	586.01	2.05	1.85	78.53	-176.59	-130.47	206.65	202.76	3.89	53.090	
700.00	695.62	683.88	683.86	2.51	2.20	83.92	-176.50	-131.52	204.48	199.78	4.70	43.472	
759.86	754.04	742.12	742.10	2.81	2.40	87.61	-176.43	-132.22	204.05	198.84	5.21	39.160 CC	
800.00	793.06	781.08	781.06	3.01	2.54	90.28	-176.32	-132.73	204.27	198.72	5.55	36.800 ES	
900.00	889.64	877.38	877.34	3.56	2.88	97.48	-175.68	-134.17	207.17	200.75	6.43	32.236	
1,000.00	985.27	972.47	972.41	4.14	3.22	105.21	-174.44	-135.80	214.46	207.14	7.31	29.327	
1,100.00	1,079.82	1,065.77	1,065.66	4.78	3.54	113.13	-172.13	-137.65	227.33	219.15	8.18	27.789	
1,200.00	1,173.17	1,156.91	1,156.70	5.46	3.86	120.84	-168.39	-139.77	246.83	237.82	9.00	27.412	
1,300.00	1,265.21	1,245.04	1,244.67	6.20	4.17	127.87	-163.56	-141.99	273.39	263.62	9.77	27.985	
1,400.00	1,355.84	1,328.78	1,328.17	6.99	4.47	133.91	-157.87	-144.70	307.43	296.96	10.47	29.368	
1,500.00	1,444.94	1,411.65	1,410.72	7.84	4.77	139.17	-151.38	-147.95	348.39	337.25	11.14	31.286	
1,600.00	1,532.39	1,493.90	1,492.61	8.75	5.07	143.64	-144.47	-151.37	395.15	383.37	11.79	33.528	
1,700.00	1,618.11	1,579.00	1,577.39	9.71	5.38	147.54	-137.75	-154.57	446.23	433.77	12.46	35.815	
1,800.00	1,701.97	1,656.72	1,654.83	10.74	5.67	150.53	-131.71	-157.10	501.16	488.08	13.09	38.298	
1,900.00	1,783.88	1,729.10	1,726.87	11.82	5.94	152.98	-125.14	-159.25	560.43	546.75	13.67	40.985	
2,000.00	1,863.74	1,794.15	1,791.53	12.96	6.18	154.90	-118.30	-161.34	624.12	609.91	14.21	43.919	
2,100.00	1,941.45	1,853.00	1,849.91	14.16	6.41	156.40	-111.27	-163.53	692.09	677.39	14.70	47.076	
2,200.00	2,016.92	1,901.11	1,897.52	15.41	6.60	157.34	-104.71	-165.95	764.52	749.41	15.11	50.597	
2,300.00	2,090.05	1,944.79	1,940.59	16.73	6.77	157.99	-98.05	-168.82	841.11	825.63	15.48	54.325	
2,400.00	2,160.76	2,000.62	1,995.52	18.10	6.99	158.92	-89.07	-173.25	921.09	905.11	15.98	57.653	
2,500.00	2,228.95	2,067.48	2,061.45	19.53	7.27	159.94	-79.62	-179.05	1,002.82	986.23	16.59	60.454	
2,600.00	2,294.55	2,126.87	2,120.13	21.01	7.51	160.51	-72.31	-184.55	1,086.12	1,068.97	17.15	63.345	
2,700.00	2,357.48	2,181.78	2,174.42	22.55	7.73	160.84	-65.95	-189.76	1,171.17	1,153.50	17.67	66.274	
2,800.00	2,418.42	2,227.26	2,219.40	24.13	7.91	161.65	-60.89	-194.15	1,257.52	1,239.40	18.12	69.415	
2,900.00	2,479.25	2,264.87	2,256.56	25.71	8.07	162.46	-56.50	-197.95	1,344.37	1,325.89	18.48	72.730	
3,000.00	2,540.09	2,301.40	2,292.60	27.31	8.22	163.19	-51.99	-201.79	1,431.71	1,412.87	18.84	75.976	
3,100.00	2,600.93	2,340.21	2,330.85	28.90	8.38	163.89	-46.95	-206.03	1,519.49	1,500.26	19.23	79.029	
3,200.00	2,661.77	2,392.64	2,382.53	30.51	8.60	164.75	-40.10	-211.67	1,607.34	1,587.60	19.74	81.421	
3,300.00	2,722.61	2,445.76	2,434.91	32.11	8.83	165.54	-33.22	-217.17	1,695.07	1,674.81	20.26	83.656	
3,400.00	2,783.44	2,487.67	2,476.25	33.72	9.00	166.10	-27.81	-221.45	1,782.82	1,762.14	20.68	86.204	
3,500.00	2,844.28	2,527.24	2,515.25	35.34	9.17	166.58	-22.61	-225.64	1,870.80	1,849.72	21.08	88.746	
3,600.00	2,905.12	2,566.26	2,553.69	36.95	9.34	167.02	-17.42	-229.93	1,959.00	1,937.52	21.48	91.217	
3,700.00	2,965.96	2,599.57	2,586.47	38.57	9.48	167.37	-12.89	-233.72	2,047.45	2,025.63	21.82	93.833	
3,800.00	3,026.79	2,630.56	2,616.93	40.19	9.62	167.67	-8.53	-237.40	2,136.25	2,114.11	22.14	96.474	
3,900.00	3,087.63	2,660.75	2,646.56	41.81	9.75	167.94	-4.14	-241.13	2,225.38	2,202.92	22.46	99.084	
4,000.00	3,148.47	2,700.00	2,685.03	43.43	9.93	168.28	1.79	-246.19	2,314.85	2,291.99	22.87	101.240	
4,100.00	3,209.31	2,867.95	2,850.61	45.05	10.65	169.51	22.92	-264.44	2,402.31	2,377.81	24.50	98.053	
4,200.00	3,270.14	2,912.94	2,895.12	46.68	10.84	169.80	28.05	-268.54	2,489.38	2,464.42	24.96	99.723	
4,300.00	3,330.98	2,963.70	2,945.33	48.31	11.05	170.12	34.05	-273.00	2,576.54	2,551.06	25.48	101.121	
4,400.00	3,391.82	3,037.82	3,018.71	49.93	11.36	170.57	42.71	-278.86	2,663.42	2,637.21	26.21	101.609	
4,500.00	3,452.66	3,095.59	3,075.95	51.56	11.60	170.92	49.35	-282.82	2,749.93	2,723.13	26.79	102.636	
4,600.00	3,513.49	3,137.26	3,117.23	53.19	11.77	171.17	54.54	-285.21	2,836.52	2,809.30	27.22	104.192	
4,700.00	3,574.33	3,178.34	3,157.89	54.82	11.94	171.43	60.08	-287.15	2,923.28	2,895.63	27.65	105.732	
4,800.00	3,635.17	3,197.00	3,176.34	56.45	12.02	171.56	62.74	-287.90	3,010.28	2,982.42	27.87	108.025	
4,900.00	3,696.01	3,257.84	3,236.35	58.08	12.11	171.66	65.44	-288.59	3,097.64	3,068.57	28.09	110.320	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES K-O-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 120-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	3,756.84	8,901.55	6,142.60	59.71	53.20	145.57	-2,700.70	-269.57	2,982.63	2,908.49	74.15	40.225	
5,100.00	3,817.68	8,987.00	6,139.38	61.34	54.60	144.37	-2,785.86	-263.50	2,953.49	2,875.81	77.68	38.021	
5,200.00	3,878.52	9,018.00	6,139.16	62.97	55.12	143.95	-2,816.73	-260.69	2,926.76	2,846.40	80.36	36.420	
5,300.00	3,939.36	9,057.65	6,139.68	64.61	55.77	143.42	-2,856.21	-257.04	2,902.46	2,819.24	83.21	34.880	
5,400.00	4,000.19	9,127.80	6,139.39	66.24	56.93	142.43	-2,926.21	-252.65	2,880.18	2,793.50	86.69	33.226	
5,500.00	4,061.03	9,205.00	6,138.80	67.87	58.21	141.33	-3,003.23	-247.37	2,859.03	2,768.67	90.36	31.640	
5,600.00	4,121.87	9,237.00	6,138.77	69.51	58.74	140.88	-3,035.17	-245.41	2,840.12	2,746.88	93.24	30.461	
5,700.00	4,182.71	9,281.37	6,138.23	71.14	59.48	140.22	-3,079.50	-243.89	2,823.70	2,727.30	96.40	29.292	
5,800.00	4,243.54	9,337.94	6,137.69	72.77	60.41	139.39	-3,136.05	-242.16	2,809.42	2,709.58	99.84	28.138	
5,900.00	4,304.38	9,378.48	6,137.27	74.41	61.08	138.78	-3,176.57	-241.15	2,797.30	2,694.34	102.96	27.168	
6,000.00	4,365.22	9,463.19	6,136.54	76.04	62.49	137.51	-3,261.26	-239.85	2,787.58	2,680.46	107.11	26.025	
6,100.00	4,426.06	9,501.71	6,136.21	77.68	63.13	136.93	-3,299.77	-239.20	2,779.62	2,669.40	110.22	25.220	
6,200.00	4,486.90	9,534.06	6,135.94	79.31	63.66	136.44	-3,332.12	-239.13	2,774.38	2,661.23	113.15	24.519	
6,300.00	4,547.73	9,581.56	6,135.64	80.95	64.45	135.72	-3,379.61	-239.71	2,771.89	2,655.45	116.44	23.805	
6,371.67	4,591.34	9,631.79	6,135.21	82.12	65.28	134.95	-3,429.83	-240.45	2,771.40	2,652.18	119.21	23.247	
6,400.00	4,608.57	9,649.42	6,135.04	82.58	65.57	134.68	-3,447.47	-240.73	2,771.48	2,651.23	120.25	23.047	
6,500.00	4,669.41	9,717.11	6,134.49	84.22	66.69	133.64	-3,515.15	-241.81	2,773.15	2,649.09	124.06	22.354	
6,600.00	4,730.25	9,760.00	6,133.78	85.86	29.91	130.77	-3,705.47	-239.81	2,775.77	2,697.25	78.51	35.354	
6,700.00	4,791.08	10,079.85	6,134.42	87.49	72.83	128.27	-3,877.39	-227.88	2,776.25	2,638.71	137.54	20.186	
6,800.00	4,851.92	10,167.21	6,136.52	89.13	74.34	127.04	-3,964.27	-218.95	2,777.41	2,635.60	141.81	19.585	
6,900.00	4,912.76	10,214.20	6,137.75	90.76	75.15	126.39	-4,011.01	-214.32	2,780.56	2,635.47	145.09	19.164	
7,000.00	4,973.60	10,288.62	6,139.36	92.40	76.44	125.34	-4,085.11	-207.48	2,785.68	2,636.66	149.02	18.693	
7,100.00	5,034.43	10,353.14	6,139.80	94.04	77.55	124.42	-4,149.39	-202.03	2,792.53	2,639.84	152.69	18.289	
7,200.00	5,095.27	10,444.11	6,138.68	95.67	79.13	123.09	-4,240.08	-195.06	2,801.12	2,644.08	157.04	17.837	
7,300.00	5,156.11	10,516.00	6,136.45	97.31	80.37	122.03	-4,311.70	-189.28	2,810.74	2,649.88	160.86	17.473	
7,400.00	5,216.95	10,556.80	6,135.30	98.95	81.08	121.43	-4,352.38	-186.34	2,822.83	2,659.06	163.76	17.237	
7,500.00	5,277.78	10,597.60	6,134.15	100.59	82.40	120.65	-4,405.89	-183.05	2,837.40	2,722.45	114.95	24.684	
7,600.00	5,338.62	10,629.64	6,133.42	102.22	82.34	120.36	-4,425.07	-182.03	2,854.35	2,685.35	169.00	16.890	
7,700.00	5,399.46	10,662.74	6,132.74	103.86	82.91	119.88	-4,458.14	-180.92	2,874.24	2,702.89	171.35	16.774	
7,800.00	5,460.30	10,790.92	6,133.47	105.50	85.12	118.07	-4,586.15	-174.71	2,895.42	2,718.91	176.51	16.403	
7,900.00	5,521.24	10,836.00	6,134.73	107.13	85.91	115.80	-4,631.13	-171.80	2,917.10	2,738.02	179.08	16.290	
8,000.00	5,584.83	10,836.00	6,134.73	108.61	85.91	107.64	-4,631.13	-171.80	2,929.94	2,749.90	180.04	16.274	
8,100.00	5,650.69	10,836.00	6,134.73	109.85	85.91	98.94	-4,631.13	-171.80	2,928.93	2,748.27	180.66	16.212	
8,200.00	5,716.83	10,836.00	6,134.73	110.82	85.91	90.35	-4,631.13	-171.80	2,914.09	2,733.19	180.90	16.109	
8,300.00	5,781.24	10,836.00	6,134.73	111.52	85.91	82.53	-4,631.13	-171.80	2,885.67	2,704.91	180.76	15.964	
8,400.00	5,841.96	10,836.00	6,134.73	111.98	85.91	76.02	-4,631.13	-171.80	2,844.13	2,663.87	180.26	15.778	
8,500.00	5,897.14	10,836.00	6,134.73	112.25	85.91	71.14	-4,631.13	-171.80	2,790.20	2,610.73	179.47	15.547	
8,600.00	5,945.12	10,836.00	6,134.73	112.37	85.91	68.11	-4,631.13	-171.80	2,724.82	2,546.34	178.48	15.267	
8,700.00	5,984.42	10,836.00	6,134.73	112.39	85.91	67.24	-4,631.13	-171.80	2,649.21	2,471.84	177.37	14.936	
8,800.00	6,013.86	10,836.00	6,134.73	112.35	85.91	69.33	-4,631.13	-171.80	2,564.89	2,388.62	176.27	14.551	
8,900.00	6,032.54	10,836.00	6,134.73	112.30	85.91	76.73	-4,631.13	-171.80	2,473.66	2,298.37	175.29	14.112	
9,000.00	6,039.89	10,836.00	6,134.73	112.24	85.91	97.52	-4,631.13	-171.80	2,377.65	2,203.13	174.53	13.623	
9,100.00	6,040.00	10,836.00	6,134.73	112.19	85.91	102.47	-4,631.13	-171.80	2,279.87	2,105.94	173.93	13.108	
9,200.00	6,040.00	10,836.00	6,134.73	112.16	85.91	102.47	-4,631.13	-171.80	2,182.26	2,008.98	173.28	12.594	
9,300.00	6,040.00	10,836.00	6,134.73	112.15	85.91	102.47	-4,631.13	-171.80	2,084.88	1,912.32	172.56	12.082	
9,400.00	6,040.00	10,836.00	6,134.73	112.15	85.91	102.47	-4,631.13	-171.80	1,987.76	1,816.00	171.76	11.573	
9,500.00	6,040.00	10,836.00	6,134.73	112.16	85.91	102.47	-4,631.13	-171.80	1,890.94	1,720.07	170.87	11.066	
9,600.00	6,040.00	10,836.00	6,134.73	112.19	85.91	102.47	-4,631.13	-171.80	1,794.47	1,624.59	169.88	10.563	
9,700.00	6,040.00	10,836.00	6,134.73	112.24	85.91	102.47	-4,631.13	-171.80	1,698.41	1,529.65	168.76	10.064	
9,800.00	6,040.00	10,836.00	6,134.73	112.31	85.91	102.47	-4,631.13	-171.80	1,602.83	1,435.33	167.49	9.570	
9,900.00	6,040.00	10,836.00	6,134.73	112.39	85.91	102.47	-4,631.13	-171.80	1,507.82	1,341.77	166.05	9.080	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES K-O-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 120-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.00	6,040.00	10,836.00	6,134.73	112.49	85.91	102.47	-4,631.13	-171.80	1,413.50	1,249.10	164.40	8.598	
10,100.00	6,040.00	10,836.00	6,134.73	112.62	85.91	102.47	-4,631.13	-171.80	1,320.02	1,157.53	162.49	8.124	
10,200.00	6,040.00	10,836.00	6,134.73	112.77	85.91	102.47	-4,631.13	-171.80	1,227.57	1,067.29	160.27	7.659	
10,300.00	6,040.00	10,836.00	6,134.73	112.94	85.91	102.47	-4,631.13	-171.80	1,136.39	978.71	157.68	7.207	
10,400.00	6,040.00	10,836.00	6,134.73	113.14	85.91	102.47	-4,631.13	-171.80	1,046.83	892.19	154.64	6.770	
10,500.00	6,040.00	10,836.00	6,134.73	113.36	85.91	102.47	-4,631.13	-171.80	959.33	808.28	151.05	6.351	
10,600.00	6,040.00	10,836.00	6,134.73	113.62	85.91	102.47	-4,631.13	-171.80	874.52	727.70	146.82	5.956	
10,700.00	6,040.00	10,836.00	6,134.73	113.91	85.91	102.47	-4,631.13	-171.80	793.25	651.36	141.89	5.591	
10,800.00	6,040.00	10,836.00	6,134.73	114.24	85.91	102.47	-4,631.13	-171.80	716.73	580.48	136.26	5.260	
10,900.00	6,040.00	10,836.00	6,134.73	114.61	85.91	102.47	-4,631.13	-171.80	646.66	516.55	130.11	4.970	
11,000.00	6,040.00	10,836.00	6,134.73	115.02	85.91	102.47	-4,631.13	-171.80	585.35	461.43	123.93	4.723	
11,100.00	6,040.00	10,836.00	6,134.73	115.49	85.91	102.47	-4,631.13	-171.80	535.82	417.33	118.49	4.522	
11,200.00	6,040.00	10,836.00	6,134.73	116.00	85.91	102.47	-4,631.13	-171.80	501.56	386.46	115.10	4.357	
11,300.00	6,040.00	10,836.00	6,134.73	116.58	85.91	102.47	-4,631.13	-171.80	485.83	368.65	117.19	4.146	
11,327.68	6,040.00	10,836.00	6,134.73	116.75	85.91	102.47	-4,631.13	-171.80	485.04	365.44	119.60	4.056	
11,400.00	6,040.00	10,836.00	6,134.73	117.22	85.91	102.47	-4,631.13	-171.80	490.41	360.53	129.87	3.776	
11,500.00	6,040.00	10,836.00	6,134.73	117.92	85.91	102.47	-4,631.13	-171.80	514.74	366.96	147.78	3.483	
11,600.00	6,040.00	10,836.00	6,134.73	118.70	85.91	102.47	-4,631.13	-171.80	556.26	392.88	163.38	3.405 SF	
11,700.00	6,040.00	10,836.00	6,134.73	119.56	85.91	102.47	-4,631.13	-171.80	611.47	436.68	174.79	3.498	
11,800.00	6,040.00	10,836.00	6,134.73	120.51	85.91	102.47	-4,631.13	-171.80	677.02	494.53	182.49	3.710	
11,900.00	6,040.00	10,836.00	6,134.73	121.54	85.91	102.47	-4,631.13	-171.80	750.21	562.70	187.51	4.001	
12,000.00	6,040.00	10,836.00	6,134.73	122.66	85.91	102.47	-4,631.13	-171.80	829.03	638.32	190.71	4.347	
12,100.00	6,040.00	10,836.00	6,134.73	123.87	85.91	102.47	-4,631.13	-171.80	912.00	719.29	192.72	4.732	
12,200.00	6,040.00	10,836.00	6,134.73	125.17	85.91	102.47	-4,631.13	-171.80	998.11	804.16	193.95	5.146	
12,300.00	6,040.00	10,836.00	6,134.73	126.57	85.91	102.47	-4,631.13	-171.80	1,086.59	891.92	194.67	5.582	
12,400.00	6,040.00	10,836.00	6,134.73	128.06	85.91	102.47	-4,631.13	-171.80	1,176.92	981.86	195.06	6.034	
12,500.00	6,040.00	10,836.00	6,134.73	129.63	85.91	102.47	-4,631.13	-171.80	1,268.71	1,073.46	195.24	6.498	
12,600.00	6,040.00	10,836.00	6,134.73	131.29	85.91	102.47	-4,631.13	-171.80	1,361.65	1,166.37	195.27	6.973	
12,700.00	6,040.00	10,836.00	6,134.73	133.03	85.91	102.47	-4,631.13	-171.80	1,455.52	1,260.31	195.22	7.456	
12,800.00	6,040.00	10,836.00	6,134.73	134.84	85.91	102.47	-4,631.13	-171.80	1,550.16	1,355.07	195.10	7.946	
12,900.00	6,040.00	10,836.00	6,134.73	136.71	85.91	102.47	-4,631.13	-171.80	1,645.44	1,450.50	194.94	8.441	
13,000.00	6,040.00	10,836.00	6,134.73	138.66	85.91	102.47	-4,631.13	-171.80	1,741.25	1,546.49	194.76	8.941	
13,100.00	6,040.00	10,836.00	6,134.73	140.66	85.91	102.47	-4,631.13	-171.80	1,837.50	1,642.94	194.56	9.444	
13,200.00	6,040.00	10,836.00	6,134.73	142.71	85.91	102.47	-4,631.13	-171.80	1,934.13	1,739.77	194.36	9.951	
13,300.00	6,040.00	10,836.00	6,134.73	144.81	85.91	102.47	-4,631.13	-171.80	2,031.09	1,836.94	194.16	10.461	
13,400.00	6,040.00	10,836.00	6,134.73	146.96	85.91	102.47	-4,631.13	-171.80	2,128.33	1,934.38	193.95	10.973	
13,500.00	6,040.00	10,836.00	6,134.73	149.14	85.91	102.47	-4,631.13	-171.80	2,225.82	2,032.06	193.76	11.488	
13,600.00	6,040.00	10,836.00	6,134.73	151.36	85.91	102.47	-4,631.13	-171.80	2,323.52	2,129.95	193.56	12.004	
13,700.00	6,040.00	10,836.00	6,134.73	153.62	85.91	102.47	-4,631.13	-171.80	2,421.40	2,228.03	193.37	12.522	
13,800.00	6,040.00	10,836.00	6,134.73	155.91	85.91	102.47	-4,631.13	-171.80	2,519.46	2,326.26	193.19	13.041	
13,900.00	6,040.00	10,836.00	6,134.73	158.22	85.91	102.47	-4,631.13	-171.80	2,617.66	2,424.64	193.02	13.562	
14,000.00	6,040.00	10,836.00	6,134.73	160.56	85.91	102.47	-4,631.13	-171.80	2,715.99	2,523.13	192.85	14.083	
14,100.00	6,040.00	10,836.00	6,134.73	162.92	85.91	102.47	-4,631.13	-171.80	2,814.44	2,621.74	192.69	14.606	
14,200.00	6,040.00	10,836.00	6,134.73	165.30	85.91	102.47	-4,631.13	-171.80	2,912.99	2,720.45	192.54	15.129	
14,300.00	6,040.00	10,836.00	6,134.73	167.70	85.91	102.47	-4,631.13	-171.80	3,011.64	2,819.25	192.39	15.653	
14,400.00	6,040.00	10,836.00	6,134.73	170.12	85.91	102.47	-4,631.13	-171.80	3,110.38	2,918.12	192.25	16.178	
14,500.00	6,040.00	10,836.00	6,134.73	172.55	85.91	102.47	-4,631.13	-171.80	3,209.19	3,017.07	192.12	16.704	
14,600.00	6,040.00	10,836.00	6,134.73	175.00	85.91	102.47	-4,631.13	-171.80	3,308.08	3,116.08	191.99	17.230	
14,700.00	6,040.00	10,836.00	6,134.73	177.46	85.91	102.47	-4,631.13	-171.80	3,407.03	3,215.16	191.87	17.757	
14,800.00	6,040.00	10,836.00	6,134.73	179.94	85.91	102.47	-4,631.13	-171.80	3,506.04	3,314.29	191.75	18.284	
14,900.00	6,040.00	10,836.00	6,134.73	182.43	85.91	102.47	-4,631.13	-171.80	3,605.10	3,413.46	191.64	18.812	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - EXIST HZ STATE SEVENTY HOLES K-O-3HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 120-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,000.00	6,040.00	10,836.00	6,134.73	184.92	85.91	102.47	-4,631.13	-171.80	3,704.22	3,512.68	191.54	19.340	
15,100.00	6,040.00	10,836.00	6,134.73	187.43	85.91	102.47	-4,631.13	-171.80	3,803.38	3,611.95	191.43	19.868	
15,200.00	6,040.00	10,836.00	6,134.73	189.95	85.91	102.47	-4,631.13	-171.80	3,902.58	3,711.25	191.34	20.397	
15,300.00	6,040.00	10,836.00	6,134.73	192.48	85.91	102.47	-4,631.13	-171.80	4,001.83	3,810.59	191.24	20.925	
15,400.00	6,040.00	10,836.00	6,134.73	195.01	85.91	102.47	-4,631.13	-171.80	4,101.11	3,909.96	191.15	21.455	
15,500.00	6,040.00	10,836.00	6,134.73	197.55	85.91	102.47	-4,631.13	-171.80	4,200.42	4,009.36	191.07	21.984	
15,600.00	6,040.00	10,836.00	6,134.73	200.10	85.91	102.47	-4,631.13	-171.80	4,299.77	4,108.79	190.99	22.514	
15,700.00	6,040.00	10,836.00	6,134.73	202.65	85.91	102.47	-4,631.13	-171.80	4,399.15	4,208.24	190.91	23.043	
15,800.00	6,040.00	10,836.00	6,134.73	205.22	85.91	102.47	-4,631.13	-171.80	4,498.55	4,307.72	190.83	23.573	
15,900.00	6,040.00	10,836.00	6,134.73	207.78	85.91	102.47	-4,631.13	-171.80	4,597.98	4,407.22	190.76	24.104	
16,000.00	6,040.00	10,836.00	6,134.73	210.36	85.91	102.47	-4,631.13	-171.80	4,697.43	4,506.74	190.69	24.634	
16,100.00	6,040.00	10,836.00	6,134.73	212.93	85.91	102.47	-4,631.13	-171.80	4,796.91	4,606.29	190.62	25.164	
16,200.00	6,040.00	10,836.00	6,134.73	215.52	85.91	102.47	-4,631.13	-171.80	4,896.41	4,705.85	190.56	25.695	
16,300.00	6,040.00	10,836.00	6,134.73	218.11	85.91	102.47	-4,631.13	-171.80	4,995.93	4,805.43	190.50	26.225	
16,400.00	6,040.00	10,836.00	6,134.73	220.70	85.91	102.47	-4,631.13	-171.80	5,095.46	4,905.02	190.44	26.756	
16,500.00	6,040.00	10,836.00	6,134.73	223.29	85.91	102.47	-4,631.13	-171.80	5,195.02	5,004.63	190.39	27.286	
16,600.00	6,040.00	10,836.00	6,134.73	225.89	85.91	102.47	-4,631.13	-171.80	5,294.59	5,104.26	190.33	27.817	
16,700.00	6,040.00	10,836.00	6,134.73	228.50	85.91	102.47	-4,631.13	-171.80	5,394.18	5,203.89	190.28	28.348	
16,800.00	6,040.00	10,836.00	6,134.73	231.11	85.91	102.47	-4,631.13	-171.80	5,493.78	5,303.54	190.23	28.879	
16,900.00	6,040.00	10,836.00	6,134.73	233.72	85.91	102.47	-4,631.13	-171.80	5,593.40	5,403.21	190.19	29.410	
17,000.00	6,040.00	10,836.00	6,134.73	236.33	85.91	102.47	-4,631.13	-171.80	5,693.03	5,502.88	190.14	29.941	
17,100.00	6,040.00	10,836.00	6,134.73	238.95	85.91	102.47	-4,631.13	-171.80	5,792.67	5,602.57	190.10	30.472	
17,200.00	6,040.00	10,836.00	6,134.73	241.57	85.91	102.47	-4,631.13	-171.80	5,892.32	5,702.26	190.06	31.003	
17,300.00	6,040.00	10,836.00	6,134.73	244.19	85.91	102.47	-4,631.13	-171.80	5,991.99	5,801.97	190.02	31.533	
17,400.00	6,040.00	10,836.00	6,134.73	246.82	85.91	102.47	-4,631.13	-171.80	6,091.67	5,901.68	189.98	32.064	
17,500.00	6,040.00	10,836.00	6,134.73	249.45	85.91	102.47	-4,631.13	-171.80	6,191.35	6,001.41	189.95	32.595	
17,600.00	6,040.00	10,836.00	6,134.73	252.08	85.91	102.47	-4,631.13	-171.80	6,291.05	6,101.14	189.91	33.126	
17,700.00	6,040.00	10,836.00	6,134.73	254.71	85.91	102.47	-4,631.13	-171.80	6,390.76	6,200.88	189.88	33.657	
17,800.00	6,040.00	10,836.00	6,134.73	257.35	85.91	102.47	-4,631.13	-171.80	6,490.47	6,300.63	189.85	34.188	
17,900.00	6,040.00	10,836.00	6,134.73	259.99	85.91	102.47	-4,631.13	-171.80	6,590.20	6,400.38	189.82	34.719	
18,000.00	6,040.00	10,836.00	6,134.73	262.63	85.91	102.47	-4,631.13	-171.80	6,689.93	6,500.14	189.79	35.249	
18,100.00	6,040.00	10,836.00	6,134.73	265.27	85.91	102.47	-4,631.13	-171.80	6,789.67	6,599.91	189.76	35.780	
18,200.00	6,040.00	10,836.00	6,134.73	267.91	85.91	102.47	-4,631.13	-171.80	6,889.42	6,699.69	189.74	36.311	
18,300.00	6,040.00	10,836.00	6,134.73	270.56	85.91	102.47	-4,631.13	-171.80	6,989.18	6,799.47	189.71	36.841	
18,400.00	6,040.00	10,836.00	6,134.73	273.21	85.91	102.47	-4,631.13	-171.80	7,088.94	6,899.25	189.69	37.372	
18,500.00	6,040.00	10,836.00	6,134.73	275.86	85.91	102.47	-4,631.13	-171.80	7,188.71	6,999.04	189.67	37.902	
18,600.00	6,040.00	10,836.00	6,134.73	278.51	85.91	102.47	-4,631.13	-171.80	7,288.48	7,098.84	189.64	38.432	
18,700.00	6,040.00	10,836.00	6,134.73	281.16	85.91	102.47	-4,631.13	-171.80	7,388.26	7,198.64	189.62	38.963	
18,800.00	6,040.00	10,836.00	6,134.73	283.81	85.91	102.47	-4,631.13	-171.80	7,488.05	7,298.45	189.60	39.493	
18,900.00	6,040.00	10,836.00	6,134.73	286.47	85.91	102.47	-4,631.13	-171.80	7,587.84	7,398.26	189.59	40.023	
18,919.70	6,040.00	10,836.00	6,134.73	286.99	85.91	102.47	-4,631.13	-171.80	7,607.51	7,417.92	189.58	40.128	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES 21-24-3HN - OWB - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-61.32	61.32					
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-61.32	61.32	61.05	0.27	228.085	CC, ES	
200.00	199.98	197.95	197.93	0.48	0.49	122.62	0.63	-62.87	63.83	62.86	0.98	65.358		
300.00	299.84	295.28	295.13	0.85	0.84	127.33	2.52	-67.48	71.71	70.01	1.70	42.158		
400.00	399.45	391.37	390.87	1.22	1.20	133.11	5.60	-75.03	85.65	83.22	2.44	35.170		
500.00	498.70	485.65	484.49	1.62	1.57	138.50	9.80	-85.32	106.10	102.93	3.17	33.474		
600.00	597.47	577.59	575.38	2.05	1.96	142.87	15.02	-98.09	133.12	129.22	3.90	34.172		
700.00	695.62	667.67	663.98	2.51	2.36	146.21	21.18	-113.17	166.45	161.83	4.61	36.082		
800.00	793.06	759.89	754.49	3.01	2.79	148.89	27.84	-129.46	203.98	198.63	5.35	38.153		
900.00	889.64	850.76	843.69	3.56	3.22	151.02	34.39	-145.52	244.68	238.60	6.09	40.205		
1,000.00	985.27	940.17	931.46	4.14	3.64	152.76	40.85	-161.31	288.50	281.68	6.82	42.326		
1,100.00	1,079.82	1,028.01	1,017.69	4.78	4.06	154.19	47.19	-176.83	335.38	327.82	7.56	44.383		
1,200.00	1,173.17	1,114.19	1,102.29	5.46	4.47	155.38	53.41	-192.06	385.25	376.96	8.29	46.445		
1,300.00	1,265.21	1,198.59	1,185.13	6.20	4.88	156.39	59.50	-206.97	438.08	429.05	9.03	48.506		
1,400.00	1,355.84	1,281.11	1,266.14	6.99	5.27	157.23	65.45	-221.55	493.78	484.02	9.76	50.570		
1,500.00	1,444.94	1,361.65	1,345.20	7.84	5.66	157.94	71.27	-235.78	552.30	541.81	10.49	52.637		
1,600.00	1,532.39	1,440.11	1,422.21	8.75	6.04	158.52	76.93	-249.64	613.58	602.36	11.21	54.712		
1,700.00	1,618.11	1,516.40	1,497.10	9.71	6.41	159.01	82.44	-263.12	677.52	665.60	11.93	56.797		
1,800.00	1,701.97	1,609.58	1,569.76	10.74	6.86	159.40	87.78	-276.20	744.08	731.37	12.71	58.541		
1,900.00	1,783.88	1,662.08	1,640.11	11.82	7.11	159.70	92.95	-288.86	813.15	799.82	13.33	61.011		
2,000.00	1,863.74	1,731.30	1,708.05	12.96	7.45	159.91	97.95	-301.09	884.67	870.66	14.01	63.147		
2,100.00	1,941.45	1,797.99	1,773.52	14.16	7.77	160.05	102.76	-312.87	958.54	943.86	14.68	65.308		
2,200.00	2,016.92	1,862.08	1,836.42	15.41	8.08	160.11	107.39	-324.19	1,034.68	1,019.35	15.33	67.498		
2,300.00	2,090.05	1,923.47	1,896.69	16.73	8.38	160.08	111.82	-335.04	1,113.00	1,097.03	15.96	69.721		
2,400.00	2,160.76	1,982.10	1,954.24	18.10	8.66	159.97	116.05	-345.40	1,193.40	1,176.82	16.58	71.982		
2,500.00	2,228.95	2,037.90	2,009.01	19.53	8.93	159.77	120.08	-355.26	1,275.78	1,258.61	17.17	74.286		
2,600.00	2,294.55	2,109.21	2,060.94	21.01	9.28	159.47	123.89	-364.60	1,360.06	1,342.24	17.82	76.315		
2,700.00	2,357.48	2,140.72	2,109.95	22.55	9.43	159.06	127.50	-373.42	1,446.12	1,427.82	18.30	79.041		
2,800.00	2,418.42	2,188.45	2,156.80	24.13	9.66	159.48	130.94	-381.86	1,533.43	1,514.61	18.82	81.458		
2,900.00	2,479.25	2,236.07	2,203.55	25.71	9.89	160.17	134.38	-390.27	1,620.87	1,601.52	19.35	83.772		
3,000.00	2,540.09	2,283.70	2,250.29	27.31	10.12	160.79	137.82	-398.68	1,708.35	1,688.48	19.87	85.964		
3,100.00	2,600.93	2,331.32	2,297.04	28.90	10.35	161.35	141.25	-407.10	1,795.88	1,775.48	20.40	88.040		
3,200.00	2,661.77	2,378.94	2,343.79	30.51	10.59	161.86	144.69	-415.51	1,883.44	1,862.52	20.92	90.010		
3,300.00	2,722.61	2,426.57	2,390.54	32.11	10.82	162.33	148.13	-423.93	1,971.04	1,949.59	21.45	91.880		
3,400.00	2,783.44	2,474.19	2,437.29	33.72	11.05	162.76	151.56	-432.34	2,058.67	2,036.69	21.98	93.658		
3,500.00	2,844.28	2,521.81	2,484.03	35.34	11.28	163.15	155.00	-440.75	2,146.32	2,123.81	22.51	95.349		
3,600.00	2,905.12	2,569.44	2,530.78	36.95	11.51	163.51	158.44	-449.17	2,233.99	2,210.95	23.04	96.960		
3,700.00	2,965.96	2,617.06	2,577.53	38.57	11.74	163.85	161.88	-457.58	2,321.69	2,298.12	23.57	98.495		
3,800.00	3,026.79	2,664.68	2,624.28	40.19	11.97	164.16	165.31	-466.00	2,409.40	2,385.29	24.10	99.959		
3,900.00	3,087.63	2,712.31	2,671.03	41.81	12.20	164.45	168.75	-474.41	2,497.12	2,472.49	24.64	101.356		
4,000.00	3,148.47	2,759.93	2,717.77	43.43	12.43	164.72	172.19	-482.82	2,584.86	2,559.69	25.17	102.692		
4,100.00	3,209.31	2,807.55	2,764.52	45.05	12.67	164.97	175.63	-491.24	2,672.62	2,646.91	25.71	103.969		
4,200.00	3,270.14	2,855.18	2,811.27	46.68	12.90	165.21	179.06	-499.65	2,760.38	2,734.14	26.24	105.190		
4,300.00	3,330.98	2,902.80	2,858.02	48.31	13.13	165.43	182.50	-508.07	2,848.16	2,821.38	26.78	106.361		
4,400.00	3,391.82	2,950.42	2,904.77	49.93	13.36	165.64	185.94	-516.48	2,935.94	2,908.62	27.32	107.482		
4,500.00	3,452.66	3,001.95	2,951.51	51.56	13.61	165.84	189.37	-524.89	3,023.73	2,995.86	27.87	108.494		
4,600.00	3,513.49	3,045.67	2,998.26	53.19	13.82	166.03	192.81	-533.31	3,111.53	3,083.14	28.39	109.589		
4,700.00	3,574.33	3,093.29	3,045.01	54.82	14.05	166.20	196.25	-541.72	3,199.34	3,170.41	28.93	110.579		
4,800.00	3,635.17	3,140.92	3,091.76	56.45	14.28	166.37	199.69	-550.14	3,287.15	3,257.68	29.47	111.531		
4,900.00	3,696.01	3,188.84	3,139.76	58.08	14.51	166.53	203.13	-558.56	3,374.96	3,344.89	29.99	112.444		
5,000.00	3,756.84	3,237.09	3,188.00	59.71	14.74	166.68	206.57	-566.97	3,462.77	3,432.30	30.51	113.317		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES 21-24-3HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	8,969.98	6,040.00	61.34	56.03	138.55	-2,701.62	-930.31	3,323.38	3,237.08	86.29	38.512	
5,200.00	3,878.52	9,040.05	6,040.00	62.97	57.15	137.68	-2,771.61	-926.94	3,311.15	3,221.51	89.64	36.937	
5,300.00	3,939.36	9,110.11	6,040.00	64.61	58.28	136.81	-2,841.59	-923.56	3,300.43	3,207.39	93.04	35.475	
5,400.00	4,000.19	9,180.18	6,040.00	66.24	59.42	135.95	-2,911.58	-920.18	3,291.21	3,194.74	96.47	34.117	
5,500.00	4,061.03	9,250.25	6,040.00	67.87	60.55	135.07	-2,981.56	-916.80	3,283.52	3,183.58	99.94	32.856	
5,600.00	4,121.87	9,320.32	6,040.00	69.51	61.69	134.20	-3,051.55	-913.43	3,277.37	3,173.93	103.44	31.685	
5,700.00	4,182.71	9,409.61	6,040.00	71.14	63.16	133.33	-3,121.54	-910.05	3,272.76	3,165.51	107.24	30.518	
5,800.00	4,243.54	9,460.45	6,040.00	72.77	63.99	132.45	-3,191.52	-906.67	3,269.70	3,159.19	110.51	29.587	
5,900.00	4,304.38	9,530.52	6,040.00	74.41	65.15	131.57	-3,261.51	-903.29	3,268.19	3,154.12	114.08	28.649	
5,946.62	4,332.74	9,563.19	6,040.00	75.17	65.69	131.17	-3,294.14	-901.72	3,268.02	3,152.28	115.74	28.235	
6,000.00	4,365.22	9,600.59	6,040.00	76.04	66.30	130.70	-3,331.50	-899.92	3,268.24	3,150.59	117.65	27.779	
6,100.00	4,426.06	9,670.66	6,040.00	77.68	67.47	129.82	-3,401.48	-896.54	3,269.85	3,148.62	121.24	26.971	
6,200.00	4,486.90	9,740.73	6,040.00	79.31	68.63	128.95	-3,471.47	-893.16	3,273.02	3,148.20	124.82	26.222	
6,300.00	4,547.73	9,810.79	6,040.00	80.95	69.80	128.07	-3,541.46	-889.79	3,277.73	3,149.33	128.40	25.527	
6,400.00	4,608.57	9,880.86	6,040.00	82.58	70.97	127.20	-3,611.44	-886.41	3,283.99	3,152.01	131.98	24.882	
6,500.00	4,669.41	9,950.93	6,040.00	84.22	72.14	126.33	-3,681.43	-883.03	3,291.79	3,156.24	135.55	24.285	
6,600.00	4,730.25	10,021.00	6,040.00	85.86	73.32	125.46	-3,751.42	-879.65	3,301.10	3,162.01	139.10	23.732	
6,700.00	4,791.08	10,108.93	6,040.00	87.49	74.80	124.59	-3,821.40	-876.28	3,311.93	3,169.02	142.92	23.174	
6,800.00	4,851.92	10,161.13	6,040.00	89.13	75.68	123.73	-3,891.39	-872.90	3,324.26	3,178.12	146.14	22.748	
6,900.00	4,912.76	10,231.20	6,040.00	90.76	76.87	122.87	-3,961.38	-869.52	3,338.06	3,188.45	149.62	22.311	
7,000.00	4,973.60	10,301.27	6,040.00	92.40	78.05	122.01	-4,031.36	-866.14	3,353.33	3,200.26	153.07	21.907	
7,100.00	5,034.43	10,371.34	6,040.00	94.04	79.24	121.16	-4,101.35	-862.77	3,370.04	3,213.55	156.49	21.536	
7,200.00	5,095.27	10,441.41	6,040.00	95.67	80.43	120.31	-4,171.34	-859.39	3,388.17	3,228.30	159.87	21.193	
7,300.00	5,156.11	10,511.47	6,040.00	97.31	81.62	119.47	-4,241.32	-856.01	3,407.69	3,244.48	163.21	20.879	
7,400.00	5,216.95	10,581.54	6,040.00	98.95	82.82	118.63	-4,311.31	-852.64	3,428.59	3,262.08	166.52	20.590	
7,500.00	5,277.78	10,651.61	6,040.00	100.59	84.01	117.80	-4,381.30	-849.26	3,450.84	3,281.06	169.78	20.325	
7,600.00	5,338.62	10,721.68	6,040.00	102.22	85.21	116.97	-4,451.28	-845.88	3,474.41	3,301.41	173.00	20.083	
7,700.00	5,399.46	10,808.26	6,040.00	103.86	86.69	116.15	-4,521.27	-842.50	3,499.28	3,322.83	176.45	19.831	
7,800.00	5,460.30	10,861.81	6,040.00	105.50	87.61	115.34	-4,591.25	-839.13	3,525.42	3,346.12	179.30	19.662	
7,900.00	5,521.24	10,919.17	6,040.00	107.13	88.60	113.03	-4,648.54	-836.36	3,552.42	3,370.38	182.04	19.514	
8,000.00	5,584.83	10,919.17	6,040.00	108.61	88.60	104.88	-4,648.54	-836.36	3,569.87	3,386.75	183.12	19.495	
8,100.00	5,650.69	10,919.17	6,040.00	109.85	88.60	96.15	-4,648.54	-836.36	3,572.81	3,388.88	183.93	19.425	
8,200.00	5,716.83	10,919.17	6,040.00	110.82	88.60	87.46	-4,648.54	-836.36	3,561.19	3,376.76	184.43	19.309	
8,300.00	5,781.24	10,919.17	6,040.00	111.52	88.60	79.46	-4,648.54	-836.36	3,535.23	3,350.61	184.63	19.148	
8,400.00	5,841.96	10,919.17	6,040.00	111.98	88.60	72.67	-4,648.54	-836.36	3,495.41	3,310.89	184.52	18.943	
8,500.00	5,897.14	10,919.17	6,040.00	112.25	88.60	67.38	-4,648.54	-836.36	3,442.48	3,258.31	184.17	18.691	
8,600.00	5,945.12	10,919.17	6,040.00	112.37	88.60	63.73	-4,648.54	-836.36	3,377.48	3,193.83	183.65	18.391	
8,700.00	5,984.42	10,919.17	6,040.00	112.39	88.60	61.90	-4,648.54	-836.36	3,301.73	3,118.70	183.03	18.039	
8,800.00	6,013.86	10,919.17	6,040.00	112.35	88.60	62.42	-4,648.54	-836.36	3,216.87	3,034.46	182.41	17.636	
8,900.00	6,032.54	10,919.17	6,040.00	112.30	88.60	67.12	-4,648.54	-836.36	3,124.84	2,942.98	181.86	17.183	
9,000.00	6,039.89	10,919.17	6,040.00	112.24	88.60	84.77	-4,648.54	-836.36	3,027.92	2,846.45	181.47	16.686	
9,100.00	6,040.00	10,919.17	6,040.00	112.19	88.60	90.00	-4,648.54	-836.36	2,929.15	2,747.96	181.19	16.166	
9,200.00	6,040.00	10,919.17	6,040.00	112.16	88.60	90.00	-4,648.54	-836.36	2,830.45	2,649.55	180.90	15.647	
9,300.00	6,040.00	10,919.17	6,040.00	112.15	88.60	90.00	-4,648.54	-836.36	2,731.85	2,551.26	180.58	15.128	
9,400.00	6,040.00	10,919.17	6,040.00	112.15	88.60	90.00	-4,648.54	-836.36	2,633.35	2,453.10	180.24	14.610	
9,500.00	6,040.00	10,919.17	6,040.00	112.16	88.60	90.00	-4,648.54	-836.36	2,534.96	2,355.09	179.87	14.093	
9,600.00	6,040.00	10,919.17	6,040.00	112.19	88.60	90.00	-4,648.54	-836.36	2,436.71	2,257.24	179.47	13.577	
9,700.00	6,040.00	10,919.17	6,040.00	112.24	88.60	90.00	-4,648.54	-836.36	2,338.61	2,159.57	179.04	13.062	
9,800.00	6,040.00	10,919.17	6,040.00	112.31	88.60	90.00	-4,648.54	-836.36	2,240.67	2,062.11	178.56	12.548	
9,900.00	6,040.00	10,919.17	6,040.00	112.39	88.60	90.00	-4,648.54	-836.36	2,142.93	1,964.89	178.04	12.036	
10,000.00	6,040.00	10,919.17	6,040.00	112.49	88.60	90.00	-4,648.54	-836.36	2,045.40	1,867.94	177.46	11.526	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES 21-24-3HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	6,040.00	10,919.17	6,040.00	112.62	88.60	90.00	-4,648.54	-836.36	1,948.12	1,771.30	176.82	11.017	
10,200.00	6,040.00	10,919.17	6,040.00	112.77	88.60	90.00	-4,648.54	-836.36	1,851.14	1,675.02	176.11	10.511	
10,300.00	6,040.00	10,919.17	6,040.00	112.94	88.60	90.00	-4,648.54	-836.36	1,754.49	1,579.17	175.32	10.007	
10,400.00	6,040.00	10,919.17	6,040.00	113.14	88.60	90.00	-4,648.54	-836.36	1,658.24	1,483.81	174.43	9.507	
10,500.00	6,040.00	10,919.17	6,040.00	113.36	88.60	90.00	-4,648.54	-836.36	1,562.46	1,389.04	173.42	9.009	
10,600.00	6,040.00	10,919.17	6,040.00	113.62	88.60	90.00	-4,648.54	-836.36	1,467.24	1,294.96	172.28	8.516	
10,700.00	6,040.00	10,919.17	6,040.00	113.91	88.60	90.00	-4,648.54	-836.36	1,372.71	1,201.73	170.98	8.028	
10,800.00	6,040.00	10,919.17	6,040.00	114.24	88.60	90.00	-4,648.54	-836.36	1,279.01	1,109.52	169.48	7.546	
10,900.00	6,040.00	10,919.17	6,040.00	114.61	88.60	90.00	-4,648.54	-836.36	1,186.33	1,018.57	167.76	7.072	
11,000.00	6,040.00	10,919.17	6,040.00	115.02	88.60	90.00	-4,648.54	-836.36	1,094.95	929.19	165.76	6.606	
11,100.00	6,040.00	10,919.17	6,040.00	115.49	88.60	90.00	-4,648.54	-836.36	1,005.20	841.77	163.43	6.151	
11,200.00	6,040.00	10,919.17	6,040.00	116.00	88.60	90.00	-4,648.54	-836.36	917.58	756.85	160.74	5.709	
11,300.00	6,040.00	10,919.17	6,040.00	116.58	88.60	90.00	-4,648.54	-836.36	832.76	675.13	157.63	5.283	
11,400.00	6,040.00	10,919.17	6,040.00	117.22	88.60	90.00	-4,648.54	-836.36	751.67	597.56	154.11	4.877	
11,500.00	6,040.00	10,919.17	6,040.00	117.92	88.60	90.00	-4,648.54	-836.36	675.67	525.42	150.26	4.497	
11,600.00	6,040.00	10,919.17	6,040.00	118.70	88.60	90.00	-4,648.54	-836.36	606.68	460.43	146.25	4.148	
11,700.00	6,040.00	10,919.17	6,040.00	119.56	88.60	90.00	-4,648.54	-836.36	547.34	404.96	142.38	3.844	
11,800.00	6,040.00	10,919.17	6,040.00	120.51	88.60	90.00	-4,648.54	-836.36	501.11	362.19	138.91	3.607	
11,900.00	6,040.00	10,919.17	6,040.00	121.54	88.60	90.00	-4,648.54	-836.36	471.84	335.50	136.34	3.461	
11,992.38	6,040.00	10,919.17	6,040.00	122.57	88.60	90.00	-4,648.54	-836.36	462.71	325.88	136.83	3.382	
12,000.00	6,040.00	10,919.17	6,040.00	122.66	88.60	90.00	-4,648.54	-836.36	462.77	325.63	137.14	3.374	
12,100.00	6,040.00	10,919.17	6,040.00	123.87	88.60	90.00	-4,648.54	-836.36	475.06	328.55	146.50	3.243	
12,200.00	6,040.00	10,919.17	6,040.00	125.17	88.60	90.00	-4,648.54	-836.36	507.16	346.20	160.96	3.151 SF	
12,300.00	6,040.00	10,919.17	6,040.00	126.57	88.60	90.00	-4,648.54	-836.36	555.64	382.19	173.44	3.204	
12,400.00	6,040.00	10,919.17	6,040.00	128.06	88.60	90.00	-4,648.54	-836.36	616.65	434.39	182.26	3.383	
12,500.00	6,040.00	10,919.17	6,040.00	129.63	88.60	90.00	-4,648.54	-836.36	686.86	498.86	188.00	3.653	
12,600.00	6,040.00	10,919.17	6,040.00	131.29	88.60	90.00	-4,648.54	-836.36	763.74	572.12	191.62	3.986	
12,700.00	6,040.00	10,919.17	6,040.00	133.03	88.60	90.00	-4,648.54	-836.36	845.48	651.63	193.85	4.362	
12,800.00	6,040.00	10,919.17	6,040.00	134.84	88.60	90.00	-4,648.54	-836.36	930.78	735.59	195.19	4.769	
12,900.00	6,040.00	10,919.17	6,040.00	136.71	88.60	90.00	-4,648.54	-836.36	1,018.76	822.80	195.96	5.199	
13,000.00	6,040.00	10,919.17	6,040.00	138.66	88.60	90.00	-4,648.54	-836.36	1,108.79	912.41	196.38	5.646	
13,100.00	6,040.00	10,919.17	6,040.00	140.66	88.60	90.00	-4,648.54	-836.36	1,200.39	1,003.82	196.57	6.107	
13,200.00	6,040.00	10,919.17	6,040.00	142.71	88.60	90.00	-4,648.54	-836.36	1,293.23	1,096.63	196.60	6.578	
13,300.00	6,040.00	10,919.17	6,040.00	144.81	88.60	90.00	-4,648.54	-836.36	1,387.08	1,190.53	196.55	7.057	
13,400.00	6,040.00	10,919.17	6,040.00	146.96	88.60	90.00	-4,648.54	-836.36	1,481.72	1,285.29	196.43	7.543	
13,500.00	6,040.00	10,919.17	6,040.00	149.14	88.60	90.00	-4,648.54	-836.36	1,577.03	1,380.75	196.28	8.035	
13,600.00	6,040.00	10,919.17	6,040.00	151.36	88.60	90.00	-4,648.54	-836.36	1,672.89	1,476.78	196.11	8.531	
13,700.00	6,040.00	10,919.17	6,040.00	153.62	88.60	90.00	-4,648.54	-836.36	1,769.20	1,573.28	195.92	9.030	
13,800.00	6,040.00	10,919.17	6,040.00	155.91	88.60	90.00	-4,648.54	-836.36	1,865.91	1,670.18	195.73	9.533	
13,900.00	6,040.00	10,919.17	6,040.00	158.22	88.60	90.00	-4,648.54	-836.36	1,962.94	1,767.40	195.54	10.039	
14,000.00	6,040.00	10,919.17	6,040.00	160.56	88.60	90.00	-4,648.54	-836.36	2,060.26	1,864.90	195.35	10.546	
14,100.00	6,040.00	10,919.17	6,040.00	162.92	88.60	90.00	-4,648.54	-836.36	2,157.82	1,962.65	195.17	11.056	
14,200.00	6,040.00	10,919.17	6,040.00	165.30	88.60	90.00	-4,648.54	-836.36	2,255.59	2,060.60	194.99	11.568	
14,300.00	6,040.00	10,919.17	6,040.00	167.70	88.60	90.00	-4,648.54	-836.36	2,353.56	2,158.74	194.82	12.081	
14,400.00	6,040.00	10,919.17	6,040.00	170.12	88.60	90.00	-4,648.54	-836.36	2,451.68	2,257.03	194.65	12.595	
14,500.00	6,040.00	10,919.17	6,040.00	172.55	88.60	90.00	-4,648.54	-836.36	2,549.96	2,355.46	194.50	13.111	
14,600.00	6,040.00	10,919.17	6,040.00	175.00	88.60	90.00	-4,648.54	-836.36	2,648.36	2,454.01	194.35	13.627	
14,700.00	6,040.00	10,919.17	6,040.00	177.46	88.60	90.00	-4,648.54	-836.36	2,746.88	2,552.67	194.20	14.144	
14,800.00	6,040.00	10,919.17	6,040.00	179.94	88.60	90.00	-4,648.54	-836.36	2,845.50	2,651.43	194.07	14.662	
14,900.00	6,040.00	10,919.17	6,040.00	182.43	88.60	90.00	-4,648.54	-836.36	2,944.21	2,750.28	193.94	15.181	
15,000.00	6,040.00	10,919.17	6,040.00	184.92	88.60	90.00	-4,648.54	-836.36	3,043.01	2,849.20	193.81	15.701	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES 21-24-3HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,100.00	6,040.00	10,919.17	6,040.00	187.43	88.60	90.00	-4,648.54	-836.36	3,141.88	2,948.19	193.69	16.221	
15,200.00	6,040.00	10,919.17	6,040.00	189.95	88.60	90.00	-4,648.54	-836.36	3,240.83	3,047.25	193.58	16.741	
15,300.00	6,040.00	10,919.17	6,040.00	192.48	88.60	90.00	-4,648.54	-836.36	3,339.83	3,146.36	193.47	17.262	
15,400.00	6,040.00	10,919.17	6,040.00	195.01	88.60	90.00	-4,648.54	-836.36	3,438.90	3,245.52	193.37	17.784	
15,500.00	6,040.00	10,919.17	6,040.00	197.55	88.60	90.00	-4,648.54	-836.36	3,538.01	3,344.74	193.27	18.306	
15,600.00	6,040.00	10,919.17	6,040.00	200.10	88.60	90.00	-4,648.54	-836.36	3,637.18	3,444.00	193.18	18.828	
15,700.00	6,040.00	10,919.17	6,040.00	202.65	88.60	90.00	-4,648.54	-836.36	3,736.39	3,543.29	193.09	19.350	
15,800.00	6,040.00	10,919.17	6,040.00	205.22	88.60	90.00	-4,648.54	-836.36	3,835.64	3,642.63	193.01	19.873	
15,900.00	6,040.00	10,919.17	6,040.00	207.78	88.60	90.00	-4,648.54	-836.36	3,934.92	3,742.00	192.93	20.396	
16,000.00	6,040.00	10,919.17	6,040.00	210.36	88.60	90.00	-4,648.54	-836.36	4,034.25	3,841.40	192.85	20.919	
16,100.00	6,040.00	10,919.17	6,040.00	212.93	88.60	90.00	-4,648.54	-836.36	4,133.60	3,940.83	192.78	21.442	
16,200.00	6,040.00	10,919.17	6,040.00	215.52	88.60	90.00	-4,648.54	-836.36	4,232.99	4,040.28	192.71	21.966	
16,300.00	6,040.00	10,919.17	6,040.00	218.11	88.60	90.00	-4,648.54	-836.36	4,332.40	4,139.76	192.64	22.489	
16,400.00	6,040.00	10,919.17	6,040.00	220.70	88.60	90.00	-4,648.54	-836.36	4,431.85	4,239.27	192.58	23.013	
16,500.00	6,040.00	10,919.17	6,040.00	223.29	88.60	90.00	-4,648.54	-836.36	4,531.31	4,338.79	192.52	23.537	
16,600.00	6,040.00	10,919.17	6,040.00	225.89	88.60	90.00	-4,648.54	-836.36	4,630.80	4,438.34	192.46	24.061	
16,700.00	6,040.00	10,919.17	6,040.00	228.50	88.60	90.00	-4,648.54	-836.36	4,730.31	4,537.90	192.41	24.585	
16,800.00	6,040.00	10,919.17	6,040.00	231.11	88.60	90.00	-4,648.54	-836.36	4,829.84	4,637.49	192.35	25.109	
16,900.00	6,040.00	10,919.17	6,040.00	233.72	88.60	90.00	-4,648.54	-836.36	4,929.39	4,737.09	192.30	25.633	
17,000.00	6,040.00	10,919.17	6,040.00	236.33	88.60	90.00	-4,648.54	-836.36	5,028.96	4,836.70	192.26	26.158	
17,100.00	6,040.00	10,919.17	6,040.00	238.95	88.60	90.00	-4,648.54	-836.36	5,128.54	4,936.33	192.21	26.682	
17,200.00	6,040.00	10,919.17	6,040.00	241.57	88.60	90.00	-4,648.54	-836.36	5,228.14	5,035.97	192.17	27.206	
17,300.00	6,040.00	10,919.17	6,040.00	244.19	88.60	90.00	-4,648.54	-836.36	5,327.76	5,135.63	192.12	27.731	
17,400.00	6,040.00	10,919.17	6,040.00	246.82	88.60	90.00	-4,648.54	-836.36	5,427.38	5,235.30	192.09	28.255	
17,500.00	6,040.00	10,919.17	6,040.00	249.45	88.60	90.00	-4,648.54	-836.36	5,527.03	5,334.98	192.05	28.779	
17,600.00	6,040.00	10,919.17	6,040.00	252.08	88.60	90.00	-4,648.54	-836.36	5,626.68	5,434.67	192.01	29.304	
17,700.00	6,040.00	10,919.17	6,040.00	254.71	88.60	90.00	-4,648.54	-836.36	5,726.35	5,534.37	191.98	29.828	
17,800.00	6,040.00	10,919.17	6,040.00	257.35	88.60	90.00	-4,648.54	-836.36	5,826.03	5,634.08	191.95	30.353	
17,900.00	6,040.00	10,919.17	6,040.00	259.99	88.60	90.00	-4,648.54	-836.36	5,925.72	5,733.80	191.91	30.877	
18,000.00	6,040.00	10,919.17	6,040.00	262.63	88.60	90.00	-4,648.54	-836.36	6,025.42	5,833.53	191.88	31.401	
18,100.00	6,040.00	10,919.17	6,040.00	265.27	88.60	90.00	-4,648.54	-836.36	6,125.13	5,933.27	191.86	31.925	
18,200.00	6,040.00	10,919.17	6,040.00	267.91	88.60	90.00	-4,648.54	-836.36	6,224.85	6,033.02	191.83	32.450	
18,300.00	6,040.00	10,919.17	6,040.00	270.56	88.60	90.00	-4,648.54	-836.36	6,324.57	6,132.77	191.81	32.974	
18,400.00	6,040.00	10,919.17	6,040.00	273.21	88.60	90.00	-4,648.54	-836.36	6,424.31	6,232.53	191.78	33.498	
18,500.00	6,040.00	10,919.17	6,040.00	275.86	88.60	90.00	-4,648.54	-836.36	6,524.05	6,332.30	191.76	34.022	
18,600.00	6,040.00	10,919.17	6,040.00	278.51	88.60	90.00	-4,648.54	-836.36	6,623.81	6,432.07	191.74	34.546	
18,700.00	6,040.00	10,919.17	6,040.00	281.16	88.60	90.00	-4,648.54	-836.36	6,723.57	6,531.85	191.72	35.070	
18,800.00	6,040.00	10,919.17	6,040.00	283.81	88.60	90.00	-4,648.54	-836.36	6,823.33	6,631.63	191.70	35.594	
18,900.00	6,040.00	10,919.17	6,040.00	286.47	88.60	90.00	-4,648.54	-836.36	6,923.10	6,731.42	191.68	36.118	
18,919.70	6,040.00	10,919.17	6,040.00	286.99	88.60	90.00	-4,648.54	-836.36	6,942.77	6,751.09	191.68	36.221	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P31-T34-3HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-47.38	47.38				
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-47.38	47.38	47.12	0.27	176.248	
200.00	199.98	201.18	201.15	0.48	0.50	124.08	1.19	-46.05	47.04	46.05	0.98	47.952	
265.19	265.10	266.92	266.83	0.72	0.74	129.83	3.23	-43.75	46.80	45.35	1.45	32.252 CC	
300.00	299.84	301.91	301.74	0.85	0.87	134.05	4.73	-42.07	46.93	45.23	1.70	27.600 ES	
400.00	399.45	401.76	401.20	1.22	1.24	149.64	10.56	-35.53	49.79	47.34	2.44	20.387	
500.00	498.70	500.24	499.06	1.62	1.62	165.92	17.94	-27.25	58.98	55.77	3.21	18.395	
600.00	597.47	601.97	596.21	2.05	2.03	177.42	25.34	-18.94	75.07	71.08	3.99	18.829	
700.00	695.62	695.14	692.69	2.51	2.40	-175.39	32.68	-10.70	96.50	91.77	4.73	20.391	
800.00	793.06	808.54	788.38	3.01	2.85	-171.04	39.97	-2.52	122.19	116.63	5.56	21.969	
900.00	889.64	886.86	883.17	3.56	3.17	-168.41	47.19	5.58	151.59	145.33	6.26	24.222	
1,000.00	985.27	981.23	976.93	4.14	3.54	-166.82	54.32	13.59	184.40	177.38	7.03	26.243	
1,100.00	1,079.82	1,074.47	1,069.56	4.78	3.92	-165.86	61.38	21.51	220.46	212.66	7.80	28.272	
1,200.00	1,173.17	1,166.44	1,160.94	5.46	4.29	-165.30	68.33	29.32	259.68	251.10	8.57	30.298	
1,300.00	1,265.21	1,257.05	1,250.95	6.20	4.65	-165.00	75.19	37.01	301.98	292.63	9.34	32.315	
1,400.00	1,355.84	1,346.18	1,339.50	6.99	5.01	-164.85	81.93	44.58	347.31	337.19	10.12	34.324	
1,500.00	1,444.94	1,433.72	1,426.48	7.84	5.36	-164.79	88.55	52.01	395.62	384.73	10.89	36.327	
1,600.00	1,532.39	1,519.56	1,511.77	8.75	5.71	-164.80	95.04	59.30	446.86	435.20	11.66	38.325	
1,700.00	1,618.11	1,603.61	1,595.27	9.71	6.05	-164.84	101.40	66.43	500.97	488.55	12.42	40.321	
1,800.00	1,701.97	1,685.75	1,676.88	10.74	6.38	-164.89	107.62	73.41	557.90	544.72	13.18	42.317	
1,900.00	1,783.88	1,765.90	1,756.50	11.82	6.70	-164.94	113.68	80.21	617.60	603.66	13.94	44.317	
2,000.00	1,863.74	1,843.94	1,834.04	12.96	7.02	-164.98	119.58	86.84	679.98	665.30	14.68	46.322	
2,100.00	1,941.45	1,919.79	1,909.40	14.16	7.32	-165.01	125.32	93.28	744.99	729.58	15.41	48.337	
2,200.00	2,016.92	1,993.36	1,982.49	15.41	7.62	-165.01	130.88	99.52	812.55	796.41	16.13	50.363	
2,300.00	2,090.05	2,064.54	2,053.21	16.73	7.91	-164.99	136.27	105.57	882.59	865.74	16.84	52.406	
2,400.00	2,160.76	2,133.27	2,121.49	18.10	8.18	-164.93	141.47	111.40	955.02	937.49	17.53	54.466	
2,500.00	2,228.95	2,200.55	2,187.24	19.53	8.45	-164.83	146.47	117.02	1,029.77	1,011.55	18.21	56.536	
2,600.00	2,294.55	2,263.00	2,250.38	21.01	8.70	-164.70	151.28	122.42	1,106.74	1,087.88	18.87	58.659	
2,700.00	2,357.48	2,323.84	2,310.83	22.55	8.95	-164.51	155.88	127.58	1,185.86	1,166.35	19.50	60.798	
2,800.00	2,418.42	2,382.67	2,369.28	24.13	9.19	-164.81	160.33	132.58	1,266.48	1,246.35	20.13	62.930	
2,900.00	2,479.25	2,441.40	2,427.63	25.71	9.42	-165.24	164.78	137.56	1,347.20	1,326.46	20.74	64.952	
3,000.00	2,540.09	2,500.14	2,485.98	27.31	9.66	-165.63	169.22	142.55	1,427.95	1,406.59	21.36	66.850	
3,100.00	2,600.93	2,558.87	2,544.33	28.90	9.90	-165.97	173.66	147.54	1,508.72	1,486.74	21.98	68.635	
3,200.00	2,661.77	2,617.60	2,602.68	30.51	10.13	-166.28	178.10	152.52	1,589.50	1,566.90	22.61	70.316	
3,300.00	2,722.61	2,676.33	2,661.04	32.11	10.37	-166.56	182.55	157.51	1,670.30	1,647.07	23.23	71.901	
3,400.00	2,783.44	2,735.07	2,719.39	33.72	10.61	-166.81	186.99	162.50	1,751.11	1,727.25	23.86	73.398	
3,500.00	2,844.28	2,806.20	2,777.74	35.34	10.89	-167.04	191.43	167.48	1,831.93	1,807.40	24.54	74.662	
3,600.00	2,905.12	2,852.53	2,836.09	36.95	11.08	-167.26	195.87	172.47	1,912.77	1,887.65	25.12	76.153	
3,700.00	2,965.96	2,911.26	2,894.44	38.57	11.32	-167.45	200.32	177.46	1,993.61	1,967.86	25.75	77.423	
3,800.00	3,026.79	2,970.00	2,952.79	40.19	11.55	-167.63	204.76	182.44	2,074.45	2,048.07	26.38	78.628	
3,900.00	3,087.63	3,028.73	3,011.14	41.81	11.79	-167.80	209.20	187.43	2,155.31	2,128.29	27.02	79.773	
4,000.00	3,148.47	3,087.46	3,069.50	43.43	12.03	-167.95	213.64	192.42	2,236.17	2,208.51	27.65	80.862	
4,100.00	3,209.31	3,146.20	3,127.85	45.05	12.26	-168.09	218.09	197.40	2,317.03	2,288.74	28.29	81.898	
4,200.00	3,270.14	3,204.93	3,186.20	46.68	12.50	-168.23	222.53	202.39	2,397.90	2,368.97	28.93	82.886	
4,300.00	3,330.98	3,263.66	3,244.55	48.31	12.74	-168.35	226.97	207.38	2,478.78	2,449.21	29.57	83.828	
4,400.00	3,391.82	3,322.39	3,302.90	49.93	12.98	-168.47	231.42	212.36	2,559.65	2,529.44	30.21	84.728	
4,500.00	3,452.66	3,381.13	3,361.25	51.56	13.21	-168.58	235.86	217.35	2,640.54	2,609.68	30.85	85.587	
4,600.00	3,513.49	3,439.41	3,419.00	53.19	13.45	-168.68	240.30	222.24	2,721.42	2,689.56	31.49	86.446	
4,700.00	3,574.33	3,499.52	3,478.50	54.82	13.69	-168.77	244.74	227.13	2,792.30	2,759.44	32.13	87.305	
4,800.00	3,635.17	3,559.33	3,537.80	56.45	13.93	-168.86	249.18	232.02	2,863.18	2,829.22	32.77	88.164	
4,900.00	3,696.01	3,619.14	3,596.50	58.08	14.17	-168.95	253.62	236.91	2,934.06	2,899.00	33.41	89.023	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P31-T34-3HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	3,756.84	8,789.85	6,040.00	59.71	53.61	158.90	-2,558.93	594.44	2,455.58	2,396.07	59.52	41.259	
5,100.00	3,817.68	8,859.96	6,040.00	61.34	54.75	157.75	-2,628.96	597.90	2,413.38	2,350.94	62.44	38.653	
5,200.00	3,878.52	8,930.07	6,040.00	62.97	55.90	156.57	-2,698.98	601.36	2,372.57	2,307.07	65.50	36.220	
5,300.00	3,939.36	9,000.19	6,040.00	64.61	57.05	155.37	-2,769.01	604.82	2,333.23	2,264.51	68.72	33.953	
5,400.00	4,000.19	9,070.30	6,040.00	66.24	58.20	154.15	-2,839.03	608.28	2,295.43	2,223.34	72.08	31.844	
5,500.00	4,061.03	9,140.41	6,040.00	67.87	59.36	152.90	-2,909.06	611.74	2,259.24	2,183.64	75.60	29.884	
5,600.00	4,121.87	9,210.52	6,040.00	69.51	60.53	151.63	-2,979.09	615.20	2,224.76	2,145.49	79.27	28.067	
5,700.00	4,182.71	9,280.63	6,040.00	71.14	61.70	150.34	-3,049.11	618.66	2,192.05	2,108.97	83.08	26.385	
5,800.00	4,243.54	9,350.74	6,040.00	72.77	62.87	149.03	-3,119.14	622.12	2,161.20	2,074.16	87.04	24.830	
5,900.00	4,304.38	9,420.85	6,040.00	74.41	64.04	147.70	-3,189.16	625.58	2,132.29	2,041.15	91.14	23.397	
6,000.00	4,365.22	9,509.04	6,040.00	76.04	65.52	146.35	-3,259.19	629.04	2,105.40	2,009.82	95.58	22.028	
6,100.00	4,426.06	9,561.07	6,040.00	77.68	66.40	144.98	-3,329.21	632.50	2,080.60	1,980.88	99.72	20.865	
6,200.00	4,486.90	9,631.18	6,040.00	79.31	67.58	143.59	-3,399.24	635.96	2,057.98	1,953.80	104.18	19.755	
6,300.00	4,547.73	9,701.29	6,040.00	80.95	68.77	142.20	-3,469.26	639.42	2,037.60	1,928.87	108.73	18.739	
6,400.00	4,608.57	9,771.40	6,040.00	82.58	69.96	140.78	-3,539.29	642.88	2,019.54	1,906.16	113.38	17.813	
6,500.00	4,669.41	9,841.52	6,040.00	84.22	71.15	139.36	-3,609.31	646.34	2,003.85	1,885.77	118.08	16.970	
6,600.00	4,730.25	9,911.63	6,040.00	85.86	72.34	137.93	-3,679.34	649.80	1,990.60	1,867.76	122.84	16.205	
6,700.00	4,791.08	9,981.74	6,040.00	87.49	73.53	136.48	-3,749.36	653.26	1,979.82	1,852.21	127.62	15.514	
6,800.00	4,851.92	10,051.85	6,040.00	89.13	74.73	135.03	-3,819.39	656.72	1,971.57	1,839.16	132.41	14.890	
6,900.00	4,912.76	10,121.96	6,040.00	90.76	75.93	133.58	-3,889.42	660.18	1,965.87	1,828.68	137.19	14.330	
7,000.00	4,973.60	10,207.93	6,040.00	92.40	77.40	132.12	-3,959.44	663.64	1,962.75	1,820.57	142.17	13.805	
7,070.67	5,016.59	10,241.62	6,040.00	93.56	77.98	131.09	-4,008.93	666.08	1,962.10	1,816.84	145.26	13.507	
7,100.00	5,034.43	10,262.18	6,040.00	94.04	78.33	130.66	-4,029.47	667.10	1,962.21	1,815.58	146.64	13.382	
7,200.00	5,095.27	10,332.29	6,040.00	95.67	79.54	129.20	-4,099.49	670.56	1,964.27	1,813.00	151.26	12.986	
7,300.00	5,156.11	10,402.40	6,040.00	97.31	80.74	127.74	-4,169.52	674.02	1,968.90	1,813.10	155.81	12.637	
7,400.00	5,216.95	10,472.51	6,040.00	98.95	81.95	126.29	-4,239.54	677.48	1,976.10	1,815.86	160.25	12.332	
7,500.00	5,277.78	10,542.62	6,040.00	100.59	83.16	124.84	-4,309.57	680.94	1,985.84	1,821.27	164.57	12.067	
7,600.00	5,338.62	10,612.73	6,040.00	102.22	84.37	123.41	-4,379.59	684.40	1,998.08	1,829.31	168.77	11.839	
7,700.00	5,399.46	10,682.85	6,040.00	103.86	85.58	121.98	-4,449.62	687.86	2,012.76	1,839.94	172.82	11.646	
7,800.00	5,460.30	10,752.96	6,040.00	105.50	86.80	120.56	-4,519.64	691.32	2,029.85	1,853.11	176.74	11.485	
7,900.00	5,521.24	10,823.17	6,040.00	107.13	88.01	117.49	-4,589.77	694.78	2,048.88	1,868.38	180.51	11.351	
8,000.00	5,584.83	10,867.43	6,040.00	108.61	88.78	108.49	-4,633.98	696.97	2,058.57	1,875.64	182.94	11.253	
8,100.00	5,650.69	10,867.43	6,040.00	109.85	88.78	99.84	-4,633.98	696.97	2,055.40	1,872.37	183.02	11.230	
8,200.00	5,716.83	10,867.43	6,040.00	110.82	88.78	91.28	-4,633.98	696.97	2,039.88	1,857.37	182.50	11.177	
8,300.00	5,781.24	10,867.43	6,040.00	111.52	88.78	83.50	-4,633.98	696.97	2,012.21	1,830.82	181.39	11.093	
8,400.00	5,841.96	10,867.43	6,040.00	111.98	88.78	77.01	-4,633.98	696.97	1,972.74	1,793.01	179.73	10.976	
8,500.00	5,897.14	10,867.43	6,040.00	112.25	88.78	72.15	-4,633.98	696.97	1,921.99	1,744.39	177.60	10.822	
8,600.00	5,945.12	10,867.43	6,040.00	112.37	88.78	69.08	-4,633.98	696.97	1,860.65	1,685.53	175.12	10.625	
8,700.00	5,984.42	10,867.43	6,040.00	112.39	88.78	68.03	-4,633.98	696.97	1,789.60	1,617.17	172.42	10.379	
8,800.00	6,013.86	10,867.43	6,040.00	112.35	88.78	69.50	-4,633.98	696.97	1,709.93	1,540.24	169.69	10.077	
8,900.00	6,032.54	10,867.43	6,040.00	112.30	88.78	74.76	-4,633.98	696.97	1,622.99	1,455.89	167.10	9.713	
9,000.00	6,039.89	10,867.43	6,040.00	112.24	88.78	87.31	-4,633.98	696.97	1,530.41	1,365.55	164.86	9.283	
9,100.00	6,040.00	10,867.43	6,040.00	112.19	88.78	90.00	-4,633.98	696.97	1,435.43	1,272.60	162.83	8.815	
9,200.00	6,040.00	10,867.43	6,040.00	112.16	88.78	90.00	-4,633.98	696.97	1,341.15	1,180.66	160.48	8.357	
9,300.00	6,040.00	10,867.43	6,040.00	112.15	88.78	90.00	-4,633.98	696.97	1,247.75	1,090.02	157.73	7.911	
9,400.00	6,040.00	10,867.43	6,040.00	112.15	88.78	90.00	-4,633.98	696.97	1,155.46	1,001.00	154.46	7.481	
9,500.00	6,040.00	10,867.43	6,040.00	112.16	88.78	90.00	-4,633.98	696.97	1,064.56	914.00	150.56	7.071	
9,600.00	6,040.00	10,867.43	6,040.00	112.19	88.78	90.00	-4,633.98	696.97	975.44	829.60	145.84	6.688	
9,700.00	6,040.00	10,867.43	6,040.00	112.24	88.78	90.00	-4,633.98	696.97	888.65	748.53	140.12	6.342	
9,800.00	6,040.00	10,867.43	6,040.00	112.31	88.78	90.00	-4,633.98	696.97	804.92	671.77	133.15	6.045	
9,900.00	6,040.00	10,867.43	6,040.00	112.39	88.78	90.00	-4,633.98	696.97	725.33	600.59	124.74	5.815	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P31-T34-3HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.00	6,040.00	10,867.43	6,040.00	112.49	88.78	90.00	-4,633.98	696.97	651.39	536.49	114.91	5.669	
10,100.00	6,040.00	10,867.43	6,040.00	112.62	88.78	90.00	-4,633.98	696.97	585.25	480.99	104.26	5.613	
10,200.00	6,040.00	10,867.43	6,040.00	112.77	88.78	90.00	-4,633.98	696.97	529.83	435.20	94.63	5.599	
10,300.00	6,040.00	10,867.43	6,040.00	112.94	88.78	90.00	-4,633.98	696.97	488.80	399.54	89.26	5.476	
10,400.00	6,040.00	10,867.43	6,040.00	113.14	88.78	90.00	-4,633.98	696.97	465.97	372.41	93.56	4.981	
10,458.98	6,040.00	10,867.43	6,040.00	113.27	88.78	90.00	-4,633.98	696.97	462.22	358.93	103.29	4.475	
10,500.00	6,040.00	10,867.43	6,040.00	113.36	88.78	90.00	-4,633.98	696.97	464.04	351.51	112.53	4.124	
10,600.00	6,040.00	10,867.43	6,040.00	113.62	88.78	90.00	-4,633.98	696.97	483.26	346.23	137.03	3.527	
10,700.00	6,040.00	10,867.43	6,040.00	113.91	88.78	90.00	-4,633.98	696.97	521.29	363.35	157.94	3.301 SF	
10,800.00	6,040.00	10,867.43	6,040.00	114.24	88.78	90.00	-4,633.98	696.97	574.41	401.34	173.07	3.319	
10,900.00	6,040.00	10,867.43	6,040.00	114.61	88.78	90.00	-4,633.98	696.97	638.87	455.70	183.16	3.488	
11,000.00	6,040.00	10,867.43	6,040.00	115.02	88.78	90.00	-4,633.98	696.97	711.59	521.95	189.64	3.752	
11,100.00	6,040.00	10,867.43	6,040.00	115.49	88.78	90.00	-4,633.98	696.97	790.29	596.58	193.71	4.080	
11,200.00	6,040.00	10,867.43	6,040.00	116.00	88.78	90.00	-4,633.98	696.97	873.36	677.14	196.23	4.451	
11,300.00	6,040.00	10,867.43	6,040.00	116.58	88.78	90.00	-4,633.98	696.97	959.67	761.92	197.75	4.853	
11,400.00	6,040.00	10,867.43	6,040.00	117.22	88.78	90.00	-4,633.98	696.97	1,048.42	849.78	198.63	5.278	
11,500.00	6,040.00	10,867.43	6,040.00	117.92	88.78	90.00	-4,633.98	696.97	1,139.03	939.92	199.11	5.721	
11,600.00	6,040.00	10,867.43	6,040.00	118.70	88.78	90.00	-4,633.98	696.97	1,231.09	1,031.78	199.31	6.177	
11,700.00	6,040.00	10,867.43	6,040.00	119.56	88.78	90.00	-4,633.98	696.97	1,324.31	1,124.96	199.35	6.643	
11,800.00	6,040.00	10,867.43	6,040.00	120.51	88.78	90.00	-4,633.98	696.97	1,418.45	1,219.18	199.27	7.118	
11,900.00	6,040.00	10,867.43	6,040.00	121.54	88.78	90.00	-4,633.98	696.97	1,513.34	1,314.22	199.12	7.600	
12,000.00	6,040.00	10,867.43	6,040.00	122.66	88.78	90.00	-4,633.98	696.97	1,608.85	1,409.93	198.92	8.088	
12,100.00	6,040.00	10,867.43	6,040.00	123.87	88.78	90.00	-4,633.98	696.97	1,704.88	1,506.18	198.70	8.580	
12,200.00	6,040.00	10,867.43	6,040.00	125.17	88.78	90.00	-4,633.98	696.97	1,801.34	1,602.88	198.46	9.077	
12,300.00	6,040.00	10,867.43	6,040.00	126.57	88.78	90.00	-4,633.98	696.97	1,898.16	1,699.95	198.21	9.576	
12,400.00	6,040.00	10,867.43	6,040.00	128.06	88.78	90.00	-4,633.98	696.97	1,995.30	1,797.34	197.96	10.079	
12,500.00	6,040.00	10,867.43	6,040.00	129.63	88.78	90.00	-4,633.98	696.97	2,092.71	1,894.99	197.72	10.584	
12,600.00	6,040.00	10,867.43	6,040.00	131.29	88.78	90.00	-4,633.98	696.97	2,190.35	1,992.87	197.48	11.092	
12,700.00	6,040.00	10,867.43	6,040.00	133.03	88.78	90.00	-4,633.98	696.97	2,288.19	2,090.95	197.25	11.601	
12,800.00	6,040.00	10,867.43	6,040.00	134.84	88.78	90.00	-4,633.98	696.97	2,386.22	2,189.20	197.02	12.112	
12,900.00	6,040.00	10,867.43	6,040.00	136.71	88.78	90.00	-4,633.98	696.97	2,484.40	2,287.60	196.80	12.624	
13,000.00	6,040.00	10,867.43	6,040.00	138.66	88.78	90.00	-4,633.98	696.97	2,582.72	2,386.13	196.59	13.137	
13,100.00	6,040.00	10,867.43	6,040.00	140.66	88.78	90.00	-4,633.98	696.97	2,681.17	2,484.77	196.39	13.652	
13,200.00	6,040.00	10,867.43	6,040.00	142.71	88.78	90.00	-4,633.98	696.97	2,779.72	2,583.52	196.20	14.168	
13,300.00	6,040.00	10,867.43	6,040.00	144.81	88.78	90.00	-4,633.98	696.97	2,878.38	2,682.36	196.02	14.684	
13,400.00	6,040.00	10,867.43	6,040.00	146.96	88.78	90.00	-4,633.98	696.97	2,977.12	2,781.28	195.84	15.202	
13,500.00	6,040.00	10,867.43	6,040.00	149.14	88.78	90.00	-4,633.98	696.97	3,075.95	2,880.28	195.67	15.720	
13,600.00	6,040.00	10,867.43	6,040.00	151.36	88.78	90.00	-4,633.98	696.97	3,174.85	2,979.34	195.51	16.239	
13,700.00	6,040.00	10,867.43	6,040.00	153.62	88.78	90.00	-4,633.98	696.97	3,273.82	3,078.46	195.35	16.758	
13,800.00	6,040.00	10,867.43	6,040.00	155.91	88.78	90.00	-4,633.98	696.97	3,372.85	3,177.64	195.21	17.278	
13,900.00	6,040.00	10,867.43	6,040.00	158.22	88.78	90.00	-4,633.98	696.97	3,471.93	3,276.86	195.07	17.799	
14,000.00	6,040.00	10,867.43	6,040.00	160.56	88.78	90.00	-4,633.98	696.97	3,571.06	3,376.13	194.93	18.320	
14,100.00	6,040.00	10,867.43	6,040.00	162.92	88.78	90.00	-4,633.98	696.97	3,670.25	3,475.44	194.80	18.841	
14,200.00	6,040.00	10,867.43	6,040.00	165.30	88.78	90.00	-4,633.98	696.97	3,769.47	3,574.79	194.68	19.363	
14,300.00	6,040.00	10,867.43	6,040.00	167.70	88.78	90.00	-4,633.98	696.97	3,868.73	3,674.18	194.56	19.885	
14,400.00	6,040.00	10,867.43	6,040.00	170.12	88.78	90.00	-4,633.98	696.97	3,968.04	3,773.59	194.45	20.407	
14,500.00	6,040.00	10,867.43	6,040.00	172.55	88.78	90.00	-4,633.98	696.97	4,067.37	3,873.04	194.34	20.929	
14,600.00	6,040.00	10,867.43	6,040.00	175.00	88.78	90.00	-4,633.98	696.97	4,166.74	3,972.51	194.23	21.452	
14,700.00	6,040.00	10,867.43	6,040.00	177.46	88.78	90.00	-4,633.98	696.97	4,266.14	4,072.00	194.13	21.975	
14,800.00	6,040.00	10,867.43	6,040.00	179.94	88.78	90.00	-4,633.98	696.97	4,365.56	4,171.52	194.04	22.499	
14,900.00	6,040.00	10,867.43	6,040.00	182.43	88.78	90.00	-4,633.98	696.97	4,465.01	4,271.07	193.95	23.022	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P31-T34-3HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,000.00	6,040.00	10,867.43	6,040.00	184.92	88.78	90.00	-4,633.98	696.97	4,564.49	4,370.63	193.86	23.546	
15,100.00	6,040.00	10,867.43	6,040.00	187.43	88.78	90.00	-4,633.98	696.97	4,663.98	4,470.21	193.77	24.069	
15,200.00	6,040.00	10,867.43	6,040.00	189.95	88.78	90.00	-4,633.98	696.97	4,763.50	4,569.81	193.69	24.593	
15,300.00	6,040.00	10,867.43	6,040.00	192.48	88.78	90.00	-4,633.98	696.97	4,863.04	4,669.43	193.61	25.117	
15,400.00	6,040.00	10,867.43	6,040.00	195.01	88.78	90.00	-4,633.98	696.97	4,962.60	4,769.06	193.54	25.641	
15,500.00	6,040.00	10,867.43	6,040.00	197.55	88.78	90.00	-4,633.98	696.97	5,062.17	4,868.70	193.47	26.166	
15,600.00	6,040.00	10,867.43	6,040.00	200.10	88.78	90.00	-4,633.98	696.97	5,161.76	4,968.36	193.40	26.690	
15,700.00	6,040.00	10,867.43	6,040.00	202.65	88.78	90.00	-4,633.98	696.97	5,261.37	5,068.03	193.33	27.214	
15,800.00	6,040.00	10,867.43	6,040.00	205.22	88.78	90.00	-4,633.98	696.97	5,360.99	5,167.72	193.27	27.739	
15,900.00	6,040.00	10,867.43	6,040.00	207.78	88.78	90.00	-4,633.98	696.97	5,460.62	5,267.41	193.21	28.263	
16,000.00	6,040.00	10,867.43	6,040.00	210.36	88.78	90.00	-4,633.98	696.97	5,560.27	5,367.12	193.15	28.788	
16,100.00	6,040.00	10,867.43	6,040.00	212.93	88.78	90.00	-4,633.98	696.97	5,659.93	5,466.84	193.09	29.312	
16,200.00	6,040.00	10,867.43	6,040.00	215.52	88.78	90.00	-4,633.98	696.97	5,759.60	5,566.56	193.04	29.837	
16,300.00	6,040.00	10,867.43	6,040.00	218.11	88.78	90.00	-4,633.98	696.97	5,859.28	5,666.30	192.99	30.361	
16,400.00	6,040.00	10,867.43	6,040.00	220.70	88.78	90.00	-4,633.98	696.97	5,958.98	5,766.04	192.94	30.886	
16,500.00	6,040.00	10,867.43	6,040.00	223.29	88.78	90.00	-4,633.98	696.97	6,058.68	5,865.79	192.89	31.411	
16,600.00	6,040.00	10,867.43	6,040.00	225.89	88.78	90.00	-4,633.98	696.97	6,158.39	5,965.55	192.84	31.935	
16,700.00	6,040.00	10,867.43	6,040.00	228.50	88.78	90.00	-4,633.98	696.97	6,258.12	6,065.32	192.80	32.460	
16,800.00	6,040.00	10,867.43	6,040.00	231.11	88.78	90.00	-4,633.98	696.97	6,357.85	6,165.09	192.75	32.984	
16,900.00	6,040.00	10,867.43	6,040.00	233.72	88.78	90.00	-4,633.98	696.97	6,457.59	6,264.87	192.71	33.509	
17,000.00	6,040.00	10,867.43	6,040.00	236.33	88.78	90.00	-4,633.98	696.97	6,557.33	6,364.66	192.67	34.034	
17,100.00	6,040.00	10,867.43	6,040.00	238.95	88.78	90.00	-4,633.98	696.97	6,657.09	6,464.45	192.63	34.558	
17,200.00	6,040.00	10,867.43	6,040.00	241.57	88.78	90.00	-4,633.98	696.97	6,756.85	6,564.25	192.60	35.083	
17,300.00	6,040.00	10,867.43	6,040.00	244.19	88.78	90.00	-4,633.98	696.97	6,856.62	6,664.06	192.56	35.607	
17,400.00	6,040.00	10,867.43	6,040.00	246.82	88.78	90.00	-4,633.98	696.97	6,956.40	6,763.87	192.53	36.131	
17,500.00	6,040.00	10,867.43	6,040.00	249.45	88.78	90.00	-4,633.98	696.97	7,056.18	6,863.68	192.50	36.656	
17,600.00	6,040.00	10,867.43	6,040.00	252.08	88.78	90.00	-4,633.98	696.97	7,155.97	6,963.50	192.47	37.180	
17,700.00	6,040.00	10,867.43	6,040.00	254.71	88.78	90.00	-4,633.98	696.97	7,255.76	7,063.32	192.44	37.704	
17,800.00	6,040.00	10,867.43	6,040.00	257.35	88.78	90.00	-4,633.98	696.97	7,355.56	7,163.15	192.41	38.229	
17,900.00	6,040.00	10,867.43	6,040.00	259.99	88.78	90.00	-4,633.98	696.97	7,455.37	7,262.98	192.38	38.753	
18,000.00	6,040.00	10,867.43	6,040.00	262.63	88.78	90.00	-4,633.98	696.97	7,555.18	7,362.82	192.36	39.277	
18,100.00	6,040.00	10,867.43	6,040.00	265.27	88.78	90.00	-4,633.98	696.97	7,654.99	7,462.66	192.33	39.801	
18,200.00	6,040.00	10,867.43	6,040.00	267.91	88.78	90.00	-4,633.98	696.97	7,754.81	7,562.50	192.31	40.325	
18,300.00	6,040.00	10,867.43	6,040.00	270.56	88.78	90.00	-4,633.98	696.97	7,854.64	7,662.35	192.29	40.849	
18,400.00	6,040.00	10,867.43	6,040.00	273.21	88.78	90.00	-4,633.98	696.97	7,954.46	7,762.20	192.27	41.372	
18,500.00	6,040.00	10,867.43	6,040.00	275.86	88.78	90.00	-4,633.98	696.97	8,054.30	7,862.05	192.25	41.896	
18,600.00	6,040.00	10,867.43	6,040.00	278.51	88.78	90.00	-4,633.98	696.97	8,154.13	7,961.91	192.23	42.420	
18,700.00	6,040.00	10,867.43	6,040.00	281.16	88.78	90.00	-4,633.98	696.97	8,253.98	8,061.77	192.21	42.943	
18,800.00	6,040.00	10,867.43	6,040.00	283.81	88.78	90.00	-4,633.98	696.97	8,353.82	8,161.63	192.19	43.466	
18,900.00	6,040.00	10,867.43	6,040.00	286.47	88.78	90.00	-4,633.98	696.97	8,453.67	8,261.50	192.17	43.990	
18,919.70	6,040.00	10,867.43	6,040.00	286.99	88.78	90.00	-4,633.98	696.97	8,473.34	8,281.17	192.17	44.093	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P41-T44-3HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-30.66	30.66				
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-30.66	30.66	30.39	0.27	114.043	
200.00	199.98	200.98	200.96	0.48	0.50	124.76	0.56	-28.97	29.95	28.97	0.98	30.543	
300.00	299.84	301.66	301.49	0.85	0.86	137.53	2.24	-23.93	28.75	27.05	1.70	16.947	
321.83	321.61	323.57	323.34	0.93	0.95	141.57	2.75	-22.39	28.68	26.82	1.86	15.450	CC, ES
400.00	399.45	401.76	401.21	1.22	1.24	158.84	5.00	-15.59	30.05	27.62	2.43	12.366	
500.00	498.70	501.01	499.70	1.62	1.63	-178.43	8.83	-4.07	37.58	34.37	3.20	11.733	
600.00	597.47	599.12	596.60	2.05	2.05	-161.90	13.67	10.50	52.41	48.39	4.02	13.051	
700.00	695.62	695.86	691.57	2.51	2.49	-151.58	19.46	27.94	73.47	68.61	4.86	15.120	
800.00	793.06	790.99	784.31	3.01	2.96	-145.12	26.13	48.04	99.73	94.00	5.73	17.393	
900.00	889.64	885.40	875.74	3.56	3.45	-141.03	33.54	70.35	130.35	123.70	6.64	19.617	
1,000.00	985.27	979.53	966.85	4.14	3.96	-139.03	41.00	92.82	163.88	156.30	7.58	21.608	
1,100.00	1,079.82	1,072.80	1,057.12	4.78	4.47	-138.21	48.39	115.08	199.93	191.38	8.55	23.387	
1,200.00	1,173.17	1,165.09	1,146.44	5.46	4.97	-138.04	55.71	137.11	238.40	228.86	9.53	25.010	
1,300.00	1,265.21	1,256.28	1,234.71	6.20	5.48	-138.25	62.93	158.87	279.27	268.74	10.53	26.517	
1,400.00	1,355.84	1,346.28	1,321.81	6.99	5.98	-138.65	70.07	180.35	322.58	311.03	11.54	27.942	
1,500.00	1,444.94	1,434.97	1,407.65	7.84	6.47	-139.17	77.09	201.52	368.33	355.76	12.57	29.311	
1,600.00	1,532.39	1,522.23	1,492.11	8.75	6.96	-139.73	84.01	222.35	416.54	402.95	13.59	30.643	
1,700.00	1,618.11	1,607.97	1,575.09	9.71	7.44	-140.29	90.80	242.81	467.24	452.62	14.62	31.953	
1,800.00	1,701.97	1,707.92	1,656.50	10.74	8.00	-140.84	97.47	262.88	520.42	504.68	15.74	33.069	
1,900.00	1,783.88	1,774.46	1,736.23	11.82	8.37	-141.34	104.00	282.54	576.07	559.39	16.67	34.548	
2,000.00	1,863.74	1,855.00	1,814.19	12.96	8.82	-141.79	110.38	301.77	634.18	616.49	17.69	35.847	
2,100.00	1,941.45	1,933.62	1,890.27	14.16	9.27	-142.18	116.61	320.53	694.72	676.02	18.70	37.154	
2,200.00	2,016.92	2,010.20	1,964.40	15.41	9.70	-142.50	122.68	338.81	757.67	737.98	19.69	38.474	
2,300.00	2,090.05	2,084.67	2,036.47	16.73	10.12	-142.75	128.58	356.58	822.98	802.31	20.67	39.810	
2,400.00	2,160.76	2,156.92	2,106.40	18.10	10.52	-142.92	134.31	373.83	890.60	868.97	21.63	41.165	
2,500.00	2,228.95	2,226.88	2,174.11	19.53	10.92	-143.00	139.85	390.52	960.49	937.91	22.58	42.542	
2,600.00	2,294.55	2,305.55	2,239.51	21.01	11.36	-142.99	145.21	406.65	1,032.58	1,009.02	23.56	43.828	
2,700.00	2,357.48	2,359.55	2,302.52	22.55	11.66	-142.89	150.37	422.19	1,106.80	1,082.40	24.39	45.371	
2,800.00	2,418.42	2,422.81	2,363.75	24.13	12.02	-143.70	155.38	437.29	1,182.60	1,157.33	25.27	46.800	
2,900.00	2,479.25	2,485.98	2,424.89	25.71	12.38	-144.76	160.38	452.36	1,258.66	1,232.52	26.14	48.154	
3,000.00	2,540.09	2,549.15	2,486.03	27.31	12.73	-145.70	165.39	467.44	1,334.90	1,307.89	27.01	49.429	
3,100.00	2,600.93	2,612.32	2,547.17	28.90	13.09	-146.54	170.40	482.52	1,411.27	1,383.39	27.87	50.630	
3,200.00	2,661.77	2,675.49	2,608.31	30.51	13.45	-147.30	175.40	497.59	1,487.76	1,459.02	28.74	51.764	
3,300.00	2,722.61	2,738.66	2,669.45	32.11	13.80	-147.98	180.41	512.67	1,564.35	1,534.74	29.61	52.835	
3,400.00	2,783.44	2,801.83	2,730.59	33.72	14.16	-148.61	185.42	527.75	1,641.03	1,610.56	30.48	53.847	
3,500.00	2,844.28	2,865.00	2,791.73	35.34	14.52	-149.18	190.42	542.82	1,717.79	1,686.44	31.34	54.805	
3,600.00	2,905.12	2,928.17	2,852.87	36.95	14.87	-149.70	195.43	557.90	1,794.61	1,762.40	32.21	55.714	
3,700.00	2,965.96	3,008.66	2,914.01	38.57	15.33	-150.18	200.43	572.98	1,871.49	1,838.31	33.18	56.409	
3,800.00	3,026.79	3,054.51	2,975.15	40.19	15.59	-150.62	205.44	588.05	1,948.42	1,914.47	33.95	57.394	
3,900.00	3,087.63	3,117.68	3,036.29	41.81	15.94	-151.03	210.45	603.13	2,025.39	1,990.58	34.82	58.172	
4,000.00	3,148.47	3,180.85	3,097.43	43.43	16.30	-151.42	215.45	618.21	2,102.41	2,066.72	35.69	58.913	
4,100.00	3,209.31	3,244.02	3,158.57	45.05	16.66	-151.77	220.46	633.28	2,179.46	2,142.90	36.56	59.619	
4,200.00	3,270.14	3,307.19	3,219.71	46.68	17.02	-152.10	225.46	648.36	2,256.54	2,219.12	37.43	60.292	
4,300.00	3,330.98	3,370.36	3,280.85	48.31	17.37	-152.41	230.47	663.44	2,333.66	2,295.36	38.30	60.934	
4,400.00	3,391.82	3,433.53	3,341.99	49.93	17.73	-152.70	235.48	678.51	2,410.79	2,371.63	39.17	61.548	
4,500.00	3,452.66	3,503.30	3,403.13	51.56	18.12	-152.97	240.48	693.59	2,487.96	2,447.88	40.08	62.077	
4,600.00	3,513.49	3,567.98	3,464.00	53.19	18.50	-153.22	245.49	708.66	2,565.13	2,525.71	40.99	62.607	
4,700.00	3,574.33	3,627.08	3,524.00	54.82	18.87	-153.47	250.50	723.73	2,642.30	2,602.87	41.90	63.137	
4,800.00	3,635.17	3,687.87	3,584.00	56.45	19.24	-153.72	255.51	738.80	2,719.47	2,679.04	42.81	63.667	
4,900.00	3,696.01	3,748.81	3,644.00	58.08	19.61	-153.97	260.52	753.87	2,796.64	2,756.21	43.72	64.197	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P41-T44-3HN - OWB - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	3,756.84	8,907.76	6,040.00	59.71	56.76	179.45	-2,515.22	1,477.43	2,283.24	2,237.96	45.28	50.423		
5,100.00	3,817.68	8,977.70	6,040.00	61.34	57.82	178.37	-2,585.09	1,480.57	2,223.06	2,176.31	46.75	47.550		
5,200.00	3,878.52	9,047.65	6,040.00	62.97	58.89	177.25	-2,654.96	1,483.71	2,163.56	2,115.24	48.32	44.773		
5,300.00	3,939.36	9,117.59	6,040.00	64.61	59.97	176.09	-2,724.84	1,486.85	2,104.81	2,054.80	50.01	42.088		
5,400.00	4,000.19	9,187.54	6,040.00	66.24	61.05	174.87	-2,794.71	1,489.99	2,046.87	1,995.04	51.83	39.491		
5,500.00	4,061.03	9,257.48	6,040.00	67.87	62.14	173.60	-2,864.59	1,493.14	1,989.80	1,936.00	53.80	36.982		
5,600.00	4,121.87	9,327.43	6,040.00	69.51	63.24	172.28	-2,934.46	1,496.28	1,933.70	1,877.75	55.95	34.561		
5,700.00	4,182.71	9,402.63	6,040.00	71.14	64.42	170.91	-3,004.34	1,499.42	1,878.64	1,820.31	58.33	32.207		
5,800.00	4,243.54	9,467.32	6,040.00	72.77	65.45	169.48	-3,074.21	1,502.56	1,824.71	1,763.87	60.84	29.990		
5,900.00	4,304.38	9,537.26	6,040.00	74.41	66.56	167.99	-3,144.09	1,505.70	1,772.03	1,708.40	63.64	27.846		
6,000.00	4,365.22	9,607.21	6,040.00	76.04	67.68	166.44	-3,213.96	1,508.84	1,720.71	1,654.02	66.69	25.802		
6,100.00	4,426.06	9,677.15	6,040.00	77.68	68.80	164.83	-3,283.83	1,511.99	1,670.86	1,600.84	70.02	23.862		
6,200.00	4,486.90	9,747.10	6,040.00	79.31	69.93	163.15	-3,353.71	1,515.13	1,622.63	1,548.97	73.66	22.029		
6,300.00	4,547.73	9,817.04	6,040.00	80.95	71.06	161.42	-3,423.58	1,518.27	1,576.17	1,498.55	77.62	20.307		
6,400.00	4,608.57	9,886.99	6,040.00	82.58	72.20	159.62	-3,493.46	1,521.41	1,531.64	1,449.73	81.91	18.698		
6,500.00	4,669.41	9,956.93	6,040.00	84.22	73.34	157.76	-3,563.33	1,524.55	1,489.20	1,402.65	86.55	17.205		
6,600.00	4,730.25	10,026.88	6,040.00	85.86	74.48	155.84	-3,633.21	1,527.69	1,449.05	1,357.50	91.55	15.828		
6,700.00	4,791.08	10,103.18	6,040.00	87.49	75.73	153.85	-3,703.08	1,530.83	1,411.38	1,314.42	96.95	14.557		
6,800.00	4,851.92	10,166.77	6,040.00	89.13	76.78	151.81	-3,772.96	1,533.98	1,376.39	1,273.82	102.57	13.419		
6,900.00	4,912.76	10,236.71	6,040.00	90.76	77.93	149.71	-3,842.83	1,537.12	1,344.29	1,235.72	108.57	12.382		
7,000.00	4,973.60	10,306.66	6,040.00	92.40	79.09	147.56	-3,912.70	1,540.26	1,315.29	1,200.45	114.84	11.453		
7,100.00	5,034.43	10,376.60	6,040.00	94.04	80.25	145.37	-3,982.58	1,543.40	1,289.61	1,168.25	121.36	10.626		
7,200.00	5,095.27	10,446.55	6,040.00	95.67	81.41	143.13	-4,052.45	1,546.54	1,267.45	1,139.39	128.06	9.897		
7,300.00	5,156.11	10,516.49	6,040.00	97.31	82.58	140.85	-4,122.33	1,549.68	1,248.98	1,114.11	134.87	9.261		
7,400.00	5,216.95	10,586.44	6,040.00	98.95	83.74	138.54	-4,192.20	1,552.83	1,234.38	1,092.67	141.71	8.710		
7,500.00	5,277.78	10,656.38	6,040.00	100.59	84.91	136.21	-4,262.08	1,555.97	1,223.79	1,075.28	148.51	8.240		
7,600.00	5,338.62	10,726.33	6,040.00	102.22	86.09	133.86	-4,331.95	1,559.11	1,217.31	1,062.13	155.18	7.845		
7,700.00	5,399.46	10,803.73	6,040.00	103.86	87.39	131.51	-4,401.82	1,562.25	1,215.00	1,053.26	161.74	7.512		
7,704.88	5,402.43	10,800.32	6,040.00	103.94	87.33	131.39	-4,405.23	1,562.40	1,215.00	1,053.05	161.95	7.502		
7,800.00	5,460.30	10,866.22	6,040.00	105.50	88.44	129.15	-4,471.70	1,565.39	1,216.90	1,049.10	167.80	7.252		
7,900.00	5,521.24	10,936.27	6,040.00	107.13	89.62	125.17	-4,541.68	1,568.54	1,222.59	1,048.98	173.61	7.042		
8,000.00	5,584.83	11,008.90	6,040.00	108.61	90.85	114.89	-4,614.24	1,571.80	1,220.72	1,041.77	178.96	6.821		
8,100.00	5,650.69	11,021.32	6,040.00	109.85	91.06	106.13	-4,626.65	1,572.36	1,207.34	1,027.90	179.44	6.728		
8,200.00	5,716.83	11,021.32	6,040.00	110.82	91.06	97.93	-4,626.65	1,572.36	1,185.32	1,007.68	177.64	6.673		
8,300.00	5,781.24	11,021.32	6,040.00	111.52	91.06	90.57	-4,626.65	1,572.36	1,154.94	980.59	174.35	6.624		
8,400.00	5,841.96	11,021.32	6,040.00	111.98	91.06	84.58	-4,626.65	1,572.36	1,116.48	946.88	169.59	6.583		
8,500.00	5,897.14	11,021.32	6,040.00	112.25	91.06	80.28	-4,626.65	1,572.36	1,070.30	906.87	163.43	6.549		
8,600.00	5,945.12	11,021.32	6,040.00	112.37	91.06	77.80	-4,626.65	1,572.36	1,016.87	860.94	155.93	6.521		
8,700.00	5,984.42	11,021.32	6,040.00	112.39	91.06	77.24	-4,626.65	1,572.36	956.74	809.52	147.22	6.499		
8,800.00	6,013.86	11,021.32	6,040.00	112.35	91.06	78.74	-4,626.65	1,572.36	890.58	753.11	137.47	6.479		
8,900.00	6,032.54	11,021.32	6,040.00	112.30	91.06	82.52	-4,626.65	1,572.36	819.20	692.31	126.89	6.456		
9,000.00	6,039.89	11,021.32	6,040.00	112.24	91.06	88.90	-4,626.65	1,572.36	743.58	627.76	115.81	6.420		
9,100.00	6,040.00	11,021.32	6,040.00	112.19	91.06	90.00	-4,626.65	1,572.36	668.06	564.18	103.88	6.431		
9,200.00	6,040.00	11,021.32	6,040.00	112.16	91.06	90.00	-4,626.65	1,572.36	599.66	509.30	90.37	6.636		
9,300.00	6,040.00	11,021.32	6,040.00	112.15	91.06	90.00	-4,626.65	1,572.36	541.19	463.49	77.69	6.966		
9,400.00	6,040.00	11,021.32	6,040.00	112.15	91.06	90.00	-4,626.65	1,572.36	496.16	424.16	72.00	6.891		
9,500.00	6,040.00	11,021.32	6,040.00	112.16	91.06	90.00	-4,626.65	1,572.36	468.47	387.28	81.19	5.770		
9,583.56	6,040.00	11,021.32	6,040.00	112.19	91.06	90.00	-4,626.65	1,572.36	460.96	360.25	100.71	4.577		
9,600.00	6,040.00	11,021.32	6,040.00	112.19	91.06	90.00	-4,626.65	1,572.36	461.25	356.01	105.24	4.383		
9,700.00	6,040.00	11,021.32	6,040.00	112.24	91.06	90.00	-4,626.65	1,572.36	475.44	342.21	133.22	3.569		
9,800.00	6,040.00	11,021.32	6,040.00	112.31	91.06	90.00	-4,626.65	1,572.36	509.24	352.26	156.98	3.244		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P41-T44-3HN - OWB - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.00	6,040.00	11,021.32	6,040.00	112.39	91.06	90.00	-4,626.65	1,572.36	559.12	384.94	174.18	3.210 SF		
10,000.00	6,040.00	11,021.32	6,040.00	112.49	91.06	90.00	-4,626.65	1,572.36	621.21	435.63	185.58	3.347		
10,100.00	6,040.00	11,021.32	6,040.00	112.62	91.06	90.00	-4,626.65	1,572.36	692.24	499.45	192.78	3.591		
10,200.00	6,040.00	11,021.32	6,040.00	112.77	91.06	90.00	-4,626.65	1,572.36	769.73	572.53	197.20	3.903		
10,300.00	6,040.00	11,021.32	6,040.00	112.94	91.06	90.00	-4,626.65	1,572.36	851.92	652.08	199.84	4.263		
10,400.00	6,040.00	11,021.32	6,040.00	113.14	91.06	90.00	-4,626.65	1,572.36	937.58	736.23	201.35	4.656		
10,500.00	6,040.00	11,021.32	6,040.00	113.36	91.06	90.00	-4,626.65	1,572.36	1,025.84	823.68	202.16	5.074		
10,600.00	6,040.00	11,021.32	6,040.00	113.62	91.06	90.00	-4,626.65	1,572.36	1,116.08	913.56	202.52	5.511		
10,700.00	6,040.00	11,021.32	6,040.00	113.91	91.06	90.00	-4,626.65	1,572.36	1,207.86	1,005.27	202.59	5.962		
10,800.00	6,040.00	11,021.32	6,040.00	114.24	91.06	90.00	-4,626.65	1,572.36	1,300.85	1,098.36	202.49	6.424		
10,900.00	6,040.00	11,021.32	6,040.00	114.61	91.06	90.00	-4,626.65	1,572.36	1,394.81	1,192.53	202.28	6.895		
11,000.00	6,040.00	11,021.32	6,040.00	115.02	91.06	90.00	-4,626.65	1,572.36	1,489.56	1,287.56	202.00	7.374		
11,100.00	6,040.00	11,021.32	6,040.00	115.49	91.06	90.00	-4,626.65	1,572.36	1,584.96	1,383.28	201.68	7.859		
11,200.00	6,040.00	11,021.32	6,040.00	116.00	91.06	90.00	-4,626.65	1,572.36	1,680.88	1,479.54	201.34	8.349		
11,300.00	6,040.00	11,021.32	6,040.00	116.58	91.06	90.00	-4,626.65	1,572.36	1,777.26	1,576.27	200.99	8.842		
11,400.00	6,040.00	11,021.32	6,040.00	117.22	91.06	90.00	-4,626.65	1,572.36	1,874.02	1,673.38	200.64	9.340		
11,500.00	6,040.00	11,021.32	6,040.00	117.92	91.06	90.00	-4,626.65	1,572.36	1,971.10	1,770.80	200.30	9.841		
11,600.00	6,040.00	11,021.32	6,040.00	118.70	91.06	90.00	-4,626.65	1,572.36	2,068.46	1,868.49	199.97	10.344		
11,700.00	6,040.00	11,021.32	6,040.00	119.56	91.06	90.00	-4,626.65	1,572.36	2,166.06	1,966.41	199.65	10.850		
11,800.00	6,040.00	11,021.32	6,040.00	120.51	91.06	90.00	-4,626.65	1,572.36	2,263.87	2,064.53	199.34	11.357		
11,900.00	6,040.00	11,021.32	6,040.00	121.54	91.06	90.00	-4,626.65	1,572.36	2,361.86	2,162.83	199.04	11.866		
12,000.00	6,040.00	11,021.32	6,040.00	122.66	91.06	90.00	-4,626.65	1,572.36	2,460.02	2,261.27	198.75	12.377		
12,100.00	6,040.00	11,021.32	6,040.00	123.87	91.06	90.00	-4,626.65	1,572.36	2,558.31	2,359.84	198.48	12.890		
12,200.00	6,040.00	11,021.32	6,040.00	125.17	91.06	90.00	-4,626.65	1,572.36	2,656.74	2,458.52	198.22	13.403		
12,300.00	6,040.00	11,021.32	6,040.00	126.57	91.06	90.00	-4,626.65	1,572.36	2,755.28	2,557.31	197.97	13.918		
12,400.00	6,040.00	11,021.32	6,040.00	128.06	91.06	90.00	-4,626.65	1,572.36	2,853.92	2,656.19	197.73	14.433		
12,500.00	6,040.00	11,021.32	6,040.00	129.63	91.06	90.00	-4,626.65	1,572.36	2,952.65	2,755.14	197.50	14.950		
12,600.00	6,040.00	11,021.32	6,040.00	131.29	91.06	90.00	-4,626.65	1,572.36	3,051.46	2,854.17	197.29	15.467		
12,700.00	6,040.00	11,021.32	6,040.00	133.03	91.06	90.00	-4,626.65	1,572.36	3,150.35	2,953.27	197.08	15.985		
12,800.00	6,040.00	11,021.32	6,040.00	134.84	91.06	90.00	-4,626.65	1,572.36	3,249.31	3,052.42	196.88	16.504		
12,900.00	6,040.00	11,021.32	6,040.00	136.71	91.06	90.00	-4,626.65	1,572.36	3,348.33	3,151.63	196.70	17.023		
13,000.00	6,040.00	11,021.32	6,040.00	138.66	91.06	90.00	-4,626.65	1,572.36	3,447.40	3,250.88	196.52	17.543		
13,100.00	6,040.00	11,021.32	6,040.00	140.66	91.06	90.00	-4,626.65	1,572.36	3,546.53	3,350.18	196.34	18.063		
13,200.00	6,040.00	11,021.32	6,040.00	142.71	91.06	90.00	-4,626.65	1,572.36	3,645.70	3,449.52	196.18	18.583		
13,300.00	6,040.00	11,021.32	6,040.00	144.81	91.06	90.00	-4,626.65	1,572.36	3,744.92	3,548.90	196.02	19.104		
13,400.00	6,040.00	11,021.32	6,040.00	146.96	91.06	90.00	-4,626.65	1,572.36	3,844.18	3,648.31	195.87	19.626		
13,500.00	6,040.00	11,021.32	6,040.00	149.14	91.06	90.00	-4,626.65	1,572.36	3,943.48	3,747.75	195.73	20.148		
13,600.00	6,040.00	11,021.32	6,040.00	151.36	91.06	90.00	-4,626.65	1,572.36	4,042.81	3,847.22	195.59	20.670		
13,700.00	6,040.00	11,021.32	6,040.00	153.62	91.06	90.00	-4,626.65	1,572.36	4,142.17	3,946.71	195.46	21.192		
13,800.00	6,040.00	11,021.32	6,040.00	155.91	91.06	90.00	-4,626.65	1,572.36	4,241.57	4,046.23	195.33	21.715		
13,900.00	6,040.00	11,021.32	6,040.00	158.22	91.06	90.00	-4,626.65	1,572.36	4,340.99	4,145.78	195.21	22.237		
14,000.00	6,040.00	11,021.32	6,040.00	160.56	91.06	90.00	-4,626.65	1,572.36	4,440.43	4,245.34	195.09	22.760		
14,100.00	6,040.00	11,021.32	6,040.00	162.92	91.06	90.00	-4,626.65	1,572.36	4,539.91	4,344.92	194.98	23.284		
14,200.00	6,040.00	11,021.32	6,040.00	165.30	91.06	90.00	-4,626.65	1,572.36	4,639.40	4,444.53	194.87	23.807		
14,300.00	6,040.00	11,021.32	6,040.00	167.70	91.06	90.00	-4,626.65	1,572.36	4,738.92	4,544.14	194.77	24.331		
14,400.00	6,040.00	11,021.32	6,040.00	170.12	91.06	90.00	-4,626.65	1,572.36	4,838.45	4,643.78	194.67	24.854		
14,500.00	6,040.00	11,021.32	6,040.00	172.55	91.06	90.00	-4,626.65	1,572.36	4,938.01	4,743.43	194.58	25.378		
14,600.00	6,040.00	11,021.32	6,040.00	175.00	91.06	90.00	-4,626.65	1,572.36	5,037.58	4,843.09	194.48	25.902		
14,700.00	6,040.00	11,021.32	6,040.00	177.46	91.06	90.00	-4,626.65	1,572.36	5,137.17	4,942.77	194.40	26.426		
14,800.00	6,040.00	11,021.32	6,040.00	179.94	91.06	90.00	-4,626.65	1,572.36	5,236.77	5,042.46	194.31	26.950		
14,900.00	6,040.00	11,021.32	6,040.00	182.43	91.06	90.00	-4,626.65	1,572.36	5,336.39	5,142.16	194.23	27.475		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P41-T44-3HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,000.00	6,040.00	11,021.32	6,040.00	184.92	91.06	90.00	-4,626.65	1,572.36	5,436.02	5,241.87	194.15	27.999	
15,100.00	6,040.00	11,021.32	6,040.00	187.43	91.06	90.00	-4,626.65	1,572.36	5,535.67	5,341.59	194.08	28.523	
15,200.00	6,040.00	11,021.32	6,040.00	189.95	91.06	90.00	-4,626.65	1,572.36	5,635.33	5,441.33	194.00	29.048	
15,300.00	6,040.00	11,021.32	6,040.00	192.48	91.06	90.00	-4,626.65	1,572.36	5,735.00	5,541.07	193.93	29.572	
15,400.00	6,040.00	11,021.32	6,040.00	195.01	91.06	90.00	-4,626.65	1,572.36	5,834.68	5,640.82	193.86	30.097	
15,500.00	6,040.00	11,021.32	6,040.00	197.55	91.06	90.00	-4,626.65	1,572.36	5,934.37	5,740.57	193.80	30.621	
15,600.00	6,040.00	11,021.32	6,040.00	200.10	91.06	90.00	-4,626.65	1,572.36	6,034.08	5,840.34	193.74	31.146	
15,700.00	6,040.00	11,021.32	6,040.00	202.65	91.06	90.00	-4,626.65	1,572.36	6,133.79	5,940.11	193.68	31.670	
15,800.00	6,040.00	11,021.32	6,040.00	205.22	91.06	90.00	-4,626.65	1,572.36	6,233.51	6,039.89	193.62	32.195	
15,900.00	6,040.00	11,021.32	6,040.00	207.78	91.06	90.00	-4,626.65	1,572.36	6,333.24	6,139.68	193.56	32.719	
16,000.00	6,040.00	11,021.32	6,040.00	210.36	91.06	90.00	-4,626.65	1,572.36	6,432.98	6,239.47	193.51	33.244	
16,100.00	6,040.00	11,021.32	6,040.00	212.93	91.06	90.00	-4,626.65	1,572.36	6,532.73	6,339.27	193.46	33.769	
16,200.00	6,040.00	11,021.32	6,040.00	215.52	91.06	90.00	-4,626.65	1,572.36	6,632.48	6,439.08	193.41	34.293	
16,300.00	6,040.00	11,021.32	6,040.00	218.11	91.06	90.00	-4,626.65	1,572.36	6,732.24	6,538.89	193.36	34.818	
16,400.00	6,040.00	11,021.32	6,040.00	220.70	91.06	90.00	-4,626.65	1,572.36	6,832.01	6,638.70	193.31	35.342	
16,500.00	6,040.00	11,021.32	6,040.00	223.29	91.06	90.00	-4,626.65	1,572.36	6,931.79	6,738.52	193.26	35.867	
16,600.00	6,040.00	11,021.32	6,040.00	225.89	91.06	90.00	-4,626.65	1,572.36	7,031.57	6,838.35	193.22	36.391	
16,700.00	6,040.00	11,021.32	6,040.00	228.50	91.06	90.00	-4,626.65	1,572.36	7,131.36	6,938.18	193.18	36.916	
16,800.00	6,040.00	11,021.32	6,040.00	231.11	91.06	90.00	-4,626.65	1,572.36	7,231.15	7,038.01	193.14	37.440	
16,900.00	6,040.00	11,021.32	6,040.00	233.72	91.06	90.00	-4,626.65	1,572.36	7,330.95	7,137.85	193.10	37.964	
17,000.00	6,040.00	11,021.32	6,040.00	236.33	91.06	90.00	-4,626.65	1,572.36	7,430.76	7,237.69	193.06	38.489	
17,100.00	6,040.00	11,021.32	6,040.00	238.95	91.06	90.00	-4,626.65	1,572.36	7,530.57	7,337.54	193.03	39.013	
17,200.00	6,040.00	11,021.32	6,040.00	241.57	91.06	90.00	-4,626.65	1,572.36	7,630.38	7,437.39	192.99	39.537	
17,300.00	6,040.00	11,021.32	6,040.00	244.19	91.06	90.00	-4,626.65	1,572.36	7,730.20	7,537.24	192.96	40.061	
17,400.00	6,040.00	11,021.32	6,040.00	246.82	91.06	90.00	-4,626.65	1,572.36	7,830.02	7,637.10	192.93	40.585	
17,500.00	6,040.00	11,021.32	6,040.00	249.45	91.06	90.00	-4,626.65	1,572.36	7,929.85	7,736.96	192.90	41.109	
17,600.00	6,040.00	11,021.32	6,040.00	252.08	91.06	90.00	-4,626.65	1,572.36	8,029.69	7,836.82	192.87	41.633	
17,700.00	6,040.00	11,021.32	6,040.00	254.71	91.06	90.00	-4,626.65	1,572.36	8,129.52	7,936.68	192.84	42.157	
17,800.00	6,040.00	11,021.32	6,040.00	257.35	91.06	90.00	-4,626.65	1,572.36	8,229.36	8,036.55	192.81	42.681	
17,900.00	6,040.00	11,021.32	6,040.00	259.99	91.06	90.00	-4,626.65	1,572.36	8,329.21	8,136.42	192.79	43.204	
18,000.00	6,040.00	11,021.32	6,040.00	262.63	91.06	90.00	-4,626.65	1,572.36	8,429.06	8,236.30	192.76	43.728	
18,100.00	6,040.00	11,021.32	6,040.00	265.27	91.06	90.00	-4,626.65	1,572.36	8,528.91	8,336.17	192.74	44.252	
18,200.00	6,040.00	11,021.32	6,040.00	267.91	91.06	90.00	-4,626.65	1,572.36	8,628.77	8,436.05	192.71	44.775	
18,300.00	6,040.00	11,021.32	6,040.00	270.56	91.06	90.00	-4,626.65	1,572.36	8,728.62	8,535.93	192.69	45.298	
18,400.00	6,040.00	11,021.32	6,040.00	273.21	91.06	90.00	-4,626.65	1,572.36	8,828.49	8,635.81	192.67	45.821	
18,500.00	6,040.00	11,021.32	6,040.00	275.86	91.06	90.00	-4,626.65	1,572.36	8,928.35	8,735.70	192.65	46.345	
18,600.00	6,040.00	11,021.32	6,040.00	278.51	91.06	90.00	-4,626.65	1,572.36	9,028.22	8,835.59	192.63	46.868	
18,700.00	6,040.00	11,021.32	6,040.00	281.16	91.06	90.00	-4,626.65	1,572.36	9,128.09	8,935.48	192.61	47.391	
18,800.00	6,040.00	11,021.32	6,040.00	283.81	91.06	90.00	-4,626.65	1,572.36	9,227.96	9,035.37	192.60	47.913	
18,900.00	6,040.00	11,021.32	6,040.00	286.47	91.06	90.00	-4,626.65	1,572.36	9,327.84	9,135.26	192.58	48.436	
18,919.70	6,040.00	11,021.32	6,040.00	286.99	91.06	90.00	-4,626.65	1,572.36	9,347.52	9,154.94	192.58	48.539	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P41-T44-4HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-75.26	75.26				
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-75.26	75.26	74.99	0.27	279.923	CC, ES
200.00	199.98	197.36	197.34	0.48	0.48	121.94	0.18	-76.90	77.86	76.88	0.97	79.925	
300.00	299.84	294.18	294.03	0.85	0.83	124.99	0.73	-81.80	85.83	84.13	1.70	50.630	
400.00	399.45	389.90	389.41	1.22	1.19	128.93	1.63	-89.82	99.52	97.09	2.43	41.009	
500.00	498.70	484.03	482.88	1.62	1.57	132.83	2.86	-100.80	119.20	116.04	3.16	37.693	
600.00	597.47	576.08	573.89	2.05	1.96	136.19	4.40	-114.48	144.92	141.02	3.90	37.172	
700.00	695.62	665.63	661.96	2.51	2.36	138.86	6.20	-130.57	176.55	171.92	4.63	38.113	
800.00	793.06	752.30	746.68	3.01	2.78	140.90	8.24	-148.74	213.87	208.51	5.36	39.880	
900.00	889.64	835.77	827.71	3.56	3.21	142.40	10.48	-168.64	256.61	250.52	6.09	42.141	
1,000.00	985.27	915.78	904.80	4.14	3.66	143.47	12.86	-189.91	304.49	297.68	6.81	44.715	
1,100.00	1,079.82	992.13	977.78	4.78	4.11	144.20	15.36	-212.19	357.21	349.69	7.52	47.516	
1,200.00	1,173.17	1,064.67	1,046.54	5.46	4.58	144.64	17.94	-235.14	414.47	406.25	8.22	50.401	
1,300.00	1,265.21	1,133.29	1,111.03	6.20	5.04	144.85	20.55	-258.44	476.00	467.09	8.92	53.371	
1,400.00	1,355.84	1,197.93	1,171.25	6.99	5.50	144.86	23.17	-281.79	541.51	531.91	9.60	56.409	
1,500.00	1,444.94	1,258.60	1,227.27	7.84	5.96	144.68	25.77	-304.93	610.70	600.43	10.27	59.461	
1,600.00	1,532.39	1,315.30	1,279.18	8.75	6.40	144.33	28.32	-327.61	683.30	672.38	10.92	62.559	
1,700.00	1,618.11	1,368.09	1,327.08	9.71	6.84	143.81	30.79	-349.64	759.06	747.50	11.56	65.666	
1,800.00	1,701.97	1,417.04	1,371.13	10.74	7.26	143.11	33.17	-370.85	837.70	825.52	12.18	68.803	
1,900.00	1,783.88	1,462.24	1,411.48	11.82	7.67	142.23	35.44	-391.10	918.98	906.21	12.77	71.949	
2,000.00	1,863.74	1,500.00	1,444.94	12.96	8.01	141.06	37.39	-408.50	1,002.68	989.39	13.30	75.410	
2,100.00	1,941.45	1,541.81	1,481.71	14.16	8.42	139.83	39.61	-428.27	1,088.54	1,074.64	13.90	78.326	
2,200.00	2,016.92	1,576.42	1,511.92	15.41	8.76	138.25	41.49	-445.04	1,176.36	1,161.94	14.42	81.565	
2,300.00	2,090.05	1,607.75	1,539.10	16.73	9.07	136.37	43.23	-460.53	1,265.95	1,251.02	14.92	84.845	
2,400.00	2,160.76	1,635.92	1,563.39	18.10	9.36	134.13	44.82	-474.72	1,357.09	1,341.69	15.40	88.143	
2,500.00	2,228.95	1,661.07	1,584.95	19.53	9.62	131.46	46.27	-487.58	1,449.61	1,433.76	15.84	91.504	
2,600.00	2,294.55	1,683.32	1,603.93	21.01	9.86	128.27	47.56	-499.11	1,543.32	1,527.07	16.26	94.930	
2,700.00	2,357.48	1,700.00	1,618.11	22.55	10.03	124.32	48.54	-507.85	1,638.08	1,621.48	16.60	98.660	
2,800.00	2,418.42	1,720.14	1,635.15	24.13	10.26	124.05	49.74	-518.52	1,733.56	1,716.55	17.01	101.920	
2,900.00	2,479.25	1,736.86	1,649.24	25.71	10.45	124.93	50.74	-527.46	1,829.30	1,811.94	17.36	105.374	
3,000.00	2,540.09	1,753.02	1,662.81	27.31	10.63	125.73	51.72	-536.19	1,925.27	1,907.56	17.70	108.768	
3,100.00	2,600.93	1,768.66	1,675.90	28.90	10.80	126.46	52.68	-544.70	2,021.42	2,003.39	18.03	112.105	
3,200.00	2,661.77	1,783.81	1,688.52	30.51	10.97	127.13	53.61	-553.02	2,117.76	2,099.41	18.35	115.390	
3,300.00	2,722.61	1,800.00	1,701.97	32.11	11.15	127.81	54.62	-561.98	2,214.26	2,195.57	18.69	118.478	
3,400.00	2,783.44	1,800.00	1,701.97	33.72	11.15	127.81	54.62	-561.98	2,310.97	2,292.19	18.78	123.072	
3,500.00	2,844.28	1,826.48	1,723.85	35.34	11.47	128.84	56.28	-576.79	2,407.70	2,388.42	19.28	124.884	
3,600.00	2,905.12	1,839.84	1,734.85	36.95	11.63	129.32	57.13	-584.34	2,504.61	2,485.04	19.58	127.946	
3,700.00	2,965.96	1,852.81	1,745.48	38.57	11.79	129.77	57.96	-591.72	2,601.65	2,581.78	19.86	130.968	
3,800.00	3,026.79	1,865.40	1,755.77	40.19	11.94	130.19	58.77	-598.93	2,698.79	2,678.64	20.15	133.951	
3,900.00	3,087.63	1,877.63	1,765.73	41.81	12.09	130.58	59.56	-605.98	2,796.04	2,775.62	20.42	136.897	
4,000.00	3,148.47	1,900.00	1,783.88	43.43	12.35	131.25	61.01	-618.97	2,893.42	2,872.56	20.86	138.679	
4,100.00	3,209.31	1,900.00	1,783.88	45.05	12.35	131.25	61.01	-618.97	2,990.83	2,969.88	20.94	142.798	
4,200.00	3,270.14	1,912.27	1,793.79	46.68	12.51	131.60	61.82	-626.16	3,088.35	3,067.13	21.23	145.501	
4,300.00	3,330.98	1,923.18	1,802.58	48.31	12.64	131.90	62.54	-632.59	3,185.96	3,164.47	21.48	148.290	
4,400.00	3,391.82	1,938.40	1,809.94	49.93	12.83	132.14	63.15	-638.01	3,283.64	3,261.88	21.77	150.857	
4,500.00	3,452.66	1,952.46	1,826.06	51.56	13.01	132.65	64.49	-649.96	3,381.38	3,359.25	22.13	152.804	
4,600.00	3,513.49	1,972.56	1,842.18	53.19	13.27	133.13	65.83	-661.90	3,479.13	3,456.58	22.54	154.328	
4,700.00	3,574.33	2,007.33	1,858.30	54.82	13.71	133.59	67.17	-673.84	3,576.89	3,553.80	23.09	154.937	
4,800.00	3,635.17	2,012.78	1,874.42	56.45	13.78	134.03	68.51	-685.79	3,674.66	3,651.28	23.38	157.193	
4,900.00	3,696.01	2,032.88	1,890.54	58.08	14.04	134.44	69.85	-697.73	3,772.44	3,748.64	23.80	158.535	
5,000.00	3,756.84	2,052.99	1,906.66	59.71	14.29	134.84	71.19	-709.67	3,870.23	3,846.01	24.22	159.826	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P41-T44-4HN - OWB - PROPOSAL 1												Offset Site Error: 0.00 usft	
Survey Program: 0-MWD OWSG												Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	2,073.10	1,922.78	61.34	14.55	135.21	72.53	-721.62	3,968.03	3,943.39	24.64	161.068	
5,200.00	3,878.52	2,106.79	1,938.90	62.97	14.98	135.57	73.87	-733.56	4,065.83	4,040.66	25.18	161.494	
5,300.00	3,939.36	2,113.31	1,955.02	64.61	15.07	135.92	75.21	-745.51	4,163.64	4,138.16	25.48	163.408	
5,400.00	4,000.19	2,133.42	1,971.14	66.24	15.33	136.25	76.55	-757.45	4,261.46	4,235.56	25.90	164.508	
5,500.00	4,061.03	2,153.53	1,987.26	67.87	15.59	136.57	77.89	-769.39	4,359.29	4,332.96	26.33	165.567	
5,600.00	4,121.87	2,173.63	2,003.38	69.51	15.85	136.87	79.24	-781.34	4,457.12	4,430.36	26.76	166.587	
5,700.00	4,182.71	2,206.26	2,019.50	71.14	16.27	137.16	80.58	-793.28	4,554.96	4,527.66	27.29	166.886	
5,800.00	4,243.54	2,213.85	2,035.62	72.77	16.37	137.44	81.92	-805.22	4,652.80	4,625.19	27.61	168.514	
5,900.00	4,304.38	2,233.95	2,051.74	74.41	16.63	137.71	83.26	-817.17	4,750.65	4,722.61	28.04	169.422	
6,000.00	4,365.22	2,254.06	2,067.86	76.04	16.89	137.96	84.60	-829.11	4,848.50	4,820.03	28.47	170.297	
6,100.00	4,426.06	2,274.17	2,083.98	77.68	17.15	138.21	85.94	-841.05	4,946.35	4,917.45	28.90	171.141	
6,200.00	4,486.90	2,305.72	2,100.10	79.31	17.56	138.45	87.28	-853.00	5,044.21	5,014.77	29.44	171.354	
6,300.00	4,547.73	2,314.38	2,116.22	80.95	17.67	138.68	88.62	-864.94	5,142.07	5,112.31	29.77	172.738	
6,400.00	4,608.57	2,334.49	2,132.34	82.58	17.94	138.90	89.96	-876.89	5,239.94	5,209.74	30.20	173.492	
6,500.00	4,669.41	2,354.60	2,148.46	84.22	18.20	139.12	91.30	-888.83	5,337.81	5,307.17	30.64	174.219	
6,600.00	4,730.25	2,374.70	2,164.58	85.86	18.46	139.33	92.64	-900.77	5,435.68	5,404.61	31.08	174.921	
6,700.00	4,791.08	2,405.19	2,180.70	87.49	18.86	139.53	93.98	-912.72	5,533.56	5,501.95	31.61	175.075	
6,800.00	4,851.92	2,414.92	2,196.82	89.13	18.99	139.72	95.32	-924.66	5,631.44	5,599.49	31.95	176.250	
6,900.00	4,912.76	2,435.03	2,212.94	90.76	19.25	139.91	96.66	-936.60	5,729.32	5,696.93	32.39	176.878	
7,000.00	4,973.60	2,455.13	2,229.06	92.40	19.51	140.09	98.00	-948.55	5,827.20	5,794.37	32.83	177.484	
7,100.00	5,034.43	2,475.24	2,245.18	94.04	19.78	140.26	99.34	-960.49	5,925.09	5,891.82	33.27	178.069	
7,200.00	5,095.27	11,680.77	6,040.00	95.67	97.23	114.65	-4,359.35	-3,492.34	5,968.30	5,802.00	166.30	35.888	
7,300.00	5,156.11	11,751.22	6,040.00	97.31	98.05	114.17	-4,429.68	-3,488.22	5,995.12	5,825.84	169.28	35.414	
7,400.00	5,216.95	11,821.67	6,040.00	98.95	98.89	113.70	-4,500.01	-3,484.09	6,022.66	5,850.40	172.26	34.963	
7,500.00	5,277.78	11,907.88	6,040.00	100.59	99.94	113.23	-4,570.33	-3,479.97	6,050.90	5,875.42	175.48	34.482	
7,600.00	5,338.62	11,962.57	6,040.00	102.22	100.62	112.76	-4,640.66	-3,475.85	6,079.84	5,901.67	178.16	34.125	
7,700.00	5,399.46	11,999.42	6,040.00	103.86	101.09	112.51	-4,677.46	-3,473.69	6,109.56	5,929.08	180.48	33.852	
7,800.00	5,460.30	11,999.42	6,040.00	105.50	101.09	112.51	-4,677.46	-3,473.69	6,140.65	5,958.57	182.08	33.725	
7,900.00	5,521.24	11,999.42	6,040.00	107.13	101.09	110.88	-4,677.46	-3,473.69	6,172.82	5,989.19	183.63	33.616	
8,000.00	5,584.83	11,999.42	6,040.00	108.61	101.09	102.77	-4,677.46	-3,473.69	6,194.84	6,009.74	185.09	33.468	
8,100.00	5,650.69	11,999.42	6,040.00	109.85	101.09	94.04	-4,677.46	-3,473.69	6,201.21	6,014.80	186.41	33.266	
8,200.00	5,716.83	11,999.42	6,040.00	110.82	101.09	85.29	-4,677.46	-3,473.69	6,191.80	6,004.27	187.53	33.018	
8,300.00	5,781.24	11,999.42	6,040.00	111.52	101.09	77.18	-4,677.46	-3,473.69	6,166.81	5,978.39	188.42	32.730	
8,400.00	5,841.96	11,999.42	6,040.00	111.98	101.09	70.21	-4,677.46	-3,473.69	6,126.83	5,937.76	189.07	32.405	
8,500.00	5,897.14	11,999.42	6,040.00	112.25	101.09	64.65	-4,677.46	-3,473.69	6,072.78	5,883.27	189.51	32.045	
8,600.00	5,945.12	11,999.42	6,040.00	112.37	101.09	60.59	-4,677.46	-3,473.69	6,005.96	5,816.18	189.78	31.648	
8,700.00	5,984.42	11,999.42	6,040.00	112.39	101.09	58.14	-4,677.46	-3,473.69	5,927.99	5,738.08	189.91	31.214	
8,800.00	6,013.86	11,999.42	6,040.00	112.35	101.09	57.67	-4,677.46	-3,473.69	5,840.87	5,650.90	189.96	30.748	
8,900.00	6,032.54	11,999.42	6,040.00	112.30	101.09	60.82	-4,677.46	-3,473.69	5,746.87	5,556.90	189.97	30.252	
9,000.00	6,039.89	11,999.42	6,040.00	112.24	101.09	80.96	-4,677.46	-3,473.69	5,648.59	5,458.63	189.95	29.737	
9,100.00	6,040.00	11,999.42	6,040.00	112.19	101.09	90.00	-4,677.46	-3,473.69	5,548.94	5,359.00	189.94	29.214	
9,200.00	6,040.00	11,999.42	6,040.00	112.16	101.09	90.00	-4,677.46	-3,473.69	5,449.29	5,259.36	189.93	28.691	
9,300.00	6,040.00	11,999.42	6,040.00	112.15	101.09	90.00	-4,677.46	-3,473.69	5,349.65	5,159.73	189.92	28.169	
9,400.00	6,040.00	11,999.42	6,040.00	112.15	101.09	90.00	-4,677.46	-3,473.69	5,250.03	5,060.12	189.90	27.646	
9,500.00	6,040.00	11,999.42	6,040.00	112.16	101.09	90.00	-4,677.46	-3,473.69	5,150.42	4,960.53	189.89	27.123	
9,600.00	6,040.00	11,999.42	6,040.00	112.19	101.09	90.00	-4,677.46	-3,473.69	5,050.82	4,860.95	189.88	26.600	
9,700.00	6,040.00	11,999.42	6,040.00	112.24	101.09	90.00	-4,677.46	-3,473.69	4,951.25	4,761.38	189.87	26.077	
9,800.00	6,040.00	11,999.42	6,040.00	112.31	101.09	90.00	-4,677.46	-3,473.69	4,851.69	4,661.83	189.86	25.554	
9,900.00	6,040.00	11,999.42	6,040.00	112.39	101.09	90.00	-4,677.46	-3,473.69	4,752.15	4,562.30	189.85	25.031	
10,000.00	6,040.00	11,999.42	6,040.00	112.49	101.09	90.00	-4,677.46	-3,473.69	4,652.63	4,462.79	189.84	24.508	
10,100.00	6,040.00	11,999.42	6,040.00	112.62	101.09	90.00	-4,677.46	-3,473.69	4,553.13	4,363.30	189.83	23.985	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P41-T44-4HN - OWB - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.00	6,040.00	11,999.42	6,040.00	112.77	101.09	90.00	-4,677.46	-3,473.69	4,453.65	4,263.83	189.82	23.462		
10,300.00	6,040.00	11,999.42	6,040.00	112.94	101.09	90.00	-4,677.46	-3,473.69	4,354.20	4,164.38	189.81	22.939		
10,400.00	6,040.00	11,999.42	6,040.00	113.14	101.09	90.00	-4,677.46	-3,473.69	4,254.77	4,064.96	189.81	22.416		
10,500.00	6,040.00	11,999.42	6,040.00	113.36	101.09	90.00	-4,677.46	-3,473.69	4,155.37	3,965.56	189.80	21.893		
10,600.00	6,040.00	11,999.42	6,040.00	113.62	101.09	90.00	-4,677.46	-3,473.69	4,056.00	3,866.20	189.80	21.370		
10,700.00	6,040.00	11,999.42	6,040.00	113.91	101.09	90.00	-4,677.46	-3,473.69	3,956.66	3,766.86	189.80	20.847		
10,800.00	6,040.00	11,999.42	6,040.00	114.24	101.09	90.00	-4,677.46	-3,473.69	3,857.35	3,667.55	189.80	20.324		
10,900.00	6,040.00	11,999.42	6,040.00	114.61	101.09	90.00	-4,677.46	-3,473.69	3,758.08	3,568.28	189.80	19.800		
11,000.00	6,040.00	11,999.42	6,040.00	115.02	101.09	90.00	-4,677.46	-3,473.69	3,658.85	3,469.05	189.80	19.277		
11,100.00	6,040.00	11,999.42	6,040.00	115.49	101.09	90.00	-4,677.46	-3,473.69	3,559.67	3,369.86	189.81	18.754		
11,200.00	6,040.00	11,999.42	6,040.00	116.00	101.09	90.00	-4,677.46	-3,473.69	3,460.53	3,270.71	189.82	18.231		
11,300.00	6,040.00	11,999.42	6,040.00	116.58	101.09	90.00	-4,677.46	-3,473.69	3,361.44	3,171.61	189.83	17.707		
11,400.00	6,040.00	11,999.42	6,040.00	117.22	101.09	90.00	-4,677.46	-3,473.69	3,262.41	3,072.56	189.85	17.184		
11,500.00	6,040.00	11,999.42	6,040.00	117.92	101.09	90.00	-4,677.46	-3,473.69	3,163.44	2,973.57	189.87	16.661		
11,600.00	6,040.00	11,999.42	6,040.00	118.70	101.09	90.00	-4,677.46	-3,473.69	3,064.54	2,874.63	189.90	16.137		
11,700.00	6,040.00	11,999.42	6,040.00	119.56	101.09	90.00	-4,677.46	-3,473.69	2,965.71	2,775.77	189.94	15.614		
11,800.00	6,040.00	11,999.42	6,040.00	120.51	101.09	90.00	-4,677.46	-3,473.69	2,866.96	2,676.97	189.98	15.091		
11,900.00	6,040.00	11,999.42	6,040.00	121.54	101.09	90.00	-4,677.46	-3,473.69	2,768.30	2,578.26	190.03	14.567		
12,000.00	6,040.00	11,999.42	6,040.00	122.66	101.09	90.00	-4,677.46	-3,473.69	2,669.74	2,479.64	190.10	14.044		
12,100.00	6,040.00	11,999.42	6,040.00	123.87	101.09	90.00	-4,677.46	-3,473.69	2,571.29	2,381.11	190.17	13.521		
12,200.00	6,040.00	11,999.42	6,040.00	125.17	101.09	90.00	-4,677.46	-3,473.69	2,472.96	2,282.70	190.27	12.997		
12,300.00	6,040.00	11,999.42	6,040.00	126.57	101.09	90.00	-4,677.46	-3,473.69	2,374.78	2,184.40	190.38	12.474		
12,400.00	6,040.00	11,999.42	6,040.00	128.06	101.09	90.00	-4,677.46	-3,473.69	2,276.75	2,086.24	190.51	11.951		
12,500.00	6,040.00	11,999.42	6,040.00	129.63	101.09	90.00	-4,677.46	-3,473.69	2,178.90	1,988.23	190.67	11.427		
12,600.00	6,040.00	11,999.42	6,040.00	131.29	101.09	90.00	-4,677.46	-3,473.69	2,081.26	1,890.39	190.87	10.904		
12,700.00	6,040.00	11,999.42	6,040.00	133.03	101.09	90.00	-4,677.46	-3,473.69	1,983.85	1,792.75	191.11	10.381		
12,800.00	6,040.00	11,999.42	6,040.00	134.84	101.09	90.00	-4,677.46	-3,473.69	1,886.72	1,695.32	191.40	9.858		
12,900.00	6,040.00	11,999.42	6,040.00	136.71	101.09	90.00	-4,677.46	-3,473.69	1,789.90	1,598.15	191.75	9.334		
13,000.00	6,040.00	11,999.42	6,040.00	138.66	101.09	90.00	-4,677.46	-3,473.69	1,693.45	1,501.26	192.19	8.811		
13,100.00	6,040.00	11,999.42	6,040.00	140.66	101.09	90.00	-4,677.46	-3,473.69	1,597.43	1,404.70	192.73	8.289		
13,200.00	6,040.00	11,999.42	6,040.00	142.71	101.09	90.00	-4,677.46	-3,473.69	1,501.94	1,308.54	193.40	7.766		
13,300.00	6,040.00	11,999.42	6,040.00	144.81	101.09	90.00	-4,677.46	-3,473.69	1,407.07	1,212.83	194.24	7.244		
13,400.00	6,040.00	11,999.42	6,040.00	146.96	101.09	90.00	-4,677.46	-3,473.69	1,312.96	1,117.66	195.30	6.723		
13,500.00	6,040.00	11,999.42	6,040.00	149.14	101.09	90.00	-4,677.46	-3,473.69	1,219.79	1,023.14	196.66	6.203		
13,600.00	6,040.00	11,999.42	6,040.00	151.36	101.09	90.00	-4,677.46	-3,473.69	1,127.80	929.41	198.39	5.685		
13,700.00	6,040.00	11,999.42	6,040.00	153.62	101.09	90.00	-4,677.46	-3,473.69	1,037.28	836.66	200.62	5.170		
13,800.00	6,040.00	11,999.42	6,040.00	155.91	101.09	90.00	-4,677.46	-3,473.69	948.67	745.16	203.51	4.661		
13,900.00	6,040.00	11,999.42	6,040.00	158.22	101.09	90.00	-4,677.46	-3,473.69	862.56	655.29	207.27	4.161		
14,000.00	6,040.00	11,999.42	6,040.00	160.56	101.09	90.00	-4,677.46	-3,473.69	779.77	567.64	212.13	3.676		
14,100.00	6,040.00	11,999.42	6,040.00	162.92	101.09	90.00	-4,677.46	-3,473.69	701.47	483.16	218.31	3.213		
14,200.00	6,040.00	11,999.42	6,040.00	165.30	101.09	90.00	-4,677.46	-3,473.69	629.36	403.43	225.93	2.786		
14,300.00	6,040.00	11,999.42	6,040.00	167.70	101.09	90.00	-4,677.46	-3,473.69	565.79	331.08	234.71	2.411		
14,400.00	6,040.00	11,999.42	6,040.00	170.12	101.09	90.00	-4,677.46	-3,473.69	513.95	270.29	243.66	2.109		
14,500.00	6,040.00	11,999.42	6,040.00	172.55	101.09	90.00	-4,677.46	-3,473.69	477.67	226.93	250.75	1.905		
14,600.00	6,040.00	11,999.42	6,040.00	175.00	101.09	90.00	-4,677.46	-3,473.69	460.65	207.08	253.58	1.817		
14,629.86	6,040.00	11,999.42	6,040.00	175.74	101.09	90.00	-4,677.46	-3,473.69	459.68	206.31	253.37	1.814 SF		
14,700.00	6,040.00	11,999.42	6,040.00	177.46	101.09	90.00	-4,677.46	-3,473.69	465.00	213.89	251.11	1.852		
14,800.00	6,040.00	11,999.42	6,040.00	179.94	101.09	90.00	-4,677.46	-3,473.69	490.16	245.30	244.86	2.002		
14,900.00	6,040.00	11,999.42	6,040.00	182.43	101.09	90.00	-4,677.46	-3,473.69	533.18	295.73	237.45	2.245		
15,000.00	6,040.00	11,999.42	6,040.00	184.92	101.09	90.00	-4,677.46	-3,473.69	590.18	359.57	230.61	2.559		
15,100.00	6,040.00	11,999.42	6,040.00	187.43	101.09	90.00	-4,677.46	-3,473.69	657.52	432.67	224.85	2.924		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES P41-T44-4HN - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,200.00	6,040.00	11,999.42	6,040.00	189.95	101.09	90.00	-4,677.46	-3,473.69	732.37	512.22	220.15	3.327	
15,300.00	6,040.00	11,999.42	6,040.00	192.48	101.09	90.00	-4,677.46	-3,473.69	812.64	596.33	216.32	3.757	
15,400.00	6,040.00	11,999.42	6,040.00	195.01	101.09	90.00	-4,677.46	-3,473.69	896.89	683.71	213.19	4.207	
15,500.00	6,040.00	11,999.42	6,040.00	197.55	101.09	90.00	-4,677.46	-3,473.69	984.10	773.49	210.61	4.673	
15,600.00	6,040.00	11,999.42	6,040.00	200.10	101.09	90.00	-4,677.46	-3,473.69	1,073.53	865.06	208.47	5.150	
15,700.00	6,040.00	11,999.42	6,040.00	202.65	101.09	90.00	-4,677.46	-3,473.69	1,164.69	958.00	206.68	5.635	
15,800.00	6,040.00	11,999.42	6,040.00	205.22	101.09	90.00	-4,677.46	-3,473.69	1,257.19	1,052.01	205.18	6.127	
15,900.00	6,040.00	11,999.42	6,040.00	207.78	101.09	90.00	-4,677.46	-3,473.69	1,350.76	1,146.86	203.90	6.625	
16,000.00	6,040.00	11,999.42	6,040.00	210.36	101.09	90.00	-4,677.46	-3,473.69	1,445.19	1,242.39	202.81	7.126	
16,100.00	6,040.00	11,999.42	6,040.00	212.93	101.09	90.00	-4,677.46	-3,473.69	1,540.33	1,338.46	201.86	7.630	
16,200.00	6,040.00	11,999.42	6,040.00	215.52	101.09	90.00	-4,677.46	-3,473.69	1,636.04	1,435.00	201.05	8.138	
16,300.00	6,040.00	11,999.42	6,040.00	218.11	101.09	90.00	-4,677.46	-3,473.69	1,732.24	1,531.91	200.33	8.647	
16,400.00	6,040.00	11,999.42	6,040.00	220.70	101.09	90.00	-4,677.46	-3,473.69	1,828.85	1,629.14	199.71	9.158	
16,500.00	6,040.00	11,999.42	6,040.00	223.29	101.09	90.00	-4,677.46	-3,473.69	1,925.80	1,726.65	199.15	9.670	
16,600.00	6,040.00	11,999.42	6,040.00	225.89	101.09	90.00	-4,677.46	-3,473.69	2,023.05	1,824.39	198.66	10.183	
16,700.00	6,040.00	11,999.42	6,040.00	228.50	101.09	90.00	-4,677.46	-3,473.69	2,120.56	1,922.33	198.23	10.698	
16,800.00	6,040.00	11,999.42	6,040.00	231.11	101.09	90.00	-4,677.46	-3,473.69	2,218.29	2,020.45	197.84	11.213	
16,900.00	6,040.00	11,999.42	6,040.00	233.72	101.09	90.00	-4,677.46	-3,473.69	2,316.21	2,118.72	197.49	11.729	
17,000.00	6,040.00	11,999.42	6,040.00	236.33	101.09	90.00	-4,677.46	-3,473.69	2,414.30	2,217.13	197.17	12.245	
17,100.00	6,040.00	11,999.42	6,040.00	238.95	101.09	90.00	-4,677.46	-3,473.69	2,512.55	2,315.66	196.88	12.762	
17,200.00	6,040.00	11,999.42	6,040.00	241.57	101.09	90.00	-4,677.46	-3,473.69	2,610.92	2,414.30	196.62	13.279	
17,300.00	6,040.00	11,999.42	6,040.00	244.19	101.09	90.00	-4,677.46	-3,473.69	2,709.42	2,513.03	196.39	13.796	
17,400.00	6,040.00	11,999.42	6,040.00	246.82	101.09	90.00	-4,677.46	-3,473.69	2,808.02	2,611.85	196.17	14.314	
17,500.00	6,040.00	11,999.42	6,040.00	249.45	101.09	90.00	-4,677.46	-3,473.69	2,906.72	2,710.74	195.97	14.832	
17,600.00	6,040.00	11,999.42	6,040.00	252.08	101.09	90.00	-4,677.46	-3,473.69	3,005.50	2,809.71	195.79	15.351	
17,700.00	6,040.00	11,999.42	6,040.00	254.71	101.09	90.00	-4,677.46	-3,473.69	3,104.36	2,908.74	195.62	15.869	
17,800.00	6,040.00	11,999.42	6,040.00	257.35	101.09	90.00	-4,677.46	-3,473.69	3,203.29	3,007.82	195.47	16.388	
17,900.00	6,040.00	11,999.42	6,040.00	259.99	101.09	90.00	-4,677.46	-3,473.69	3,302.29	3,106.96	195.33	16.906	
18,000.00	6,040.00	11,999.42	6,040.00	262.63	101.09	90.00	-4,677.46	-3,473.69	3,401.34	3,206.14	195.20	17.425	
18,100.00	6,040.00	11,999.42	6,040.00	265.27	101.09	90.00	-4,677.46	-3,473.69	3,500.45	3,305.37	195.08	17.944	
18,200.00	6,040.00	11,999.42	6,040.00	267.91	101.09	90.00	-4,677.46	-3,473.69	3,599.61	3,404.64	194.97	18.463	
18,300.00	6,040.00	11,999.42	6,040.00	270.56	101.09	90.00	-4,677.46	-3,473.69	3,698.81	3,503.95	194.86	18.982	
18,400.00	6,040.00	11,999.42	6,040.00	273.21	101.09	90.00	-4,677.46	-3,473.69	3,798.06	3,603.29	194.77	19.501	
18,500.00	6,040.00	11,999.42	6,040.00	275.86	101.09	90.00	-4,677.46	-3,473.69	3,897.34	3,702.66	194.68	20.019	
18,600.00	6,040.00	11,999.42	6,040.00	278.51	101.09	90.00	-4,677.46	-3,473.69	3,996.66	3,802.07	194.59	20.538	
18,700.00	6,040.00	11,999.42	6,040.00	281.16	101.09	90.00	-4,677.46	-3,473.69	4,096.01	3,901.50	194.52	21.057	
18,800.00	6,040.00	11,999.42	6,040.00	283.81	101.09	90.00	-4,677.46	-3,473.69	4,195.40	4,000.95	194.45	21.576	
18,900.00	6,040.00	11,999.42	6,040.00	286.47	101.09	90.00	-4,677.46	-3,473.69	4,294.81	4,100.43	194.38	22.095	
18,919.70	6,040.00	11,999.42	6,040.00	286.99	101.09	90.00	-4,677.46	-3,473.69	4,314.40	4,120.03	194.37	22.197	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES U-Y-10HNXRL - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-16.72	16.72				
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-16.72	16.72	16.46	0.27	62.205	
200.00	199.98	200.52	200.50	0.48	0.49	127.88	0.48	-15.03	16.05	15.07	0.98	16.402	
271.35	271.25	272.09	271.99	0.74	0.76	142.78	1.39	-11.75	15.51	14.02	1.49	10.420 CC	
300.00	299.84	300.77	300.60	0.85	0.86	151.07	1.89	-9.95	15.67	13.98	1.69	9.267	
400.00	399.45	400.47	399.92	1.22	1.23	-177.64	4.24	-1.56	20.16	17.72	2.44	8.278	
500.00	498.70	499.38	498.08	1.62	1.63	-156.61	7.49	10.04	31.73	28.51	3.22	9.858	
600.00	597.47	597.23	594.74	2.05	2.04	-145.63	11.60	24.73	49.13	45.10	4.03	12.191	
700.00	695.62	693.80	689.55	2.51	2.48	-139.61	16.52	42.33	71.32	66.45	4.87	14.642	
800.00	793.06	788.86	782.24	3.01	2.95	-135.94	22.21	62.65	97.82	92.07	5.75	17.021	
900.00	889.64	882.23	872.55	3.56	3.45	-133.49	28.60	85.48	128.37	121.71	6.66	19.269	
1,000.00	985.27	973.73	960.25	4.14	3.97	-131.70	35.62	110.60	162.79	155.17	7.62	21.373	
1,100.00	1,079.82	1,063.20	1,045.16	4.78	4.53	-130.31	43.22	137.75	200.92	192.31	8.62	23.321	
1,200.00	1,173.17	1,150.52	1,127.13	5.46	5.12	-129.15	51.32	166.70	242.63	232.97	9.66	25.127	
1,300.00	1,265.21	1,235.57	1,206.06	6.20	5.73	-128.13	59.85	197.19	287.75	277.02	10.74	26.803	
1,400.00	1,355.84	1,320.18	1,283.69	6.99	6.37	-127.22	68.91	229.60	336.07	324.20	11.88	28.292	
1,500.00	1,444.94	1,406.50	1,362.70	7.84	7.05	-126.65	78.28	263.08	386.50	373.40	13.10	29.497	
1,600.00	1,532.39	1,508.35	1,440.64	8.75	7.87	-126.38	87.52	296.12	438.75	424.27	14.48	30.302	
1,700.00	1,618.11	1,575.52	1,517.40	9.71	8.41	-126.28	96.63	328.65	492.82	477.18	15.64	31.514	
1,800.00	1,701.97	1,658.01	1,592.90	10.74	9.07	-126.30	105.58	360.65	548.72	531.78	16.94	32.399	
1,900.00	1,783.88	1,739.02	1,667.05	11.82	9.73	-126.37	114.37	392.08	606.48	588.23	18.25	33.234	
2,000.00	1,863.74	1,818.44	1,739.74	12.96	10.38	-126.46	122.99	422.89	666.11	646.54	19.57	34.039	
2,100.00	1,941.45	1,903.81	1,810.90	14.16	11.08	-126.55	131.43	453.05	727.62	706.67	20.95	34.729	
2,200.00	2,016.92	1,972.17	1,880.44	15.41	11.64	-126.62	139.68	482.52	791.01	768.80	22.22	35.606	
2,300.00	2,090.05	2,046.28	1,948.28	16.73	12.25	-126.65	147.72	511.27	856.29	832.76	23.53	36.388	
2,400.00	2,160.76	2,118.44	2,014.32	18.10	12.85	-126.62	155.55	539.27	923.43	898.59	24.84	37.179	
2,500.00	2,228.95	2,188.55	2,078.49	19.53	13.42	-126.53	163.16	566.47	992.43	966.30	26.13	37.984	
2,600.00	2,294.55	2,256.54	2,140.72	21.01	13.99	-126.36	170.54	592.84	1,063.26	1,035.86	27.40	38.807	
2,700.00	2,357.48	2,322.31	2,200.92	22.55	14.53	-126.10	177.68	618.36	1,135.88	1,107.24	28.65	39.652	
2,800.00	2,418.42	2,386.43	2,259.61	24.13	15.06	-127.04	184.64	643.23	1,209.89	1,180.02	29.87	40.504	
2,900.00	2,479.25	2,450.46	2,318.22	25.71	15.59	-128.30	191.59	668.07	1,284.27	1,253.19	31.09	41.313	
3,000.00	2,540.09	2,514.50	2,376.83	27.31	16.12	-129.43	198.54	692.91	1,358.93	1,326.63	32.30	42.077	
3,100.00	2,600.93	2,578.53	2,435.44	28.90	16.66	-130.46	205.49	717.75	1,433.80	1,400.30	33.50	42.797	
3,200.00	2,661.77	2,642.57	2,494.05	30.51	17.19	-131.39	212.44	742.59	1,508.88	1,474.17	34.71	43.477	
3,300.00	2,722.61	2,706.60	2,552.66	32.11	17.72	-132.23	219.38	767.43	1,584.12	1,548.21	35.90	44.120	
3,400.00	2,783.44	2,770.64	2,611.26	33.72	18.25	-133.00	226.33	792.28	1,659.50	1,622.40	37.10	44.728	
3,500.00	2,844.28	2,834.67	2,669.87	35.34	18.78	-133.71	233.28	817.12	1,735.01	1,696.71	38.30	45.303	
3,600.00	2,905.12	2,901.29	2,728.48	36.95	19.34	-134.36	240.23	841.96	1,810.63	1,771.11	39.51	45.823	
3,700.00	2,965.96	2,962.74	2,787.09	38.57	19.85	-134.96	247.18	866.80	1,886.34	1,845.66	40.69	46.364	
3,800.00	3,026.79	3,026.78	2,845.70	40.19	20.38	-135.52	254.13	891.64	1,962.14	1,920.26	41.88	46.855	
3,900.00	3,087.63	3,109.19	2,904.31	41.81	21.07	-136.04	261.08	916.48	2,038.01	1,994.80	43.22	47.156	
4,000.00	3,148.47	3,154.85	2,962.92	43.43	21.45	-136.52	268.03	941.32	2,113.96	2,069.70	44.26	47.764	
4,100.00	3,209.31	3,218.88	3,021.53	45.05	21.98	-136.96	274.98	966.16	2,189.96	2,144.51	45.45	48.186	
4,200.00	3,270.14	3,282.92	3,080.14	46.68	22.52	-137.38	281.93	991.01	2,266.02	2,219.38	46.64	48.589	
4,300.00	3,330.98	3,346.95	3,138.75	48.31	23.05	-137.77	288.88	1,015.85	2,342.12	2,294.30	47.83	48.972	
4,400.00	3,391.82	3,410.99	3,197.36	49.93	23.59	-138.14	295.83	1,040.69	2,418.27	2,369.26	49.01	49.338	
4,500.00	3,452.66	3,475.02	3,255.97	51.56	24.12	-138.49	302.78	1,065.53	2,494.46	2,444.26	50.20	49.688	
4,600.00	3,513.49	3,539.06	3,314.58	53.19	24.66	-138.81	309.73	1,090.37	2,570.69	2,519.30	51.39	50.023	
4,700.00	3,574.33	3,600.00	3,373.19	54.82	25.19	-139.09	316.68	1,115.20	2,646.92	2,584.54	52.57	50.285	
4,800.00	3,635.17	3,660.84	3,431.80	56.45	25.72	-139.33	323.63	1,140.03	2,723.15	2,659.77	53.75	50.547	
4,900.00	3,696.01	3,721.68	3,490.41	58.08	26.25	-139.54	330.58	1,164.86	2,800.38	2,736.00	54.93	50.809	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES U-Y-10HNXRL - OWB - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	3,756.84	9,336.38	6,040.00	59.71	64.18	-155.41	-2,494.80	2,319.77	2,426.87	2,374.54	52.33	46.375		
5,100.00	3,817.68	9,405.51	6,040.00	61.34	65.05	-155.95	-2,563.91	2,321.41	2,356.48	2,303.12	53.36	44.163		
5,200.00	3,878.52	9,474.65	6,040.00	62.97	65.94	-156.51	-2,633.03	2,323.05	2,286.20	2,231.83	54.36	42.054		
5,300.00	3,939.36	9,543.78	6,040.00	64.61	66.84	-157.11	-2,702.14	2,324.69	2,216.05	2,160.70	55.34	40.043		
5,400.00	4,000.19	9,612.92	6,040.00	66.24	67.76	-157.75	-2,771.26	2,326.34	2,146.03	2,089.74	56.29	38.122		
5,500.00	4,061.03	9,682.05	6,040.00	67.87	68.68	-158.42	-2,840.37	2,327.98	2,076.18	2,018.96	57.22	36.286		
5,600.00	4,121.87	9,751.19	6,040.00	69.51	69.62	-159.14	-2,909.49	2,329.62	2,006.49	1,948.38	58.11	34.528		
5,700.00	4,182.71	9,820.32	6,040.00	71.14	70.57	-159.91	-2,978.60	2,331.26	1,936.99	1,878.01	58.98	32.843		
5,800.00	4,243.54	9,889.46	6,040.00	72.77	71.53	-160.73	-3,047.72	2,332.90	1,867.70	1,807.88	59.81	31.226		
5,900.00	4,304.38	9,958.59	6,040.00	74.41	72.50	-161.61	-3,116.83	2,334.54	1,798.64	1,738.02	60.62	29.672		
6,000.00	4,365.22	10,027.72	6,040.00	76.04	73.48	-162.55	-3,185.95	2,336.18	1,729.84	1,668.44	61.40	28.175		
6,100.00	4,426.06	10,103.14	6,040.00	77.68	74.55	-163.56	-3,255.06	2,337.82	1,661.34	1,599.13	62.20	26.708		
6,200.00	4,486.90	10,165.99	6,040.00	79.31	75.46	-164.65	-3,324.18	2,339.46	1,593.16	1,530.28	62.89	25.333		
6,300.00	4,547.73	10,235.13	6,040.00	80.95	76.46	-165.82	-3,393.29	2,341.10	1,525.37	1,461.75	63.61	23.979		
6,400.00	4,608.57	10,304.26	6,040.00	82.58	77.48	-167.09	-3,462.41	2,342.74	1,458.00	1,393.65	64.34	22.660		
6,500.00	4,669.41	10,373.40	6,040.00	84.22	78.50	-168.47	-3,531.52	2,344.38	1,391.12	1,326.03	65.09	21.372		
6,600.00	4,730.25	10,442.53	6,040.00	85.86	79.52	-169.96	-3,600.64	2,346.03	1,324.80	1,258.92	65.88	20.108		
6,700.00	4,791.08	10,511.67	6,040.00	87.49	80.56	-171.59	-3,669.75	2,347.67	1,259.14	1,192.38	66.76	18.860		
6,800.00	4,851.92	10,580.80	6,040.00	89.13	81.60	-173.36	-3,738.87	2,349.31	1,194.24	1,126.46	67.78	17.620		
6,900.00	4,912.76	10,649.94	6,040.00	90.76	82.64	-175.30	-3,807.98	2,350.95	1,130.23	1,061.23	69.00	16.380		
7,000.00	4,973.60	10,719.07	6,040.00	92.40	83.69	-177.42	-3,877.10	2,352.59	1,067.28	996.75	70.52	15.133		
7,100.00	5,034.43	10,788.20	6,040.00	94.04	84.75	-179.74	-3,946.21	2,354.23	1,005.58	933.10	72.48	13.874		
7,200.00	5,095.27	10,857.34	6,040.00	95.67	85.81	-177.72	-4,015.33	2,355.87	945.37	870.34	75.03	12.601		
7,300.00	5,156.11	10,926.47	6,040.00	97.31	86.88	-174.93	-4,084.44	2,357.51	886.96	808.61	78.36	11.320		
7,400.00	5,216.95	11,004.39	6,040.00	98.95	88.09	-171.87	-4,153.56	2,359.15	830.74	747.97	82.77	10.037		
7,500.00	5,277.78	11,064.74	6,040.00	100.59	89.03	-168.51	-4,222.67	2,360.79	777.16	688.88	88.29	8.803		
7,600.00	5,338.62	11,133.88	6,040.00	102.22	90.11	-164.85	-4,291.79	2,362.43	726.83	631.48	95.35	7.623		
7,700.00	5,399.46	11,203.01	6,040.00	103.86	91.20	-160.88	-4,360.90	2,364.08	680.46	576.40	104.06	6.539		
7,800.00	5,460.30	11,272.15	6,040.00	105.50	92.29	-156.58	-4,430.02	2,365.72	638.92	524.43	114.49	5.581		
7,900.00	5,521.24	11,341.39	6,040.00	107.13	93.38	-150.94	-4,499.25	2,367.36	602.91	476.45	126.46	4.768		
8,000.00	5,584.83	11,413.47	6,040.00	108.61	94.53	-140.93	-4,571.30	2,369.07	564.79	426.47	138.31	4.083		
8,100.00	5,650.69	11,487.87	6,040.00	109.85	95.71	-130.63	-4,645.68	2,370.84	519.79	370.70	149.09	3.486		
8,200.00	5,716.83	11,562.34	6,040.00	110.82	96.90	-120.87	-4,720.13	2,372.60	466.95	308.37	158.58	2.945		
8,300.00	5,781.24	11,634.61	6,040.00	111.52	98.06	-112.62	-4,792.38	2,374.32	405.74	239.08	166.65	2.435		
8,400.00	5,841.96	11,702.50	6,040.00	111.98	99.15	-106.91	-4,860.25	2,375.93	336.08	162.90	173.19	1.941		
8,500.00	5,897.14	11,763.93	6,040.00	112.25	100.15	-105.28	-4,921.67	2,377.39	258.44	80.55	177.89	1.453 Level 3		
8,600.00	5,945.12	11,817.05	6,040.00	112.37	101.00	-111.82	-4,974.77	2,378.65	173.88	-5.75	179.63	0.968 Level 1		
8,700.00	5,984.42	11,860.23	6,040.00	112.39	101.70	-140.62	-5,017.94	2,379.67	85.28	-84.59	169.87	0.502 Level 1		
8,782.15	6,009.37	11,887.34	6,040.00	112.36	102.14	-175.45	-5,045.04	2,380.32	31.83	-62.91	94.74	0.336 Level 1		
8,800.00	6,013.86	11,907.83	6,040.00	112.35	102.47	-167.80	-5,049.87	2,380.43	36.35	-106.70	143.04	0.254 Level 1, ES, SF		
8,900.00	6,032.54	11,911.90	6,040.00	112.30	102.54	-144.69	-5,069.59	2,380.90	121.59	-76.11	197.70	0.615 Level 1		
9,000.00	6,039.89	11,918.80	6,040.00	112.24	102.65	-166.32	-5,076.49	2,381.06	220.72	21.69	199.03	1.109 Level 2		
9,100.00	6,040.00	11,917.53	6,040.00	112.19	102.63	90.00	-5,075.22	2,381.03	320.71	121.70	199.01	1.612		
9,200.00	6,040.00	11,916.14	6,040.00	112.16	102.61	90.00	-5,073.83	2,381.00	420.70	221.72	198.98	2.114		
9,300.00	6,040.00	11,914.75	6,040.00	112.15	102.59	90.00	-5,072.44	2,380.97	520.69	321.74	198.94	2.617		
9,400.00	6,040.00	11,913.36	6,040.00	112.15	102.56	90.00	-5,071.05	2,380.94	620.68	421.77	198.91	3.120		
9,500.00	6,040.00	11,911.97	6,040.00	112.16	102.54	90.00	-5,069.66	2,380.90	720.67	521.79	198.88	3.624		
9,600.00	6,040.00	11,910.57	6,040.00	112.19	102.52	90.00	-5,068.27	2,380.87	820.66	621.81	198.85	4.127		
9,700.00	6,040.00	11,909.18	6,040.00	112.24	102.50	90.00	-5,066.87	2,380.84	920.65	721.83	198.82	4.631		
9,800.00	6,040.00	11,907.79	6,040.00	112.31	102.47	90.00	-5,065.48	2,380.80	1,020.64	821.85	198.79	5.134		
9,900.00	6,040.00	11,906.40	6,040.00	112.39	102.45	90.00	-5,064.09	2,380.77	1,120.63	921.87	198.76	5.638		

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES U-Y-10HNXRL - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.00	6,040.00	11,905.01	6,040.00	112.49	102.43	90.00	-5,062.70	2,380.74	1,220.62	1,021.89	198.73	6.142	
10,100.00	6,040.00	11,903.61	6,040.00	112.62	102.41	90.00	-5,061.31	2,380.70	1,320.61	1,121.91	198.70	6.646	
10,200.00	6,040.00	11,902.22	6,040.00	112.77	102.38	90.00	-5,059.92	2,380.67	1,420.60	1,221.93	198.67	7.150	
10,300.00	6,040.00	11,900.83	6,040.00	112.94	102.36	90.00	-5,058.53	2,380.64	1,520.59	1,321.95	198.64	7.655	
10,400.00	6,040.00	11,900.56	6,040.00	113.14	102.36	90.00	-5,057.13	2,380.60	1,620.58	1,421.95	198.63	8.159	
10,500.00	6,040.00	11,901.95	6,040.00	113.36	102.38	90.00	-5,055.74	2,380.57	1,720.57	1,521.92	198.65	8.661	
10,600.00	6,040.00	11,903.35	6,040.00	113.62	102.40	90.00	-5,054.35	2,380.54	1,820.56	1,621.89	198.67	9.164	
10,700.00	6,040.00	11,904.74	6,040.00	113.91	102.42	90.00	-5,052.96	2,380.51	1,920.55	1,721.86	198.69	9.666	
10,800.00	6,040.00	11,906.13	6,040.00	114.24	102.45	90.00	-5,051.57	2,380.47	2,020.54	1,821.83	198.71	10.168	
10,900.00	6,040.00	11,907.52	6,040.00	114.61	102.47	90.00	-5,050.18	2,380.44	2,120.53	1,921.80	198.73	10.670	
11,000.00	6,040.00	11,908.91	6,040.00	115.02	102.49	90.00	-5,048.78	2,380.41	2,220.52	2,021.77	198.75	11.172	
11,100.00	6,040.00	11,889.69	6,040.00	115.49	102.18	90.00	-5,047.39	2,380.37	2,320.51	2,122.10	198.42	11.695	
11,200.00	6,040.00	11,888.30	6,040.00	116.00	102.16	90.00	-5,046.00	2,380.34	2,420.51	2,222.12	198.39	12.201	
11,300.00	6,040.00	11,886.91	6,040.00	116.58	102.14	90.00	-5,044.61	2,380.31	2,520.50	2,322.13	198.36	12.707	
11,400.00	6,040.00	11,885.52	6,040.00	117.22	102.11	90.00	-5,043.22	2,380.27	2,620.49	2,422.15	198.34	13.212	
11,500.00	6,040.00	11,884.13	6,040.00	117.92	102.09	90.00	-5,041.83	2,380.24	2,720.48	2,522.17	198.31	13.718	
11,600.00	6,040.00	11,882.73	6,040.00	118.70	102.07	90.00	-5,040.43	2,380.21	2,820.47	2,622.18	198.28	14.224	
11,700.00	6,040.00	11,881.34	6,040.00	119.56	102.05	90.00	-5,039.04	2,380.18	2,920.46	2,722.20	198.26	14.731	
11,800.00	6,040.00	11,879.95	6,040.00	120.51	102.02	90.00	-5,037.65	2,380.14	3,020.45	2,822.22	198.23	15.237	
11,900.00	6,040.00	11,878.56	6,040.00	121.54	102.00	90.00	-5,036.26	2,380.11	3,120.44	2,922.23	198.21	15.743	
12,000.00	6,040.00	11,877.17	6,040.00	122.66	101.98	90.00	-5,034.87	2,380.08	3,220.43	3,022.25	198.18	16.250	
12,100.00	6,040.00	11,875.77	6,040.00	123.87	101.95	90.00	-5,033.48	2,380.04	3,320.42	3,122.26	198.15	16.757	
12,200.00	6,040.00	11,874.38	6,040.00	125.17	101.93	90.00	-5,032.08	2,380.01	3,420.41	3,222.28	198.13	17.263	
12,300.00	6,040.00	11,872.99	6,040.00	126.57	101.91	90.00	-5,030.69	2,379.98	3,520.40	3,322.29	198.10	17.770	
12,400.00	6,040.00	11,871.60	6,040.00	128.06	101.89	90.00	-5,029.30	2,379.94	3,620.39	3,422.31	198.08	18.277	
12,500.00	6,040.00	11,870.21	6,040.00	129.63	101.86	90.00	-5,027.91	2,379.91	3,720.38	3,522.32	198.06	18.784	
12,600.00	6,040.00	11,868.81	6,040.00	131.29	101.84	90.00	-5,026.52	2,379.88	3,820.37	3,622.34	198.03	19.292	
12,700.00	6,040.00	11,867.42	6,040.00	133.03	101.82	90.00	-5,025.13	2,379.85	3,920.36	3,722.35	198.01	19.799	
12,800.00	6,040.00	11,866.03	6,040.00	134.84	101.80	90.00	-5,023.73	2,379.81	4,020.35	3,822.37	197.98	20.306	
12,900.00	6,040.00	11,864.64	6,040.00	136.71	101.77	90.00	-5,022.34	2,379.78	4,120.34	3,922.38	197.96	20.814	
13,000.00	6,040.00	11,863.25	6,040.00	138.66	101.75	90.00	-5,020.95	2,379.75	4,220.33	4,022.39	197.94	21.322	
13,100.00	6,040.00	11,861.85	6,040.00	140.66	101.73	90.00	-5,019.56	2,379.71	4,320.32	4,122.41	197.91	21.829	
13,200.00	6,040.00	11,860.46	6,040.00	142.71	101.71	90.00	-5,018.17	2,379.68	4,420.31	4,222.42	197.89	22.337	
13,300.00	6,040.00	11,859.07	6,040.00	144.81	101.68	90.00	-5,016.78	2,379.65	4,520.30	4,322.43	197.87	22.845	
13,400.00	6,040.00	11,857.68	6,040.00	146.96	101.66	90.00	-5,015.38	2,379.61	4,620.29	4,422.45	197.85	23.353	
13,500.00	6,040.00	11,856.29	6,040.00	149.14	101.64	90.00	-5,013.99	2,379.58	4,720.28	4,522.46	197.82	23.861	
13,600.00	6,040.00	11,854.89	6,040.00	151.36	101.62	90.00	-5,012.60	2,379.55	4,820.27	4,622.47	197.80	24.369	
13,700.00	6,040.00	11,853.50	6,040.00	153.62	101.59	90.00	-5,011.21	2,379.51	4,920.26	4,722.48	197.78	24.877	
13,800.00	6,040.00	11,852.11	6,040.00	155.91	101.57	90.00	-5,009.82	2,379.48	5,020.25	4,822.49	197.76	25.386	
13,900.00	6,040.00	11,850.72	6,040.00	158.22	101.55	90.00	-5,008.43	2,379.45	5,120.24	4,922.51	197.74	25.894	
14,000.00	6,040.00	11,849.33	6,040.00	160.56	101.53	90.00	-5,007.04	2,379.42	5,220.23	5,022.52	197.72	26.402	
14,100.00	6,040.00	11,847.93	6,040.00	162.92	101.50	90.00	-5,005.64	2,379.38	5,320.22	5,122.53	197.70	26.911	
14,200.00	6,040.00	11,846.54	6,040.00	165.30	101.48	90.00	-5,004.25	2,379.35	5,420.21	5,222.54	197.68	27.420	
14,300.00	6,040.00	11,845.15	6,040.00	167.70	101.46	90.00	-5,002.86	2,379.32	5,520.20	5,322.55	197.66	27.928	
14,400.00	6,040.00	11,843.76	6,040.00	170.12	101.44	90.00	-5,001.47	2,379.28	5,620.20	5,422.56	197.64	28.437	
14,500.00	6,040.00	11,842.37	6,040.00	172.55	101.41	90.00	-5,000.08	2,379.25	5,720.19	5,522.57	197.62	28.946	
14,600.00	6,040.00	11,840.97	6,040.00	175.00	101.39	90.00	-4,998.69	2,379.22	5,820.18	5,622.58	197.60	29.455	
14,700.00	6,040.00	11,839.58	6,040.00	177.46	101.37	90.00	-4,997.29	2,379.18	5,920.17	5,722.59	197.58	29.964	
14,800.00	6,040.00	11,838.19	6,040.00	179.94	101.35	90.00	-4,995.90	2,379.15	6,020.16	5,822.60	197.56	30.473	
14,900.00	6,040.00	11,836.80	6,040.00	182.43	101.32	90.00	-4,994.51	2,379.12	6,120.15	5,922.61	197.54	30.982	
15,000.00	6,040.00	11,835.41	6,040.00	184.92	101.30	90.00	-4,993.12	2,379.09	6,220.14	6,022.62	197.52	31.491	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 3-T4N-R62W - STATE SEVENTY HOLES U-Y-10HNXRL - OWB - PROPOSAL 1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,100.00	6,040.00	11,834.01	6,040.00	187.43	101.28	90.00	-4,991.73	2,379.05	6,320.13	6,122.63	197.50	32.001	
15,200.00	6,040.00	11,832.62	6,040.00	189.95	101.26	90.00	-4,990.34	2,379.02	6,420.12	6,222.64	197.48	32.510	
15,300.00	6,040.00	11,831.23	6,040.00	192.48	101.23	90.00	-4,988.94	2,378.99	6,520.11	6,322.64	197.46	33.019	
15,400.00	6,040.00	11,829.84	6,040.00	195.01	101.21	90.00	-4,987.55	2,378.95	6,620.10	6,422.65	197.45	33.529	
15,500.00	6,040.00	11,828.45	6,040.00	197.55	101.19	90.00	-4,986.16	2,378.92	6,720.09	6,522.66	197.43	34.038	
15,600.00	6,040.00	11,827.05	6,040.00	200.10	101.17	90.00	-4,984.77	2,378.89	6,820.08	6,622.67	197.41	34.548	
15,700.00	6,040.00	11,825.66	6,040.00	202.65	101.14	90.00	-4,983.38	2,378.85	6,920.07	6,722.68	197.39	35.057	
15,800.00	6,040.00	11,824.27	6,040.00	205.22	101.12	90.00	-4,981.99	2,378.82	7,020.06	6,822.68	197.38	35.567	
15,900.00	6,040.00	11,822.88	6,040.00	207.78	101.10	90.00	-4,980.59	2,378.79	7,120.05	6,922.69	197.36	36.076	
16,000.00	6,040.00	11,821.49	6,040.00	210.36	101.08	90.00	-4,979.20	2,378.75	7,220.04	7,022.70	197.34	36.586	
16,100.00	6,040.00	11,820.09	6,040.00	212.93	101.05	90.00	-4,977.81	2,378.72	7,320.03	7,122.70	197.33	37.096	
16,200.00	6,040.00	11,818.70	6,040.00	215.52	101.03	90.00	-4,976.42	2,378.69	7,420.02	7,222.71	197.31	37.606	
16,300.00	6,040.00	11,817.31	6,040.00	218.11	101.01	90.00	-4,975.03	2,378.66	7,520.01	7,322.72	197.30	38.116	
16,400.00	6,040.00	11,815.92	6,040.00	220.70	100.99	90.00	-4,973.64	2,378.62	7,620.00	7,422.72	197.28	38.625	
16,500.00	6,040.00	11,814.53	6,040.00	223.29	100.96	90.00	-4,972.24	2,378.59	7,719.99	7,522.73	197.26	39.135	
16,600.00	6,040.00	11,813.13	6,040.00	225.89	100.94	90.00	-4,970.85	2,378.56	7,819.98	7,622.73	197.25	39.645	
16,700.00	6,040.00	11,811.74	6,040.00	228.50	100.92	90.00	-4,969.46	2,378.52	7,919.97	7,722.74	197.23	40.155	
16,800.00	6,040.00	11,810.35	6,040.00	231.11	100.90	90.00	-4,968.07	2,378.49	8,019.96	7,822.74	197.22	40.665	
16,900.00	6,040.00	11,808.96	6,040.00	233.72	100.87	90.00	-4,966.68	2,378.46	8,119.95	7,922.75	197.20	41.175	
17,000.00	6,040.00	11,807.57	6,040.00	236.33	100.85	90.00	-4,965.29	2,378.42	8,219.94	8,022.75	197.19	41.685	
17,100.00	6,040.00	11,806.17	6,040.00	238.95	100.83	90.00	-4,963.89	2,378.39	8,319.93	8,122.76	197.18	42.196	
17,200.00	6,040.00	11,804.78	6,040.00	241.57	100.81	90.00	-4,962.50	2,378.36	8,419.92	8,222.76	197.16	42.706	
17,300.00	6,040.00	11,803.39	6,040.00	244.19	100.78	90.00	-4,961.11	2,378.33	8,519.91	8,322.77	197.15	43.216	
17,400.00	6,040.00	11,802.00	6,040.00	246.82	100.76	90.00	-4,959.72	2,378.29	8,619.90	8,422.77	197.13	43.726	
17,500.00	6,040.00	11,800.61	6,040.00	249.45	100.74	90.00	-4,958.33	2,378.26	8,719.89	8,522.77	197.12	44.236	
17,600.00	6,040.00	11,800.79	6,040.00	252.08	100.74	90.00	-4,956.94	2,378.23	8,819.89	8,622.75	197.13	44.740	
17,700.00	6,040.00	11,802.18	6,040.00	254.71	100.76	90.00	-4,955.55	2,378.19	8,919.88	8,722.71	197.17	45.240	
17,800.00	6,040.00	11,803.57	6,040.00	257.35	100.79	90.00	-4,954.15	2,378.16	9,019.87	8,822.66	197.20	45.739	
17,900.00	6,040.00	11,804.96	6,040.00	259.99	100.81	90.00	-4,952.76	2,378.13	9,119.86	8,922.62	197.24	46.237	
18,000.00	6,040.00	11,806.35	6,040.00	262.63	100.83	90.00	-4,951.37	2,378.09	9,219.85	9,022.57	197.28	46.736	
18,100.00	6,040.00	11,807.75	6,040.00	265.27	100.85	90.00	-4,949.98	2,378.06	9,319.84	9,122.53	197.31	47.234	
18,200.00	6,040.00	11,809.14	6,040.00	267.91	100.88	90.00	-4,948.59	2,378.03	9,419.83	9,222.48	197.35	47.732	
18,300.00	6,040.00	11,789.47	6,040.00	270.56	100.56	90.00	-4,947.20	2,377.99	9,519.82	9,322.79	197.02	48.318	
18,400.00	6,040.00	11,788.08	6,040.00	273.21	100.54	90.00	-4,945.80	2,377.96	9,619.81	9,422.80	197.01	48.829	
18,500.00	6,040.00	11,786.69	6,040.00	275.86	100.51	90.00	-4,944.41	2,377.93	9,719.80	9,522.80	197.00	49.339	
18,600.00	6,040.00	11,785.29	6,040.00	278.51	100.49	90.00	-4,943.02	2,377.90	9,819.79	9,622.80	196.99	49.849	
18,700.00	6,040.00	11,783.90	6,040.00	281.16	100.47	90.00	-4,941.63	2,377.86	9,919.78	9,722.80	196.98	50.360	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES 21-24-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-90.68	-82.81	-6,960.03	6,960.52				
100.00	100.00	88.02	88.02	0.13	0.24	-90.68	-82.84	-6,960.09	6,960.59	6,960.22	0.37	N/A	
200.00	199.98	172.64	172.64	0.48	0.54	120.08	-82.97	-6,960.33	6,961.75	6,960.72	1.02	6,798.033	
300.00	299.84	257.16	257.16	0.85	0.84	120.06	-83.20	-6,960.75	6,964.88	6,963.19	1.69	4,127.181	
400.00	399.45	341.46	341.46	1.22	1.15	120.02	-83.53	-6,961.35	6,969.98	6,967.61	2.37	2,945.177	
500.00	498.70	425.45	425.44	1.62	1.45	119.96	-83.96	-6,962.14	6,977.05	6,973.98	3.06	2,278.234	
600.00	597.47	513.17	513.16	2.05	1.76	119.90	-84.51	-6,963.15	6,986.08	6,982.29	3.79	1,841.567	
700.00	695.62	613.43	613.40	2.51	2.12	119.84	-85.13	-6,964.34	6,996.92	6,992.33	4.60	1,522.614	
800.00	793.06	701.58	701.55	3.01	2.44	119.76	-85.64	-6,965.40	7,009.55	7,004.17	5.38	1,302.108	
900.00	889.64	783.47	783.42	3.56	2.73	119.65	-86.15	-6,966.56	7,024.15	7,017.97	6.18	1,136.412	
1,000.00	985.27	3,225.53	3,156.51	4.14	13.41	126.31	126.20	-6,594.49	7,015.26	6,999.71	15.55	451.274	
1,100.00	1,079.82	3,255.68	3,184.72	4.78	13.61	126.62	131.44	-6,585.25	7,003.32	6,987.04	16.27	430.333	
1,200.00	1,173.17	3,520.34	3,432.03	5.46	15.35	127.81	176.88	-6,502.74	6,993.88	6,975.82	18.06	387.300	
1,300.00	1,265.21	3,573.00	3,480.97	6.20	15.71	128.17	186.08	-6,485.62	6,985.11	6,966.13	18.98	368.088	
1,400.00	1,355.84	3,573.00	3,480.97	6.99	15.71	128.25	186.08	-6,485.62	6,979.62	6,959.91	19.71	354.159	
1,500.00	1,444.94	3,623.18	3,527.84	7.84	16.04	128.51	194.54	-6,469.82	6,977.08	6,956.38	20.70	337.097	
1,521.18	1,463.60	3,628.19	3,532.55	8.04	16.07	128.54	195.35	-6,468.30	6,977.00	6,956.11	20.89	333.954	
1,600.00	1,532.39	3,667.00	3,569.09	8.75	16.33	128.70	201.48	-6,456.75	6,978.14	6,956.44	21.70	321.535	
1,700.00	1,618.11	3,667.00	3,569.09	9.71	16.33	128.63	201.48	-6,456.75	6,982.33	6,959.77	22.56	309.510	
1,800.00	1,701.97	3,667.00	3,569.09	10.74	16.33	128.51	201.48	-6,456.75	6,990.12	6,966.67	23.46	298.016	
1,900.00	1,783.88	3,667.00	3,569.09	11.82	16.33	128.33	201.48	-6,456.75	7,001.49	6,977.10	24.39	287.068	
2,000.00	1,863.74	3,711.70	3,611.53	12.96	16.60	128.33	208.11	-6,444.39	7,015.63	6,990.09	25.55	274.619	
2,100.00	1,941.45	3,762.00	3,659.79	14.16	16.90	128.32	214.97	-6,432.00	7,034.04	7,007.28	26.76	262.825	
2,200.00	2,016.92	3,762.00	3,659.79	15.41	16.90	127.98	214.97	-6,432.00	7,054.95	7,027.15	27.80	253.751	
2,300.00	2,090.05	3,762.00	3,659.79	16.73	16.90	127.59	214.97	-6,432.00	7,079.30	7,050.42	28.87	245.195	
2,400.00	2,160.76	3,762.00	3,659.79	18.10	16.90	127.13	214.97	-6,432.00	7,107.02	7,077.05	29.97	237.144	
2,500.00	2,228.95	3,762.00	3,659.79	19.53	16.90	126.60	214.97	-6,432.00	7,138.03	7,106.94	31.09	229.583	
2,600.00	2,294.55	3,797.76	3,694.37	21.01	17.10	126.25	219.44	-6,424.06	7,171.91	7,139.54	32.38	221.504	
2,700.00	2,357.48	3,813.33	3,709.48	22.55	17.18	125.70	221.26	-6,420.77	7,208.91	7,175.31	33.61	214.517	
2,800.00	2,418.42	3,856.00	3,751.05	24.13	17.41	125.80	225.89	-6,412.34	7,248.55	7,213.60	34.95	207.392	
2,900.00	2,479.25	3,856.00	3,751.05	25.71	17.41	125.80	225.89	-6,412.34	7,288.91	7,252.80	36.12	201.817	
3,000.00	2,540.09	3,856.00	3,751.05	27.31	17.41	125.80	225.89	-6,412.34	7,330.42	7,293.15	37.27	196.680	
3,100.00	2,600.93	3,856.00	3,751.05	28.90	17.41	125.80	225.89	-6,412.34	7,373.05	7,334.63	38.41	191.943	
3,200.00	2,661.77	3,856.00	3,751.05	30.51	17.41	125.80	225.89	-6,412.34	7,416.78	7,377.24	39.54	187.570	
3,300.00	2,722.61	3,901.77	3,795.88	32.11	17.62	126.09	230.29	-6,404.23	7,461.00	7,420.17	40.83	182.724	
3,400.00	2,783.44	3,916.17	3,810.03	33.72	17.69	126.18	231.56	-6,401.90	7,506.46	7,464.47	41.99	178.771	
3,500.00	2,844.28	3,951.00	3,844.35	35.34	17.86	126.40	234.41	-6,396.65	7,552.97	7,509.76	43.21	174.786	
3,600.00	2,905.12	3,951.00	3,844.35	36.95	17.86	126.40	234.41	-6,396.65	7,600.18	7,555.89	44.29	171.618	
3,700.00	2,965.96	3,951.00	3,844.35	38.57	17.86	126.40	234.41	-6,396.65	7,648.40	7,603.06	45.34	168.682	
3,800.00	3,026.79	3,951.00	3,844.35	40.19	17.86	126.40	234.41	-6,396.65	7,697.62	7,651.24	46.38	165.958	
3,900.00	3,087.63	3,951.00	3,844.35	41.81	17.86	126.40	234.41	-6,396.65	7,747.82	7,700.41	47.41	163.431	
4,000.00	3,148.47	3,994.22	3,887.09	43.43	18.03	126.66	237.49	-6,391.08	7,798.37	7,749.79	48.58	160.534	
4,100.00	3,209.31	4,006.26	3,899.03	45.05	18.08	126.74	238.26	-6,389.73	7,850.09	7,800.48	49.62	158.213	
4,200.00	3,270.14	4,046.00	3,938.52	46.68	18.24	126.97	240.51	-6,385.89	7,902.89	7,852.14	50.75	155.726	
4,300.00	3,330.98	4,046.00	3,938.52	48.31	18.24	126.97	240.51	-6,385.89	7,956.10	7,904.39	51.71	153.855	
4,400.00	3,391.82	8,739.96	6,205.70	49.93	49.97	123.66	-2,428.27	-6,236.41	8,007.69	7,916.64	91.05	87.948	
4,500.00	3,452.66	8,789.00	6,206.19	51.56	50.75	123.41	-2,477.26	-6,234.36	8,022.10	7,928.78	93.32	85.967	
4,600.00	3,513.49	8,908.70	6,207.32	53.19	52.66	122.81	-2,596.83	-6,229.02	8,037.09	7,940.19	96.91	82.937	
4,700.00	3,574.33	8,996.61	6,206.86	54.82	54.08	122.36	-2,684.65	-6,224.97	8,052.15	7,952.22	99.93	80.578	
4,800.00	3,635.17	9,095.87	6,205.54	56.45	55.70	121.85	-2,783.78	-6,220.25	8,067.51	7,964.32	103.19	78.182	
4,900.00	3,696.01	9,145.46	6,204.71	58.08	56.51	121.59	-2,833.31	-6,217.96	8,083.52	7,978.01	105.51	76.614	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES 21-24-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	3,756.84	9,189.26	6,203.88	59.71	57.22	121.37	-2,877.07	-6,216.08	8,100.33	7,992.61	107.72	75.200	
5,100.00	3,817.68	9,228.14	6,203.44	61.34	57.86	121.17	-2,915.91	-6,214.47	8,118.00	8,008.17	109.83	73.917	
5,200.00	3,878.52	9,268.27	6,203.36	62.97	58.52	120.97	-2,956.01	-6,212.85	8,136.52	8,024.57	111.95	72.679	
5,300.00	3,939.36	9,323.91	6,203.24	64.61	59.43	120.69	-3,011.61	-6,210.76	8,155.82	8,041.43	114.38	71.302	
5,400.00	4,000.19	9,361.00	6,202.91	66.24	60.04	120.50	-3,048.67	-6,209.49	8,175.85	8,059.40	116.44	70.213	
5,500.00	4,061.03	9,402.43	6,202.59	67.87	60.72	120.29	-3,090.08	-6,208.22	8,196.71	8,078.13	118.58	69.121	
5,600.00	4,121.87	9,433.94	6,202.53	69.51	61.24	120.13	-3,121.58	-6,207.38	8,218.49	8,097.98	120.51	68.195	
5,700.00	4,182.71	9,456.00	6,202.58	71.14	61.61	120.02	-3,143.63	-6,206.85	8,241.17	8,118.93	122.24	67.418	
5,800.00	4,243.54	9,456.00	6,202.58	72.77	61.61	120.02	-3,143.63	-6,206.85	8,264.94	8,141.45	123.49	66.928	
5,900.00	4,304.38	9,504.42	6,202.81	74.41	62.40	119.77	-3,192.04	-6,206.08	8,289.38	8,163.64	125.74	65.925	
6,000.00	4,365.22	9,551.00	6,203.07	76.04	63.16	119.54	-3,238.63	-6,205.95	8,315.05	8,187.11	127.94	64.990	
6,100.00	4,426.06	10,167.31	6,208.91	77.68	73.53	116.53	-3,853.94	-6,179.70	8,337.85	8,195.62	142.23	58.624	
6,200.00	4,486.90	10,217.00	6,209.25	79.31	74.39	116.29	-3,903.51	-6,176.21	8,360.05	8,215.46	144.59	57.819	
6,300.00	4,547.73	10,237.15	6,209.43	80.95	74.73	116.20	-3,923.62	-6,174.87	8,383.02	8,236.71	146.32	57.294	
6,400.00	4,608.57	10,280.28	6,209.99	82.58	75.47	115.99	-3,966.65	-6,172.09	8,406.81	8,258.29	148.52	56.603	
6,500.00	4,669.41	10,328.21	6,210.85	84.22	76.29	115.77	-4,014.48	-6,169.12	8,431.35	8,280.53	150.82	55.903	
6,600.00	4,730.25	10,390.01	6,211.92	85.86	77.36	115.47	-4,076.16	-6,165.40	8,456.51	8,303.10	153.41	55.122	
6,700.00	4,791.08	10,547.91	6,213.39	87.49	80.08	114.73	-4,233.73	-6,155.41	8,481.88	8,323.78	158.10	53.648	
6,800.00	4,851.92	10,699.74	6,212.36	89.13	82.70	114.00	-4,385.19	-6,144.76	8,507.12	8,344.45	162.67	52.297	
6,900.00	4,912.76	10,695.00	6,212.35	90.76	82.62	114.02	-4,380.46	-6,145.12	8,532.79	8,368.97	163.82	52.087	
7,000.00	4,973.60	10,729.82	6,212.41	92.40	83.22	113.86	-4,415.20	-6,142.68	8,559.26	8,393.44	165.82	51.619	
7,100.00	5,034.43	10,746.88	6,212.45	94.04	83.52	113.78	-4,432.23	-6,141.65	8,586.74	8,419.34	167.40	51.294	
7,200.00	5,095.27	10,791.00	6,212.61	95.67	84.28	113.57	-4,476.29	-6,139.47	8,615.34	8,445.76	169.58	50.804	
7,300.00	5,156.11	10,791.00	6,212.61	97.31	84.28	113.57	-4,476.29	-6,139.47	8,644.53	8,473.78	170.75	50.628	
7,400.00	5,216.95	10,834.31	6,212.62	98.95	85.02	113.37	-4,519.56	-6,137.65	8,674.71	8,501.83	172.87	50.180	
7,500.00	5,277.78	11,015.00	6,212.05	100.59	88.15	112.52	-4,700.00	-6,128.33	8,704.42	8,526.29	178.13	48.866	
7,600.00	5,338.62	11,015.00	6,212.05	102.22	88.15	112.52	-4,700.00	-6,128.33	8,734.96	8,555.69	179.27	48.726	
7,700.00	5,399.46	11,015.00	6,212.05	103.86	88.15	112.52	-4,700.00	-6,128.33	8,766.52	8,586.15	180.37	48.602	
7,800.00	5,460.30	11,015.00	6,212.05	105.50	88.15	112.52	-4,700.00	-6,128.33	8,799.11	8,617.66	181.45	48.492	
7,900.00	5,521.24	11,015.00	6,212.05	107.13	88.15	110.89	-4,700.00	-6,128.33	8,832.33	8,649.83	182.51	48.395	
8,000.00	5,584.83	11,015.00	6,212.05	108.61	88.15	102.77	-4,700.00	-6,128.33	8,854.97	8,671.49	183.48	48.262	
8,100.00	5,650.69	11,015.00	6,212.05	109.85	88.15	94.04	-4,700.00	-6,128.33	8,861.50	8,677.19	184.31	48.080	
8,200.00	5,716.83	11,015.00	6,212.05	110.82	88.15	85.29	-4,700.00	-6,128.33	8,851.76	8,666.81	184.95	47.859	
8,300.00	5,781.24	11,015.00	6,212.05	111.52	88.15	77.19	-4,700.00	-6,128.33	8,826.00	8,640.61	185.39	47.607	
8,400.00	5,841.96	11,015.00	6,212.05	111.98	88.15	70.23	-4,700.00	-6,128.33	8,784.87	8,599.23	185.63	47.324	
8,500.00	5,897.14	11,015.00	6,212.05	112.25	88.15	64.68	-4,700.00	-6,128.33	8,729.39	8,543.69	185.70	47.008	
8,600.00	5,945.12	11,015.00	6,212.05	112.37	88.15	60.66	-4,700.00	-6,128.33	8,661.01	8,475.37	185.65	46.653	
8,700.00	5,984.42	11,015.00	6,212.05	112.39	88.15	58.29	-4,700.00	-6,128.33	8,581.52	8,396.00	185.52	46.257	
8,800.00	6,013.86	11,015.00	6,212.05	112.35	88.15	58.04	-4,700.00	-6,128.33	8,493.07	8,307.70	185.37	45.817	
8,900.00	6,032.54	11,015.00	6,212.05	112.30	88.15	62.12	-4,700.00	-6,128.33	8,398.09	8,212.85	185.24	45.336	
9,000.00	6,039.89	11,015.00	6,212.05	112.24	88.15	93.81	-4,700.00	-6,128.33	8,299.31	8,114.14	185.17	44.820	
9,100.00	6,040.00	11,015.00	6,212.05	112.19	88.15	110.38	-4,700.00	-6,128.33	8,199.49	8,014.35	185.14	44.288	
9,200.00	6,040.00	11,015.00	6,212.05	112.16	88.15	110.38	-4,700.00	-6,128.33	8,099.68	7,914.56	185.11	43.755	
9,300.00	6,040.00	11,015.00	6,212.05	112.15	88.15	110.38	-4,700.00	-6,128.33	7,999.86	7,814.78	185.09	43.222	
9,400.00	6,040.00	11,015.00	6,212.05	112.15	88.15	110.38	-4,700.00	-6,128.33	7,900.06	7,715.00	185.06	42.690	
9,500.00	6,040.00	11,015.00	6,212.05	112.16	88.15	110.38	-4,700.00	-6,128.33	7,800.26	7,615.23	185.03	42.157	
9,600.00	6,040.00	11,015.00	6,212.05	112.19	88.15	110.38	-4,700.00	-6,128.33	7,700.46	7,515.46	185.00	41.624	
9,700.00	6,040.00	11,015.00	6,212.05	112.24	88.15	110.38	-4,700.00	-6,128.33	7,600.67	7,415.69	184.97	41.090	
9,800.00	6,040.00	11,015.00	6,212.05	112.31	88.15	110.38	-4,700.00	-6,128.33	7,500.88	7,315.94	184.95	40.557	
9,900.00	6,040.00	11,015.00	6,212.05	112.39	88.15	110.38	-4,700.00	-6,128.33	7,401.10	7,216.18	184.92	40.024	
10,000.00	6,040.00	11,015.00	6,212.05	112.49	88.15	110.38	-4,700.00	-6,128.33	7,301.33	7,116.44	184.89	39.490	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES 21-24-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	11,015.00	6,212.05	112.62	88.15	110.38	-4,700.00	-6,128.33	7,201.56	7,016.70	184.86	38.957	
10,200.00	6,040.00	11,015.00	6,212.05	112.77	88.15	110.38	-4,700.00	-6,128.33	7,101.80	6,916.97	184.83	38.423	
10,300.00	6,040.00	11,015.00	6,212.05	112.94	88.15	110.38	-4,700.00	-6,128.33	7,002.05	6,817.24	184.80	37.889	
10,400.00	6,040.00	11,015.00	6,212.05	113.14	88.15	110.38	-4,700.00	-6,128.33	6,902.30	6,717.53	184.77	37.356	
10,500.00	6,040.00	11,015.00	6,212.05	113.36	88.15	110.38	-4,700.00	-6,128.33	6,802.56	6,617.82	184.74	36.822	
10,600.00	6,040.00	11,015.00	6,212.05	113.62	88.15	110.38	-4,700.00	-6,128.33	6,702.83	6,518.11	184.71	36.288	
10,700.00	6,040.00	11,015.00	6,212.05	113.91	88.15	110.38	-4,700.00	-6,128.33	6,603.10	6,418.42	184.68	35.754	
10,800.00	6,040.00	11,015.00	6,212.05	114.24	88.15	110.38	-4,700.00	-6,128.33	6,503.39	6,318.74	184.65	35.220	
10,900.00	6,040.00	11,015.00	6,212.05	114.61	88.15	110.38	-4,700.00	-6,128.33	6,403.68	6,219.06	184.62	34.685	
11,000.00	6,040.00	11,015.00	6,212.05	115.02	88.15	110.38	-4,700.00	-6,128.33	6,303.98	6,119.39	184.59	34.151	
11,100.00	6,040.00	11,015.00	6,212.05	115.49	88.15	110.38	-4,700.00	-6,128.33	6,204.30	6,019.74	184.56	33.616	
11,200.00	6,040.00	11,015.00	6,212.05	116.00	88.15	110.38	-4,700.00	-6,128.33	6,104.62	5,920.09	184.53	33.082	
11,300.00	6,040.00	11,015.00	6,212.05	116.58	88.15	110.38	-4,700.00	-6,128.33	6,004.95	5,820.45	184.50	32.547	
11,400.00	6,040.00	11,015.00	6,212.05	117.22	88.15	110.38	-4,700.00	-6,128.33	5,905.30	5,720.83	184.47	32.012	
11,500.00	6,040.00	11,015.00	6,212.05	117.92	88.15	110.38	-4,700.00	-6,128.33	5,805.66	5,621.22	184.44	31.478	
11,600.00	6,040.00	11,015.00	6,212.05	118.70	88.15	110.38	-4,700.00	-6,128.33	5,706.02	5,521.62	184.41	30.943	
11,700.00	6,040.00	11,015.00	6,212.05	119.56	88.15	110.38	-4,700.00	-6,128.33	5,606.41	5,422.03	184.38	30.407	
11,800.00	6,040.00	11,015.00	6,212.05	120.51	88.15	110.38	-4,700.00	-6,128.33	5,506.80	5,322.46	184.34	29.872	
11,900.00	6,040.00	11,015.00	6,212.05	121.54	88.15	110.38	-4,700.00	-6,128.33	5,407.21	5,222.90	184.31	29.337	
12,000.00	6,040.00	11,015.00	6,212.05	122.66	88.15	110.38	-4,700.00	-6,128.33	5,307.64	5,123.36	184.28	28.802	
12,100.00	6,040.00	11,015.00	6,212.05	123.87	88.15	110.38	-4,700.00	-6,128.33	5,208.08	5,023.83	184.25	28.266	
12,200.00	6,040.00	11,015.00	6,212.05	125.17	88.15	110.38	-4,700.00	-6,128.33	5,108.54	4,924.32	184.22	27.730	
12,300.00	6,040.00	11,015.00	6,212.05	126.57	88.15	110.38	-4,700.00	-6,128.33	5,009.02	4,824.83	184.19	27.195	
12,400.00	6,040.00	11,015.00	6,212.05	128.06	88.15	110.38	-4,700.00	-6,128.33	4,909.52	4,725.36	184.16	26.659	
12,500.00	6,040.00	11,015.00	6,212.05	129.63	88.15	110.38	-4,700.00	-6,128.33	4,810.04	4,625.90	184.13	26.123	
12,600.00	6,040.00	11,015.00	6,212.05	131.29	88.15	110.38	-4,700.00	-6,128.33	4,710.58	4,526.47	184.10	25.586	
12,700.00	6,040.00	11,015.00	6,212.05	133.03	88.15	110.38	-4,700.00	-6,128.33	4,611.14	4,427.06	184.08	25.050	
12,800.00	6,040.00	11,015.00	6,212.05	134.84	88.15	110.38	-4,700.00	-6,128.33	4,511.73	4,327.68	184.05	24.514	
12,900.00	6,040.00	11,015.00	6,212.05	136.71	88.15	110.38	-4,700.00	-6,128.33	4,412.34	4,228.32	184.02	23.977	
13,000.00	6,040.00	11,015.00	6,212.05	138.66	88.15	110.38	-4,700.00	-6,128.33	4,312.99	4,128.99	184.00	23.440	
13,100.00	6,040.00	11,015.00	6,212.05	140.66	88.15	110.38	-4,700.00	-6,128.33	4,213.66	4,029.68	183.98	22.903	
13,200.00	6,040.00	11,015.00	6,212.05	142.71	88.15	110.38	-4,700.00	-6,128.33	4,114.37	3,930.41	183.96	22.366	
13,300.00	6,040.00	11,015.00	6,212.05	144.81	88.15	110.38	-4,700.00	-6,128.33	4,015.11	3,831.17	183.94	21.828	
13,400.00	6,040.00	11,015.00	6,212.05	146.96	88.15	110.38	-4,700.00	-6,128.33	3,915.89	3,731.96	183.93	21.291	
13,500.00	6,040.00	11,015.00	6,212.05	149.14	88.15	110.38	-4,700.00	-6,128.33	3,816.71	3,632.80	183.91	20.753	
13,600.00	6,040.00	11,015.00	6,212.05	151.36	88.15	110.38	-4,700.00	-6,128.33	3,717.57	3,533.67	183.91	20.215	
13,700.00	6,040.00	11,015.00	6,212.05	153.62	88.15	110.38	-4,700.00	-6,128.33	3,618.49	3,434.58	183.90	19.676	
13,800.00	6,040.00	11,015.00	6,212.05	155.91	88.15	110.38	-4,700.00	-6,128.33	3,519.45	3,335.54	183.90	19.137	
13,900.00	6,040.00	11,015.00	6,212.05	158.22	88.15	110.38	-4,700.00	-6,128.33	3,420.47	3,236.56	183.91	18.598	
14,000.00	6,040.00	11,015.00	6,212.05	160.56	88.15	110.38	-4,700.00	-6,128.33	3,321.55	3,137.62	183.93	18.059	
14,100.00	6,040.00	11,015.00	6,212.05	162.92	88.15	110.38	-4,700.00	-6,128.33	3,222.70	3,038.74	183.95	17.519	
14,200.00	6,040.00	11,015.00	6,212.05	165.30	88.15	110.38	-4,700.00	-6,128.33	3,123.92	2,939.93	183.99	16.979	
14,300.00	6,040.00	11,015.00	6,212.05	167.70	88.15	110.38	-4,700.00	-6,128.33	3,025.22	2,841.18	184.03	16.439	
14,400.00	6,040.00	11,015.00	6,212.05	170.12	88.15	110.38	-4,700.00	-6,128.33	2,926.60	2,742.51	184.09	15.897	
14,500.00	6,040.00	11,015.00	6,212.05	172.55	88.15	110.38	-4,700.00	-6,128.33	2,828.09	2,643.92	184.17	15.356	
14,600.00	6,040.00	11,015.00	6,212.05	175.00	88.15	110.38	-4,700.00	-6,128.33	2,729.68	2,545.42	184.27	14.814	
14,700.00	6,040.00	11,015.00	6,212.05	177.46	88.15	110.38	-4,700.00	-6,128.33	2,631.40	2,447.01	184.39	14.271	
14,800.00	6,040.00	11,015.00	6,212.05	179.94	88.15	110.38	-4,700.00	-6,128.33	2,533.25	2,348.71	184.53	13.728	
14,900.00	6,040.00	11,015.00	6,212.05	182.43	88.15	110.38	-4,700.00	-6,128.33	2,435.25	2,250.53	184.72	13.184	
15,000.00	6,040.00	11,015.00	6,212.05	184.92	88.15	110.38	-4,700.00	-6,128.33	2,337.41	2,152.48	184.94	12.639	
15,100.00	6,040.00	11,015.00	6,212.05	187.43	88.15	110.38	-4,700.00	-6,128.33	2,239.77	2,054.57	185.21	12.093	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference				Offset			Semi Major Axis		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,200.00	6,040.00	11,015.00	6,212.05	189.95	88.15	110.38	-4,700.00	-6,128.33	2,142.35	1,956.82	185.53	11.547	
15,300.00	6,040.00	11,015.00	6,212.05	192.48	88.15	110.38	-4,700.00	-6,128.33	2,045.18	1,859.25	185.93	11.000	
15,400.00	6,040.00	11,015.00	6,212.05	195.01	88.15	110.38	-4,700.00	-6,128.33	1,948.29	1,761.88	186.41	10.452	
15,500.00	6,040.00	11,015.00	6,212.05	197.55	88.15	110.38	-4,700.00	-6,128.33	1,851.73	1,664.74	186.99	9.903	
15,600.00	6,040.00	11,015.00	6,212.05	200.10	88.15	110.38	-4,700.00	-6,128.33	1,755.56	1,567.86	187.70	9.353	
15,700.00	6,040.00	11,015.00	6,212.05	202.65	88.15	110.38	-4,700.00	-6,128.33	1,659.84	1,471.28	188.57	8.802	
15,800.00	6,040.00	11,015.00	6,212.05	205.22	88.15	110.38	-4,700.00	-6,128.33	1,564.66	1,375.04	189.62	8.251	
15,900.00	6,040.00	11,015.00	6,212.05	207.78	88.15	110.38	-4,700.00	-6,128.33	1,470.12	1,279.20	190.91	7.700	
16,000.00	6,040.00	11,015.00	6,212.05	210.36	88.15	110.38	-4,700.00	-6,128.33	1,376.34	1,183.85	192.50	7.150	
16,100.00	6,040.00	11,015.00	6,212.05	212.93	88.15	110.38	-4,700.00	-6,128.33	1,283.51	1,089.07	194.44	6.601	
16,200.00	6,040.00	11,015.00	6,212.05	215.52	88.15	110.38	-4,700.00	-6,128.33	1,191.84	995.00	196.84	6.055	
16,300.00	6,040.00	11,015.00	6,212.05	218.11	88.15	110.38	-4,700.00	-6,128.33	1,101.62	901.83	199.79	5.514	
16,400.00	6,040.00	11,015.00	6,212.05	220.70	88.15	110.38	-4,700.00	-6,128.33	1,013.24	809.82	203.42	4.981	
16,500.00	6,040.00	11,015.00	6,212.05	223.29	88.15	110.38	-4,700.00	-6,128.33	927.22	719.36	207.86	4.461	
16,600.00	6,040.00	11,015.00	6,212.05	225.89	88.15	110.38	-4,700.00	-6,128.33	844.29	631.06	213.23	3.960	
16,700.00	6,040.00	11,015.00	6,212.05	228.50	88.15	110.38	-4,700.00	-6,128.33	765.44	545.84	219.60	3.486	
16,800.00	6,040.00	11,015.00	6,212.05	231.11	88.15	110.38	-4,700.00	-6,128.33	692.09	465.18	226.90	3.050	
16,900.00	6,040.00	11,015.00	6,212.05	233.72	88.15	110.38	-4,700.00	-6,128.33	626.15	391.38	234.77	2.667	
17,000.00	6,040.00	11,015.00	6,212.05	236.33	88.15	110.38	-4,700.00	-6,128.33	570.22	327.78	242.43	2.352	
17,100.00	6,040.00	11,015.00	6,212.05	238.95	88.15	110.38	-4,700.00	-6,128.33	527.47	278.48	248.99	2.118	
17,200.00	6,040.00	11,015.00	6,212.05	241.57	88.15	110.38	-4,700.00	-6,128.33	501.31	246.21	255.10	1.965	
17,284.59	6,040.00	11,015.00	6,212.05	243.79	88.15	110.38	-4,700.00	-6,128.33	494.12	231.86	262.26	1.884	CC
17,300.00	6,040.00	11,015.00	6,212.05	244.19	88.15	110.38	-4,700.00	-6,128.33	494.36	230.61	263.75	1.874	ES
17,400.00	6,040.00	11,015.00	6,212.05	246.82	88.15	110.38	-4,700.00	-6,128.33	507.42	235.21	272.21	1.864	SF
17,500.00	6,040.00	11,015.00	6,212.05	249.45	88.15	110.38	-4,700.00	-6,128.33	539.03	263.47	275.56	1.956	
17,600.00	6,040.00	11,015.00	6,212.05	252.08	88.15	110.38	-4,700.00	-6,128.33	586.21	312.57	273.64	2.142	
17,700.00	6,040.00	11,015.00	6,212.05	254.71	88.15	110.38	-4,700.00	-6,128.33	645.54	377.13	268.41	2.405	
17,800.00	6,040.00	11,015.00	6,212.05	257.35	88.15	110.38	-4,700.00	-6,128.33	714.01	452.26	261.74	2.728	
17,900.00	6,040.00	11,015.00	6,212.05	259.99	88.15	110.38	-4,700.00	-6,128.33	789.23	534.39	254.84	3.097	
18,000.00	6,040.00	11,015.00	6,212.05	262.63	88.15	110.38	-4,700.00	-6,128.33	869.46	621.15	248.31	3.501	
18,100.00	6,040.00	11,015.00	6,212.05	265.27	88.15	110.38	-4,700.00	-6,128.33	953.44	711.03	242.41	3.933	
18,200.00	6,040.00	11,015.00	6,212.05	267.91	88.15	110.38	-4,700.00	-6,128.33	1,040.26	803.07	237.19	4.386	
18,300.00	6,040.00	11,015.00	6,212.05	270.56	88.15	110.38	-4,700.00	-6,128.33	1,129.25	896.63	232.62	4.854	
18,400.00	6,040.00	11,015.00	6,212.05	273.21	88.15	110.38	-4,700.00	-6,128.33	1,219.96	991.32	228.64	5.336	
18,500.00	6,040.00	11,015.00	6,212.05	275.86	88.15	110.38	-4,700.00	-6,128.33	1,312.01	1,086.84	225.18	5.827	
18,600.00	6,040.00	11,015.00	6,212.05	278.51	88.15	110.38	-4,700.00	-6,128.33	1,405.15	1,183.00	222.15	6.325	
18,700.00	6,040.00	11,015.00	6,212.05	281.16	88.15	110.38	-4,700.00	-6,128.33	1,499.18	1,279.67	219.51	6.830	
18,800.00	6,040.00	11,015.00	6,212.05	283.81	88.15	110.38	-4,700.00	-6,128.33	1,593.93	1,376.75	217.18	7.339	
18,900.00	6,040.00	11,015.00	6,212.05	286.47	88.15	110.38	-4,700.00	-6,128.33	1,689.29	1,474.16	215.13	7.852	
18,919.70	6,040.00	11,015.00	6,212.05	286.99	88.15	110.38	-4,700.00	-6,128.33	1,708.14	1,493.38	214.76	7.954	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F21-J24-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference				Offset				Semi Major Axis				Distance	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.00	-1.00	0.00	0.00	-90.50	-60.95	-6,960.03	6,960.29				
100.00	100.00	98.32	98.32	0.13	0.27	-90.50	-60.85	-6,960.03	6,960.30	6,959.89	0.41	N/A	
200.00	199.98	197.41	197.41	0.48	0.63	120.27	-60.45	-6,960.05	6,961.19	6,960.08	1.11	6,260.469	
300.00	299.84	296.34	296.34	0.85	0.98	120.27	-59.73	-6,960.08	6,963.86	6,962.04	1.83	3,813.230	
400.00	399.45	394.96	394.95	1.22	1.34	120.26	-58.70	-6,960.13	6,968.31	6,965.75	2.56	2,726.423	
500.00	498.70	502.42	502.40	1.62	1.72	120.26	-57.25	-6,960.17	6,974.52	6,971.19	3.33	2,091.383	
600.00	597.47	625.98	625.95	2.05	2.16	120.28	-55.60	-6,959.88	6,982.23	6,978.04	4.19	1,665.258	
700.00	695.62	688.87	688.84	2.51	2.38	120.20	-54.93	-6,959.70	6,991.74	6,986.88	4.85	1,440.144	
800.00	793.06	739.77	739.74	3.01	2.56	120.08	-54.80	-6,959.92	7,003.67	6,998.17	5.50	1,272.947	
900.00	889.64	790.29	790.25	3.56	2.73	119.92	-55.04	-6,960.46	7,018.05	7,011.87	6.18	1,135.726	
1,000.00	985.27	846.22	846.16	4.14	2.93	119.73	-55.73	-6,961.44	7,034.83	7,027.93	6.91	1,018.231	
1,100.00	1,079.82	941.02	940.94	4.78	3.25	119.61	-57.08	-6,963.31	7,053.65	7,045.84	7.81	903.648	
1,200.00	1,173.17	1,057.72	1,057.61	5.46	3.65	119.54	-58.56	-6,965.56	7,074.24	7,065.43	8.82	802.228	
1,300.00	1,265.21	1,291.09	1,290.96	6.20	4.45	119.81	-59.88	-6,966.82	7,095.24	7,084.96	10.28	690.203	
1,400.00	1,355.84	1,490.23	1,490.09	6.99	5.13	120.02	-61.37	-6,964.74	7,116.85	7,105.18	11.66	610.172	
1,500.00	1,444.94	2,842.49	2,812.15	7.84	10.61	125.38	125.28	-6,816.23	7,132.48	7,115.04	17.44	408.941	
1,600.00	1,532.39	2,873.52	2,841.82	8.75	10.77	125.35	132.00	-6,810.13	7,142.94	7,124.57	18.37	388.777	
1,700.00	1,618.11	2,911.00	2,877.71	9.71	10.96	125.32	140.15	-6,803.04	7,156.46	7,137.08	19.37	369.428	
1,800.00	1,701.97	2,938.16	2,903.77	10.74	11.10	125.19	145.98	-6,798.07	7,172.97	7,152.61	20.36	352.223	
1,900.00	1,783.88	2,973.66	2,937.92	11.82	11.28	125.06	153.33	-6,791.75	7,192.46	7,171.03	21.43	335.607	
2,000.00	1,863.74	3,006.00	2,969.11	12.96	11.44	124.86	159.75	-6,786.16	7,214.88	7,192.36	22.52	320.375	
2,100.00	1,941.45	3,032.99	2,995.23	14.16	11.57	124.58	164.88	-6,781.67	7,240.24	7,216.63	23.62	306.574	
2,200.00	2,016.92	3,057.59	3,019.10	15.41	11.69	124.23	169.34	-6,777.75	7,268.57	7,243.83	24.74	293.852	
2,300.00	2,090.05	3,100.00	3,060.41	16.73	11.90	123.94	176.50	-6,771.38	7,299.85	7,273.89	25.96	281.202	
2,400.00	2,160.76	3,123.86	3,083.71	18.10	12.01	123.48	180.30	-6,767.92	7,333.84	7,306.71	27.13	270.319	
2,500.00	2,228.95	3,208.17	3,166.17	19.53	12.41	123.35	192.81	-6,755.55	7,370.21	7,341.64	28.57	257.949	
2,600.00	2,294.55	3,245.02	3,202.27	21.01	12.58	122.88	197.94	-6,750.22	7,409.08	7,379.24	29.84	248.269	
2,700.00	2,357.48	3,290.00	3,246.38	22.55	12.79	122.40	204.03	-6,743.90	7,450.53	7,419.37	31.17	239.052	
2,800.00	2,418.42	3,290.00	3,246.38	24.13	12.79	122.19	204.03	-6,743.90	7,494.10	7,461.78	32.32	231.874	
2,900.00	2,479.25	3,331.44	3,287.07	25.71	12.97	122.47	209.57	-6,738.32	7,538.54	7,504.91	33.63	224.163	
3,000.00	2,540.09	3,355.31	3,310.52	27.31	13.08	122.62	212.77	-6,735.24	7,583.91	7,549.05	34.86	217.560	
3,100.00	2,600.93	3,384.00	3,338.73	28.90	13.21	122.81	216.64	-6,731.67	7,630.14	7,594.05	36.10	211.383	
3,200.00	2,661.77	3,384.00	3,338.73	30.51	13.21	122.81	216.64	-6,731.67	7,677.28	7,640.07	37.21	206.348	
3,300.00	2,722.61	3,384.00	3,338.73	32.11	13.21	122.81	216.64	-6,731.67	7,725.42	7,687.12	38.30	201.704	
3,400.00	2,783.44	3,422.48	3,376.60	33.72	13.38	123.07	221.78	-6,727.29	7,774.16	7,734.63	39.54	196.631	
3,500.00	2,844.28	3,436.17	3,390.10	35.34	13.44	123.16	223.58	-6,725.88	7,823.94	7,783.28	40.66	192.426	
3,600.00	2,905.12	3,479.00	3,432.40	36.95	13.63	123.43	229.11	-6,721.96	7,874.80	7,832.92	41.89	188.001	
3,700.00	2,965.96	3,479.00	3,432.40	38.57	13.63	123.43	229.11	-6,721.96	7,926.13	7,883.21	42.93	184.650	
3,800.00	3,026.79	3,479.00	3,432.40	40.19	13.63	123.43	229.11	-6,721.96	7,978.38	7,934.43	43.95	181.543	
3,900.00	3,087.63	3,479.00	3,432.40	41.81	13.63	123.43	229.11	-6,721.96	8,031.54	7,986.58	44.95	178.660	
4,000.00	3,148.47	3,520.51	3,473.47	43.43	13.81	123.70	234.14	-6,718.76	8,085.32	8,039.21	46.11	175.337	
4,100.00	3,209.31	3,543.33	3,496.10	45.05	13.90	123.84	236.69	-6,717.18	8,139.88	8,092.69	47.18	172.517	
4,200.00	3,270.14	3,573.00	3,525.55	46.68	14.02	124.03	239.78	-6,715.34	8,195.14	8,146.87	48.27	169.786	
4,300.00	3,330.98	3,573.00	3,525.55	48.31	14.02	124.03	239.78	-6,715.34	8,251.12	8,201.90	49.21	167.657	
4,400.00	3,391.82	3,573.00	3,525.55	49.93	14.02	124.03	239.78	-6,715.34	8,307.92	8,257.77	50.14	165.678	
4,500.00	3,452.66	8,884.00	6,212.58	51.56	53.11	122.22	-2,626.43	-6,557.82	8,335.64	8,239.54	96.09	86.745	
4,600.00	3,513.49	8,907.21	6,212.26	53.19	53.49	122.11	-2,649.61	-6,556.70	8,350.55	8,252.60	97.94	85.260	
4,700.00	3,574.33	8,939.02	6,212.11	54.82	54.01	121.95	-2,681.38	-6,555.18	8,366.37	8,266.43	99.94	83.712	
4,800.00	3,635.17	8,979.00	6,212.42	56.45	54.67	121.76	-2,721.32	-6,553.33	8,383.10	8,281.01	102.09	82.117	
4,900.00	3,696.01	9,150.90	6,214.35	58.08	57.51	120.93	-2,892.96	-6,544.18	8,400.02	8,293.30	106.72	78.713	
5,000.00	3,756.84	9,171.00	6,214.23	59.71	57.84	120.83	-2,913.03	-6,543.09	8,417.25	8,308.74	108.50	77.575	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F21-J24-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	9,214.66	6,214.22	61.34	58.57	120.62	-2,956.63	-6,540.85	8,435.28	8,324.54	110.73	76.176	
5,200.00	3,878.52	9,266.00	6,215.13	62.97	59.42	120.38	-3,007.91	-6,538.52	8,454.45	8,341.34	113.11	74.748	
5,300.00	3,939.36	9,300.00	6,215.79	64.61	20.71	120.07	-3,072.18	-6,535.55	8,474.06	8,411.26	62.79	134.950	
5,400.00	4,000.19	9,406.41	6,215.82	66.24	61.76	119.70	-3,148.16	-6,532.03	8,494.01	8,375.41	118.60	71.622	
5,500.00	4,061.03	9,607.68	6,216.29	67.87	65.15	118.74	-3,349.15	-6,521.74	8,514.42	8,390.48	123.94	68.697	
5,600.00	4,121.87	9,653.55	6,217.02	69.51	65.92	118.52	-3,394.92	-6,518.87	8,534.65	8,408.41	126.23	67.609	
5,700.00	4,182.71	9,713.62	6,218.02	71.14	66.94	118.24	-3,454.88	-6,515.24	8,555.54	8,426.74	128.81	66.421	
5,800.00	4,243.54	9,766.62	6,218.74	72.77	67.85	118.00	-3,507.78	-6,512.15	8,577.07	8,445.84	131.24	65.355	
5,900.00	4,304.38	9,812.56	6,218.88	74.41	68.63	117.78	-3,553.66	-6,509.72	8,599.32	8,465.80	133.52	64.404	
6,000.00	4,365.22	9,932.27	6,218.87	76.04	70.66	117.21	-3,673.20	-6,503.47	8,622.16	8,484.85	137.31	62.793	
6,100.00	4,426.06	10,062.88	6,220.25	77.68	72.90	116.60	-3,803.55	-6,495.36	8,644.96	8,503.62	141.34	61.165	
6,200.00	4,486.90	10,124.00	6,221.39	79.31	73.95	116.32	-3,864.51	-6,491.08	8,667.83	8,523.88	143.94	60.217	
6,300.00	4,547.73	10,156.30	6,221.94	80.95	74.51	116.18	-3,896.74	-6,488.92	8,691.48	8,545.54	145.95	59.553	
6,400.00	4,608.57	10,174.81	6,222.06	82.58	74.83	116.09	-3,915.21	-6,487.88	8,716.11	8,568.46	147.65	59.033	
6,500.00	4,669.41	10,218.00	6,221.83	84.22	75.57	115.89	-3,958.36	-6,485.98	8,741.80	8,591.94	149.86	58.335	
6,600.00	4,730.25	10,218.00	6,221.83	85.86	75.57	115.89	-3,958.36	-6,485.98	8,768.15	8,617.02	151.13	58.016	
6,700.00	4,791.08	10,258.27	6,221.42	87.49	76.26	115.70	-3,998.60	-6,484.54	8,795.46	8,642.21	153.25	57.391	
6,800.00	4,851.92	10,344.35	6,221.47	89.13	77.73	115.30	-4,084.62	-6,481.28	8,823.32	8,666.96	156.35	56.432	
6,900.00	4,912.76	10,462.81	6,222.35	90.76	79.76	114.75	-4,202.96	-6,476.10	8,851.29	8,691.14	160.15	55.267	
7,000.00	4,973.60	10,530.29	6,223.07	92.40	80.93	114.44	-4,270.36	-6,472.93	8,879.58	8,716.72	162.85	54.525	
7,100.00	5,034.43	7,100.00	6,222.81	94.04	23.20	113.98	-4,370.16	-6,468.53	8,908.48	8,802.67	105.81	84.194	
7,200.00	5,095.27	7,200.00	6,222.37	95.67	24.38	113.66	-4,439.73	-6,465.25	8,937.55	8,828.54	109.01	81.987	
7,300.00	5,156.11	10,736.78	6,222.20	97.31	84.49	113.49	-4,476.63	-6,463.42	8,967.09	8,796.06	171.03	52.431	
7,400.00	5,216.95	10,757.39	6,222.07	98.95	84.85	113.40	-4,497.23	-6,462.58	8,997.56	8,824.88	172.67	52.107	
7,500.00	5,277.78	10,791.00	6,221.81	100.59	85.43	113.25	-4,530.81	-6,461.46	9,028.90	8,854.31	174.59	51.714	
7,600.00	5,338.62	10,791.00	6,221.81	102.22	85.43	113.25	-4,530.81	-6,461.46	9,061.04	8,885.30	175.74	51.559	
7,700.00	5,399.46	10,840.04	6,221.78	103.86	86.27	113.02	-4,579.83	-6,460.13	9,093.91	8,915.93	177.98	51.096	
7,800.00	5,460.30	7,800.00	6,222.63	105.50	34.40	112.78	-4,634.60	-6,458.81	9,127.49	9,000.35	127.14	71.789	
7,900.00	5,521.24	10,965.00	6,223.88	107.13	88.42	110.84	-4,704.74	-6,456.93	9,160.96	8,977.93	183.03	50.052	
8,000.00	5,584.83	10,965.00	6,223.88	108.61	88.42	102.73	-4,704.74	-6,456.93	9,183.69	8,999.63	184.06	49.895	
8,100.00	5,650.69	10,965.00	6,223.88	109.85	88.42	93.99	-4,704.74	-6,456.93	9,190.28	9,005.33	184.95	49.691	
8,200.00	5,716.83	10,965.00	6,223.88	110.82	88.42	85.24	-4,704.74	-6,456.93	9,180.56	8,994.91	185.66	49.449	
8,300.00	5,781.24	10,965.00	6,223.88	111.52	88.42	77.14	-4,704.74	-6,456.93	9,154.78	8,968.63	186.16	49.178	
8,400.00	5,841.96	10,965.00	6,223.88	111.98	88.42	70.17	-4,704.74	-6,456.93	9,113.59	8,927.13	186.45	48.878	
8,500.00	5,897.14	10,965.00	6,223.88	112.25	88.42	64.62	-4,704.74	-6,456.93	9,058.03	8,871.45	186.58	48.548	
8,600.00	5,945.12	10,965.00	6,223.88	112.37	88.42	60.59	-4,704.74	-6,456.93	8,989.55	8,802.98	186.58	48.182	
8,700.00	5,984.42	10,965.00	6,223.88	112.39	88.42	58.21	-4,704.74	-6,456.93	8,909.97	8,723.47	186.49	47.777	
8,800.00	6,013.86	10,965.00	6,223.88	112.35	88.42	57.94	-4,704.74	-6,456.93	8,821.42	8,635.04	186.38	47.331	
8,900.00	6,032.54	10,965.00	6,223.88	112.30	88.42	62.00	-4,704.74	-6,456.93	8,726.38	8,540.10	186.27	46.847	
9,000.00	6,039.89	10,965.00	6,223.88	112.24	88.42	94.49	-4,704.74	-6,456.93	8,627.56	8,441.35	186.21	46.331	
9,100.00	6,040.00	10,965.00	6,223.88	112.19	88.42	111.82	-4,704.74	-6,456.93	8,527.73	8,341.54	186.19	45.801	
9,200.00	6,040.00	10,965.00	6,223.88	112.16	88.42	111.82	-4,704.74	-6,456.93	8,427.91	8,241.74	186.17	45.270	
9,300.00	6,040.00	10,965.00	6,223.88	112.15	88.42	111.82	-4,704.74	-6,456.93	8,328.08	8,141.94	186.15	44.739	
9,400.00	6,040.00	10,965.00	6,223.88	112.15	88.42	111.82	-4,704.74	-6,456.93	8,228.26	8,042.14	186.13	44.208	
9,500.00	6,040.00	10,965.00	6,223.88	112.16	88.42	111.82	-4,704.74	-6,456.93	8,128.45	7,942.35	186.10	43.677	
9,600.00	6,040.00	10,965.00	6,223.88	112.19	88.42	111.82	-4,704.74	-6,456.93	8,028.64	7,842.56	186.08	43.146	
9,700.00	6,040.00	10,965.00	6,223.88	112.24	88.42	111.82	-4,704.74	-6,456.93	7,928.83	7,742.77	186.06	42.615	
9,800.00	6,040.00	10,965.00	6,223.88	112.31	88.42	111.82	-4,704.74	-6,456.93	7,829.03	7,643.00	186.04	42.083	
9,900.00	6,040.00	10,965.00	6,223.88	112.39	88.42	111.82	-4,704.74	-6,456.93	7,729.24	7,543.22	186.01	41.552	
10,000.00	6,040.00	10,965.00	6,223.88	112.49	88.42	111.82	-4,704.74	-6,456.93	7,629.45	7,443.45	185.99	41.020	
10,100.00	6,040.00	10,965.00	6,223.88	112.62	88.42	111.82	-4,704.74	-6,456.93	7,529.66	7,343.69	185.97	40.489	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F21-J24-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,200.00	6,040.00	10,965.00	6,223.88	112.77	88.42	111.82	-4,704.74	-6,456.93	7,429.88	7,243.94	185.95	39.957	
10,300.00	6,040.00	10,965.00	6,223.88	112.94	88.42	111.82	-4,704.74	-6,456.93	7,330.11	7,144.19	185.93	39.425	
10,400.00	6,040.00	10,965.00	6,223.88	113.14	88.42	111.82	-4,704.74	-6,456.93	7,230.34	7,044.44	185.90	38.893	
10,500.00	6,040.00	10,965.00	6,223.88	113.36	88.42	111.82	-4,704.74	-6,456.93	7,130.58	6,944.70	185.88	38.361	
10,600.00	6,040.00	10,965.00	6,223.88	113.62	88.42	111.82	-4,704.74	-6,456.93	7,030.83	6,844.97	185.86	37.829	
10,700.00	6,040.00	10,965.00	6,223.88	113.91	88.42	111.82	-4,704.74	-6,456.93	6,931.09	6,745.25	185.84	37.297	
10,800.00	6,040.00	10,965.00	6,223.88	114.24	88.42	111.82	-4,704.74	-6,456.93	6,831.35	6,645.53	185.81	36.764	
10,900.00	6,040.00	10,965.00	6,223.88	114.61	88.42	111.82	-4,704.74	-6,456.93	6,731.62	6,545.82	185.79	36.232	
11,000.00	6,040.00	10,965.00	6,223.88	115.02	88.42	111.82	-4,704.74	-6,456.93	6,631.89	6,446.12	185.77	35.699	
11,100.00	6,040.00	10,965.00	6,223.88	115.49	88.42	111.82	-4,704.74	-6,456.93	6,532.18	6,346.43	185.75	35.167	
11,200.00	6,040.00	10,965.00	6,223.88	116.00	88.42	111.82	-4,704.74	-6,456.93	6,432.47	6,246.75	185.73	34.634	
11,300.00	6,040.00	10,965.00	6,223.88	116.58	88.42	111.82	-4,704.74	-6,456.93	6,332.78	6,147.07	185.70	34.101	
11,400.00	6,040.00	10,965.00	6,223.88	117.22	88.42	111.82	-4,704.74	-6,456.93	6,233.09	6,047.41	185.68	33.568	
11,500.00	6,040.00	10,965.00	6,223.88	117.92	88.42	111.82	-4,704.74	-6,456.93	6,133.42	5,947.75	185.66	33.035	
11,600.00	6,040.00	10,965.00	6,223.88	118.70	88.42	111.82	-4,704.74	-6,456.93	6,033.75	5,848.11	185.64	32.502	
11,700.00	6,040.00	10,965.00	6,223.88	119.56	88.42	111.82	-4,704.74	-6,456.93	5,934.10	5,748.48	185.62	31.969	
11,800.00	6,040.00	10,965.00	6,223.88	120.51	88.42	111.82	-4,704.74	-6,456.93	5,834.45	5,648.86	185.60	31.436	
11,900.00	6,040.00	10,965.00	6,223.88	121.54	88.42	111.82	-4,704.74	-6,456.93	5,734.82	5,549.25	185.58	30.902	
12,000.00	6,040.00	10,965.00	6,223.88	122.66	88.42	111.82	-4,704.74	-6,456.93	5,635.21	5,449.65	185.56	30.369	
12,100.00	6,040.00	10,965.00	6,223.88	123.87	88.42	111.82	-4,704.74	-6,456.93	5,535.61	5,350.07	185.54	29.835	
12,200.00	6,040.00	10,965.00	6,223.88	125.17	88.42	111.82	-4,704.74	-6,456.93	5,436.02	5,250.50	185.52	29.301	
12,300.00	6,040.00	10,965.00	6,223.88	126.57	88.42	111.82	-4,704.74	-6,456.93	5,336.44	5,150.94	185.50	28.767	
12,400.00	6,040.00	10,965.00	6,223.88	128.06	88.42	111.82	-4,704.74	-6,456.93	5,236.89	5,051.40	185.49	28.233	
12,500.00	6,040.00	10,965.00	6,223.88	129.63	88.42	111.82	-4,704.74	-6,456.93	5,137.35	4,951.88	185.47	27.699	
12,600.00	6,040.00	10,965.00	6,223.88	131.29	88.42	111.82	-4,704.74	-6,456.93	5,037.83	4,852.37	185.45	27.165	
12,700.00	6,040.00	10,965.00	6,223.88	133.03	88.42	111.82	-4,704.74	-6,456.93	4,938.33	4,752.89	185.44	26.630	
12,800.00	6,040.00	10,965.00	6,223.88	134.84	88.42	111.82	-4,704.74	-6,456.93	4,838.85	4,653.42	185.43	26.096	
12,900.00	6,040.00	10,965.00	6,223.88	136.71	88.42	111.82	-4,704.74	-6,456.93	4,739.39	4,553.97	185.41	25.561	
13,000.00	6,040.00	10,965.00	6,223.88	138.66	88.42	111.82	-4,704.74	-6,456.93	4,639.95	4,454.55	185.40	25.026	
13,100.00	6,040.00	10,965.00	6,223.88	140.66	88.42	111.82	-4,704.74	-6,456.93	4,540.54	4,355.14	185.40	24.491	
13,200.00	6,040.00	10,965.00	6,223.88	142.71	88.42	111.82	-4,704.74	-6,456.93	4,441.15	4,255.76	185.39	23.956	
13,300.00	6,040.00	10,965.00	6,223.88	144.81	88.42	111.82	-4,704.74	-6,456.93	4,341.80	4,156.41	185.39	23.420	
13,400.00	6,040.00	10,965.00	6,223.88	146.96	88.42	111.82	-4,704.74	-6,456.93	4,242.47	4,057.09	185.39	22.885	
13,500.00	6,040.00	10,965.00	6,223.88	149.14	88.42	111.82	-4,704.74	-6,456.93	4,143.18	3,957.79	185.39	22.349	
13,600.00	6,040.00	10,965.00	6,223.88	151.36	88.42	111.82	-4,704.74	-6,456.93	4,043.92	3,858.52	185.39	21.813	
13,700.00	6,040.00	10,965.00	6,223.88	153.62	88.42	111.82	-4,704.74	-6,456.93	3,944.70	3,759.29	185.40	21.276	
13,800.00	6,040.00	10,965.00	6,223.88	155.91	88.42	111.82	-4,704.74	-6,456.93	3,845.51	3,660.10	185.42	20.740	
13,900.00	6,040.00	10,965.00	6,223.88	158.22	88.42	111.82	-4,704.74	-6,456.93	3,746.38	3,560.94	185.44	20.203	
14,000.00	6,040.00	10,965.00	6,223.88	160.56	88.42	111.82	-4,704.74	-6,456.93	3,647.29	3,461.82	185.46	19.666	
14,100.00	6,040.00	10,965.00	6,223.88	162.92	88.42	111.82	-4,704.74	-6,456.93	3,548.25	3,362.75	185.50	19.128	
14,200.00	6,040.00	10,965.00	6,223.88	165.30	88.42	111.82	-4,704.74	-6,456.93	3,449.26	3,263.72	185.54	18.590	
14,300.00	6,040.00	10,965.00	6,223.88	167.70	88.42	111.82	-4,704.74	-6,456.93	3,350.34	3,164.75	185.59	18.052	
14,400.00	6,040.00	10,965.00	6,223.88	170.12	88.42	111.82	-4,704.74	-6,456.93	3,251.48	3,065.83	185.65	17.514	
14,500.00	6,040.00	10,965.00	6,223.88	172.55	88.42	111.82	-4,704.74	-6,456.93	3,152.69	2,966.96	185.73	16.975	
14,600.00	6,040.00	10,965.00	6,223.88	175.00	88.42	111.82	-4,704.74	-6,456.93	3,053.99	2,868.17	185.82	16.435	
14,700.00	6,040.00	10,965.00	6,223.88	177.46	88.42	111.82	-4,704.74	-6,456.93	2,955.37	2,769.44	185.93	15.895	
14,800.00	6,040.00	10,965.00	6,223.88	179.94	88.42	111.82	-4,704.74	-6,456.93	2,856.84	2,670.79	186.05	15.355	
14,900.00	6,040.00	10,965.00	6,223.88	182.43	88.42	111.82	-4,704.74	-6,456.93	2,758.42	2,572.22	186.21	14.814	
15,000.00	6,040.00	10,965.00	6,223.88	184.92	88.42	111.82	-4,704.74	-6,456.93	2,660.12	2,473.74	186.38	14.272	
15,100.00	6,040.00	10,965.00	6,223.88	187.43	88.42	111.82	-4,704.74	-6,456.93	2,561.95	2,375.36	186.60	13.730	
15,200.00	6,040.00	10,965.00	6,223.88	189.95	88.42	111.82	-4,704.74	-6,456.93	2,463.93	2,277.09	186.85	13.187	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRXL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRXL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F21-J24-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,300.00	6,040.00	10,965.00	6,223.88	192.48	88.42	111.82	-4,704.74	-6,456.93	2,366.08	2,178.94	187.14	12.643	
15,400.00	6,040.00	10,965.00	6,223.88	195.01	88.42	111.82	-4,704.74	-6,456.93	2,268.41	2,080.92	187.49	12.099	
15,500.00	6,040.00	10,965.00	6,223.88	197.55	88.42	111.82	-4,704.74	-6,456.93	2,170.95	1,983.05	187.90	11.553	
15,600.00	6,040.00	10,965.00	6,223.88	200.10	88.42	111.82	-4,704.74	-6,456.93	2,073.74	1,885.34	188.40	11.007	
15,700.00	6,040.00	10,965.00	6,223.88	202.65	88.42	111.82	-4,704.74	-6,456.93	1,976.80	1,787.82	188.98	10.460	
15,800.00	6,040.00	10,965.00	6,223.88	205.22	88.42	111.82	-4,704.74	-6,456.93	1,880.19	1,690.51	189.68	9.913	
15,900.00	6,040.00	10,965.00	6,223.88	207.78	88.42	111.82	-4,704.74	-6,456.93	1,783.94	1,593.43	190.51	9.364	
16,000.00	6,040.00	10,965.00	6,223.88	210.36	88.42	111.82	-4,704.74	-6,456.93	1,688.14	1,496.63	191.51	8.815	
16,100.00	6,040.00	10,965.00	6,223.88	212.93	88.42	111.82	-4,704.74	-6,456.93	1,592.85	1,400.14	192.71	8.265	
16,200.00	6,040.00	10,965.00	6,223.88	215.52	88.42	111.82	-4,704.74	-6,456.93	1,498.17	1,304.01	194.16	7.716	
16,300.00	6,040.00	10,965.00	6,223.88	218.11	88.42	111.82	-4,704.74	-6,456.93	1,404.24	1,208.32	195.92	7.167	
16,400.00	6,040.00	10,965.00	6,223.88	220.70	88.42	111.82	-4,704.74	-6,456.93	1,311.20	1,113.15	198.05	6.621	
16,500.00	6,040.00	10,965.00	6,223.88	223.29	88.42	111.82	-4,704.74	-6,456.93	1,219.26	1,018.62	200.65	6.077	
16,600.00	6,040.00	10,965.00	6,223.88	225.89	88.42	111.82	-4,704.74	-6,456.93	1,128.69	924.89	203.81	5.538	
16,700.00	6,040.00	10,965.00	6,223.88	228.50	88.42	111.82	-4,704.74	-6,456.93	1,039.86	832.20	207.66	5.008	
16,800.00	6,040.00	10,965.00	6,223.88	231.11	88.42	111.82	-4,704.74	-6,456.93	953.24	740.91	212.33	4.489	
16,900.00	6,040.00	10,965.00	6,223.88	233.72	88.42	111.82	-4,704.74	-6,456.93	869.49	651.54	217.95	3.989	
17,000.00	6,040.00	10,965.00	6,223.88	236.33	88.42	111.82	-4,704.74	-6,456.93	789.54	564.94	224.60	3.515	
17,100.00	6,040.00	10,965.00	6,223.88	238.95	88.42	111.82	-4,704.74	-6,456.93	714.66	482.42	232.24	3.077	
17,200.00	6,040.00	10,965.00	6,223.88	241.57	88.42	111.82	-4,704.74	-6,456.93	646.60	406.06	240.54	2.688	
17,300.00	6,040.00	10,965.00	6,223.88	244.19	88.42	111.82	-4,704.74	-6,456.93	587.75	339.02	248.72	2.363	
17,400.00	6,040.00	10,965.00	6,223.88	246.82	88.42	111.82	-4,704.74	-6,456.93	541.11	285.54	255.57	2.117	
17,500.00	6,040.00	10,965.00	6,223.88	249.45	88.42	111.82	-4,704.74	-6,456.93	510.06	249.63	260.43	1.959	
17,600.00	6,040.00	10,965.00	6,223.88	252.08	88.42	111.82	-4,704.74	-6,456.93	497.51	231.64	265.87	1.871	
17,613.22	6,040.00	10,965.00	6,223.88	252.43	88.42	111.82	-4,704.74	-6,456.93	497.33	230.50	266.83	1.864 CC, ES	
17,700.00	6,040.00	10,965.00	6,223.88	254.71	88.42	111.82	-4,704.74	-6,456.93	504.85	231.40	273.45	1.846 SF	
17,800.00	6,040.00	10,965.00	6,223.88	257.35	88.42	111.82	-4,704.74	-6,456.93	531.25	253.38	277.87	1.912	
17,900.00	6,040.00	10,965.00	6,223.88	259.99	88.42	111.82	-4,704.74	-6,456.93	574.09	297.09	277.00	2.073	
18,000.00	6,040.00	10,965.00	6,223.88	262.63	88.42	111.82	-4,704.74	-6,456.93	630.03	357.75	272.28	2.314	
18,100.00	6,040.00	10,965.00	6,223.88	265.27	88.42	111.82	-4,704.74	-6,456.93	695.91	430.24	265.67	2.619	
18,200.00	6,040.00	10,965.00	6,223.88	267.91	88.42	111.82	-4,704.74	-6,456.93	769.19	510.62	258.57	2.975	
18,300.00	6,040.00	10,965.00	6,223.88	270.56	88.42	111.82	-4,704.74	-6,456.93	847.94	596.22	251.72	3.369	
18,400.00	6,040.00	10,965.00	6,223.88	273.21	88.42	111.82	-4,704.74	-6,456.93	930.79	685.32	245.47	3.792	
18,500.00	6,040.00	10,965.00	6,223.88	275.86	88.42	111.82	-4,704.74	-6,456.93	1,016.72	776.81	239.91	4.238	
18,600.00	6,040.00	10,965.00	6,223.88	278.51	88.42	111.82	-4,704.74	-6,456.93	1,105.02	869.98	235.04	4.701	
18,700.00	6,040.00	10,965.00	6,223.88	281.16	88.42	111.82	-4,704.74	-6,456.93	1,195.17	964.37	230.80	5.178	
18,800.00	6,040.00	10,965.00	6,223.88	283.81	88.42	111.82	-4,704.74	-6,456.93	1,286.77	1,059.67	227.10	5.666	
18,900.00	6,040.00	10,965.00	6,223.88	286.47	88.42	111.82	-4,704.74	-6,456.93	1,379.54	1,155.66	223.89	6.162	
18,919.70	6,040.00	10,965.00	6,223.88	286.99	88.42	111.82	-4,704.74	-6,456.93	1,397.94	1,174.64	223.30	6.260	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HC - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	1.00	-1.00	0.00	0.00	-90.17	-20.87	-6,960.01	6,960.05				
100.00	100.00	99.74	99.74	0.13	0.28	-90.17	-20.92	-6,960.01	6,960.04	6,959.63	0.41	N/A	
100.60	100.60	100.35	100.35	0.14	0.28	120.60	-20.92	-6,960.01	6,960.04	6,959.62	0.42	N/A	
200.00	199.98	200.69	200.69	0.48	0.64	120.60	-21.09	-6,959.99	6,960.91	6,959.79	1.12	6,192.103	
300.00	299.84	301.52	301.52	0.85	1.00	120.59	-21.41	-6,959.96	6,963.55	6,961.70	1.85	3,773.150	
400.00	399.45	402.15	402.14	1.22	1.36	120.57	-21.87	-6,959.91	6,967.95	6,965.37	2.58	2,698.100	
500.00	498.70	502.44	502.44	1.62	1.72	120.54	-22.46	-6,959.85	6,974.12	6,970.78	3.34	2,090.280	
600.00	597.47	602.30	602.29	2.05	2.08	120.51	-23.19	-6,959.78	6,982.06	6,977.95	4.11	1,698.514	
700.00	695.62	677.91	677.90	2.51	2.35	120.44	-23.94	-6,959.92	6,992.04	6,987.21	4.82	1,449.492	
800.00	793.06	760.45	760.44	3.01	2.65	120.35	-24.92	-6,960.21	7,003.99	6,998.40	5.59	1,252.803	
900.00	889.64	835.00	834.98	3.56	2.92	120.24	-25.95	-6,960.63	7,017.96	7,011.60	6.36	1,103.326	
1,000.00	985.27	913.59	913.55	4.14	3.19	120.11	-26.69	-6,961.30	7,034.02	7,026.85	7.17	981.151	
1,100.00	1,079.82	985.44	985.40	4.78	3.43	119.96	-26.68	-6,962.13	7,052.20	7,044.21	7.99	882.536	
1,200.00	1,173.17	1,055.86	1,055.81	5.46	3.68	119.79	-26.02	-6,963.17	7,072.51	7,063.67	8.85	799.559	
1,300.00	1,265.21	1,124.69	1,124.62	6.20	3.91	119.59	-24.76	-6,964.38	7,094.97	7,085.23	9.73	728.906	
1,400.00	1,355.84	1,191.79	1,191.68	6.99	4.14	119.37	-22.94	-6,965.75	7,119.56	7,108.91	10.66	668.153	
1,500.00	1,444.94	1,277.68	1,277.49	7.84	4.44	119.19	-19.96	-6,967.68	7,146.22	7,134.54	11.68	611.894	
1,600.00	1,532.39	1,369.40	1,369.14	8.75	4.75	119.02	-16.59	-6,969.64	7,174.69	7,161.93	12.76	562.139	
1,700.00	1,618.11	1,428.85	1,428.54	9.71	4.95	118.70	-14.53	-6,970.93	7,205.10	7,191.33	13.78	522.972	
1,800.00	1,701.97	1,470.26	1,469.91	10.74	5.09	118.27	-13.19	-6,972.07	7,237.84	7,223.07	14.77	490.129	
1,900.00	1,783.88	1,512.41	1,512.01	11.82	5.24	117.80	-11.91	-6,973.46	7,272.89	7,257.10	15.80	460.375	
2,000.00	1,863.74	2,000.00	1,656.17	12.96	6.95	117.79	-4.98	-6,978.09	7,310.03	7,291.59	18.44	396.397	
2,100.00	1,941.45	1,820.73	1,819.43	14.16	6.32	117.92	7.92	-6,981.19	7,348.34	7,329.55	18.79	391.116	
2,200.00	2,016.92	1,858.63	1,857.11	15.41	6.46	117.38	12.05	-6,981.56	7,387.91	7,368.00	19.92	370.964	
2,300.00	2,090.05	1,894.88	1,893.14	16.73	6.59	116.77	16.03	-6,982.07	7,429.74	7,408.68	21.07	352.665	
2,400.00	2,160.76	1,929.45	1,927.49	18.10	6.72	116.10	19.85	-6,982.68	7,473.78	7,451.54	22.24	336.023	
2,500.00	2,228.95	1,968.00	1,965.79	19.53	6.86	115.41	24.15	-6,983.51	7,519.99	7,496.53	23.46	320.575	
2,600.00	2,294.55	2,019.46	2,016.91	21.01	7.05	114.75	29.86	-6,984.72	7,568.20	7,543.45	24.75	305.779	
2,700.00	2,357.48	2,079.60	2,076.68	22.55	7.27	114.10	36.40	-6,986.11	7,618.25	7,592.15	26.10	291.894	
2,800.00	2,418.42	2,137.77	2,134.51	24.13	7.48	114.22	42.61	-6,987.42	7,669.76	7,642.30	27.45	279.386	
2,900.00	2,479.25	2,190.90	2,187.34	25.71	7.68	114.59	48.16	-6,988.61	7,721.88	7,693.10	28.78	268.312	
3,000.00	2,540.09	2,241.63	2,237.78	27.31	7.87	114.93	53.39	-6,989.76	7,774.59	7,744.50	30.09	258.391	
3,100.00	2,600.93	2,292.53	2,288.40	28.90	8.06	115.28	58.56	-6,990.94	7,827.88	7,796.49	31.39	249.394	
3,200.00	2,661.77	2,343.61	2,339.21	30.51	8.25	115.62	63.67	-6,992.15	7,881.74	7,849.06	32.68	241.207	
3,300.00	2,722.61	2,346.00	2,341.59	32.11	8.26	115.64	63.91	-6,992.21	7,936.31	7,902.55	33.76	235.080	
3,400.00	2,783.44	2,398.90	2,394.22	33.72	8.46	115.99	69.05	-6,993.67	7,991.41	7,956.38	35.03	228.119	
3,500.00	2,844.28	2,425.98	2,421.16	35.34	8.56	116.17	71.60	-6,994.56	8,047.29	8,011.10	36.19	222.376	
3,600.00	2,905.12	2,453.06	2,448.11	36.95	8.66	116.35	74.09	-6,995.56	8,103.83	8,066.50	37.33	217.085	
3,700.00	2,965.96	2,480.13	2,475.05	38.57	8.76	116.53	76.53	-6,996.65	8,161.04	8,122.58	38.46	212.200	
3,800.00	3,026.79	2,535.00	2,529.65	40.19	8.97	116.89	81.29	-6,999.17	8,218.98	8,179.29	39.69	207.082	
3,900.00	3,087.63	2,535.00	2,529.65	41.81	8.97	116.89	81.29	-6,999.17	8,277.37	8,236.69	40.68	203.478	
4,000.00	3,148.47	2,567.91	2,562.41	43.43	9.09	117.10	84.10	-7,000.83	8,336.45	8,294.65	41.79	199.473	
4,100.00	3,209.31	2,601.47	2,595.78	45.05	9.22	117.32	87.04	-7,002.59	8,396.09	8,353.20	42.89	195.739	
4,200.00	3,270.14	2,634.74	2,628.87	46.68	9.35	117.53	90.01	-7,004.39	8,456.29	8,412.31	43.98	192.268	
4,300.00	3,330.98	2,667.74	2,661.68	48.31	9.47	117.75	93.01	-7,006.24	8,517.03	8,471.98	45.05	189.039	
4,400.00	3,391.82	2,723.00	2,716.61	49.93	9.68	118.10	98.19	-7,009.48	8,578.36	8,532.15	46.21	185.644	
4,500.00	3,452.66	2,774.99	2,768.28	51.56	9.88	118.43	103.00	-7,012.52	8,640.08	8,592.75	47.34	182.523	
4,600.00	3,513.49	3,031.39	3,023.61	53.19	10.84	120.01	122.62	-7,025.23	8,701.67	8,652.34	49.33	176.397	
4,700.00	3,574.33	3,133.91	3,125.88	54.82	11.22	120.62	128.44	-7,029.09	8,762.49	8,711.83	50.66	172.981	
4,800.00	3,635.17	3,171.36	3,163.26	56.45	11.36	120.84	130.45	-7,030.53	8,823.75	8,772.06	51.69	170.694	
4,900.00	3,696.01	3,208.72	3,200.53	58.08	11.50	121.06	132.45	-7,032.06	8,885.49	8,832.77	52.72	168.545	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HC - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	3,756.84	3,245.97	3,237.69	59.71	11.64	121.27	134.43	-7,033.66	8,947.69	8,893.96	53.73	166.525	
5,100.00	3,817.68	3,290.00	3,281.62	61.34	11.80	121.53	136.76	-7,035.66	9,010.34	8,955.58	54.76	164.534	
5,200.00	3,878.52	3,290.00	3,281.62	62.97	11.80	121.53	136.76	-7,035.66	9,073.50	9,017.92	55.59	163.224	
5,300.00	3,939.36	3,290.00	3,281.62	64.61	11.80	121.53	136.76	-7,035.66	9,137.33	9,080.92	56.40	162.004	
5,400.00	4,000.19	3,290.00	3,281.62	66.24	11.80	121.53	136.76	-7,035.66	9,201.79	9,144.59	57.20	160.870	
5,500.00	4,061.03	3,290.00	3,281.62	67.87	11.80	121.53	136.76	-7,035.66	9,266.89	9,208.90	57.98	159.817	
5,600.00	4,121.87	3,366.08	3,357.46	69.51	12.08	121.96	140.73	-7,040.05	9,331.52	9,272.42	59.10	157.884	
5,700.00	4,182.71	3,381.57	3,372.89	71.14	12.14	122.05	141.52	-7,041.14	9,397.36	9,337.42	59.94	156.789	
5,800.00	4,243.54	3,396.96	3,388.22	72.77	12.20	122.14	142.31	-7,042.30	9,463.71	9,402.95	60.76	155.764	
5,900.00	4,304.38	3,412.25	3,403.44	74.41	12.26	122.22	143.09	-7,043.52	9,530.56	9,468.99	61.57	154.805	
6,000.00	4,365.22	3,479.00	3,469.83	76.04	12.51	122.59	146.46	-7,049.62	9,598.39	9,535.78	62.61	153.310	
6,100.00	4,426.06	3,479.00	3,469.83	77.68	12.51	122.59	146.46	-7,049.62	9,665.96	9,602.64	63.32	152.646	
6,200.00	4,486.90	6,755.00	6,462.37	79.31	23.93	133.78	-316.06	-7,047.54	9,725.47	9,646.53	78.94	123.206	
6,300.00	4,547.73	6,755.00	6,462.37	80.95	23.93	133.78	-316.06	-7,047.54	9,772.36	9,692.53	79.84	122.404	
6,400.00	4,608.57	6,755.00	6,462.37	82.58	23.93	133.78	-316.06	-7,047.54	9,820.06	9,739.33	80.72	121.650	
6,500.00	4,669.41	6,755.00	6,462.37	84.22	23.93	133.78	-316.06	-7,047.54	9,868.54	9,786.94	81.60	120.943	
6,600.00	4,730.25	6,755.00	6,462.37	85.86	23.93	133.78	-316.06	-7,047.54	9,917.78	9,835.33	82.46	120.279	
6,700.00	4,791.08	6,755.00	6,462.37	87.49	23.93	133.78	-316.06	-7,047.54	9,967.79	9,884.49	83.30	119.658	
9,500.00	6,040.00	6,755.00	6,462.37	112.16	23.93	94.98	-316.06	-7,047.54	9,938.20	9,843.87	94.33	105.360	
9,600.00	6,040.00	6,755.00	6,462.37	112.19	23.93	94.98	-316.06	-7,047.54	9,851.17	9,756.77	94.40	104.354	
9,700.00	6,040.00	6,755.00	6,462.37	112.24	23.93	94.98	-316.06	-7,047.54	9,764.40	9,669.89	94.51	103.316	
9,800.00	6,040.00	6,755.00	6,462.37	112.31	23.93	94.98	-316.06	-7,047.54	9,677.88	9,583.22	94.65	102.247	
9,900.00	6,040.00	6,755.00	6,462.37	112.39	23.93	94.98	-316.06	-7,047.54	9,591.62	9,496.79	94.83	101.146	
10,000.00	6,040.00	6,755.00	6,462.37	112.49	23.93	94.98	-316.06	-7,047.54	9,505.63	9,410.59	95.04	100.013	
10,100.00	6,040.00	6,755.00	6,462.37	112.62	23.93	94.98	-316.06	-7,047.54	9,419.92	9,324.62	95.30	98.849	
10,200.00	6,040.00	6,755.00	6,462.37	112.77	23.93	94.98	-316.06	-7,047.54	9,334.49	9,238.90	95.59	97.652	
10,300.00	6,040.00	6,755.00	6,462.37	112.94	23.93	94.98	-316.06	-7,047.54	9,249.35	9,153.43	95.92	96.424	
10,400.00	6,040.00	6,755.00	6,462.37	113.14	23.93	94.98	-316.06	-7,047.54	9,164.52	9,068.22	96.30	95.165	
10,500.00	6,040.00	6,755.00	6,462.37	113.36	23.93	94.98	-316.06	-7,047.54	9,079.99	8,983.27	96.72	93.876	
10,600.00	6,040.00	6,755.00	6,462.37	113.62	23.93	94.98	-316.06	-7,047.54	8,995.78	8,898.59	97.19	92.557	
10,700.00	6,040.00	6,755.00	6,462.37	113.91	23.93	94.98	-316.06	-7,047.54	8,911.90	8,814.19	97.71	91.209	
10,800.00	6,040.00	6,755.00	6,462.37	114.24	23.93	94.98	-316.06	-7,047.54	8,828.35	8,730.08	98.27	89.834	
10,900.00	6,040.00	6,755.00	6,462.37	114.61	23.93	94.98	-316.06	-7,047.54	8,745.15	8,646.26	98.89	88.433	
11,000.00	6,040.00	6,755.00	6,462.37	115.02	23.93	94.98	-316.06	-7,047.54	8,662.31	8,562.75	99.56	87.007	
11,100.00	6,040.00	6,755.00	6,462.37	115.49	23.93	94.98	-316.06	-7,047.54	8,579.82	8,479.54	100.28	85.558	
11,200.00	6,040.00	6,755.00	6,462.37	116.00	23.93	94.98	-316.06	-7,047.54	8,497.72	8,396.66	101.06	84.087	
11,300.00	6,040.00	6,755.00	6,462.37	116.58	23.93	94.98	-316.06	-7,047.54	8,416.00	8,314.11	101.89	82.597	
11,400.00	6,040.00	6,755.00	6,462.37	117.22	23.93	94.98	-316.06	-7,047.54	8,334.68	8,231.90	102.78	81.090	
11,500.00	6,040.00	6,755.00	6,462.37	117.92	23.93	94.98	-316.06	-7,047.54	8,253.78	8,150.04	103.73	79.568	
11,600.00	6,040.00	6,755.00	6,462.37	118.70	23.93	94.98	-316.06	-7,047.54	8,173.29	8,068.55	104.74	78.033	
11,700.00	6,040.00	6,755.00	6,462.37	119.56	23.93	94.98	-316.06	-7,047.54	8,093.24	7,987.43	105.81	76.487	
11,800.00	6,040.00	6,755.00	6,462.37	120.51	23.93	94.98	-316.06	-7,047.54	8,013.64	7,906.69	106.94	74.933	
11,900.00	6,040.00	6,755.00	6,462.37	121.54	23.93	94.98	-316.06	-7,047.54	7,934.50	7,826.36	108.14	73.373	
12,000.00	6,040.00	6,755.00	6,462.37	122.66	23.93	94.98	-316.06	-7,047.54	7,855.83	7,746.43	109.40	71.809	
12,100.00	6,040.00	6,755.00	6,462.37	123.87	23.93	94.98	-316.06	-7,047.54	7,777.66	7,666.93	110.72	70.244	
12,200.00	6,040.00	6,755.00	6,462.37	125.17	23.93	94.98	-316.06	-7,047.54	7,699.99	7,587.87	112.11	68.681	
12,300.00	6,040.00	6,755.00	6,462.37	126.57	23.93	94.98	-316.06	-7,047.54	7,622.84	7,509.27	113.57	67.121	
12,400.00	6,040.00	6,755.00	6,462.37	128.06	23.93	94.98	-316.06	-7,047.54	7,546.22	7,431.13	115.09	65.567	
12,500.00	6,040.00	6,755.00	6,462.37	129.63	23.93	94.98	-316.06	-7,047.54	7,470.16	7,353.48	116.68	64.021	
12,600.00	6,040.00	6,755.00	6,462.37	131.29	23.93	94.98	-316.06	-7,047.54	7,394.67	7,276.33	118.34	62.486	
12,700.00	6,040.00	6,755.00	6,462.37	133.03	23.93	94.98	-316.06	-7,047.54	7,319.77	7,199.70	120.07	60.963	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HC - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,800.00	6,040.00	6,755.00	6,462.37	134.84	23.93	94.98	-316.06	-7,047.54	7,245.48	7,123.61	121.87	59.454	
12,900.00	6,040.00	6,755.00	6,462.37	136.71	23.93	94.98	-316.06	-7,047.54	7,171.80	7,048.07	123.73	57.962	
13,000.00	6,040.00	6,755.00	6,462.37	138.66	23.93	94.98	-316.06	-7,047.54	7,098.78	6,973.11	125.67	56.488	
13,100.00	6,040.00	6,755.00	6,462.37	140.66	23.93	94.98	-316.06	-7,047.54	7,026.41	6,898.74	127.68	55.033	
13,200.00	6,040.00	6,755.00	6,462.37	142.71	23.93	94.98	-316.06	-7,047.54	6,954.74	6,824.98	129.75	53.600	
13,300.00	6,040.00	6,755.00	6,462.37	144.81	23.93	94.98	-316.06	-7,047.54	6,883.76	6,751.86	131.90	52.189	
13,400.00	6,040.00	6,755.00	6,462.37	146.96	23.93	94.98	-316.06	-7,047.54	6,813.52	6,679.40	134.12	50.802	
13,500.00	6,040.00	6,755.00	6,462.37	149.14	23.93	94.98	-316.06	-7,047.54	6,744.03	6,607.62	136.41	49.440	
13,600.00	6,040.00	6,755.00	6,462.37	151.36	23.93	94.98	-316.06	-7,047.54	6,675.31	6,536.54	138.77	48.105	
13,700.00	6,040.00	6,755.00	6,462.37	153.62	23.93	94.98	-316.06	-7,047.54	6,607.39	6,466.20	141.20	46.796	
13,800.00	6,040.00	6,755.00	6,462.37	155.91	23.93	94.98	-316.06	-7,047.54	6,540.30	6,396.60	143.70	45.515	
13,900.00	6,040.00	6,755.00	6,462.37	158.22	23.93	94.98	-316.06	-7,047.54	6,474.05	6,327.79	146.26	44.263	
14,000.00	6,040.00	6,755.00	6,462.37	160.56	23.93	94.98	-316.06	-7,047.54	6,408.68	6,259.78	148.90	43.040	
14,100.00	6,040.00	6,755.00	6,462.37	162.92	23.93	94.98	-316.06	-7,047.54	6,344.21	6,192.61	151.61	41.846	
14,200.00	6,040.00	6,755.00	6,462.37	165.30	23.93	94.98	-316.06	-7,047.54	6,280.68	6,126.29	154.38	40.683	
14,300.00	6,040.00	6,755.00	6,462.37	167.70	23.93	94.98	-316.06	-7,047.54	6,218.10	6,060.88	157.22	39.550	
14,400.00	6,040.00	6,755.00	6,462.37	170.12	23.93	94.98	-316.06	-7,047.54	6,156.51	5,996.38	160.13	38.447	
14,500.00	6,040.00	6,755.00	6,462.37	172.55	23.93	94.98	-316.06	-7,047.54	6,095.94	5,932.84	163.10	37.375	
14,600.00	6,040.00	6,755.00	6,462.37	175.00	23.93	94.98	-316.06	-7,047.54	6,036.42	5,870.28	166.14	36.334	
14,700.00	6,040.00	6,755.00	6,462.37	177.46	23.93	94.98	-316.06	-7,047.54	5,977.97	5,808.74	169.23	35.324	
14,800.00	6,040.00	6,755.00	6,462.37	179.94	23.93	94.98	-316.06	-7,047.54	5,920.64	5,748.25	172.39	34.344	
14,900.00	6,040.00	6,755.00	6,462.37	182.43	23.93	94.98	-316.06	-7,047.54	5,864.46	5,688.85	175.61	33.395	
15,000.00	6,040.00	6,755.00	6,462.37	184.92	23.93	94.98	-316.06	-7,047.54	5,809.45	5,630.57	178.88	32.477	
15,100.00	6,040.00	6,755.00	6,462.37	187.43	23.93	94.98	-316.06	-7,047.54	5,755.66	5,573.45	182.21	31.589	
15,200.00	6,040.00	6,755.00	6,462.37	189.95	23.93	94.98	-316.06	-7,047.54	5,703.11	5,517.52	185.59	30.730	
15,300.00	6,040.00	6,755.00	6,462.37	192.48	23.93	94.98	-316.06	-7,047.54	5,651.84	5,462.83	189.01	29.902	
15,400.00	6,040.00	6,755.00	6,462.37	195.01	23.93	94.98	-316.06	-7,047.54	5,601.89	5,409.40	192.49	29.102	
15,500.00	6,040.00	6,755.00	6,462.37	197.55	23.93	94.98	-316.06	-7,047.54	5,553.29	5,357.28	196.01	28.332	
15,600.00	6,040.00	6,755.00	6,462.37	200.10	23.93	94.98	-316.06	-7,047.54	5,506.07	5,306.51	199.57	27.590	
15,700.00	6,040.00	6,755.00	6,462.37	202.65	23.93	94.98	-316.06	-7,047.54	5,460.28	5,257.12	203.16	26.877	
15,800.00	6,040.00	6,755.00	6,462.37	205.22	23.93	94.98	-316.06	-7,047.54	5,415.95	5,209.17	206.79	26.191	
15,900.00	6,040.00	6,755.00	6,462.37	207.78	23.93	94.98	-316.06	-7,047.54	5,373.12	5,162.68	210.44	25.532	
16,000.00	6,040.00	6,755.00	6,462.37	210.36	23.93	94.98	-316.06	-7,047.54	5,331.82	5,117.69	214.12	24.901	
16,100.00	6,040.00	6,755.00	6,462.37	212.93	23.93	94.98	-316.06	-7,047.54	5,292.08	5,074.26	217.82	24.295	
16,200.00	6,040.00	6,755.00	6,462.37	215.52	23.93	94.98	-316.06	-7,047.54	5,253.95	5,032.41	221.54	23.716	
16,300.00	6,040.00	6,755.00	6,462.37	218.11	23.93	94.98	-316.06	-7,047.54	5,217.46	4,992.19	225.26	23.162	
16,400.00	6,040.00	6,755.00	6,462.37	220.70	23.93	94.98	-316.06	-7,047.54	5,182.63	4,953.64	228.99	22.633	
16,500.00	6,040.00	6,755.00	6,462.37	223.29	23.93	94.98	-316.06	-7,047.54	5,149.52	4,916.80	232.72	22.128	
16,600.00	6,040.00	6,755.00	6,462.37	225.89	23.93	94.98	-316.06	-7,047.54	5,118.14	4,881.71	236.44	21.647	
16,700.00	6,040.00	6,755.00	6,462.37	228.50	23.93	94.98	-316.06	-7,047.54	5,088.54	4,848.40	240.14	21.190	
16,800.00	6,040.00	6,755.00	6,462.37	231.11	23.93	94.98	-316.06	-7,047.54	5,060.74	4,816.91	243.83	20.755	
16,900.00	6,040.00	6,755.00	6,462.37	233.72	23.93	94.98	-316.06	-7,047.54	5,034.78	4,787.28	247.50	20.343	
17,000.00	6,040.00	6,755.00	6,462.37	236.33	23.93	94.98	-316.06	-7,047.54	5,010.67	4,759.54	251.13	19.953	
17,100.00	6,040.00	6,755.00	6,462.37	238.95	23.93	94.98	-316.06	-7,047.54	4,988.45	4,733.73	254.72	19.584	
17,200.00	6,040.00	6,755.00	6,462.37	241.57	23.93	94.98	-316.06	-7,047.54	4,968.15	4,709.88	258.28	19.236	
17,300.00	6,040.00	6,755.00	6,462.37	244.19	23.93	94.98	-316.06	-7,047.54	4,949.79	4,688.01	261.78	18.908	
17,400.00	6,040.00	6,755.00	6,462.37	246.82	23.93	94.98	-316.06	-7,047.54	4,933.38	4,668.16	265.22	18.601	
17,500.00	6,040.00	6,755.00	6,462.37	249.45	23.93	94.98	-316.06	-7,047.54	4,918.95	4,650.34	268.61	18.313	
17,600.00	6,040.00	6,755.00	6,462.37	252.08	23.93	94.98	-316.06	-7,047.54	4,906.52	4,634.60	271.93	18.044	
17,700.00	6,040.00	6,755.00	6,462.37	254.71	23.93	94.98	-316.06	-7,047.54	4,896.10	4,620.93	275.17	17.793	
17,800.00	6,040.00	6,755.00	6,462.37	257.35	23.93	94.98	-316.06	-7,047.54	4,887.70	4,609.37	278.33	17.561	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HC - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
17,900.00	6,040.00	6,755.00	6,462.37	259.99	23.93	94.98	-316.06	-7,047.54	4,881.34	4,599.93	281.41	17.346	
18,000.00	6,040.00	6,755.00	6,462.37	262.63	23.93	94.98	-316.06	-7,047.54	4,877.02	4,592.62	284.40	17.148	
18,100.00	6,040.00	6,755.00	6,462.37	265.27	23.93	94.98	-316.06	-7,047.54	4,874.75	4,587.45	287.30	16.967	
18,160.73	6,040.00	6,755.00	6,462.37	266.87	23.93	94.98	-316.06	-7,047.54	4,874.38	4,585.36	289.01	16.866	CC
18,200.00	6,040.00	6,755.00	6,462.37	267.91	23.93	94.98	-316.06	-7,047.54	4,874.53	4,584.43	290.10	16.803	
18,300.00	6,040.00	6,755.00	6,462.37	270.56	23.93	94.98	-316.06	-7,047.54	4,876.36	4,583.57	292.80	16.654	ES
18,400.00	6,040.00	6,755.00	6,462.37	273.21	23.93	94.98	-316.06	-7,047.54	4,880.24	4,584.86	295.39	16.521	
18,500.00	6,040.00	6,755.00	6,462.37	275.86	23.93	94.98	-316.06	-7,047.54	4,886.17	4,588.30	297.87	16.404	
18,600.00	6,040.00	6,755.00	6,462.37	278.51	23.93	94.98	-316.06	-7,047.54	4,894.13	4,593.88	300.24	16.300	
18,700.00	6,040.00	6,755.00	6,462.37	281.16	23.93	94.98	-316.06	-7,047.54	4,904.12	4,601.61	302.50	16.212	
18,800.00	6,040.00	6,755.00	6,462.37	283.81	23.93	94.98	-316.06	-7,047.54	4,916.12	4,611.47	304.65	16.137	
18,900.00	6,040.00	6,755.00	6,462.37	286.47	23.93	94.98	-316.06	-7,047.54	4,930.12	4,623.44	306.68	16.076	
18,919.70	6,040.00	6,755.00	6,462.37	286.99	23.93	94.98	-316.06	-7,047.54	4,933.11	4,626.05	307.06	16.066	SF

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HC - STK 1 - STK 1												Offset Well Error:	0.00 usft
Survey Program: 22-MWD OWSG, 6146-MWD OWSG													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.00	-1.00	0.00	0.00	-90.17	-20.87	-6,960.01	6,960.05				
100.00	100.00	99.74	99.74	0.13	0.28	-90.17	-20.92	-6,960.01	6,960.04	6,959.63	0.41	N/A	
100.60	100.60	100.35	100.35	0.14	0.28	120.60	-20.92	-6,960.01	6,960.04	6,959.62	0.42	N/A	
200.00	199.98	200.69	200.69	0.48	0.64	120.60	-21.09	-6,959.99	6,960.91	6,959.79	1.12	6,192.103	
300.00	299.84	301.52	301.52	0.85	1.00	120.59	-21.41	-6,959.96	6,963.55	6,961.70	1.85	3,773.150	
400.00	399.45	402.15	402.14	1.22	1.36	120.57	-21.87	-6,959.91	6,967.95	6,965.37	2.58	2,698.100	
500.00	498.70	502.44	502.44	1.62	1.72	120.54	-22.46	-6,959.85	6,974.12	6,970.78	3.34	2,090.280	
600.00	597.47	602.30	602.29	2.05	2.08	120.51	-23.19	-6,959.78	6,982.06	6,977.95	4.11	1,698.514	
700.00	695.62	677.91	677.90	2.51	2.35	120.44	-23.94	-6,959.92	6,992.04	6,987.21	4.82	1,449.492	
800.00	793.06	760.45	760.44	3.01	2.65	120.35	-24.92	-6,960.21	7,003.99	6,998.40	5.59	1,252.803	
900.00	889.64	835.00	834.98	3.56	2.92	120.24	-25.95	-6,960.63	7,017.96	7,011.60	6.36	1,103.326	
1,000.00	985.27	913.59	913.55	4.14	3.19	120.11	-26.69	-6,961.30	7,034.02	7,026.85	7.17	981.151	
1,100.00	1,079.82	985.44	985.40	4.78	3.43	119.96	-26.68	-6,962.13	7,052.20	7,044.21	7.99	882.536	
1,200.00	1,173.17	1,055.86	1,055.81	5.46	3.68	119.79	-26.02	-6,963.17	7,072.51	7,063.67	8.85	799.559	
1,300.00	1,265.21	1,124.69	1,124.62	6.20	3.91	119.59	-24.76	-6,964.38	7,094.97	7,085.23	9.73	728.906	
1,400.00	1,355.84	1,191.79	1,191.68	6.99	4.14	119.37	-22.94	-6,965.75	7,119.56	7,108.91	10.66	668.153	
1,500.00	1,444.94	1,277.68	1,277.49	7.84	4.44	119.19	-19.96	-6,967.68	7,146.22	7,134.54	11.68	611.894	
1,600.00	1,532.39	1,369.40	1,369.14	8.75	4.75	119.02	-16.59	-6,969.64	7,174.69	7,161.93	12.76	562.139	
1,700.00	1,618.11	1,428.85	1,428.54	9.71	4.95	118.70	-14.53	-6,970.93	7,205.10	7,191.33	13.78	522.972	
1,800.00	1,701.97	1,470.26	1,469.91	10.74	5.09	118.27	-13.19	-6,972.07	7,237.84	7,223.07	14.77	490.129	
1,900.00	1,783.88	1,512.41	1,512.01	11.82	5.24	117.80	-11.91	-6,973.46	7,272.89	7,257.10	15.80	460.375	
2,000.00	1,863.74	2,000.00	1,656.17	12.96	6.95	117.79	-4.98	-6,978.09	7,310.03	7,291.59	18.44	396.397	
2,100.00	1,941.45	1,820.73	1,819.43	14.16	6.32	117.92	7.92	-6,981.19	7,348.34	7,329.55	18.79	391.116	
2,200.00	2,016.92	1,858.63	1,857.11	15.41	6.46	117.38	12.05	-6,981.56	7,387.91	7,368.00	19.92	370.964	
2,300.00	2,090.05	1,894.88	1,893.14	16.73	6.59	116.77	16.03	-6,982.07	7,429.74	7,408.68	21.07	352.665	
2,400.00	2,160.76	1,929.45	1,927.49	18.10	6.72	116.10	19.85	-6,982.68	7,473.78	7,451.54	22.24	336.023	
2,500.00	2,228.95	1,968.00	1,965.79	19.53	6.86	115.41	24.15	-6,983.51	7,519.99	7,496.53	23.46	320.575	
2,600.00	2,294.55	2,019.46	2,016.91	21.01	7.05	114.75	29.86	-6,984.72	7,568.20	7,543.45	24.75	305.779	
2,700.00	2,357.48	2,079.60	2,076.68	22.55	7.27	114.10	36.40	-6,986.11	7,618.25	7,592.15	26.10	291.894	
2,800.00	2,418.42	2,137.77	2,134.51	24.13	7.48	114.22	42.61	-6,987.42	7,669.76	7,642.30	27.45	279.386	
2,900.00	2,479.25	2,190.90	2,187.34	25.71	7.68	114.59	48.16	-6,988.61	7,721.88	7,693.10	28.78	268.312	
3,000.00	2,540.09	2,241.63	2,237.78	27.31	7.87	114.93	53.39	-6,989.76	7,774.59	7,744.50	30.09	258.391	
3,100.00	2,600.93	2,292.53	2,288.40	28.90	8.06	115.28	58.56	-6,990.94	7,827.88	7,796.49	31.39	249.394	
3,200.00	2,661.77	2,343.61	2,339.21	30.51	8.25	115.62	63.67	-6,992.15	7,881.74	7,849.06	32.68	241.207	
3,300.00	2,722.61	2,346.00	2,341.59	32.11	8.26	115.64	63.91	-6,992.21	7,936.31	7,902.55	33.76	235.080	
3,400.00	2,783.44	2,398.90	2,394.22	33.72	8.46	115.99	69.05	-6,993.67	7,991.41	7,956.38	35.03	228.119	
3,500.00	2,844.28	2,425.98	2,421.16	35.34	8.56	116.17	71.60	-6,994.56	8,047.29	8,011.10	36.19	222.376	
3,600.00	2,905.12	2,453.06	2,448.11	36.95	8.66	116.35	74.09	-6,995.56	8,103.83	8,066.50	37.33	217.085	
3,700.00	2,965.96	2,480.13	2,475.05	38.57	8.76	116.53	76.53	-6,996.65	8,161.04	8,122.58	38.46	212.200	
3,800.00	3,026.79	2,535.00	2,529.65	40.19	8.97	116.89	81.29	-6,999.17	8,218.98	8,179.29	39.69	207.082	
3,900.00	3,087.63	2,535.00	2,529.65	41.81	8.97	116.89	81.29	-6,999.17	8,277.37	8,236.69	40.68	203.478	
4,000.00	3,148.47	2,567.91	2,562.41	43.43	9.09	117.10	84.10	-7,000.83	8,336.45	8,294.65	41.79	199.473	
4,100.00	3,209.31	2,601.47	2,595.78	45.05	9.22	117.32	87.04	-7,002.59	8,396.09	8,353.20	42.89	195.739	
4,200.00	3,270.14	2,634.74	2,628.87	46.68	9.35	117.53	90.01	-7,004.39	8,456.29	8,412.31	43.98	192.268	
4,300.00	3,330.98	2,667.74	2,661.68	48.31	9.47	117.75	93.01	-7,006.24	8,517.03	8,471.98	45.05	189.039	
4,400.00	3,391.82	2,723.00	2,716.61	49.93	9.68	118.10	98.19	-7,009.48	8,578.36	8,532.15	46.21	185.644	
4,500.00	3,452.66	2,774.99	2,768.28	51.56	9.88	118.43	103.00	-7,012.52	8,640.08	8,592.75	47.34	182.523	
4,600.00	3,513.49	3,031.39	3,023.61	53.19	10.84	120.01	122.62	-7,025.23	8,701.67	8,652.34	49.33	176.397	
4,700.00	3,574.33	3,133.91	3,125.88	54.82	11.22	120.62	128.44	-7,029.09	8,762.49	8,711.83	50.66	172.981	
4,800.00	3,635.17	9,552.00	6,410.64	56.45	60.97	120.32	-3,123.55	-6,907.71	8,806.24	8,697.82	108.42	81.223	
4,900.00	3,696.01	9,552.00	6,410.64	58.08	60.97	120.32	-3,123.55	-6,907.71	8,820.22	8,710.29	109.93	80.238	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNRRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNRRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HC - STK 1 - STK 1		Offset Site Error: 0.00 usft	
Survey Program: 22-MWD OWSG, 6146-MWD OWSG												Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis		Distance						Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)			Separation Factor	
5,000.00	3,756.84	9,552.00	6,410.64	59.71	60.97	120.32	-3,123.55	-6,907.71	8,835.31	8,723.90	111.42	79.301			
5,100.00	3,817.68	9,600.90	6,410.49	61.34	61.79	120.09	-3,172.31	-6,904.04	8,851.08	8,737.28	113.80	77.778			
5,200.00	3,878.52	9,647.00	6,410.02	62.97	62.57	119.88	-3,218.33	-6,901.24	8,868.01	8,751.87	116.13	76.362			
5,300.00	3,939.36	9,647.00	6,410.02	64.61	62.57	119.88	-3,218.33	-6,901.24	8,885.64	8,768.06	117.59	75.568			
5,400.00	4,000.19	9,725.65	6,409.26	66.24	63.90	119.52	-3,296.85	-6,896.86	8,904.10	8,783.57	120.53	73.877			
5,500.00	4,061.03	9,839.42	6,409.63	67.87	65.83	119.00	-3,410.40	-6,889.73	8,922.86	8,798.71	124.15	71.874			
5,600.00	4,121.87	9,875.65	6,410.03	69.51	66.44	118.84	-3,446.55	-6,887.36	8,942.09	8,815.80	126.28	70.810			
5,700.00	4,182.71	9,912.37	6,410.25	71.14	67.07	118.67	-3,483.19	-6,885.15	8,962.10	8,833.67	128.42	69.786			
5,800.00	4,243.54	9,950.63	6,410.33	72.77	67.72	118.50	-3,521.40	-6,883.04	8,982.88	8,852.30	130.58	68.790			
5,900.00	4,304.38	9,991.53	6,410.49	74.41	68.42	118.31	-3,562.24	-6,880.90	9,004.42	8,871.63	132.79	67.808			
6,000.00	4,365.22	10,034.23	6,410.79	76.04	69.14	118.12	-3,604.89	-6,878.79	9,026.69	8,891.66	135.03	66.850			
6,100.00	4,426.06	10,090.24	6,411.02	77.68	70.10	117.87	-3,660.83	-6,876.18	9,049.63	8,912.10	137.53	65.803			
6,200.00	4,486.90	10,124.00	6,410.98	79.31	70.67	117.72	-3,694.56	-6,874.69	9,073.21	8,933.63	139.57	65.007			
6,300.00	4,547.73	10,164.45	6,411.09	80.95	71.36	117.53	-3,734.97	-6,873.02	9,097.53	8,955.79	141.74	64.183			
6,400.00	4,608.57	10,504.00	6,415.24	82.58	77.20	116.03	-4,074.01	-6,855.29	9,122.45	8,972.45	150.00	60.816			
6,500.00	4,669.41	10,550.35	6,415.57	84.22	78.00	115.83	-4,120.24	-6,852.09	9,145.85	8,993.52	152.33	60.041			
6,600.00	4,730.25	10,584.08	6,415.78	85.86	78.58	115.68	-4,153.90	-6,849.93	9,170.04	9,015.65	154.39	59.397			
6,700.00	4,791.08	10,620.00	6,415.99	87.49	79.20	115.52	-4,189.76	-6,847.78	9,194.99	9,038.51	156.48	58.761			
6,800.00	4,851.92	10,646.10	6,416.15	89.13	79.66	115.41	-4,215.82	-6,846.33	9,220.72	9,062.36	158.36	58.227			
6,900.00	4,912.76	10,674.14	6,416.38	90.76	80.14	115.29	-4,243.83	-6,844.90	9,247.25	9,086.99	160.26	57.700			
7,000.00	4,973.60	10,961.00	6,418.42	92.40	85.12	114.04	-4,530.12	-6,827.41	9,273.46	9,105.86	167.59	55.334			
7,100.00	5,034.43	10,961.00	6,418.42	94.04	85.12	114.04	-4,530.12	-6,827.41	9,299.69	9,130.76	168.93	55.052			
7,200.00	5,095.27	10,961.00	6,418.42	95.67	85.12	114.04	-4,530.12	-6,827.41	9,326.92	9,156.68	170.23	54.789			
7,300.00	5,156.11	10,961.00	6,418.42	97.31	85.12	114.04	-4,530.12	-6,827.41	9,355.14	9,183.62	171.52	54.543			
7,400.00	5,216.95	10,961.00	6,418.42	98.95	85.12	114.04	-4,530.12	-6,827.41	9,384.34	9,211.56	172.78	54.314			
7,500.00	5,277.78	10,961.00	6,418.42	100.59	85.12	114.04	-4,530.12	-6,827.41	9,414.51	9,240.49	174.02	54.102			
7,600.00	5,338.62	10,961.00	6,418.42	102.22	85.12	114.04	-4,530.12	-6,827.41	9,445.64	9,270.42	175.23	53.905			
7,700.00	5,399.46	10,961.00	6,418.42	103.86	85.12	114.04	-4,530.12	-6,827.41	9,477.73	9,301.31	176.42	53.724			
7,800.00	5,460.30	10,961.00	6,418.42	105.50	85.12	114.04	-4,530.12	-6,827.41	9,510.76	9,333.18	177.58	53.558			
7,900.00	5,521.24	10,961.00	6,418.42	107.13	85.12	112.39	-4,530.12	-6,827.41	9,544.34	9,365.62	178.72	53.404			
8,000.00	5,584.83	10,961.00	6,418.42	108.61	85.12	104.22	-4,530.12	-6,827.41	9,567.29	9,387.50	179.79	53.214			
8,100.00	5,650.69	10,961.00	6,418.42	109.85	85.12	95.46	-4,530.12	-6,827.41	9,574.09	9,393.36	180.72	52.976			
8,200.00	5,716.83	10,961.00	6,418.42	110.82	85.12	86.74	-4,530.12	-6,827.41	9,564.56	9,383.08	181.48	52.703			
8,300.00	5,781.24	10,961.00	6,418.42	111.52	85.12	78.70	-4,530.12	-6,827.41	9,538.95	9,356.91	182.03	52.402			
8,400.00	5,841.96	10,961.00	6,418.42	111.98	85.12	71.87	-4,530.12	-6,827.41	9,497.91	9,315.52	182.38	52.076			
8,500.00	5,897.14	10,961.00	6,418.42	112.25	85.12	66.52	-4,530.12	-6,827.41	9,442.49	9,259.93	182.56	51.723			
8,600.00	5,945.12	10,961.00	6,418.42	112.37	85.12	62.83	-4,530.12	-6,827.41	9,374.14	9,191.54	182.60	51.338			
8,700.00	5,984.42	10,961.00	6,418.42	112.39	85.12	61.01	-4,530.12	-6,827.41	9,294.68	9,112.13	182.55	50.916			
8,800.00	6,013.86	10,961.00	6,418.42	112.35	85.12	61.83	-4,530.12	-6,827.41	9,206.27	9,023.81	182.46	50.456			
8,900.00	6,032.54	10,961.00	6,418.42	112.30	85.12	68.48	-4,530.12	-6,827.41	9,111.38	8,929.01	182.38	49.959			
9,000.00	6,039.89	10,961.00	6,418.42	112.24	85.12	106.49	-4,530.12	-6,827.41	9,012.73	8,830.41	182.32	49.433			
9,100.00	6,040.00	10,961.00	6,418.42	112.19	85.12	120.66	-4,530.12	-6,827.41	8,913.08	8,730.78	182.30	48.893			
9,200.00	6,040.00	10,961.00	6,418.42	112.16	85.12	120.66	-4,530.12	-6,827.41	8,813.43	8,631.16	182.28	48.352			
9,300.00	6,040.00	10,961.00	6,418.42	112.15	85.12	120.66	-4,530.12	-6,827.41	8,713.79	8,531.54	182.25	47.811			
9,400.00	6,040.00	10,961.00	6,418.42	112.15	85.12	120.66	-4,530.12	-6,827.41	8,614.16	8,431.93	182.23	47.271			
9,500.00	6,040.00	10,961.00	6,418.42	112.16	85.12	120.66	-4,530.12	-6,827.41	8,514.54	8,332.33	182.21	46.730			
9,600.00	6,040.00	10,961.00	6,418.42	112.19	85.12	120.66	-4,530.12	-6,827.41	8,414.93	8,232.74	182.19	46.189			
9,700.00	6,040.00	10,961.00	6,418.42	112.24	85.12	120.66	-4,530.12	-6,827.41	8,315.32	8,133.16	182.16	45.647			
9,800.00	6,040.00	10,961.00	6,418.42	112.31	85.12	120.66	-4,530.12	-6,827.41	8,215.73	8,033.59	182.14	45.106			
9,900.00	6,040.00	10,961.00	6,418.42	112.39	85.12	120.66	-4,530.12	-6,827.41	8,116.15	7,934.02	182.12	44.565			
10,000.00	6,040.00	10,961.00	6,418.42	112.49	85.12	120.66	-4,530.12	-6,827.41	8,016.57	7,834.47	182.10	44.023			

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HC - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG, 6146-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	6,040.00	10,961.00	6,418.42	112.62	85.12	120.66	-4,530.12	-6,827.41	7,917.01	7,734.93	182.08	43.481	
10,200.00	6,040.00	10,961.00	6,418.42	112.77	85.12	120.66	-4,530.12	-6,827.41	7,817.46	7,635.40	182.06	42.939	
10,300.00	6,040.00	10,961.00	6,418.42	112.94	85.12	120.66	-4,530.12	-6,827.41	7,717.92	7,535.88	182.04	42.397	
10,400.00	6,040.00	10,961.00	6,418.42	113.14	85.12	120.66	-4,530.12	-6,827.41	7,618.39	7,436.37	182.02	41.855	
10,500.00	6,040.00	10,961.00	6,418.42	113.36	85.12	120.66	-4,530.12	-6,827.41	7,518.87	7,336.87	182.00	41.313	
10,600.00	6,040.00	10,961.00	6,418.42	113.62	85.12	120.66	-4,530.12	-6,827.41	7,419.37	7,237.39	181.98	40.770	
10,700.00	6,040.00	10,961.00	6,418.42	113.91	85.12	120.66	-4,530.12	-6,827.41	7,319.88	7,137.92	181.96	40.228	
10,800.00	6,040.00	10,961.00	6,418.42	114.24	85.12	120.66	-4,530.12	-6,827.41	7,220.41	7,038.46	181.94	39.685	
10,900.00	6,040.00	10,961.00	6,418.42	114.61	85.12	120.66	-4,530.12	-6,827.41	7,120.95	6,939.02	181.93	39.142	
11,000.00	6,040.00	10,961.00	6,418.42	115.02	85.12	120.66	-4,530.12	-6,827.41	7,021.50	6,839.59	181.91	38.599	
11,100.00	6,040.00	10,961.00	6,418.42	115.49	85.12	120.66	-4,530.12	-6,827.41	6,922.07	6,740.18	181.89	38.056	
11,200.00	6,040.00	10,961.00	6,418.42	116.00	85.12	120.66	-4,530.12	-6,827.41	6,822.66	6,640.78	181.88	37.512	
11,300.00	6,040.00	10,961.00	6,418.42	116.58	85.12	120.66	-4,530.12	-6,827.41	6,723.26	6,541.40	181.86	36.969	
11,400.00	6,040.00	10,961.00	6,418.42	117.22	85.12	120.66	-4,530.12	-6,827.41	6,623.89	6,442.04	181.85	36.425	
11,500.00	6,040.00	10,961.00	6,418.42	117.92	85.12	120.66	-4,530.12	-6,827.41	6,524.53	6,342.69	181.84	35.881	
11,600.00	6,040.00	10,961.00	6,418.42	118.70	85.12	120.66	-4,530.12	-6,827.41	6,425.19	6,243.37	181.83	35.337	
11,700.00	6,040.00	10,961.00	6,418.42	119.56	85.12	120.66	-4,530.12	-6,827.41	6,325.88	6,144.06	181.81	34.793	
11,800.00	6,040.00	10,961.00	6,418.42	120.51	85.12	120.66	-4,530.12	-6,827.41	6,226.58	6,044.78	181.81	34.249	
11,900.00	6,040.00	10,961.00	6,418.42	121.54	85.12	120.66	-4,530.12	-6,827.41	6,127.31	5,945.51	181.80	33.704	
12,000.00	6,040.00	10,961.00	6,418.42	122.66	85.12	120.66	-4,530.12	-6,827.41	6,028.06	5,846.27	181.79	33.159	
12,100.00	6,040.00	10,961.00	6,418.42	123.87	85.12	120.66	-4,530.12	-6,827.41	5,928.84	5,747.05	181.79	32.614	
12,200.00	6,040.00	10,961.00	6,418.42	125.17	85.12	120.66	-4,530.12	-6,827.41	5,829.64	5,647.86	181.78	32.069	
12,300.00	6,040.00	10,961.00	6,418.42	126.57	85.12	120.66	-4,530.12	-6,827.41	5,730.47	5,548.69	181.78	31.524	
12,400.00	6,040.00	10,961.00	6,418.42	128.06	85.12	120.66	-4,530.12	-6,827.41	5,631.34	5,449.55	181.79	30.978	
12,500.00	6,040.00	10,961.00	6,418.42	129.63	85.12	120.66	-4,530.12	-6,827.41	5,532.23	5,350.44	181.79	30.432	
12,600.00	6,040.00	10,961.00	6,418.42	131.29	85.12	120.66	-4,530.12	-6,827.41	5,433.15	5,251.36	181.80	29.886	
12,700.00	6,040.00	10,961.00	6,418.42	133.03	85.12	120.66	-4,530.12	-6,827.41	5,334.11	5,152.31	181.81	29.340	
12,800.00	6,040.00	10,961.00	6,418.42	134.84	85.12	120.66	-4,530.12	-6,827.41	5,235.11	5,053.29	181.82	28.793	
12,900.00	6,040.00	10,961.00	6,418.42	136.71	85.12	120.66	-4,530.12	-6,827.41	5,136.14	4,954.31	181.83	28.246	
13,000.00	6,040.00	10,961.00	6,418.42	138.66	85.12	120.66	-4,530.12	-6,827.41	5,037.22	4,855.36	181.85	27.699	
13,100.00	6,040.00	10,961.00	6,418.42	140.66	85.12	120.66	-4,530.12	-6,827.41	4,938.34	4,756.46	181.88	27.152	
13,200.00	6,040.00	10,961.00	6,418.42	142.71	85.12	120.66	-4,530.12	-6,827.41	4,839.50	4,657.59	181.91	26.604	
13,300.00	6,040.00	10,961.00	6,418.42	144.81	85.12	120.66	-4,530.12	-6,827.41	4,740.72	4,558.77	181.94	26.056	
13,400.00	6,040.00	10,961.00	6,418.42	146.96	85.12	120.66	-4,530.12	-6,827.41	4,641.98	4,460.00	181.99	25.507	
13,500.00	6,040.00	10,961.00	6,418.42	149.14	85.12	120.66	-4,530.12	-6,827.41	4,543.30	4,361.27	182.03	24.959	
13,600.00	6,040.00	10,961.00	6,418.42	151.36	85.12	120.66	-4,530.12	-6,827.41	4,444.68	4,262.59	182.09	24.410	
13,700.00	6,040.00	10,961.00	6,418.42	153.62	85.12	120.66	-4,530.12	-6,827.41	4,346.12	4,163.97	182.15	23.860	
13,800.00	6,040.00	10,961.00	6,418.42	155.91	85.12	120.66	-4,530.12	-6,827.41	4,247.64	4,065.41	182.22	23.310	
13,900.00	6,040.00	10,961.00	6,418.42	158.22	85.12	120.66	-4,530.12	-6,827.41	4,149.22	3,966.91	182.30	22.760	
14,000.00	6,040.00	10,961.00	6,418.42	160.56	85.12	120.66	-4,530.12	-6,827.41	4,050.88	3,868.48	182.40	22.209	
14,100.00	6,040.00	10,961.00	6,418.42	162.92	85.12	120.66	-4,530.12	-6,827.41	3,952.62	3,770.12	182.50	21.658	
14,200.00	6,040.00	10,961.00	6,418.42	165.30	85.12	120.66	-4,530.12	-6,827.41	3,854.45	3,671.83	182.62	21.106	
14,300.00	6,040.00	10,961.00	6,418.42	167.70	85.12	120.66	-4,530.12	-6,827.41	3,756.38	3,573.62	182.76	20.554	
14,400.00	6,040.00	10,961.00	6,418.42	170.12	85.12	120.66	-4,530.12	-6,827.41	3,658.42	3,475.51	182.91	20.001	
14,500.00	6,040.00	10,961.00	6,418.42	172.55	85.12	120.66	-4,530.12	-6,827.41	3,560.57	3,377.48	183.09	19.447	
14,600.00	6,040.00	10,961.00	6,418.42	175.00	85.12	120.66	-4,530.12	-6,827.41	3,462.84	3,279.55	183.28	18.893	
14,700.00	6,040.00	10,961.00	6,418.42	177.46	85.12	120.66	-4,530.12	-6,827.41	3,365.24	3,181.74	183.51	18.339	
14,800.00	6,040.00	10,961.00	6,418.42	179.94	85.12	120.66	-4,530.12	-6,827.41	3,267.79	3,084.03	183.76	17.783	
14,900.00	6,040.00	10,961.00	6,418.42	182.43	85.12	120.66	-4,530.12	-6,827.41	3,170.50	2,986.46	184.04	17.227	
15,000.00	6,040.00	10,961.00	6,418.42	184.92	85.12	120.66	-4,530.12	-6,827.41	3,073.38	2,889.02	184.36	16.671	
15,100.00	6,040.00	10,961.00	6,418.42	187.43	85.12	120.66	-4,530.12	-6,827.41	2,976.45	2,791.73	184.72	16.113	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HC - STK 1 - STK 1												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG, 6146-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,200.00	6,040.00	10,961.00	6,418.42	189.95	85.12	120.66	-4,530.12	-6,827.41	2,879.73	2,694.61	185.13	15.555	
15,300.00	6,040.00	10,961.00	6,418.42	192.48	85.12	120.66	-4,530.12	-6,827.41	2,783.25	2,597.66	185.59	14.997	
15,400.00	6,040.00	10,961.00	6,418.42	195.01	85.12	120.66	-4,530.12	-6,827.41	2,687.02	2,500.90	186.12	14.437	
15,500.00	6,040.00	10,961.00	6,418.42	197.55	85.12	120.66	-4,530.12	-6,827.41	2,591.08	2,404.37	186.71	13.877	
15,600.00	6,040.00	10,961.00	6,418.42	200.10	85.12	120.66	-4,530.12	-6,827.41	2,495.45	2,308.06	187.39	13.317	
15,700.00	6,040.00	10,961.00	6,418.42	202.65	85.12	120.66	-4,530.12	-6,827.41	2,400.19	2,212.02	188.16	12.756	
15,800.00	6,040.00	10,961.00	6,418.42	205.22	85.12	120.66	-4,530.12	-6,827.41	2,305.32	2,116.28	189.04	12.195	
15,900.00	6,040.00	10,961.00	6,418.42	207.78	85.12	120.66	-4,530.12	-6,827.41	2,210.90	2,020.86	190.04	11.634	
16,000.00	6,040.00	10,961.00	6,418.42	210.36	85.12	120.66	-4,530.12	-6,827.41	2,117.00	1,925.81	191.19	11.073	
16,100.00	6,040.00	10,961.00	6,418.42	212.93	85.12	120.66	-4,530.12	-6,827.41	2,023.69	1,831.19	192.50	10.513	
16,200.00	6,040.00	10,961.00	6,418.42	215.52	85.12	120.66	-4,530.12	-6,827.41	1,931.04	1,737.04	194.00	9.954	
16,300.00	6,040.00	10,961.00	6,418.42	218.11	85.12	120.66	-4,530.12	-6,827.41	1,839.16	1,643.44	195.73	9.397	
16,400.00	6,040.00	10,961.00	6,418.42	220.70	85.12	120.66	-4,530.12	-6,827.41	1,748.18	1,550.48	197.70	8.843	
16,500.00	6,040.00	10,961.00	6,418.42	223.29	85.12	120.66	-4,530.12	-6,827.41	1,658.23	1,458.26	199.97	8.293	
16,600.00	6,040.00	10,961.00	6,418.42	225.89	85.12	120.66	-4,530.12	-6,827.41	1,569.50	1,366.94	202.56	7.748	
16,700.00	6,040.00	10,961.00	6,418.42	228.50	85.12	120.66	-4,530.12	-6,827.41	1,482.21	1,276.67	205.54	7.211	
16,800.00	6,040.00	10,961.00	6,418.42	231.11	85.12	120.66	-4,530.12	-6,827.41	1,396.62	1,187.68	208.93	6.685	
16,900.00	6,040.00	10,961.00	6,418.42	233.72	85.12	120.66	-4,530.12	-6,827.41	1,313.07	1,100.27	212.79	6.171	
17,000.00	6,040.00	10,961.00	6,418.42	236.33	85.12	120.66	-4,530.12	-6,827.41	1,231.97	1,014.82	217.15	5.673	
17,100.00	6,040.00	10,961.00	6,418.42	238.95	85.12	120.66	-4,530.12	-6,827.41	1,153.84	931.83	222.01	5.197	
17,200.00	6,040.00	10,961.00	6,418.42	241.57	85.12	120.66	-4,530.12	-6,827.41	1,079.33	851.97	227.37	4.747	
17,300.00	6,040.00	10,961.00	6,418.42	244.19	85.12	120.66	-4,530.12	-6,827.41	1,009.24	776.12	233.12	4.329	
17,400.00	6,040.00	10,961.00	6,418.42	246.82	85.12	120.66	-4,530.12	-6,827.41	944.55	705.44	239.10	3.950	
17,500.00	6,040.00	10,961.00	6,418.42	249.45	85.12	120.66	-4,530.12	-6,827.41	886.44	641.40	245.03	3.618	
17,600.00	6,040.00	10,961.00	6,418.42	252.08	85.12	120.66	-4,530.12	-6,827.41	836.29	585.76	250.52	3.338	
17,700.00	6,040.00	10,961.00	6,418.42	254.71	85.12	120.66	-4,530.12	-6,827.41	795.60	540.43	255.17	3.118	
17,800.00	6,040.00	10,961.00	6,418.42	257.35	85.12	120.66	-4,530.12	-6,827.41	765.89	507.06	258.83	2.959	
17,900.00	6,040.00	10,961.00	6,418.42	259.99	85.12	120.66	-4,530.12	-6,827.41	748.46	486.51	261.94	2.857	
17,981.98	6,040.00	10,961.00	6,418.42	262.15	85.12	120.66	-4,530.12	-6,827.41	743.95	479.19	264.76	2.810 CC	
18,000.00	6,040.00	10,961.00	6,418.42	262.63	85.12	120.66	-4,530.12	-6,827.41	744.17	478.73	265.44	2.804 ES	
18,100.00	6,040.00	10,961.00	6,418.42	265.27	85.12	120.66	-4,530.12	-6,827.41	753.26	483.97	269.29	2.797 SF	
18,200.00	6,040.00	10,961.00	6,418.42	267.91	85.12	120.66	-4,530.12	-6,827.41	775.24	503.06	272.19	2.848	
18,300.00	6,040.00	10,961.00	6,418.42	270.56	85.12	120.66	-4,530.12	-6,827.41	809.08	535.92	273.16	2.962	
18,400.00	6,040.00	10,961.00	6,418.42	273.21	85.12	120.66	-4,530.12	-6,827.41	853.35	581.26	272.09	3.136	
18,500.00	6,040.00	10,961.00	6,418.42	275.86	85.12	120.66	-4,530.12	-6,827.41	906.54	637.13	269.41	3.365	
18,600.00	6,040.00	10,961.00	6,418.42	278.51	85.12	120.66	-4,530.12	-6,827.41	967.17	701.51	265.66	3.641	
18,700.00	6,040.00	10,961.00	6,418.42	281.16	85.12	120.66	-4,530.12	-6,827.41	1,033.94	772.61	261.33	3.956	
18,800.00	6,040.00	10,961.00	6,418.42	283.81	85.12	120.66	-4,530.12	-6,827.41	1,105.73	848.96	256.77	4.306	
18,900.00	6,040.00	10,961.00	6,418.42	286.47	85.12	120.66	-4,530.12	-6,827.41	1,181.62	929.40	252.23	4.685	
18,919.70	6,040.00	10,961.00	6,418.42	286.99	85.12	120.66	-4,530.12	-6,827.41	1,197.00	945.65	251.35	4.762	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	1.00	-1.00	0.00	0.00	-90.35	-42.74	-6,960.02	6,960.15				
100.00	100.00	99.68	99.68	0.13	0.28	-90.35	-42.74	-6,960.02	6,960.15	6,959.73	0.41	N/A	
100.56	100.56	100.25	100.25	0.14	0.28	120.42	-42.74	-6,960.02	6,960.15	6,959.73	0.42	N/A	
200.00	199.98	200.55	200.55	0.48	0.64	120.42	-42.73	-6,960.00	6,961.02	6,959.89	1.12	6,197.033	
300.00	299.84	301.30	301.30	0.85	1.00	120.41	-42.72	-6,959.97	6,963.64	6,961.79	1.84	3,776.135	
400.00	399.45	401.79	401.79	1.22	1.36	120.40	-42.71	-6,959.93	6,968.02	6,965.44	2.58	2,700.278	
500.00	498.70	501.93	501.93	1.62	1.72	120.38	-42.69	-6,959.87	6,974.17	6,970.83	3.33	2,092.034	
600.00	597.47	606.55	606.55	2.05	2.09	120.36	-42.72	-6,959.79	6,982.06	6,977.94	4.12	1,694.044	
700.00	695.62	715.86	715.86	2.51	2.48	120.34	-43.08	-6,959.54	6,991.61	6,986.66	4.95	1,412.867	
800.00	793.06	812.74	812.74	3.01	2.82	120.29	-43.63	-6,959.23	7,002.87	6,997.11	5.76	1,215.954	
900.00	889.64	905.27	905.27	3.56	3.14	120.23	-44.14	-6,958.99	7,015.98	7,009.39	6.59	1,065.244	
1,000.00	985.27	1,006.51	1,006.50	4.14	3.50	120.18	-44.70	-6,958.73	7,030.92	7,023.43	7.48	939.793	
1,100.00	1,079.82	1,110.25	1,110.24	4.78	3.86	120.12	-45.39	-6,958.35	7,047.57	7,039.14	8.42	836.670	
1,200.00	1,173.17	1,159.49	1,159.48	5.46	4.03	119.92	-45.57	-6,958.25	7,066.26	7,057.05	9.21	767.458	
1,300.00	1,265.21	1,214.00	1,213.99	6.20	4.22	119.70	-45.09	-6,958.58	7,087.46	7,077.41	10.05	705.381	
1,400.00	1,355.84	1,322.09	1,322.06	6.99	4.59	119.63	-43.53	-6,959.35	7,110.74	7,099.63	11.11	640.013	
1,500.00	1,444.94	1,441.31	1,441.27	7.84	5.00	119.58	-42.04	-6,959.51	7,135.33	7,123.07	12.26	582.235	
1,600.00	1,532.39	1,523.70	1,523.66	8.75	5.28	119.40	-41.12	-6,959.52	7,161.72	7,148.41	13.32	537.791	
1,700.00	1,618.11	1,592.00	1,591.95	9.71	5.52	119.15	-39.92	-6,959.59	7,190.13	7,175.76	14.37	500.356	
1,800.00	1,701.97	1,640.62	1,640.55	10.74	5.69	118.79	-38.73	-6,959.80	7,220.76	7,205.37	15.39	469.105	
1,900.00	1,783.88	1,686.00	1,685.91	11.82	5.84	118.38	-37.35	-6,960.23	7,253.73	7,237.29	16.44	441.185	
2,000.00	1,863.74	1,731.96	1,731.83	12.96	6.00	117.93	-35.63	-6,960.85	7,288.99	7,271.46	17.53	415.817	
2,100.00	1,941.45	1,781.00	1,780.81	14.16	6.18	117.46	-33.34	-6,961.68	7,326.46	7,307.80	18.66	392.558	
2,200.00	2,016.92	1,859.54	1,859.15	15.41	6.45	117.12	-27.88	-6,962.96	7,365.96	7,346.02	19.94	369.404	
2,300.00	2,090.05	1,922.18	1,921.50	16.73	6.68	116.67	-21.94	-6,963.81	7,407.36	7,386.16	21.19	349.521	
2,400.00	2,160.76	1,978.51	1,977.55	18.10	6.88	116.15	-16.48	-6,964.62	7,450.77	7,428.31	22.45	331.839	
2,500.00	2,228.95	2,032.23	2,031.01	19.53	7.07	115.57	-11.20	-6,965.43	7,496.17	7,472.44	23.73	315.884	
2,600.00	2,294.55	2,104.80	2,103.22	21.01	7.33	115.07	-4.05	-6,966.55	7,543.50	7,518.40	25.11	300.459	
2,700.00	2,357.48	2,206.80	2,204.78	22.55	7.71	114.73	5.30	-6,967.73	7,592.45	7,565.83	26.62	285.223	
2,800.00	2,418.42	2,800.00	2,236.24	24.13	9.87	114.67	7.92	-6,967.93	7,642.67	7,612.75	29.91	255.482	
2,900.00	2,479.25	2,306.01	2,303.63	25.71	8.07	115.12	13.65	-6,968.57	7,693.56	7,664.30	29.27	262.889	
3,000.00	2,540.09	2,340.74	2,338.25	27.31	8.19	115.35	16.50	-6,969.00	7,745.19	7,714.67	30.52	253.788	
3,100.00	2,600.93	2,375.40	2,372.79	28.90	8.32	115.58	19.33	-6,969.52	7,797.52	7,765.76	31.76	245.513	
3,200.00	2,661.77	2,409.98	2,407.25	30.51	8.45	115.81	22.12	-6,970.13	7,850.53	7,817.54	32.99	237.967	
3,300.00	2,722.61	2,447.34	2,444.48	32.11	8.58	116.06	25.11	-6,970.89	7,904.22	7,870.00	34.22	230.991	
3,400.00	2,783.44	2,503.96	2,500.92	33.72	8.79	116.43	29.55	-6,972.11	7,958.47	7,922.96	35.51	224.111	
3,500.00	2,844.28	2,560.91	2,557.69	35.34	9.00	116.80	33.89	-6,973.34	8,013.21	7,976.42	36.79	217.790	
3,600.00	2,905.12	2,618.20	2,614.81	36.95	9.21	117.17	38.12	-6,974.59	8,068.44	8,030.37	38.06	211.968	
3,700.00	2,965.96	2,680.12	2,676.55	38.57	9.44	117.56	42.50	-6,975.93	8,124.12	8,084.78	39.34	206.501	
3,800.00	3,026.79	2,743.72	2,740.00	40.19	9.67	117.97	46.73	-6,977.32	8,180.22	8,139.60	40.61	201.414	
3,900.00	3,087.63	2,808.07	2,804.21	41.81	9.91	118.37	50.73	-6,978.71	8,236.72	8,194.84	41.88	196.685	
4,000.00	3,148.47	2,818.00	2,814.12	43.43	9.94	118.43	51.32	-6,978.92	8,293.76	8,250.85	42.91	193.290	
4,100.00	3,209.31	2,870.11	2,866.13	45.05	10.13	118.75	54.34	-6,980.22	8,351.29	8,307.19	44.10	189.388	
4,200.00	3,270.14	2,898.23	2,894.19	46.68	10.23	118.93	55.92	-6,981.07	8,409.49	8,364.31	45.17	186.160	
4,300.00	3,330.98	2,926.29	2,922.19	48.31	10.34	119.10	57.47	-6,982.02	8,468.28	8,422.05	46.24	183.149	
4,400.00	3,391.82	2,954.27	2,950.11	49.93	10.44	119.27	58.97	-6,983.08	8,527.67	8,480.38	47.29	180.337	
4,500.00	3,452.66	3,006.00	3,001.72	51.56	10.63	119.58	61.66	-6,985.29	8,587.69	8,539.26	48.43	177.340	
4,600.00	3,513.49	3,006.00	3,001.72	53.19	10.63	119.58	61.66	-6,985.29	8,648.14	8,598.81	49.33	175.309	
4,700.00	3,574.33	8,840.05	6,215.06	54.82	52.83	121.79	-2,628.79	-6,889.09	8,682.35	8,583.79	98.56	88.092	
4,800.00	3,635.17	8,884.00	6,214.98	56.45	53.54	121.58	-2,672.71	-6,887.49	8,700.36	8,599.58	100.78	86.329	
4,900.00	3,696.01	8,993.61	6,215.42	58.08	55.34	121.07	-2,782.24	-6,883.23	8,718.91	8,614.69	104.21	83.665	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	3,756.84	9,267.00	6,212.86	59.71	59.87	119.78	-3,055.21	-6,868.98	8,736.34	8,625.62	110.72	78.905	
5,100.00	3,817.68	9,305.14	6,211.56	61.34	60.51	119.60	-3,093.27	-6,866.81	8,754.15	8,641.26	112.88	77.550	
5,200.00	3,878.52	9,324.26	6,211.08	62.97	60.83	119.50	-3,112.36	-6,865.84	8,772.99	8,658.30	114.68	76.498	
5,300.00	3,939.36	9,361.00	6,210.48	64.61	61.44	119.33	-3,149.06	-6,864.21	8,792.83	8,676.03	116.81	75.278	
5,400.00	4,000.19	9,366.42	6,210.43	66.24	61.53	119.30	-3,154.47	-6,863.99	8,813.50	8,695.18	118.32	74.490	
5,500.00	4,061.03	9,422.99	6,210.31	67.87	62.48	119.04	-3,210.99	-6,861.63	8,834.98	8,714.17	120.81	73.133	
5,600.00	4,121.87	9,482.17	6,210.87	69.51	63.48	118.77	-3,270.12	-6,859.07	8,857.09	8,733.74	123.34	71.808	
5,700.00	4,182.71	9,542.33	6,210.99	71.14	64.49	118.49	-3,330.22	-6,856.65	8,879.79	8,753.89	125.90	70.530	
5,800.00	4,243.54	9,594.59	6,210.69	72.77	65.37	118.25	-3,382.45	-6,854.72	8,903.11	8,774.81	128.30	69.392	
5,900.00	4,304.38	9,647.00	6,210.40	74.41	66.25	118.01	-3,434.82	-6,852.90	8,927.10	8,796.40	130.70	68.302	
6,000.00	4,365.22	9,716.99	6,210.24	76.04	67.43	117.68	-3,504.77	-6,850.48	8,951.67	8,818.21	133.45	67.078	
6,100.00	4,426.06	9,976.52	6,210.22	77.68	71.84	116.50	-3,763.98	-6,838.12	8,975.58	8,835.55	140.02	64.100	
6,200.00	4,486.90	9,994.22	6,210.22	79.31	72.14	116.42	-3,781.66	-6,837.17	8,999.87	8,858.12	141.75	63.493	
6,300.00	4,547.73	10,028.00	6,210.24	80.95	72.72	116.27	-3,815.41	-6,835.64	9,025.12	8,881.34	143.78	62.770	
6,400.00	4,608.57	10,035.04	6,210.26	82.58	72.84	116.23	-3,822.44	-6,835.35	9,051.16	8,905.90	145.26	62.312	
6,500.00	4,669.41	10,131.35	6,212.02	84.22	74.49	115.81	-3,918.63	-6,831.09	9,077.80	8,929.25	148.56	61.106	
6,600.00	4,730.25	10,240.32	6,214.96	85.86	76.36	115.33	-4,027.43	-6,825.68	9,104.62	8,952.49	152.13	59.849	
6,700.00	4,791.08	10,325.78	6,216.70	87.49	77.83	114.96	-4,112.77	-6,821.33	9,131.74	8,976.53	155.22	58.833	
6,800.00	4,851.92	10,496.30	6,218.43	89.13	80.78	114.21	-4,283.01	-6,811.82	9,158.87	8,998.79	160.08	57.213	
6,900.00	4,912.76	10,621.68	6,219.15	90.76	82.95	113.66	-4,408.12	-6,803.68	9,185.69	9,021.67	164.02	56.003	
7,000.00	4,973.60	10,662.32	6,218.77	92.40	83.66	113.48	-4,448.67	-6,801.12	9,213.05	9,046.86	166.19	55.438	
7,100.00	5,034.43	10,709.22	6,217.66	94.04	84.47	113.27	-4,495.49	-6,798.42	9,241.09	9,072.62	168.48	54.851	
7,200.00	5,095.27	10,792.69	6,216.06	95.67	85.92	112.89	-4,578.80	-6,793.56	9,269.63	9,098.10	171.53	54.039	
7,300.00	5,156.11	10,827.41	6,215.72	97.31	86.52	112.74	-4,613.46	-6,791.55	9,298.72	9,125.17	173.55	53.580	
7,400.00	5,216.95	10,868.00	6,215.58	98.95	87.23	112.56	-4,653.99	-6,789.32	9,328.52	9,152.84	175.68	53.100	
7,500.00	5,277.78	10,922.00	6,215.58	100.59	88.17	112.33	-4,707.91	-6,786.44	9,358.92	9,180.84	178.08	52.554	
7,600.00	5,338.62	10,922.00	6,215.58	102.22	88.17	112.33	-4,707.91	-6,786.44	9,390.09	9,210.78	179.31	52.369	
7,700.00	5,399.46	10,922.00	6,215.58	103.86	88.17	112.33	-4,707.91	-6,786.44	9,422.21	9,241.71	180.50	52.199	
7,800.00	5,460.30	10,922.00	6,215.58	105.50	88.17	112.33	-4,707.91	-6,786.44	9,455.28	9,273.60	181.68	52.044	
7,900.00	5,521.24	10,922.00	6,215.58	107.13	88.17	110.70	-4,707.91	-6,786.44	9,488.91	9,306.08	182.82	51.902	
8,000.00	5,584.83	10,922.00	6,215.58	108.61	88.17	102.59	-4,707.91	-6,786.44	9,511.89	9,327.99	183.90	51.723	
8,100.00	5,650.69	10,922.00	6,215.58	109.85	88.17	93.86	-4,707.91	-6,786.44	9,518.69	9,333.85	184.84	51.498	
8,200.00	5,716.83	10,922.00	6,215.58	110.82	88.17	85.11	-4,707.91	-6,786.44	9,509.15	9,323.56	185.59	51.237	
8,300.00	5,781.24	10,922.00	6,215.58	111.52	88.17	76.99	-4,707.91	-6,786.44	9,483.50	9,297.36	186.14	50.948	
8,400.00	5,841.96	10,922.00	6,215.58	111.98	88.17	70.02	-4,707.91	-6,786.44	9,442.39	9,255.91	186.49	50.633	
8,500.00	5,897.14	10,922.00	6,215.58	112.25	88.17	64.45	-4,707.91	-6,786.44	9,386.89	9,200.23	186.66	50.289	
8,600.00	5,945.12	10,922.00	6,215.58	112.37	88.17	60.38	-4,707.91	-6,786.44	9,318.44	9,131.74	186.69	49.913	
8,700.00	5,984.42	10,922.00	6,215.58	112.39	88.17	57.95	-4,707.91	-6,786.44	9,238.85	9,052.20	186.65	49.499	
8,800.00	6,013.86	10,922.00	6,215.58	112.35	88.17	57.57	-4,707.91	-6,786.44	9,150.29	8,963.73	186.56	49.047	
8,900.00	6,032.54	10,922.00	6,215.58	112.30	88.17	61.38	-4,707.91	-6,786.44	9,055.23	8,868.75	186.48	48.560	
9,000.00	6,039.89	10,922.00	6,215.58	112.24	88.17	93.20	-4,707.91	-6,786.44	8,956.40	8,769.97	186.43	48.042	
9,100.00	6,040.00	10,922.00	6,215.58	112.19	88.17	110.93	-4,707.91	-6,786.44	8,856.56	8,670.15	186.41	47.512	
9,200.00	6,040.00	10,922.00	6,215.58	112.16	88.17	110.93	-4,707.91	-6,786.44	8,756.71	8,570.32	186.39	46.981	
9,300.00	6,040.00	10,922.00	6,215.58	112.15	88.17	110.93	-4,707.91	-6,786.44	8,656.88	8,470.50	186.37	46.449	
9,400.00	6,040.00	10,922.00	6,215.58	112.15	88.17	110.93	-4,707.91	-6,786.44	8,557.04	8,370.69	186.35	45.918	
9,500.00	6,040.00	10,922.00	6,215.58	112.16	88.17	110.93	-4,707.91	-6,786.44	8,457.21	8,270.87	186.34	45.387	
9,600.00	6,040.00	10,922.00	6,215.58	112.19	88.17	110.93	-4,707.91	-6,786.44	8,357.38	8,171.06	186.32	44.855	
9,700.00	6,040.00	10,922.00	6,215.58	112.24	88.17	110.93	-4,707.91	-6,786.44	8,257.56	8,071.26	186.30	44.324	
9,800.00	6,040.00	10,922.00	6,215.58	112.31	88.17	110.93	-4,707.91	-6,786.44	8,157.74	7,971.46	186.28	43.792	
9,900.00	6,040.00	10,922.00	6,215.58	112.39	88.17	110.93	-4,707.91	-6,786.44	8,057.93	7,871.66	186.26	43.261	
10,000.00	6,040.00	10,922.00	6,215.58	112.49	88.17	110.93	-4,707.91	-6,786.44	7,958.12	7,771.87	186.25	42.729	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	10,922.00	6,215.58	112.62	88.17	110.93	-4,707.91	-6,786.44	7,858.31	7,672.08	186.23	42.197	
10,200.00	6,040.00	10,922.00	6,215.58	112.77	88.17	110.93	-4,707.91	-6,786.44	7,758.51	7,572.30	186.21	41.665	
10,300.00	6,040.00	10,922.00	6,215.58	112.94	88.17	110.93	-4,707.91	-6,786.44	7,658.72	7,472.52	186.20	41.133	
10,400.00	6,040.00	10,922.00	6,215.58	113.14	88.17	110.93	-4,707.91	-6,786.44	7,558.93	7,372.75	186.18	40.600	
10,500.00	6,040.00	10,922.00	6,215.58	113.36	88.17	110.93	-4,707.91	-6,786.44	7,459.15	7,272.99	186.16	40.068	
10,600.00	6,040.00	10,922.00	6,215.58	113.62	88.17	110.93	-4,707.91	-6,786.44	7,359.37	7,173.23	186.14	39.536	
10,700.00	6,040.00	10,922.00	6,215.58	113.91	88.17	110.93	-4,707.91	-6,786.44	7,259.60	7,073.47	186.13	39.003	
10,800.00	6,040.00	10,922.00	6,215.58	114.24	88.17	110.93	-4,707.91	-6,786.44	7,159.84	6,973.72	186.11	38.471	
10,900.00	6,040.00	10,922.00	6,215.58	114.61	88.17	110.93	-4,707.91	-6,786.44	7,060.08	6,873.98	186.10	37.938	
11,000.00	6,040.00	10,922.00	6,215.58	115.02	88.17	110.93	-4,707.91	-6,786.44	6,960.33	6,774.25	186.08	37.405	
11,100.00	6,040.00	10,922.00	6,215.58	115.49	88.17	110.93	-4,707.91	-6,786.44	6,860.58	6,674.52	186.06	36.872	
11,200.00	6,040.00	10,922.00	6,215.58	116.00	88.17	110.93	-4,707.91	-6,786.44	6,760.85	6,574.80	186.05	36.339	
11,300.00	6,040.00	10,922.00	6,215.58	116.58	88.17	110.93	-4,707.91	-6,786.44	6,661.12	6,475.08	186.03	35.806	
11,400.00	6,040.00	10,922.00	6,215.58	117.22	88.17	110.93	-4,707.91	-6,786.44	6,561.40	6,375.38	186.02	35.273	
11,500.00	6,040.00	10,922.00	6,215.58	117.92	88.17	110.93	-4,707.91	-6,786.44	6,461.69	6,275.68	186.00	34.740	
11,600.00	6,040.00	10,922.00	6,215.58	118.70	88.17	110.93	-4,707.91	-6,786.44	6,361.98	6,175.99	185.99	34.206	
11,700.00	6,040.00	10,922.00	6,215.58	119.56	88.17	110.93	-4,707.91	-6,786.44	6,262.29	6,076.32	185.98	33.673	
11,800.00	6,040.00	10,922.00	6,215.58	120.51	88.17	110.93	-4,707.91	-6,786.44	6,162.61	5,976.65	185.96	33.139	
11,900.00	6,040.00	10,922.00	6,215.58	121.54	88.17	110.93	-4,707.91	-6,786.44	6,062.94	5,876.99	185.95	32.605	
12,000.00	6,040.00	10,922.00	6,215.58	122.66	88.17	110.93	-4,707.91	-6,786.44	5,963.28	5,777.34	185.94	32.071	
12,100.00	6,040.00	10,922.00	6,215.58	123.87	88.17	110.93	-4,707.91	-6,786.44	5,863.63	5,677.70	185.93	31.537	
12,200.00	6,040.00	10,922.00	6,215.58	125.17	88.17	110.93	-4,707.91	-6,786.44	5,763.99	5,578.07	185.92	31.003	
12,300.00	6,040.00	10,922.00	6,215.58	126.57	88.17	110.93	-4,707.91	-6,786.44	5,664.36	5,478.46	185.91	30.469	
12,400.00	6,040.00	10,922.00	6,215.58	128.06	88.17	110.93	-4,707.91	-6,786.44	5,564.75	5,378.85	185.90	29.935	
12,500.00	6,040.00	10,922.00	6,215.58	129.63	88.17	110.93	-4,707.91	-6,786.44	5,465.15	5,279.26	185.89	29.400	
12,600.00	6,040.00	10,922.00	6,215.58	131.29	88.17	110.93	-4,707.91	-6,786.44	5,365.57	5,179.69	185.88	28.865	
12,700.00	6,040.00	10,922.00	6,215.58	133.03	88.17	110.93	-4,707.91	-6,786.44	5,266.00	5,080.13	185.88	28.331	
12,800.00	6,040.00	10,922.00	6,215.58	134.84	88.17	110.93	-4,707.91	-6,786.44	5,166.45	4,980.58	185.87	27.796	
12,900.00	6,040.00	10,922.00	6,215.58	136.71	88.17	110.93	-4,707.91	-6,786.44	5,066.92	4,881.05	185.87	27.261	
13,000.00	6,040.00	10,922.00	6,215.58	138.66	88.17	110.93	-4,707.91	-6,786.44	4,967.41	4,781.54	185.87	26.725	
13,100.00	6,040.00	10,922.00	6,215.58	140.66	88.17	110.93	-4,707.91	-6,786.44	4,867.92	4,682.05	185.87	26.190	
13,200.00	6,040.00	10,922.00	6,215.58	142.71	88.17	110.93	-4,707.91	-6,786.44	4,768.44	4,582.57	185.87	25.654	
13,300.00	6,040.00	10,922.00	6,215.58	144.81	88.17	110.93	-4,707.91	-6,786.44	4,668.99	4,483.12	185.88	25.119	
13,400.00	6,040.00	10,922.00	6,215.58	146.96	88.17	110.93	-4,707.91	-6,786.44	4,569.57	4,383.68	185.88	24.583	
13,500.00	6,040.00	10,922.00	6,215.58	149.14	88.17	110.93	-4,707.91	-6,786.44	4,470.17	4,284.27	185.90	24.047	
13,600.00	6,040.00	10,922.00	6,215.58	151.36	88.17	110.93	-4,707.91	-6,786.44	4,370.80	4,184.89	185.91	23.510	
13,700.00	6,040.00	10,922.00	6,215.58	153.62	88.17	110.93	-4,707.91	-6,786.44	4,271.45	4,085.52	185.93	22.974	
13,800.00	6,040.00	10,922.00	6,215.58	155.91	88.17	110.93	-4,707.91	-6,786.44	4,172.14	3,986.19	185.95	22.437	
13,900.00	6,040.00	10,922.00	6,215.58	158.22	88.17	110.93	-4,707.91	-6,786.44	4,072.86	3,886.89	185.98	21.900	
14,000.00	6,040.00	10,922.00	6,215.58	160.56	88.17	110.93	-4,707.91	-6,786.44	3,973.62	3,787.61	186.01	21.363	
14,100.00	6,040.00	10,922.00	6,215.58	162.92	88.17	110.93	-4,707.91	-6,786.44	3,874.42	3,688.37	186.05	20.825	
14,200.00	6,040.00	10,922.00	6,215.58	165.30	88.17	110.93	-4,707.91	-6,786.44	3,775.26	3,589.16	186.09	20.287	
14,300.00	6,040.00	10,922.00	6,215.58	167.70	88.17	110.93	-4,707.91	-6,786.44	3,676.14	3,490.00	186.15	19.749	
14,400.00	6,040.00	10,922.00	6,215.58	170.12	88.17	110.93	-4,707.91	-6,786.44	3,577.07	3,390.87	186.21	19.210	
14,500.00	6,040.00	10,922.00	6,215.58	172.55	88.17	110.93	-4,707.91	-6,786.44	3,478.06	3,291.78	186.28	18.671	
14,600.00	6,040.00	10,922.00	6,215.58	175.00	88.17	110.93	-4,707.91	-6,786.44	3,379.11	3,192.74	186.36	18.132	
14,700.00	6,040.00	10,922.00	6,215.58	177.46	88.17	110.93	-4,707.91	-6,786.44	3,280.21	3,093.75	186.46	17.592	
14,800.00	6,040.00	10,922.00	6,215.58	179.94	88.17	110.93	-4,707.91	-6,786.44	3,181.39	2,994.82	186.57	17.052	
14,900.00	6,040.00	10,922.00	6,215.58	182.43	88.17	110.93	-4,707.91	-6,786.44	3,082.65	2,895.94	186.70	16.511	
15,000.00	6,040.00	10,922.00	6,215.58	184.92	88.17	110.93	-4,707.91	-6,786.44	2,983.98	2,797.13	186.85	15.970	
15,100.00	6,040.00	10,922.00	6,215.58	187.43	88.17	110.93	-4,707.91	-6,786.44	2,885.41	2,698.39	187.03	15.428	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES F-J-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.00	6,040.00	10,922.00	6,215.58	189.95	88.17	110.93	-4,707.91	-6,786.44	2,786.94	2,599.72	187.23	14.885	
15,300.00	6,040.00	10,922.00	6,215.58	192.48	88.17	110.93	-4,707.91	-6,786.44	2,688.59	2,501.13	187.46	14.342	
15,400.00	6,040.00	10,922.00	6,215.58	195.01	88.17	110.93	-4,707.91	-6,786.44	2,590.36	2,402.63	187.73	13.798	
15,500.00	6,040.00	10,922.00	6,215.58	197.55	88.17	110.93	-4,707.91	-6,786.44	2,492.27	2,304.23	188.04	13.254	
15,600.00	6,040.00	10,922.00	6,215.58	200.10	88.17	110.93	-4,707.91	-6,786.44	2,394.34	2,205.93	188.41	12.708	
15,700.00	6,040.00	10,922.00	6,215.58	202.65	88.17	110.93	-4,707.91	-6,786.44	2,296.59	2,107.76	188.83	12.162	
15,800.00	6,040.00	10,922.00	6,215.58	205.22	88.17	110.93	-4,707.91	-6,786.44	2,199.04	2,009.71	189.33	11.615	
15,900.00	6,040.00	10,922.00	6,215.58	207.78	88.17	110.93	-4,707.91	-6,786.44	2,101.72	1,911.81	189.91	11.067	
16,000.00	6,040.00	10,922.00	6,215.58	210.36	88.17	110.93	-4,707.91	-6,786.44	2,004.66	1,814.07	190.59	10.518	
16,100.00	6,040.00	10,922.00	6,215.58	212.93	88.17	110.93	-4,707.91	-6,786.44	1,907.91	1,716.52	191.39	9.969	
16,200.00	6,040.00	10,922.00	6,215.58	215.52	88.17	110.93	-4,707.91	-6,786.44	1,811.51	1,619.17	192.34	9.418	
16,300.00	6,040.00	10,922.00	6,215.58	218.11	88.17	110.93	-4,707.91	-6,786.44	1,715.52	1,522.05	193.47	8.867	
16,400.00	6,040.00	10,922.00	6,215.58	220.70	88.17	110.93	-4,707.91	-6,786.44	1,620.02	1,425.20	194.82	8.316	
16,500.00	6,040.00	10,922.00	6,215.58	223.29	88.17	110.93	-4,707.91	-6,786.44	1,525.10	1,328.67	196.42	7.764	
16,600.00	6,040.00	10,922.00	6,215.58	225.89	88.17	110.93	-4,707.91	-6,786.44	1,430.86	1,232.51	198.35	7.214	
16,700.00	6,040.00	10,922.00	6,215.58	228.50	88.17	110.93	-4,707.91	-6,786.44	1,337.47	1,136.79	200.68	6.665	
16,800.00	6,040.00	10,922.00	6,215.58	231.11	88.17	110.93	-4,707.91	-6,786.44	1,245.10	1,041.61	203.49	6.119	
16,900.00	6,040.00	10,922.00	6,215.58	233.72	88.17	110.93	-4,707.91	-6,786.44	1,154.00	947.12	206.89	5.578	
17,000.00	6,040.00	10,922.00	6,215.58	236.33	88.17	110.93	-4,707.91	-6,786.44	1,064.50	853.50	211.00	5.045	
17,100.00	6,040.00	10,922.00	6,215.58	238.95	88.17	110.93	-4,707.91	-6,786.44	977.05	761.06	215.98	4.524	
17,200.00	6,040.00	10,922.00	6,215.58	241.57	88.17	110.93	-4,707.91	-6,786.44	892.23	670.26	221.97	4.020	
17,300.00	6,040.00	10,922.00	6,215.58	244.19	88.17	110.93	-4,707.91	-6,786.44	810.88	581.81	229.07	3.540	
17,400.00	6,040.00	10,922.00	6,215.58	246.82	88.17	110.93	-4,707.91	-6,786.44	734.15	496.86	237.29	3.094	
17,500.00	6,040.00	10,922.00	6,215.58	249.45	88.17	110.93	-4,707.91	-6,786.44	663.64	417.25	246.39	2.693	
17,600.00	6,040.00	10,922.00	6,215.58	252.08	88.17	110.93	-4,707.91	-6,786.44	601.56	345.87	255.69	2.353	
17,700.00	6,040.00	10,922.00	6,215.58	254.71	88.17	110.93	-4,707.91	-6,786.44	550.75	286.90	263.85	2.087	
17,800.00	6,040.00	10,922.00	6,215.58	257.35	88.17	110.93	-4,707.91	-6,786.44	514.56	245.17	269.39	1.910	
17,900.00	6,040.00	10,922.00	6,215.58	259.99	88.17	110.93	-4,707.91	-6,786.44	496.21	223.20	273.00	1.818	
17,942.75	6,040.00	10,922.00	6,215.58	261.12	88.17	110.93	-4,707.91	-6,786.44	494.36	219.31	275.05	1.797 CC	
18,000.00	6,040.00	10,922.00	6,215.58	262.63	88.17	110.93	-4,707.91	-6,786.44	497.67	219.15	278.51	1.787 ES, SF	
18,100.00	6,040.00	10,922.00	6,215.58	265.27	88.17	110.93	-4,707.91	-6,786.44	518.77	235.54	283.23	1.832	
18,200.00	6,040.00	10,922.00	6,215.58	267.91	88.17	110.93	-4,707.91	-6,786.44	557.29	274.29	283.00	1.969	
18,300.00	6,040.00	10,922.00	6,215.58	270.56	88.17	110.93	-4,707.91	-6,786.44	609.94	331.53	278.41	2.191	
18,400.00	6,040.00	10,922.00	6,215.58	273.21	88.17	110.93	-4,707.91	-6,786.44	673.40	401.94	271.47	2.481	
18,500.00	6,040.00	10,922.00	6,215.58	275.86	88.17	110.93	-4,707.91	-6,786.44	744.93	481.14	263.79	2.824	
18,600.00	6,040.00	10,922.00	6,215.58	278.51	88.17	110.93	-4,707.91	-6,786.44	822.42	566.12	256.30	3.209	
18,700.00	6,040.00	10,922.00	6,215.58	281.16	88.17	110.93	-4,707.91	-6,786.44	904.34	654.90	249.43	3.626	
18,800.00	6,040.00	10,922.00	6,215.58	283.81	88.17	110.93	-4,707.91	-6,786.44	989.58	746.26	243.32	4.067	
18,900.00	6,040.00	10,922.00	6,215.58	286.47	88.17	110.93	-4,707.91	-6,786.44	1,077.37	839.41	237.96	4.527	
18,919.70	6,040.00	10,922.00	6,215.58	286.99	88.17	110.93	-4,707.91	-6,786.44	1,094.91	857.92	236.99	4.620	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference				Offset			Semi Major Axis		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-90.83	-101.03	-6,960.04	6,960.77				
100.00	100.00	100.23	100.23	0.13	0.28	-90.83	-101.09	-6,960.03	6,960.77	6,960.35	0.42	N/A	
100.19	100.19	100.42	100.42	0.14	0.28	-90.83	-101.10	-6,960.03	6,960.77	6,960.35	0.42	N/A	
200.00	199.98	200.51	200.51	0.48	0.64	119.94	-101.38	-6,960.02	6,961.63	6,960.51	1.12	6,194.702	
300.00	299.84	300.69	300.68	0.85	1.00	119.92	-101.90	-6,960.01	6,964.24	6,962.40	1.84	3,778.740	
400.00	399.45	400.67	400.66	1.22	1.36	119.91	-102.63	-6,959.98	6,968.58	6,966.01	2.58	2,703.108	
500.00	498.70	500.34	500.33	1.62	1.72	119.88	-103.59	-6,959.95	6,974.67	6,971.34	3.33	2,094.389	
600.00	597.47	607.09	607.07	2.05	2.10	119.85	-104.78	-6,959.87	6,982.47	6,978.34	4.13	1,690.706	
700.00	695.62	716.12	716.09	2.51	2.49	119.83	-105.99	-6,959.62	6,991.88	6,986.91	4.96	1,408.526	
800.00	793.06	768.71	768.68	3.01	2.67	119.71	-106.43	-6,959.63	7,003.30	6,997.68	5.62	1,246.403	
900.00	889.64	820.70	820.68	3.56	2.85	119.56	-106.59	-6,959.98	7,017.11	7,010.81	6.30	1,113.191	
1,000.00	985.27	871.94	871.91	4.14	3.03	119.38	-106.48	-6,960.64	7,033.31	7,026.29	7.02	1,001.885	
1,100.00	1,079.82	936.45	936.41	4.78	3.25	119.21	-106.01	-6,961.88	7,051.86	7,044.05	7.82	902.113	
1,200.00	1,173.17	1,029.00	1,028.93	5.46	3.57	119.09	-105.18	-6,963.76	7,072.35	7,063.60	8.75	808.619	
1,300.00	1,265.21	4,022.00	3,900.22	6.20	17.63	128.87	121.13	-6,412.98	7,058.50	7,038.64	19.87	355.281	
1,400.00	1,355.84	4,022.00	3,900.22	6.99	17.63	129.04	121.13	-6,412.98	7,047.12	7,026.52	20.60	342.070	
1,500.00	1,444.94	4,022.00	3,900.22	7.84	17.63	129.17	121.13	-6,412.98	7,039.33	7,017.95	21.38	329.264	
1,600.00	1,532.39	4,022.00	3,900.22	8.75	17.63	129.23	121.13	-6,412.98	7,035.16	7,012.96	22.20	316.907	
1,687.72	1,607.68	4,093.07	3,965.85	9.60	18.12	129.58	131.52	-6,387.78	7,033.20	7,009.96	23.24	302.624	
1,700.00	1,618.11	4,095.87	3,968.45	9.71	18.14	129.59	131.92	-6,386.82	7,033.22	7,009.87	23.36	301.108	
1,800.00	1,701.97	4,118.42	3,989.44	10.74	18.30	129.66	135.12	-6,379.22	7,035.33	7,010.98	24.35	288.894	
1,900.00	1,783.88	4,140.57	4,010.12	11.82	18.45	129.69	138.23	-6,371.92	7,040.83	7,015.45	25.39	277.350	
2,000.00	1,863.74	4,211.00	4,076.31	12.96	18.94	129.92	147.81	-6,349.85	7,050.32	7,023.67	26.65	264.529	
2,100.00	1,941.45	4,211.00	4,076.31	14.16	18.94	129.73	147.81	-6,349.85	7,062.19	7,034.52	27.67	255.208	
2,200.00	2,016.92	4,211.00	4,076.31	15.41	18.94	129.49	147.81	-6,349.85	7,077.65	7,048.93	28.73	246.384	
2,300.00	2,090.05	4,211.00	4,076.31	16.73	18.94	129.19	147.81	-6,349.85	7,096.67	7,066.86	29.81	238.053	
2,400.00	2,160.76	4,267.42	4,129.66	18.10	19.29	129.16	155.29	-6,333.10	7,118.73	7,087.58	31.15	228.534	
2,500.00	2,228.95	4,299.77	4,160.33	19.53	19.50	128.95	159.56	-6,323.71	7,144.02	7,111.60	32.42	220.360	
2,600.00	2,294.55	4,330.93	4,189.91	21.01	19.69	128.68	163.66	-6,314.81	7,172.43	7,138.72	33.71	212.769	
2,700.00	2,357.48	4,398.00	4,253.72	22.55	20.12	128.59	172.43	-6,296.14	7,204.11	7,168.95	35.16	204.870	
2,800.00	2,418.42	4,398.00	4,253.72	24.13	20.12	128.45	172.43	-6,296.14	7,237.89	7,201.53	36.36	199.048	
2,900.00	2,479.25	4,422.45	4,277.04	25.71	20.27	128.60	175.60	-6,289.49	7,272.89	7,235.24	37.65	193.173	
3,000.00	2,540.09	4,456.60	4,309.64	27.31	20.47	128.82	179.97	-6,280.31	7,308.82	7,269.85	38.97	187.570	
3,100.00	2,600.93	4,492.00	4,343.48	28.90	20.69	129.05	184.43	-6,270.93	7,345.65	7,305.37	40.28	182.377	
3,200.00	2,661.77	4,535.54	4,385.20	30.51	20.95	129.33	189.59	-6,259.56	7,383.33	7,341.73	41.60	177.463	
3,300.00	2,722.61	4,759.99	4,600.66	32.11	22.27	130.70	209.20	-6,199.93	7,420.95	7,377.36	43.59	170.244	
3,400.00	2,783.44	4,799.30	4,638.38	33.72	22.51	130.93	212.02	-6,189.23	7,458.65	7,413.78	44.87	166.215	
3,500.00	2,844.28	4,830.88	4,668.74	35.34	22.69	131.12	214.15	-6,180.81	7,497.21	7,451.10	46.12	162.571	
3,600.00	2,905.12	4,870.00	4,706.43	36.95	22.92	131.35	216.64	-6,170.59	7,536.64	7,489.27	47.37	159.086	
3,700.00	2,965.96	4,870.00	4,706.43	38.57	22.92	131.35	216.64	-6,170.59	7,576.98	7,528.50	48.48	156.297	
3,800.00	3,026.79	4,870.00	4,706.43	40.19	22.92	131.35	216.64	-6,170.59	7,618.42	7,568.85	49.57	153.701	
3,900.00	3,087.63	4,918.54	4,753.35	41.81	23.19	131.63	219.61	-6,158.50	7,660.37	7,609.55	50.81	150.755	
4,000.00	3,148.47	8,624.24	6,204.38	43.43	48.09	125.12	-2,247.29	-5,937.67	7,675.66	7,592.97	82.69	92.822	
4,100.00	3,209.31	8,693.12	6,203.88	45.05	49.15	124.75	-2,316.06	-5,933.83	7,685.27	7,599.99	85.28	90.116	
4,200.00	3,270.14	8,743.31	6,203.33	46.68	49.93	124.48	-2,366.18	-5,931.19	7,695.63	7,608.08	87.55	87.903	
4,300.00	3,330.98	8,798.02	6,203.12	48.31	50.78	124.19	-2,420.82	-5,928.30	7,706.81	7,616.91	89.90	85.727	
4,400.00	3,391.82	8,897.53	6,203.32	49.93	52.34	123.67	-2,520.17	-5,922.68	7,718.55	7,625.46	93.10	82.910	
4,500.00	3,452.66	8,941.14	6,203.42	51.56	53.03	123.44	-2,563.71	-5,920.24	7,730.96	7,635.69	95.26	81.155	
4,600.00	3,513.49	8,993.72	6,203.49	53.19	53.86	123.16	-2,616.21	-5,917.44	7,744.16	7,646.57	97.60	79.346	
4,700.00	3,574.33	9,055.87	6,203.96	54.82	54.85	122.83	-2,678.28	-5,914.10	7,758.11	7,657.99	100.13	77.483	
4,800.00	3,635.17	9,101.53	6,204.53	56.45	55.58	122.60	-2,723.86	-5,911.64	7,772.80	7,670.47	102.34	75.954	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES K21-O24-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,900.00	3,696.01	9,138.14	6,204.59	58.08	56.16	122.41	-2,760.44	-5,909.98	7,788.40	7,684.03	104.37	74.624	
5,000.00	3,756.84	9,321.70	6,208.08	59.71	59.13	121.46	-2,943.61	-5,899.56	7,804.22	7,694.89	109.33	71.384	
5,100.00	3,817.68	9,389.55	6,209.62	61.34	60.24	121.12	-3,011.29	-5,895.18	7,820.20	7,708.19	112.01	69.817	
5,200.00	3,878.52	9,457.40	6,209.73	62.97	25.22	120.35	-3,159.33	-5,885.68	7,836.26	7,771.91	64.35	121.784	
5,300.00	3,939.36	9,525.26	6,209.99	64.61	63.76	120.02	-3,223.90	-5,881.01	7,852.54	7,733.55	118.98	65.997	
5,400.00	4,000.19	9,593.11	6,210.10	66.24	64.49	119.79	-3,268.17	-5,878.17	7,869.86	7,748.64	121.21	64.926	
5,500.00	4,061.03	9,660.96	6,210.10	67.87	64.49	119.79	-3,268.17	-5,878.17	7,888.11	7,765.60	122.51	64.386	
5,600.00	4,121.87	9,728.81	6,210.13	69.51	65.09	119.60	-3,304.44	-5,876.18	7,907.34	7,782.79	124.56	63.485	
5,700.00	4,182.71	9,796.66	6,210.15	71.14	65.48	119.48	-3,328.07	-5,875.07	7,927.61	7,801.29	126.32	62.758	
5,800.00	4,243.54	9,864.51	6,206.76	72.77	69.58	118.20	-3,573.87	-5,862.36	7,947.93	7,815.10	132.83	59.836	
5,900.00	4,304.38	9,932.36	6,206.56	74.41	70.36	117.96	-3,620.02	-5,859.39	7,968.16	7,833.06	135.10	58.981	
6,000.00	4,365.22	10,000.21	6,207.02	76.04	71.13	117.73	-3,666.12	-5,856.41	7,989.17	7,851.81	137.36	58.163	
6,100.00	4,426.06	10,068.06	6,204.68	77.68	74.77	116.63	-3,880.90	-5,842.63	8,010.89	7,867.60	143.28	55.910	
6,200.00	4,486.90	10,135.91	6,203.98	79.31	75.68	116.36	-3,933.90	-5,838.68	8,031.99	7,886.28	145.71	55.121	
6,300.00	4,547.73	10,203.76	6,203.82	80.95	76.14	116.23	-3,960.78	-5,836.74	8,053.92	7,906.36	147.56	54.579	
6,400.00	4,608.57	10,271.61	6,203.86	82.58	76.66	116.07	-3,991.44	-5,834.63	8,076.76	7,927.28	149.48	54.031	
6,500.00	4,669.41	10,339.46	6,204.27	84.22	77.32	115.88	-4,029.68	-5,832.14	8,100.51	7,948.95	151.56	53.449	
6,600.00	4,730.25	10,407.31	6,204.84	85.86	78.05	115.67	-4,072.75	-5,829.47	8,125.06	7,971.34	153.73	52.854	
6,700.00	4,791.08	10,475.16	6,205.27	87.49	79.00	115.40	-4,128.20	-5,826.20	8,150.30	7,994.13	156.17	52.189	
6,800.00	4,851.92	10,543.01	6,205.48	89.13	79.94	115.12	-4,183.08	-5,823.10	8,176.20	8,017.61	158.59	51.556	
6,900.00	4,912.76	10,610.86	6,205.58	90.76	80.55	114.94	-4,219.35	-5,821.12	8,202.79	8,042.21	160.58	51.083	
7,000.00	4,973.60	10,678.71	6,205.59	92.40	81.41	114.69	-4,269.33	-5,818.58	8,230.13	8,067.26	162.87	50.532	
7,100.00	5,034.43	10,746.56	6,205.42	94.04	82.19	114.47	-4,315.24	-5,816.51	8,258.29	8,093.23	165.06	50.033	
7,200.00	5,095.27	10,814.41	6,204.66	95.67	84.27	113.86	-4,437.36	-5,810.78	8,286.89	8,117.88	169.01	49.032	
7,300.00	5,156.11	10,882.26	6,204.83	97.31	30.72	113.48	-4,513.99	-5,806.71	8,315.61	8,204.95	110.66	75.144	
7,400.00	5,216.95	10,950.11	6,204.97	98.95	86.19	113.31	-4,548.90	-5,804.91	8,345.01	8,171.19	173.82	48.009	
7,500.00	5,277.78	11,017.96	6,204.60	100.59	87.08	113.06	-4,600.90	-5,802.65	8,375.30	8,199.17	176.13	47.553	
7,600.00	5,338.62	11,085.81	6,204.05	102.22	87.88	112.83	-4,647.89	-5,800.75	8,406.24	8,227.94	178.30	47.146	
7,700.00	5,399.46	11,153.66	6,203.52	103.86	88.72	112.59	-4,696.81	-5,798.71	8,437.70	8,257.18	180.51	46.743	
7,800.00	5,460.30	11,221.51	6,203.52	105.50	88.72	112.59	-4,696.81	-5,798.71	8,470.06	8,288.53	181.53	46.658	
7,900.00	5,521.24	11,289.36	6,203.52	107.13	88.72	110.95	-4,696.81	-5,798.71	8,503.09	8,320.56	182.53	46.585	
8,000.00	5,584.83	11,357.21	6,203.52	108.61	88.72	102.84	-4,696.81	-5,798.71	8,525.57	8,342.14	183.44	46.477	
8,100.00	5,650.69	11,425.06	6,203.52	109.85	88.72	94.10	-4,696.81	-5,798.71	8,532.00	8,347.80	184.20	46.319	
8,200.00	5,716.83	11,492.91	6,203.52	110.82	88.72	85.36	-4,696.81	-5,798.71	8,522.19	8,337.42	184.78	46.122	
8,300.00	5,781.24	11,560.76	6,203.52	111.52	88.72	77.26	-4,696.81	-5,798.71	8,496.41	8,311.27	185.15	45.891	
8,400.00	5,841.96	11,628.61	6,203.52	111.98	88.72	70.31	-4,696.81	-5,798.71	8,455.29	8,269.97	185.32	45.626	
8,500.00	5,897.14	11,696.46	6,203.52	112.25	88.72	64.77	-4,696.81	-5,798.71	8,399.87	8,214.54	185.32	45.325	
8,600.00	5,945.12	11,764.31	6,203.52	112.37	88.72	60.76	-4,696.81	-5,798.71	8,331.56	8,146.34	185.21	44.984	
8,700.00	5,984.42	11,832.16	6,203.52	112.39	88.72	58.41	-4,696.81	-5,798.71	8,252.15	8,067.11	185.04	44.597	
8,800.00	6,013.86	11,900.01	6,203.52	112.35	88.72	58.20	-4,696.81	-5,798.71	8,163.77	7,978.92	184.85	44.165	
8,900.00	6,032.54	11,967.86	6,203.52	112.30	88.72	62.34	-4,696.81	-5,798.71	8,068.85	7,884.16	184.69	43.688	
9,000.00	6,039.89	12,035.71	6,203.52	112.24	88.72	93.54	-4,696.81	-5,798.71	7,970.10	7,785.49	184.60	43.174	
9,100.00	6,040.00	12,103.56	6,203.52	112.19	88.72	109.45	-4,696.81	-5,798.71	7,870.30	7,685.72	184.57	42.641	
9,200.00	6,040.00	12,171.41	6,203.52	112.16	88.72	109.45	-4,696.81	-5,798.71	7,770.49	7,585.96	184.54	42.108	
9,300.00	6,040.00	12,239.26	6,203.52	112.15	88.72	109.45	-4,696.81	-5,798.71	7,670.70	7,486.19	184.50	41.575	
9,400.00	6,040.00	12,307.11	6,203.52	112.15	88.72	109.45	-4,696.81	-5,798.71	7,570.90	7,386.44	184.47	41.042	
9,500.00	6,040.00	12,374.96	6,203.52	112.16	88.72	109.45	-4,696.81	-5,798.71	7,471.12	7,286.68	184.43	40.509	
9,600.00	6,040.00	12,442.81	6,203.52	112.19	88.72	109.45	-4,696.81	-5,798.71	7,371.34	7,186.94	184.40	39.975	
9,700.00	6,040.00	12,510.66	6,203.52	112.24	88.72	109.45	-4,696.81	-5,798.71	7,271.56	7,087.20	184.36	39.442	
9,800.00	6,040.00	12,578.51	6,203.52	112.31	88.72	109.45	-4,696.81	-5,798.71	7,171.79	6,987.47	184.33	38.908	
9,900.00	6,040.00	12,646.36	6,203.52	112.39	88.72	109.45	-4,696.81	-5,798.71	7,072.03	6,887.74	184.29	38.374	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES K21-O24-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 22-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,000.00	6,040.00	11,078.00	6,203.52	112.49	88.72	109.45	-4,696.81	-5,798.71	6,972.28	6,788.02	184.25	37.841	
10,100.00	6,040.00	11,078.00	6,203.52	112.62	88.72	109.45	-4,696.81	-5,798.71	6,872.53	6,688.31	184.22	37.307	
10,200.00	6,040.00	11,078.00	6,203.52	112.77	88.72	109.45	-4,696.81	-5,798.71	6,772.79	6,588.61	184.18	36.773	
10,300.00	6,040.00	11,078.00	6,203.52	112.94	88.72	109.45	-4,696.81	-5,798.71	6,673.05	6,488.91	184.14	36.239	
10,400.00	6,040.00	11,078.00	6,203.52	113.14	88.72	109.45	-4,696.81	-5,798.71	6,573.33	6,389.23	184.10	35.705	
10,500.00	6,040.00	11,078.00	6,203.52	113.36	88.72	109.45	-4,696.81	-5,798.71	6,473.61	6,289.55	184.06	35.170	
10,600.00	6,040.00	11,078.00	6,203.52	113.62	88.72	109.45	-4,696.81	-5,798.71	6,373.91	6,189.88	184.02	34.636	
10,700.00	6,040.00	11,078.00	6,203.52	113.91	88.72	109.45	-4,696.81	-5,798.71	6,274.21	6,090.22	183.98	34.102	
10,800.00	6,040.00	11,078.00	6,203.52	114.24	88.72	109.45	-4,696.81	-5,798.71	6,174.52	5,990.58	183.94	33.567	
10,900.00	6,040.00	11,078.00	6,203.52	114.61	88.72	109.45	-4,696.81	-5,798.71	6,074.84	5,890.94	183.90	33.033	
11,000.00	6,040.00	11,078.00	6,203.52	115.02	88.72	109.45	-4,696.81	-5,798.71	5,975.18	5,791.31	183.86	32.498	
11,100.00	6,040.00	11,078.00	6,203.52	115.49	88.72	109.45	-4,696.81	-5,798.71	5,875.52	5,691.70	183.82	31.963	
11,200.00	6,040.00	11,078.00	6,203.52	116.00	88.72	109.45	-4,696.81	-5,798.71	5,775.88	5,592.10	183.78	31.429	
11,300.00	6,040.00	11,078.00	6,203.52	116.58	88.72	109.45	-4,696.81	-5,798.71	5,676.24	5,492.51	183.74	30.894	
11,400.00	6,040.00	11,078.00	6,203.52	117.22	88.72	109.45	-4,696.81	-5,798.71	5,576.63	5,392.93	183.69	30.359	
11,500.00	6,040.00	11,078.00	6,203.52	117.92	88.72	109.45	-4,696.81	-5,798.71	5,477.02	5,293.37	183.65	29.823	
11,600.00	6,040.00	11,078.00	6,203.52	118.70	88.72	109.45	-4,696.81	-5,798.71	5,377.43	5,193.83	183.60	29.288	
11,700.00	6,040.00	11,078.00	6,203.52	119.56	88.72	109.45	-4,696.81	-5,798.71	5,277.86	5,094.30	183.56	28.753	
11,800.00	6,040.00	11,078.00	6,203.52	120.51	88.72	109.45	-4,696.81	-5,798.71	5,178.30	4,994.79	183.51	28.217	
11,900.00	6,040.00	11,078.00	6,203.52	121.54	88.72	109.45	-4,696.81	-5,798.71	5,078.76	4,895.29	183.47	27.682	
12,000.00	6,040.00	11,078.00	6,203.52	122.66	88.72	109.45	-4,696.81	-5,798.71	4,979.24	4,795.81	183.42	27.146	
12,100.00	6,040.00	11,078.00	6,203.52	123.87	88.72	109.45	-4,696.81	-5,798.71	4,879.74	4,696.36	183.38	26.610	
12,200.00	6,040.00	11,078.00	6,203.52	125.17	88.72	109.45	-4,696.81	-5,798.71	4,780.25	4,596.92	183.33	26.074	
12,300.00	6,040.00	11,078.00	6,203.52	126.57	88.72	109.45	-4,696.81	-5,798.71	4,680.80	4,497.51	183.29	25.538	
12,400.00	6,040.00	11,078.00	6,203.52	128.06	88.72	109.45	-4,696.81	-5,798.71	4,581.36	4,398.12	183.24	25.002	
12,500.00	6,040.00	11,078.00	6,203.52	129.63	88.72	109.45	-4,696.81	-5,798.71	4,481.95	4,298.76	183.19	24.466	
12,600.00	6,040.00	11,078.00	6,203.52	131.29	88.72	109.45	-4,696.81	-5,798.71	4,382.56	4,199.42	183.15	23.929	
12,700.00	6,040.00	11,078.00	6,203.52	133.03	88.72	109.45	-4,696.81	-5,798.71	4,283.21	4,100.11	183.10	23.393	
12,800.00	6,040.00	11,078.00	6,203.52	134.84	88.72	109.45	-4,696.81	-5,798.71	4,183.88	4,000.83	183.05	22.856	
12,900.00	6,040.00	11,078.00	6,203.52	136.71	88.72	109.45	-4,696.81	-5,798.71	4,084.59	3,901.58	183.01	22.319	
13,000.00	6,040.00	11,078.00	6,203.52	138.66	88.72	109.45	-4,696.81	-5,798.71	3,985.34	3,802.37	182.97	21.782	
13,100.00	6,040.00	11,078.00	6,203.52	140.66	88.72	109.45	-4,696.81	-5,798.71	3,886.12	3,703.19	182.92	21.244	
13,200.00	6,040.00	11,078.00	6,203.52	142.71	88.72	109.45	-4,696.81	-5,798.71	3,786.94	3,604.06	182.88	20.707	
13,300.00	6,040.00	11,078.00	6,203.52	144.81	88.72	109.45	-4,696.81	-5,798.71	3,687.81	3,504.96	182.84	20.169	
13,400.00	6,040.00	11,078.00	6,203.52	146.96	88.72	109.45	-4,696.81	-5,798.71	3,588.72	3,405.92	182.81	19.631	
13,500.00	6,040.00	11,078.00	6,203.52	149.14	88.72	109.45	-4,696.81	-5,798.71	3,489.69	3,306.92	182.78	19.093	
13,600.00	6,040.00	11,078.00	6,203.52	151.36	88.72	109.45	-4,696.81	-5,798.71	3,390.72	3,207.97	182.75	18.554	
13,700.00	6,040.00	11,078.00	6,203.52	153.62	88.72	109.45	-4,696.81	-5,798.71	3,291.80	3,109.08	182.72	18.015	
13,800.00	6,040.00	11,078.00	6,203.52	155.91	88.72	109.45	-4,696.81	-5,798.71	3,192.96	3,010.25	182.70	17.476	
13,900.00	6,040.00	11,078.00	6,203.52	158.22	88.72	109.45	-4,696.81	-5,798.71	3,094.19	2,911.49	182.69	16.936	
14,000.00	6,040.00	11,078.00	6,203.52	160.56	88.72	109.45	-4,696.81	-5,798.71	2,995.50	2,812.81	182.69	16.396	
14,100.00	6,040.00	11,078.00	6,203.52	162.92	88.72	109.45	-4,696.81	-5,798.71	2,896.90	2,714.20	182.70	15.856	
14,200.00	6,040.00	11,078.00	6,203.52	165.30	88.72	109.45	-4,696.81	-5,798.71	2,798.40	2,615.68	182.72	15.315	
14,300.00	6,040.00	11,078.00	6,203.52	167.70	88.72	109.45	-4,696.81	-5,798.71	2,700.01	2,517.25	182.76	14.774	
14,400.00	6,040.00	11,078.00	6,203.52	170.12	88.72	109.45	-4,696.81	-5,798.71	2,601.74	2,418.93	182.81	14.232	
14,500.00	6,040.00	11,078.00	6,203.52	172.55	88.72	109.45	-4,696.81	-5,798.71	2,503.61	2,320.72	182.89	13.689	
14,600.00	6,040.00	11,078.00	6,203.52	175.00	88.72	109.45	-4,696.81	-5,798.71	2,405.63	2,222.64	182.99	13.146	
14,700.00	6,040.00	11,078.00	6,203.52	177.46	88.72	109.45	-4,696.81	-5,798.71	2,307.83	2,124.70	183.13	12.602	
14,800.00	6,040.00	11,078.00	6,203.52	179.94	88.72	109.45	-4,696.81	-5,798.71	2,210.22	2,026.92	183.30	12.058	
14,900.00	6,040.00	11,078.00	6,203.52	182.43	88.72	109.45	-4,696.81	-5,798.71	2,112.84	1,929.31	183.53	11.512	
15,000.00	6,040.00	11,078.00	6,203.52	184.92	88.72	109.45	-4,696.81	-5,798.71	2,015.71	1,831.89	183.82	10.966	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES K21-O24-4HNB - OWB - FINAL SURVEY												Offset Well Error:	0.00 usft
Survey Program: 22-MWD OWSG													
Reference				Offset			Semi Major Axis			Distance			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,100.00	6,040.00	11,078.00	6,203.52	187.43	88.72	109.45	-4,696.81	-5,798.71	1,918.88	1,734.70	184.18	10.419	
15,200.00	6,040.00	11,078.00	6,203.52	189.95	88.72	109.45	-4,696.81	-5,798.71	1,822.39	1,637.76	184.63	9.871	
15,300.00	6,040.00	11,078.00	6,203.52	192.48	88.72	109.45	-4,696.81	-5,798.71	1,726.30	1,541.11	185.19	9.322	
15,400.00	6,040.00	11,078.00	6,203.52	195.01	88.72	109.45	-4,696.81	-5,798.71	1,630.68	1,444.79	185.90	8.772	
15,500.00	6,040.00	11,078.00	6,203.52	197.55	88.72	109.45	-4,696.81	-5,798.71	1,535.62	1,348.85	186.78	8.222	
15,600.00	6,040.00	11,078.00	6,203.52	200.10	88.72	109.45	-4,696.81	-5,798.71	1,441.23	1,253.35	187.88	7.671	
15,700.00	6,040.00	11,078.00	6,203.52	202.65	88.72	109.45	-4,696.81	-5,798.71	1,347.65	1,158.40	189.25	7.121	
15,800.00	6,040.00	11,078.00	6,203.52	205.22	88.72	109.45	-4,696.81	-5,798.71	1,255.06	1,064.09	190.97	6.572	
15,900.00	6,040.00	11,078.00	6,203.52	207.78	88.72	109.45	-4,696.81	-5,798.71	1,163.69	970.58	193.11	6.026	
16,000.00	6,040.00	11,078.00	6,203.52	210.36	88.72	109.45	-4,696.81	-5,798.71	1,073.87	878.07	195.79	5.485	
16,100.00	6,040.00	11,078.00	6,203.52	212.93	88.72	109.45	-4,696.81	-5,798.71	986.00	786.87	199.13	4.952	
16,200.00	6,040.00	11,078.00	6,203.52	215.52	88.72	109.45	-4,696.81	-5,798.71	900.67	697.42	203.25	4.431	
16,300.00	6,040.00	11,078.00	6,203.52	218.11	88.72	109.45	-4,696.81	-5,798.71	818.67	610.39	208.28	3.931	
16,400.00	6,040.00	11,078.00	6,203.52	220.70	88.72	109.45	-4,696.81	-5,798.71	741.10	526.82	214.27	3.459	
16,500.00	6,040.00	11,078.00	6,203.52	223.29	88.72	109.45	-4,696.81	-5,798.71	669.50	448.36	221.14	3.027	
16,600.00	6,040.00	11,078.00	6,203.52	225.89	88.72	109.45	-4,696.81	-5,798.71	606.01	377.47	228.53	2.652	
16,700.00	6,040.00	11,078.00	6,203.52	228.50	88.72	109.45	-4,696.81	-5,798.71	553.40	317.57	235.83	2.347	
16,800.00	6,040.00	11,078.00	6,203.52	231.11	88.72	109.45	-4,696.81	-5,798.71	515.04	272.10	242.93	2.120	
16,900.00	6,040.00	11,078.00	6,203.52	233.72	88.72	109.45	-4,696.81	-5,798.71	494.24	242.33	251.91	1.962	
16,954.95	6,040.00	11,078.00	6,203.52	235.15	88.72	109.45	-4,696.81	-5,798.71	491.17	233.04	258.13	1.903 CC	
17,000.00	6,040.00	11,078.00	6,203.52	236.33	88.72	109.45	-4,696.81	-5,798.71	493.23	230.06	263.18	1.874 ES, SF	
17,100.00	6,040.00	11,078.00	6,203.52	238.95	88.72	109.45	-4,696.81	-5,798.71	512.14	240.89	271.25	1.888	
17,200.00	6,040.00	11,078.00	6,203.52	241.57	88.72	109.45	-4,696.81	-5,798.71	548.91	275.61	273.29	2.008	
17,300.00	6,040.00	11,078.00	6,203.52	244.19	88.72	109.45	-4,696.81	-5,798.71	600.26	329.81	270.44	2.220	
17,400.00	6,040.00	11,078.00	6,203.52	246.82	88.72	109.45	-4,696.81	-5,798.71	662.81	397.94	264.87	2.502	
17,500.00	6,040.00	11,078.00	6,203.52	249.45	88.72	109.45	-4,696.81	-5,798.71	733.71	475.43	258.27	2.841	
17,600.00	6,040.00	11,078.00	6,203.52	252.08	88.72	109.45	-4,696.81	-5,798.71	810.76	559.11	251.65	3.222	
17,700.00	6,040.00	11,078.00	6,203.52	254.71	88.72	109.45	-4,696.81	-5,798.71	892.38	646.90	245.48	3.635	
17,800.00	6,040.00	11,078.00	6,203.52	257.35	88.72	109.45	-4,696.81	-5,798.71	977.42	737.48	239.94	4.074	
17,900.00	6,040.00	11,078.00	6,203.52	259.99	88.72	109.45	-4,696.81	-5,798.71	1,065.07	830.01	235.06	4.531	
18,000.00	6,040.00	11,078.00	6,203.52	262.63	88.72	109.45	-4,696.81	-5,798.71	1,154.72	923.92	230.79	5.003	
18,100.00	6,040.00	11,078.00	6,203.52	265.27	88.72	109.45	-4,696.81	-5,798.71	1,245.95	1,018.87	227.08	5.487	
18,200.00	6,040.00	11,078.00	6,203.52	267.91	88.72	109.45	-4,696.81	-5,798.71	1,338.43	1,114.60	223.83	5.980	
18,300.00	6,040.00	11,078.00	6,203.52	270.56	88.72	109.45	-4,696.81	-5,798.71	1,431.92	1,210.92	221.00	6.479	
18,400.00	6,040.00	11,078.00	6,203.52	273.21	88.72	109.45	-4,696.81	-5,798.71	1,526.24	1,307.72	218.52	6.985	
18,500.00	6,040.00	11,078.00	6,203.52	275.86	88.72	109.45	-4,696.81	-5,798.71	1,621.24	1,404.91	216.33	7.494	
18,600.00	6,040.00	11,078.00	6,203.52	278.51	88.72	109.45	-4,696.81	-5,798.71	1,716.81	1,502.41	214.40	8.008	
18,700.00	6,040.00	11,078.00	6,203.52	281.16	88.72	109.45	-4,696.81	-5,798.71	1,812.85	1,600.17	212.68	8.524	
18,800.00	6,040.00	11,078.00	6,203.52	283.81	88.72	109.45	-4,696.81	-5,798.71	1,909.31	1,698.15	211.16	9.042	
18,900.00	6,040.00	11,078.00	6,203.52	286.47	88.72	109.45	-4,696.81	-5,798.71	2,006.11	1,796.32	209.79	9.562	
18,919.70	6,040.00	11,078.00	6,203.52	286.99	88.72	109.45	-4,696.81	-5,798.71	2,025.22	1,815.68	209.54	9.665	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES P-T-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 142-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-91.43	-112.53	-4,512.74	4,514.14				
100.00	100.00	84.60	84.60	0.13	0.14	-91.43	-112.86	-4,512.86	4,514.30	4,514.02	0.27	N/A	
200.00	199.98	171.29	171.29	0.48	0.34	119.32	-113.85	-4,513.25	4,515.63	4,514.80	0.82	5,484.529	
300.00	299.84	260.46	260.44	0.85	0.66	119.30	-115.20	-4,513.87	4,518.93	4,517.42	1.50	3,003.085	
400.00	399.45	353.69	353.65	1.22	1.00	119.28	-116.77	-4,514.70	4,524.13	4,521.92	2.22	2,040.590	
500.00	498.70	447.94	447.88	1.62	1.34	119.26	-118.31	-4,515.66	4,531.18	4,528.23	2.95	1,535.334	
600.00	597.47	508.00	507.93	2.05	1.55	119.19	-119.19	-4,516.41	4,540.28	4,536.70	3.58	1,266.487	
700.00	695.62	632.70	632.61	2.51	1.99	119.27	-118.84	-4,518.57	4,551.49	4,547.03	4.46	1,020.918	
800.00	793.06	748.75	748.64	3.01	2.38	119.35	-117.54	-4,519.81	4,563.77	4,558.44	5.33	856.694	
900.00	889.64	849.59	849.47	3.56	2.73	119.42	-116.03	-4,520.75	4,577.75	4,571.57	6.18	740.830	
1,000.00	985.27	960.86	960.71	4.14	3.12	119.53	-113.88	-4,521.54	4,593.35	4,586.24	7.10	646.624	
1,100.00	1,079.82	1,218.48	1,217.97	4.78	4.01	120.32	-101.07	-4,519.48	4,610.22	4,601.64	8.57	537.732	
1,200.00	1,173.17	1,373.88	1,372.61	5.46	4.56	120.82	-87.11	-4,513.27	4,625.26	4,615.53	9.74	475.024	
1,300.00	1,265.21	1,444.46	1,442.84	6.20	4.82	120.90	-80.77	-4,510.23	4,642.26	4,631.62	10.64	436.120	
1,400.00	1,355.84	1,507.86	1,505.97	6.99	5.05	120.90	-75.56	-4,507.81	4,661.84	4,650.28	11.57	403.098	
1,500.00	1,444.94	1,569.80	1,567.70	7.84	5.28	120.87	-70.76	-4,505.79	4,684.05	4,671.53	12.52	374.173	
1,600.00	1,532.39	1,628.64	1,626.29	8.75	5.50	120.80	-65.75	-4,504.17	4,708.91	4,695.41	13.50	348.830	
1,700.00	1,618.11	1,682.00	1,679.39	9.71	5.69	120.66	-60.59	-4,502.94	4,736.46	4,721.96	14.49	326.782	
1,800.00	1,701.97	1,740.29	1,737.36	10.74	5.91	120.52	-54.57	-4,501.87	4,766.69	4,751.15	15.55	306.635	
1,900.00	1,783.88	1,793.61	1,790.38	11.82	6.11	120.32	-48.99	-4,501.17	4,799.62	4,783.01	16.61	288.976	
2,000.00	1,863.74	1,908.72	1,904.81	12.96	6.55	120.56	-36.61	-4,499.55	4,834.87	4,816.93	17.94	269.448	
2,100.00	1,941.45	1,990.56	1,986.14	14.16	6.86	120.53	-27.64	-4,497.77	4,871.86	4,852.68	19.18	254.008	
2,200.00	2,016.92	2,200.00	2,142.07	15.41	7.66	121.09	-11.98	-4,493.06	4,910.51	4,889.58	20.93	234.597	
2,300.00	2,090.05	2,258.41	2,252.54	16.73	7.88	121.27	-1.86	-4,487.98	4,950.27	4,928.14	22.13	223.702	
2,400.00	2,160.76	2,296.97	2,290.92	18.10	8.03	120.80	1.55	-4,486.33	4,992.76	4,969.49	23.27	214.548	
2,500.00	2,228.95	2,335.54	2,329.31	19.53	8.17	120.27	4.95	-4,484.89	5,037.98	5,013.55	24.43	206.221	
2,600.00	2,294.55	2,374.41	2,368.01	21.01	8.32	119.69	8.28	-4,483.64	5,085.82	5,060.22	25.60	198.631	
2,700.00	2,357.48	2,411.52	2,404.98	22.55	8.46	119.03	11.36	-4,482.62	5,136.22	5,109.44	26.78	191.768	
2,800.00	2,418.42	2,503.08	2,496.21	24.13	8.81	119.64	18.80	-4,480.30	5,188.68	5,160.50	28.18	184.135	
2,900.00	2,479.25	2,616.35	2,608.94	25.71	9.24	120.74	28.81	-4,475.57	5,240.90	5,211.26	29.64	176.801	
3,000.00	2,540.09	2,665.87	2,658.20	27.31	9.43	121.22	33.35	-4,473.36	5,293.93	5,263.09	30.84	171.642	
3,100.00	2,600.93	2,700.00	2,692.15	28.90	9.56	121.55	36.51	-4,471.86	5,347.82	5,315.85	31.96	167.304	
3,200.00	2,661.77	2,741.01	2,732.94	30.51	9.72	121.93	40.35	-4,470.20	5,402.61	5,369.52	33.10	163.244	
3,300.00	2,722.61	2,772.07	2,763.84	32.11	9.84	122.23	43.29	-4,469.10	5,458.39	5,424.22	34.17	159.753	
3,400.00	2,783.44	2,802.88	2,794.50	33.72	9.96	122.52	46.22	-4,468.15	5,515.10	5,479.88	35.22	156.593	
3,500.00	2,844.28	2,837.13	2,828.58	35.34	10.09	122.84	49.50	-4,467.25	5,572.73	5,536.46	36.27	153.663	
3,600.00	2,905.12	2,888.39	2,879.60	36.95	10.29	123.31	54.34	-4,466.01	5,631.11	5,593.74	37.36	150.712	
3,700.00	2,965.96	2,939.89	2,930.87	38.57	10.49	123.78	59.08	-4,464.85	5,690.14	5,651.70	38.44	148.009	
3,800.00	3,026.79	2,978.77	2,969.58	40.19	10.64	124.14	62.58	-4,464.04	5,749.86	5,710.41	39.46	145.731	
3,900.00	3,087.63	3,011.12	3,001.80	41.81	10.76	124.43	65.51	-4,463.50	5,810.37	5,769.95	40.42	143.748	
4,000.00	3,148.47	3,043.25	3,033.78	43.43	10.88	124.71	68.44	-4,463.08	5,871.65	5,830.28	41.37	141.943	
4,100.00	3,209.31	3,085.00	3,075.36	45.05	11.04	125.08	72.27	-4,462.73	5,933.70	5,891.37	42.34	140.158	
4,200.00	3,270.14	3,132.37	3,122.53	46.68	11.22	125.50	76.58	-4,462.44	5,996.39	5,953.08	43.31	138.445	
4,300.00	3,330.98	3,201.80	3,191.69	48.31	11.49	126.10	82.66	-4,461.94	6,059.48	6,015.11	44.37	136.569	
4,400.00	3,391.82	3,322.45	3,311.81	49.93	11.95	127.13	93.82	-4,460.04	6,122.73	6,077.10	45.63	134.174	
4,500.00	3,452.66	3,380.58	3,369.61	51.56	12.18	127.63	99.81	-4,458.46	6,186.09	6,139.48	46.61	132.722	
4,600.00	3,513.49	3,441.00	3,430.49	53.19	12.49	128.19	-2,491.14	-4,267.32	6,219.96	6,128.86	91.10	68.278	
4,700.00	3,574.33	3,470.00	3,460.00	54.82	12.75	128.69	-2,565.77	-4,264.46	6,227.99	6,169.25	58.74	106.033	
4,800.00	3,635.17	3,483.01	3,473.01	56.45	12.85	129.05	-2,722.90	-4,256.85	6,236.21	6,137.83	98.38	63.390	
4,900.00	3,696.01	3,496.01	3,486.01	58.08	12.90	129.30	-2,761.52	-4,254.42	6,244.96	6,144.35	100.61	62.072	
5,000.00	3,756.84	3,509.01	3,499.01	59.71	12.95	129.55	-2,810.17	-4,251.29	6,254.65	6,151.63	103.03	60.710	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES P-T-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 142-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	3,817.68	9,112.65	6,204.30	61.34	57.82	124.12	-2,962.03	-4,241.71	6,264.85	6,157.41	107.44	58.311	
5,200.00	3,878.52	9,218.97	6,205.09	62.97	59.60	123.44	-3,068.07	-4,234.07	6,275.15	6,164.15	111.00	56.531	
5,300.00	3,939.36	9,284.40	6,205.00	64.61	60.70	123.01	-3,133.33	-4,229.47	6,286.10	6,172.31	113.79	55.242	
5,400.00	4,000.19	9,307.93	6,204.41	66.24	61.10	122.86	-3,156.81	-4,228.13	6,298.11	6,182.36	115.75	54.410	
5,500.00	4,061.03	9,325.00	6,203.89	67.87	61.38	122.74	-3,173.85	-4,227.30	6,311.43	6,193.86	117.57	53.683	
5,600.00	4,121.87	9,350.37	6,203.28	69.51	61.81	122.58	-3,199.19	-4,226.21	6,326.06	6,206.52	119.53	52.924	
5,700.00	4,182.71	9,368.00	6,203.14	71.14	62.10	122.46	-3,216.81	-4,225.51	6,342.02	6,220.71	121.31	52.278	
5,800.00	4,243.54	9,649.80	6,208.22	72.77	66.87	120.69	-3,498.04	-4,209.12	6,358.60	6,230.05	128.55	49.463	
5,900.00	4,304.38	9,728.18	6,208.32	74.41	68.21	120.19	-3,576.21	-4,203.38	6,373.95	6,242.32	131.63	48.422	
6,000.00	4,365.22	9,814.45	6,208.06	76.04	69.68	119.65	-3,662.22	-4,196.77	6,389.69	6,254.81	134.89	47.371	
6,100.00	4,426.06	9,838.00	6,208.51	77.68	70.09	119.50	-3,685.69	-4,194.97	6,406.59	6,269.78	136.82	46.826	
6,200.00	4,486.90	9,881.00	6,209.67	79.31	70.83	119.24	-3,728.56	-4,191.83	6,424.63	6,285.49	139.14	46.173	
6,300.00	4,547.73	9,924.00	6,210.72	80.95	71.56	118.97	-3,771.45	-4,188.95	6,443.71	6,302.26	141.45	45.554	
6,400.00	4,608.57	9,948.82	6,211.20	82.58	71.99	118.82	-3,796.23	-4,187.49	6,463.89	6,320.54	143.36	45.090	
6,500.00	4,669.41	10,000.48	6,211.90	84.22	72.87	118.50	-3,847.81	-4,184.73	6,485.12	6,339.29	145.83	44.471	
6,600.00	4,730.25	10,026.28	6,211.93	85.86	73.31	118.34	-3,873.58	-4,183.51	6,507.33	6,359.62	147.71	44.054	
6,700.00	4,791.08	10,153.37	6,207.44	87.49	75.48	117.51	-4,000.50	-4,178.89	6,530.52	6,378.66	151.86	43.002	
6,800.00	4,851.92	10,280.25	6,203.12	89.13	77.66	116.69	-4,127.14	-4,172.57	6,553.37	6,397.35	156.02	42.004	
6,900.00	4,912.76	10,309.00	6,202.60	90.76	78.16	116.51	-4,155.84	-4,171.05	6,577.05	6,419.09	157.96	41.638	
7,000.00	4,973.60	10,651.00	6,203.80	92.40	84.10	114.43	-4,496.77	-4,144.67	6,599.52	6,432.59	166.92	39.536	
7,100.00	5,034.43	10,694.00	6,203.91	94.04	84.86	114.17	-4,539.58	-4,140.63	6,621.96	6,452.74	169.22	39.132	
7,200.00	5,095.27	10,694.00	6,203.91	95.67	84.86	114.17	-4,539.58	-4,140.63	6,645.61	6,475.09	170.53	38.971	
7,300.00	5,156.11	10,737.00	6,203.68	97.31	85.61	113.91	-4,582.45	-4,137.30	6,670.44	6,497.66	172.78	38.607	
7,400.00	5,216.95	10,786.99	6,202.94	98.95	86.48	113.61	-4,632.30	-4,133.75	6,696.24	6,521.07	175.17	38.227	
7,500.00	5,277.78	10,835.00	6,201.93	100.59	87.32	113.31	-4,680.19	-4,130.41	6,722.79	6,545.29	177.50	37.875	
7,600.00	5,338.62	10,835.00	6,201.93	102.22	87.32	113.31	-4,680.19	-4,130.41	6,750.55	6,571.87	178.69	37.779	
7,700.00	5,399.46	10,835.00	6,201.93	103.86	87.32	113.31	-4,680.19	-4,130.41	6,779.68	6,599.85	179.83	37.701	
7,800.00	5,460.30	10,835.00	6,201.93	105.50	87.32	113.31	-4,680.19	-4,130.41	6,810.14	6,629.22	180.93	37.640	
7,900.00	5,521.24	10,835.00	6,201.93	107.13	87.32	111.67	-4,680.19	-4,130.41	6,841.55	6,659.57	181.98	37.595	
8,000.00	5,584.83	10,835.00	6,201.93	108.61	87.32	103.54	-4,680.19	-4,130.41	6,862.64	6,679.70	182.94	37.513	
8,100.00	5,650.69	10,835.00	6,201.93	109.85	87.32	94.80	-4,680.19	-4,130.41	6,867.93	6,684.20	183.74	37.379	
8,200.00	5,716.83	10,835.00	6,201.93	110.82	87.32	86.07	-4,680.19	-4,130.41	6,857.30	6,672.96	184.33	37.200	
8,300.00	5,781.24	10,835.00	6,201.93	111.52	87.32	78.01	-4,680.19	-4,130.41	6,830.99	6,646.28	184.71	36.982	
8,400.00	5,841.96	10,835.00	6,201.93	111.98	87.32	71.12	-4,680.19	-4,130.41	6,789.62	6,604.74	184.88	36.724	
8,500.00	5,897.14	10,835.00	6,201.93	112.25	87.32	65.69	-4,680.19	-4,130.41	6,734.20	6,549.33	184.87	36.426	
8,600.00	5,945.12	10,835.00	6,201.93	112.37	87.32	61.84	-4,680.19	-4,130.41	6,666.08	6,481.34	184.74	36.084	
8,700.00	5,984.42	10,835.00	6,201.93	112.39	87.32	59.75	-4,680.19	-4,130.41	6,586.96	6,402.43	184.53	35.695	
8,800.00	6,013.86	10,835.00	6,201.93	112.35	87.32	60.01	-4,680.19	-4,130.41	6,498.91	6,314.60	184.31	35.260	
8,900.00	6,032.54	10,835.00	6,201.93	112.30	87.32	65.15	-4,680.19	-4,130.41	6,404.28	6,220.15	184.13	34.781	
9,000.00	6,039.89	10,835.00	6,201.93	112.24	87.32	96.28	-4,680.19	-4,130.41	6,305.73	6,121.71	184.02	34.266	
9,100.00	6,040.00	10,835.00	6,201.93	112.19	87.32	109.37	-4,680.19	-4,130.41	6,206.04	6,022.07	183.97	33.734	
9,200.00	6,040.00	10,835.00	6,201.93	112.16	87.32	109.37	-4,680.19	-4,130.41	6,106.36	5,922.44	183.92	33.202	
9,300.00	6,040.00	10,835.00	6,201.93	112.15	87.32	109.37	-4,680.19	-4,130.41	6,006.69	5,822.82	183.87	32.669	
9,400.00	6,040.00	10,835.00	6,201.93	112.15	87.32	109.37	-4,680.19	-4,130.41	5,907.03	5,723.22	183.81	32.136	
9,500.00	6,040.00	10,835.00	6,201.93	112.16	87.32	109.37	-4,680.19	-4,130.41	5,807.38	5,623.63	183.76	31.604	
9,600.00	6,040.00	10,835.00	6,201.93	112.19	87.32	109.37	-4,680.19	-4,130.41	5,707.75	5,524.05	183.70	31.071	
9,700.00	6,040.00	10,835.00	6,201.93	112.24	87.32	109.37	-4,680.19	-4,130.41	5,608.13	5,424.48	183.64	30.538	
9,800.00	6,040.00	10,835.00	6,201.93	112.31	87.32	109.37	-4,680.19	-4,130.41	5,508.52	5,324.93	183.59	30.005	
9,900.00	6,040.00	10,835.00	6,201.93	112.39	87.32	109.37	-4,680.19	-4,130.41	5,408.92	5,225.40	183.53	29.472	
10,000.00	6,040.00	10,835.00	6,201.93	112.49	87.32	109.37	-4,680.19	-4,130.41	5,309.34	5,125.88	183.47	28.939	
10,100.00	6,040.00	10,835.00	6,201.93	112.62	87.32	109.37	-4,680.19	-4,130.41	5,209.78	5,026.38	183.40	28.406	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES P-T-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 142-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.00	6,040.00	10,835.00	6,201.93	112.77	87.32	109.37	-4,680.19	-4,130.41	5,110.23	4,926.90	183.34	27.873	
10,300.00	6,040.00	10,835.00	6,201.93	112.94	87.32	109.37	-4,680.19	-4,130.41	5,010.71	4,827.43	183.27	27.340	
10,400.00	6,040.00	10,835.00	6,201.93	113.14	87.32	109.37	-4,680.19	-4,130.41	4,911.20	4,727.99	183.21	26.807	
10,500.00	6,040.00	10,835.00	6,201.93	113.36	87.32	109.37	-4,680.19	-4,130.41	4,811.71	4,628.57	183.14	26.274	
10,600.00	6,040.00	10,835.00	6,201.93	113.62	87.32	109.37	-4,680.19	-4,130.41	4,712.24	4,529.18	183.07	25.741	
10,700.00	6,040.00	10,835.00	6,201.93	113.91	87.32	109.37	-4,680.19	-4,130.41	4,612.80	4,429.81	182.99	25.208	
10,800.00	6,040.00	10,835.00	6,201.93	114.24	87.32	109.37	-4,680.19	-4,130.41	4,513.38	4,330.46	182.92	24.674	
10,900.00	6,040.00	10,835.00	6,201.93	114.61	87.32	109.37	-4,680.19	-4,130.41	4,413.99	4,231.15	182.84	24.141	
11,000.00	6,040.00	10,835.00	6,201.93	115.02	87.32	109.37	-4,680.19	-4,130.41	4,314.62	4,131.86	182.76	23.608	
11,100.00	6,040.00	10,835.00	6,201.93	115.49	87.32	109.37	-4,680.19	-4,130.41	4,215.29	4,032.61	182.68	23.074	
11,200.00	6,040.00	10,835.00	6,201.93	116.00	87.32	109.37	-4,680.19	-4,130.41	4,115.99	3,933.39	182.60	22.541	
11,300.00	6,040.00	10,835.00	6,201.93	116.58	87.32	109.37	-4,680.19	-4,130.41	4,016.72	3,834.21	182.51	22.008	
11,400.00	6,040.00	10,835.00	6,201.93	117.22	87.32	109.37	-4,680.19	-4,130.41	3,917.49	3,735.06	182.43	21.474	
11,500.00	6,040.00	10,835.00	6,201.93	117.92	87.32	109.37	-4,680.19	-4,130.41	3,818.30	3,635.96	182.34	20.941	
11,600.00	6,040.00	10,835.00	6,201.93	118.70	87.32	109.37	-4,680.19	-4,130.41	3,719.15	3,536.91	182.24	20.408	
11,700.00	6,040.00	10,835.00	6,201.93	119.56	87.32	109.37	-4,680.19	-4,130.41	3,620.05	3,437.90	182.15	19.874	
11,800.00	6,040.00	10,835.00	6,201.93	120.51	87.32	109.37	-4,680.19	-4,130.41	3,521.00	3,338.95	182.05	19.341	
11,900.00	6,040.00	10,835.00	6,201.93	121.54	87.32	109.37	-4,680.19	-4,130.41	3,422.01	3,240.06	181.95	18.807	
12,000.00	6,040.00	10,835.00	6,201.93	122.66	87.32	109.37	-4,680.19	-4,130.41	3,323.08	3,141.23	181.85	18.274	
12,100.00	6,040.00	10,835.00	6,201.93	123.87	87.32	109.37	-4,680.19	-4,130.41	3,224.21	3,042.46	181.75	17.740	
12,200.00	6,040.00	10,835.00	6,201.93	125.17	87.32	109.37	-4,680.19	-4,130.41	3,125.41	2,943.77	181.64	17.207	
12,300.00	6,040.00	10,835.00	6,201.93	126.57	87.32	109.37	-4,680.19	-4,130.41	3,026.70	2,845.17	181.53	16.673	
12,400.00	6,040.00	10,835.00	6,201.93	128.06	87.32	109.37	-4,680.19	-4,130.41	2,928.07	2,746.65	181.42	16.140	
12,500.00	6,040.00	10,835.00	6,201.93	129.63	87.32	109.37	-4,680.19	-4,130.41	2,829.53	2,648.22	181.31	15.606	
12,600.00	6,040.00	10,835.00	6,201.93	131.29	87.32	109.37	-4,680.19	-4,130.41	2,731.11	2,549.91	181.20	15.072	
12,700.00	6,040.00	10,835.00	6,201.93	133.03	87.32	109.37	-4,680.19	-4,130.41	2,632.80	2,451.71	181.09	14.539	
12,800.00	6,040.00	10,835.00	6,201.93	134.84	87.32	109.37	-4,680.19	-4,130.41	2,534.63	2,353.64	180.98	14.005	
12,900.00	6,040.00	10,835.00	6,201.93	136.71	87.32	109.37	-4,680.19	-4,130.41	2,436.60	2,255.72	180.88	13.471	
13,000.00	6,040.00	10,835.00	6,201.93	138.66	87.32	109.37	-4,680.19	-4,130.41	2,338.74	2,157.96	180.78	12.937	
13,100.00	6,040.00	10,835.00	6,201.93	140.66	87.32	109.37	-4,680.19	-4,130.41	2,241.07	2,060.38	180.68	12.403	
13,200.00	6,040.00	10,835.00	6,201.93	142.71	87.32	109.37	-4,680.19	-4,130.41	2,143.61	1,963.01	180.60	11.869	
13,300.00	6,040.00	10,835.00	6,201.93	144.81	87.32	109.37	-4,680.19	-4,130.41	2,046.40	1,865.87	180.53	11.335	
13,400.00	6,040.00	10,835.00	6,201.93	146.96	87.32	109.37	-4,680.19	-4,130.41	1,949.47	1,768.99	180.49	10.801	
13,500.00	6,040.00	10,835.00	6,201.93	149.14	87.32	109.37	-4,680.19	-4,130.41	1,852.87	1,672.40	180.47	10.267	
13,600.00	6,040.00	10,835.00	6,201.93	151.36	87.32	109.37	-4,680.19	-4,130.41	1,756.65	1,576.16	180.48	9.733	
13,700.00	6,040.00	10,835.00	6,201.93	153.62	87.32	109.37	-4,680.19	-4,130.41	1,660.87	1,480.32	180.55	9.199	
13,800.00	6,040.00	10,835.00	6,201.93	155.91	87.32	109.37	-4,680.19	-4,130.41	1,565.62	1,384.94	180.68	8.665	
13,900.00	6,040.00	10,835.00	6,201.93	158.22	87.32	109.37	-4,680.19	-4,130.41	1,471.01	1,290.11	180.90	8.131	
14,000.00	6,040.00	10,835.00	6,201.93	160.56	87.32	109.37	-4,680.19	-4,130.41	1,377.15	1,195.91	181.24	7.599	
14,100.00	6,040.00	10,835.00	6,201.93	162.92	87.32	109.37	-4,680.19	-4,130.41	1,284.23	1,102.50	181.73	7.067	
14,200.00	6,040.00	10,835.00	6,201.93	165.30	87.32	109.37	-4,680.19	-4,130.41	1,192.44	1,010.02	182.42	6.537	
14,300.00	6,040.00	10,835.00	6,201.93	167.70	87.32	109.37	-4,680.19	-4,130.41	1,102.09	918.71	183.38	6.010	
14,400.00	6,040.00	10,835.00	6,201.93	170.12	87.32	109.37	-4,680.19	-4,130.41	1,013.56	828.88	184.68	5.488	
14,500.00	6,040.00	10,835.00	6,201.93	172.55	87.32	109.37	-4,680.19	-4,130.41	927.35	740.95	186.40	4.975	
14,600.00	6,040.00	10,835.00	6,201.93	175.00	87.32	109.37	-4,680.19	-4,130.41	844.20	655.55	188.64	4.475	
14,700.00	6,040.00	10,835.00	6,201.93	177.46	87.32	109.37	-4,680.19	-4,130.41	765.08	573.63	191.45	3.996	
14,800.00	6,040.00	10,835.00	6,201.93	179.94	87.32	109.37	-4,680.19	-4,130.41	691.40	496.61	194.79	3.549	
14,900.00	6,040.00	10,835.00	6,201.93	182.43	87.32	109.37	-4,680.19	-4,130.41	625.08	426.67	198.41	3.150	
15,000.00	6,040.00	10,835.00	6,201.93	184.92	87.32	109.37	-4,680.19	-4,130.41	568.69	366.94	201.75	2.819	
15,100.00	6,040.00	10,835.00	6,201.93	187.43	87.32	109.37	-4,680.19	-4,130.41	525.45	321.33	204.12	2.574	
15,200.00	6,040.00	10,835.00	6,201.93	189.95	87.32	109.37	-4,680.19	-4,130.41	498.78	292.62	206.15	2.419	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 4-T4N-R62W - EXIST HZ STATE SEVENTY HOLES P-T-4HNB - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 142-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,286.57	6,040.00	10,835.00	6,201.93	192.14	87.32	109.37	-4,680.19	-4,130.41	491.21	280.20	211.00	2.328 CC	
15,300.00	6,040.00	10,835.00	6,201.93	192.48	87.32	109.37	-4,680.19	-4,130.41	491.39	279.22	212.18	2.316 ES	
15,400.00	6,040.00	10,835.00	6,201.93	195.01	87.32	109.37	-4,680.19	-4,130.41	504.13	281.99	222.14	2.269 SF	
15,500.00	6,040.00	10,835.00	6,201.93	197.55	87.32	109.37	-4,680.19	-4,130.41	535.57	305.89	229.69	2.332	
15,600.00	6,040.00	10,835.00	6,201.93	200.10	87.32	109.37	-4,680.19	-4,130.41	582.69	349.81	232.87	2.502	
15,700.00	6,040.00	10,835.00	6,201.93	202.65	87.32	109.37	-4,680.19	-4,130.41	642.03	409.28	232.75	2.758	
15,800.00	6,040.00	10,835.00	6,201.93	205.22	87.32	109.37	-4,680.19	-4,130.41	710.56	479.81	230.75	3.079	
15,900.00	6,040.00	10,835.00	6,201.93	207.78	87.32	109.37	-4,680.19	-4,130.41	785.86	557.96	227.90	3.448	
16,000.00	6,040.00	10,835.00	6,201.93	210.36	87.32	109.37	-4,680.19	-4,130.41	866.18	641.35	224.83	3.853	
16,100.00	6,040.00	10,835.00	6,201.93	212.93	87.32	109.37	-4,680.19	-4,130.41	950.24	728.40	221.84	4.284	
16,200.00	6,040.00	10,835.00	6,201.93	215.52	87.32	109.37	-4,680.19	-4,130.41	1,037.13	818.07	219.06	4.734	
16,300.00	6,040.00	10,835.00	6,201.93	218.11	87.32	109.37	-4,680.19	-4,130.41	1,126.20	909.65	216.55	5.201	
16,400.00	6,040.00	10,835.00	6,201.93	220.70	87.32	109.37	-4,680.19	-4,130.41	1,216.97	1,002.66	214.30	5.679	
16,500.00	6,040.00	10,835.00	6,201.93	223.29	87.32	109.37	-4,680.19	-4,130.41	1,309.08	1,096.77	212.31	6.166	
16,600.00	6,040.00	10,835.00	6,201.93	225.89	87.32	109.37	-4,680.19	-4,130.41	1,402.28	1,191.73	210.54	6.660	
16,700.00	6,040.00	10,835.00	6,201.93	228.50	87.32	109.37	-4,680.19	-4,130.41	1,496.35	1,287.38	208.97	7.160	
16,800.00	6,040.00	10,835.00	6,201.93	231.11	87.32	109.37	-4,680.19	-4,130.41	1,591.15	1,383.57	207.58	7.665	
16,900.00	6,040.00	10,835.00	6,201.93	233.72	87.32	109.37	-4,680.19	-4,130.41	1,686.55	1,480.21	206.33	8.174	
17,000.00	6,040.00	10,835.00	6,201.93	236.33	87.32	109.37	-4,680.19	-4,130.41	1,782.45	1,577.23	205.22	8.685	
17,100.00	6,040.00	10,835.00	6,201.93	238.95	87.32	109.37	-4,680.19	-4,130.41	1,878.78	1,674.56	204.22	9.200	
17,200.00	6,040.00	10,835.00	6,201.93	241.57	87.32	109.37	-4,680.19	-4,130.41	1,975.47	1,772.15	203.32	9.716	
17,300.00	6,040.00	10,835.00	6,201.93	244.19	87.32	109.37	-4,680.19	-4,130.41	2,072.48	1,869.97	202.51	10.234	
17,400.00	6,040.00	10,835.00	6,201.93	246.82	87.32	109.37	-4,680.19	-4,130.41	2,169.76	1,967.99	201.77	10.753	
17,500.00	6,040.00	10,835.00	6,201.93	249.45	87.32	109.37	-4,680.19	-4,130.41	2,267.28	2,066.17	201.10	11.274	
17,600.00	6,040.00	10,835.00	6,201.93	252.08	87.32	109.37	-4,680.19	-4,130.41	2,365.00	2,164.51	200.49	11.796	
17,700.00	6,040.00	10,835.00	6,201.93	254.71	87.32	109.37	-4,680.19	-4,130.41	2,462.91	2,262.98	199.93	12.319	
17,800.00	6,040.00	10,835.00	6,201.93	257.35	87.32	109.37	-4,680.19	-4,130.41	2,560.98	2,361.56	199.42	12.842	
17,900.00	6,040.00	10,835.00	6,201.93	259.99	87.32	109.37	-4,680.19	-4,130.41	2,659.19	2,460.24	198.95	13.366	
18,000.00	6,040.00	10,835.00	6,201.93	262.63	87.32	109.37	-4,680.19	-4,130.41	2,757.53	2,559.02	198.51	13.891	
18,100.00	6,040.00	10,835.00	6,201.93	265.27	87.32	109.37	-4,680.19	-4,130.41	2,855.99	2,657.87	198.11	14.416	
18,200.00	6,040.00	10,835.00	6,201.93	267.91	87.32	109.37	-4,680.19	-4,130.41	2,954.55	2,756.81	197.74	14.942	
18,300.00	6,040.00	10,835.00	6,201.93	270.56	87.32	109.37	-4,680.19	-4,130.41	3,053.20	2,855.81	197.40	15.467	
18,400.00	6,040.00	10,835.00	6,201.93	273.21	87.32	109.37	-4,680.19	-4,130.41	3,151.94	2,954.87	197.07	15.994	
18,500.00	6,040.00	10,835.00	6,201.93	275.86	87.32	109.37	-4,680.19	-4,130.41	3,250.75	3,053.98	196.78	16.520	
18,600.00	6,040.00	10,835.00	6,201.93	278.51	87.32	109.37	-4,680.19	-4,130.41	3,349.64	3,153.14	196.50	17.047	
18,700.00	6,040.00	10,835.00	6,201.93	281.16	87.32	109.37	-4,680.19	-4,130.41	3,448.59	3,252.36	196.24	17.574	
18,800.00	6,040.00	10,835.00	6,201.93	283.81	87.32	109.37	-4,680.19	-4,130.41	3,547.60	3,351.61	195.99	18.101	
18,900.00	6,040.00	10,835.00	6,201.93	286.47	87.32	109.37	-4,680.19	-4,130.41	3,646.66	3,450.90	195.76	18.628	
18,919.70	6,040.00	10,835.00	6,201.93	286.99	87.32	109.37	-4,680.19	-4,130.41	3,666.19	3,470.47	195.72	18.732	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 5-T4N-R62W - STATE SEVENTY HOLES 34-32-34XRLN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 156-MWD OWSG, 1664-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	16,228.12	6,154.40	0.00	285.34	10.98	343.49	66.67	6,179.31				
100.00	100.00	16,227.52	6,154.40	0.13	285.32	10.89	343.47	66.07	6,079.47	5,995.44	84.03	72.345	
200.00	199.98	16,227.32	6,154.41	0.48	285.32	-153.76	343.46	65.86	5,979.74	5,895.64	84.09	71.109	
300.00	299.84	16,227.92	6,154.40	0.85	285.33	-161.02	343.48	66.47	5,880.29	5,796.10	84.19	69.846	
400.00	399.45	16,229.35	6,154.38	1.22	285.37	-165.07	343.53	67.90	5,781.27	5,696.94	84.33	68.556	
500.00	498.70	16,231.64	6,154.35	1.62	285.44	-167.60	343.60	70.19	5,682.83	5,598.31	84.52	67.238	
600.00	597.47	16,234.81	6,154.31	2.05	285.52	-169.30	343.71	73.36	5,585.10	5,500.34	84.76	65.891	
700.00	695.62	16,238.89	6,154.27	2.51	285.63	-170.50	343.83	77.43	5,488.26	5,403.18	85.08	64.511	
800.00	793.06	16,243.91	6,154.22	3.01	285.77	-171.38	343.99	82.44	5,392.46	5,307.00	85.47	63.096	
900.00	889.64	16,249.88	6,154.17	3.56	285.93	-172.04	344.17	88.42	5,297.88	5,211.93	85.95	61.642	
1,000.00	985.27	16,256.84	6,154.11	4.14	286.12	-172.54	344.37	95.38	5,204.70	5,118.16	86.53	60.146	
1,100.00	1,079.82	16,264.83	6,154.06	4.78	286.33	-172.91	344.60	103.36	5,113.09	5,025.85	87.25	58.605	
1,200.00	1,173.17	16,273.86	6,154.02	5.46	286.58	-173.19	344.84	112.39	5,023.26	4,935.16	88.10	57.016	
1,300.00	1,265.21	16,293.00	6,153.98	6.20	287.10	-173.20	345.31	131.52	4,935.42	4,846.24	89.19	55.338	
1,400.00	1,355.84	16,293.00	6,153.98	6.99	287.10	-173.59	345.31	131.52	4,849.73	4,759.42	90.32	53.696	
1,500.00	1,444.94	16,312.64	6,153.98	7.84	287.63	-173.54	345.80	151.16	4,766.43	4,674.64	91.79	51.928	
1,600.00	1,532.39	16,330.27	6,154.00	8.75	288.11	-173.51	346.31	168.77	4,685.72	4,592.25	93.47	50.129	
1,700.00	1,618.11	16,348.82	6,154.04	9.71	288.61	-173.46	346.92	187.32	4,607.82	4,512.40	95.41	48.292	
1,800.00	1,701.97	16,368.25	6,154.09	10.74	289.13	-173.38	347.64	206.74	4,532.95	4,435.31	97.63	46.428	
1,900.00	1,783.88	16,397.98	6,154.19	11.82	289.94	-173.12	348.82	236.44	4,461.33	4,361.10	100.23	44.511	
2,000.00	1,863.74	16,452.39	6,154.32	12.96	291.41	-172.48	350.19	290.83	4,393.04	4,289.72	103.32	42.521	
2,100.00	1,941.45	16,492.77	6,154.37	14.16	292.51	-172.07	350.59	331.21	4,328.25	4,221.65	106.60	40.603	
2,200.00	2,016.92	16,524.85	6,154.34	15.41	293.38	-171.80	351.10	363.29	4,267.29	4,157.13	110.16	38.737	
2,300.00	2,090.05	16,557.09	6,154.27	16.73	294.25	-171.51	351.86	395.51	4,210.40	4,096.33	114.07	36.910	
2,400.00	2,160.76	16,587.27	6,154.18	18.10	295.07	-171.25	352.74	425.69	4,157.81	4,039.51	118.31	35.144	
2,500.00	2,228.95	16,617.99	6,154.10	19.53	295.90	-170.98	353.69	456.38	4,109.75	3,986.87	122.88	33.445	
2,600.00	2,294.55	16,649.51	6,154.03	21.01	296.75	-170.68	354.75	487.89	4,066.40	3,938.61	127.79	31.822	
2,700.00	2,357.48	16,679.54	6,154.01	22.55	297.57	-170.40	355.78	517.90	4,027.96	3,894.98	132.98	30.291	
2,800.00	2,418.42	16,710.29	6,154.04	24.13	298.40	-170.00	356.86	548.64	3,993.73	3,855.29	138.44	28.849	
2,900.00	2,479.25	16,741.90	6,154.13	25.71	299.26	-169.56	357.97	580.23	3,961.54	3,817.42	144.11	27.489	
3,000.00	2,540.09	16,782.47	6,154.28	27.31	300.35	-169.00	359.37	620.77	3,931.27	3,781.18	150.09	26.192	
3,100.00	2,600.93	16,823.25	6,154.43	28.90	301.46	-168.43	360.72	661.52	3,902.94	3,746.68	156.25	24.978	
3,200.00	2,661.77	16,855.81	6,154.55	30.51	302.34	-167.97	361.82	694.06	3,876.60	3,714.14	162.46	23.862	
3,300.00	2,722.61	16,886.85	6,154.67	32.11	303.18	-167.54	362.99	725.08	3,852.37	3,683.58	168.79	22.823	
3,400.00	2,783.44	16,917.45	6,154.79	33.72	304.01	-167.11	364.27	755.66	3,830.29	3,655.05	175.24	21.857	
3,500.00	2,844.28	16,947.62	6,154.91	35.34	304.82	-166.68	365.65	785.80	3,810.41	3,628.62	181.79	20.961	
3,600.00	2,905.12	16,977.37	6,155.04	36.95	305.63	-166.26	367.12	815.51	3,792.76	3,604.34	188.42	20.129	
3,700.00	2,965.96	17,006.91	6,155.16	38.57	306.43	-165.84	368.70	845.01	3,777.39	3,582.27	195.12	19.360	
3,800.00	3,026.79	17,043.42	6,155.20	40.19	307.41	-165.32	370.90	881.46	3,764.28	3,562.26	202.02	18.633	
3,900.00	3,087.63	17,077.87	6,155.03	41.81	308.34	-164.83	373.31	915.82	3,753.46	3,544.51	208.95	17.964	
4,000.00	3,148.47	17,215.19	6,153.63	43.43	312.05	-162.87	380.32	1,052.92	3,744.21	3,526.05	218.16	17.162	
4,100.00	3,209.31	17,248.87	6,153.56	45.05	312.96	-162.39	381.05	1,086.60	3,737.00	3,511.90	225.10	16.601	
4,200.00	3,270.14	17,284.48	6,153.69	46.68	313.93	-161.89	381.62	1,122.20	3,732.10	3,500.05	232.05	16.083	
4,300.00	3,330.98	17,322.33	6,154.00	48.31	314.96	-161.36	382.07	1,160.04	3,729.48	3,490.47	239.01	15.604	
4,365.83	3,371.03	17,347.70	6,154.28	49.38	315.65	-161.00	382.30	1,185.41	3,728.99	3,485.41	243.58	15.309 CC	
4,400.00	3,391.82	17,361.02	6,154.45	49.93	316.01	-160.81	382.40	1,198.73	3,729.12	3,483.18	245.95	15.162	
4,500.00	3,452.66	4,500.00	6,154.76	51.56	314.54	-159.84	382.80	1,267.90	3,730.60	3,678.48	52.12	71.576	
4,600.00	3,513.49	17,495.65	6,154.38	53.19	319.66	-158.92	383.39	1,333.35	3,734.19	3,473.13	261.06	14.304	
4,700.00	3,574.33	17,725.60	6,144.70	54.82	325.89	-155.65	385.27	1,563.05	3,739.31	3,466.67	272.64	13.715	
4,800.00	3,635.17	17,750.18	6,143.13	56.45	326.55	-155.29	385.16	1,587.58	3,745.59	3,466.36	279.24	13.414 ES	
4,900.00	3,696.01	17,778.07	6,141.21	58.08	327.31	-154.90	385.22	1,615.40	3,754.25	3,468.45	285.80	13.136	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 5-T4N-R62W - STATE SEVENTY HOLES 34-32-34XRLN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 156-MWD OWSG, 1664-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	3,756.84	17,808.00	6,138.98	59.71	328.11	-154.47	385.54	1,645.25	3,765.28	3,472.99	292.30	12.882	
5,100.00	3,817.68	17,918.93	6,131.94	61.34	331.12	-152.89	384.14	1,755.94	3,778.09	3,477.35	300.74	12.563	
5,200.00	3,878.52	17,958.26	6,129.80	62.97	332.18	-152.34	382.93	1,795.18	3,792.88	3,485.68	307.19	12.347	
5,300.00	3,939.36	17,997.58	6,127.67	64.61	333.25	-151.79	381.72	1,834.43	3,809.82	3,496.32	313.51	12.152	
5,400.00	4,000.19	18,036.91	6,125.54	66.24	334.31	-151.24	380.51	1,873.68	3,828.90	3,509.23	319.67	11.978	
5,500.00	4,061.03	18,076.23	6,123.40	67.87	335.38	-150.69	379.30	1,912.93	3,850.08	3,524.41	325.67	11.822	
5,600.00	4,121.87	18,115.56	6,121.27	69.51	336.45	-150.14	378.09	1,952.18	3,873.33	3,541.81	331.52	11.684	
5,700.00	4,182.71	18,154.88	6,119.14	71.14	337.51	-149.59	376.88	1,991.43	3,898.61	3,561.41	337.20	11.562	
5,800.00	4,243.54	18,194.21	6,117.00	72.77	338.58	-149.05	375.67	2,030.67	3,925.88	3,583.16	342.71	11.455	
5,900.00	4,304.38	18,233.53	6,114.87	74.41	339.64	-148.50	374.46	2,069.92	3,955.10	3,607.04	348.06	11.363	
6,000.00	4,365.22	18,231.00	6,115.01	76.04	339.57	-148.54	374.54	2,067.40	3,986.44	3,634.51	351.94	11.327	
6,100.00	4,426.06	18,231.00	6,115.01	77.68	339.57	-148.54	374.54	2,067.40	4,020.03	3,664.38	355.65	11.303	
6,200.00	4,486.90	18,231.00	6,115.01	79.31	339.57	-148.54	374.54	2,067.40	4,055.81	3,696.68	359.12	11.294	
6,300.00	4,547.73	18,231.00	6,115.01	80.95	339.57	-148.54	374.54	2,067.40	4,093.71	3,731.35	362.36	11.297	
6,400.00	4,608.57	18,231.00	6,115.01	82.58	339.57	-148.54	374.54	2,067.40	4,133.69	3,768.32	365.38	11.314	
6,500.00	4,669.41	18,231.00	6,115.01	84.22	339.57	-148.54	374.54	2,067.40	4,175.68	3,807.52	368.17	11.342	
6,600.00	4,730.25	18,231.00	6,115.01	85.86	339.57	-148.54	374.54	2,067.40	4,219.63	3,848.89	370.74	11.382	
6,700.00	4,791.08	18,231.00	6,115.01	87.49	339.57	-148.54	374.54	2,067.40	4,265.47	3,892.35	373.11	11.432	
6,800.00	4,851.92	18,231.00	6,115.01	89.13	339.57	-148.54	374.54	2,067.40	4,313.13	3,937.85	375.29	11.493	
6,900.00	4,912.76	18,231.00	6,115.01	90.76	339.57	-148.54	374.54	2,067.40	4,362.57	3,985.30	377.27	11.563	
7,000.00	4,973.60	18,231.00	6,115.01	92.40	339.57	-148.54	374.54	2,067.40	4,413.73	4,034.65	379.08	11.643	
7,100.00	5,034.43	18,231.00	6,115.01	94.04	339.57	-148.54	374.54	2,067.40	4,466.53	4,085.82	380.71	11.732	
7,200.00	5,095.27	18,231.00	6,115.01	95.67	339.57	-148.54	374.54	2,067.40	4,520.93	4,138.76	382.18	11.829	
7,300.00	5,156.11	18,231.00	6,115.01	97.31	339.57	-148.54	374.54	2,067.40	4,576.87	4,193.38	383.49	11.935	
7,400.00	5,216.95	18,231.00	6,115.01	98.95	339.57	-148.54	374.54	2,067.40	4,634.29	4,249.64	384.66	12.048	
7,500.00	5,277.78	18,231.00	6,115.01	100.59	339.57	-148.54	374.54	2,067.40	4,693.14	4,307.46	385.69	12.168	
7,600.00	5,338.62	18,231.00	6,115.01	102.22	339.57	-148.54	374.54	2,067.40	4,753.37	4,366.78	386.59	12.296	
7,700.00	5,399.46	18,231.00	6,115.01	103.86	339.57	-148.54	374.54	2,067.40	4,814.92	4,427.55	387.37	12.430	
7,800.00	5,460.30	18,231.00	6,115.01	105.50	339.57	-148.54	374.54	2,067.40	4,877.74	4,489.70	388.04	12.570	
7,900.00	5,521.24	18,231.00	6,115.01	107.13	339.57	-151.94	374.54	2,067.40	4,941.85	4,553.25	388.60	12.717	
8,000.00	5,584.83	18,231.00	6,115.01	108.61	339.57	-168.81	374.54	2,067.40	5,008.44	4,619.30	389.14	12.870	
8,100.00	5,650.69	18,231.00	6,115.01	109.85	339.57	173.25	374.54	2,067.40	5,076.40	4,686.69	389.71	13.026	
8,200.00	5,716.83	18,231.00	6,115.01	110.82	339.57	155.59	374.54	2,067.40	5,143.66	4,753.32	390.34	13.177	
8,300.00	5,781.24	18,231.00	6,115.01	111.52	339.57	139.44	374.54	2,067.40	5,208.23	4,817.17	391.06	13.318	
8,400.00	5,841.96	18,231.00	6,115.01	111.98	339.57	125.61	374.54	2,067.40	5,268.29	4,876.38	391.91	13.443	
8,500.00	5,897.14	18,231.00	6,115.01	112.25	339.57	114.35	374.54	2,067.40	5,322.20	4,929.29	392.91	13.546	
8,600.00	5,945.12	18,231.00	6,115.01	112.37	339.57	105.60	374.54	2,067.40	5,368.52	4,974.44	394.09	13.623	
8,700.00	5,984.42	18,231.00	6,115.01	112.39	339.57	99.11	374.54	2,067.40	5,406.06	5,010.62	395.44	13.671	
8,800.00	6,013.86	18,231.00	6,115.01	112.35	339.57	94.63	374.54	2,067.40	5,433.88	5,036.91	396.97	13.688	
8,900.00	6,032.54	18,231.00	6,115.01	112.30	339.57	91.96	374.54	2,067.40	5,451.26	5,052.63	398.64	13.675	
9,000.00	6,039.89	18,231.00	6,115.01	112.24	339.57	90.96	374.54	2,067.40	5,457.81	5,057.41	400.39	13.631	
9,100.00	6,040.00	18,231.00	6,115.01	112.19	339.57	90.94	374.54	2,067.40	5,458.12	5,055.96	402.16	13.572	
9,200.00	6,040.00	18,231.00	6,115.01	112.16	339.57	90.94	374.54	2,067.40	5,460.15	5,056.25	403.90	13.519	
9,300.00	6,040.00	18,197.27	6,116.84	112.15	338.66	90.96	375.57	2,033.73	5,463.90	5,059.54	404.35	13.513	
9,400.00	6,040.00	18,097.50	6,122.25	112.15	335.96	91.02	378.64	1,934.15	5,468.05	5,065.60	402.45	13.587	
9,500.00	6,040.00	17,997.73	6,127.66	112.16	333.25	91.08	381.71	1,834.58	5,472.21	5,071.55	400.66	13.658	
9,600.00	6,040.00	17,745.58	6,143.43	112.19	326.43	91.24	385.17	1,582.99	5,474.24	5,080.83	393.41	13.915	
9,700.00	6,040.00	17,509.84	6,154.13	112.24	320.04	91.35	383.66	1,347.54	5,475.08	5,088.36	386.72	14.158	
9,800.00	6,040.00	17,451.00	6,154.86	112.31	318.45	91.36	382.91	1,288.71	5,474.63	5,087.80	386.83	14.152	
9,818.02	6,040.00	17,451.00	6,154.86	112.32	318.45	91.36	382.91	1,288.71	5,474.60	5,087.34	387.26	14.137	
9,900.00	6,040.00	17,387.88	6,154.75	112.39	316.74	91.36	382.58	1,225.59	5,474.92	5,088.09	386.82	14.154	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 5-T4N-R62W - STATE SEVENTY HOLES 34-32-34XRLN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 156-MWD OWSG, 1664-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,000.00	6,040.00	17,006.00	6,155.16	112.49	306.40	91.36	368.65	844.10	5,471.03	5,096.25	374.77	14.598	
10,100.00	6,040.00	16,955.64	6,154.94	112.62	305.04	91.36	366.03	793.81	5,466.74	5,091.19	375.55	14.556	
10,200.00	6,040.00	16,897.12	6,154.71	112.77	303.46	91.36	363.41	735.34	5,463.22	5,087.18	376.04	14.528	
10,300.00	6,040.00	16,828.00	6,154.44	112.94	301.59	91.36	360.87	666.27	5,460.48	5,084.32	376.16	14.516	
10,400.00	6,040.00	16,729.50	6,154.09	113.14	298.92	91.36	357.53	567.83	5,458.06	5,082.83	375.22	14.546	
10,500.00	6,040.00	16,638.67	6,154.05	113.36	296.46	91.36	354.38	477.06	5,455.57	5,080.94	374.63	14.563	
10,600.00	6,040.00	16,561.00	6,154.26	113.62	294.36	91.36	351.97	399.42	5,453.44	5,078.88	374.56	14.560	
10,700.00	6,040.00	16,520.43	6,154.35	113.91	293.26	91.36	351.01	358.87	5,452.04	5,076.19	375.85	14.506	
10,800.00	6,040.00	16,340.70	6,154.02	114.24	288.39	91.36	346.65	179.20	5,450.71	5,078.52	372.19	14.645	
10,900.00	6,040.00	10,900.00	6,154.27	114.61	141.09	91.36	344.32	98.66	5,448.77	5,221.70	227.06	23.997	
11,000.00	6,040.00	16,167.62	6,155.34	115.02	283.70	91.37	341.45	6.21	5,446.68	5,074.99	371.70	14.654	
11,100.00	6,040.00	16,115.00	6,156.05	115.49	282.28	91.38	340.25	-46.39	5,445.35	5,072.67	372.68	14.611	
11,194.49	6,040.00	16,073.98	6,156.52	115.97	281.17	91.38	339.70	-87.41	5,444.95	5,071.06	373.89	14.563	
11,200.00	6,040.00	16,071.07	6,156.55	116.00	281.09	91.38	339.67	-90.32	5,444.95	5,071.01	373.94	14.561	
11,300.00	6,040.00	16,026.00	6,157.00	116.58	279.86	91.39	339.41	-135.38	5,445.44	5,070.29	375.15	14.515	
11,400.00	6,040.00	15,759.00	6,160.57	117.22	272.64	91.43	334.05	-402.21	5,443.59	5,074.67	368.92	14.756	
11,500.00	6,040.00	15,680.43	6,162.20	117.92	270.51	91.44	331.98	-480.74	5,441.94	5,072.83	369.11	14.743	
11,600.00	6,040.00	15,591.22	6,164.95	118.70	268.10	91.47	329.67	-569.88	5,440.41	5,071.45	368.96	14.745	
11,700.00	6,040.00	15,503.39	6,167.64	119.56	265.72	91.50	327.60	-657.63	5,439.11	5,070.23	368.88	14.745	
11,776.20	6,040.00	15,492.00	6,167.98	120.27	265.41	91.51	327.34	-669.02	5,438.59	5,067.93	370.66	14.673	
11,800.00	6,040.00	15,492.00	6,167.98	120.51	265.41	91.51	327.34	-669.02	5,438.64	5,067.32	371.32	14.647	
11,900.00	6,040.00	15,453.72	6,169.06	121.54	264.38	91.52	327.02	-707.28	5,439.34	5,066.52	372.82	14.590	
12,000.00	6,040.00	15,403.00	6,170.20	122.66	263.00	91.53	328.20	-757.97	5,442.05	5,068.15	373.90	14.555	
12,100.00	6,040.00	15,403.00	6,170.20	123.87	263.00	91.53	328.20	-757.97	5,445.45	5,068.97	376.48	14.464	
12,200.00	6,040.00	15,295.97	6,172.33	125.17	260.10	91.55	331.87	-864.92	5,449.92	5,074.10	375.82	14.501	
12,300.00	6,040.00	15,243.12	6,173.28	126.57	258.67	91.56	333.76	-917.72	5,454.53	5,077.77	376.77	14.477	
12,400.00	6,040.00	14,835.16	6,174.89	128.06	247.62	91.58	335.28	-1,325.52	5,453.25	5,086.26	366.99	14.860	
12,441.76	6,040.00	14,825.98	6,175.10	128.71	247.37	91.58	335.16	-1,334.69	5,453.12	5,085.25	367.87	14.823	
12,500.00	6,040.00	14,813.18	6,175.41	129.63	247.02	91.58	335.08	-1,347.49	5,453.37	5,084.28	369.09	14.775	
12,600.00	6,040.00	12,600.00	6,177.71	131.29	187.19	91.60	335.48	-1,414.01	5,454.87	5,143.17	311.70	17.501	
12,700.00	6,040.00	14,602.00	6,184.48	133.03	241.32	91.68	334.89	-1,558.46	5,455.43	5,087.35	368.08	14.821	
12,800.00	6,040.00	14,548.79	6,186.40	134.84	239.88	91.70	334.86	-1,611.64	5,456.48	5,087.29	369.19	14.780	
12,900.00	6,040.00	14,463.01	6,187.36	136.71	237.55	91.70	335.60	-1,697.41	5,458.31	5,089.01	369.30	14.780	
13,000.00	6,040.00	13,000.00	6,188.67	138.66	197.95	91.72	335.46	-1,893.79	5,459.31	5,127.50	331.81	16.453	
13,065.32	6,040.00	14,202.12	6,188.21	139.96	230.49	91.71	334.56	-1,958.27	5,459.02	5,093.09	365.93	14.918	
13,100.00	6,040.00	14,188.67	6,188.05	140.66	230.13	91.71	334.46	-1,971.72	5,459.09	5,092.61	366.48	14.896	
13,200.00	6,040.00	13,833.72	6,178.55	142.71	220.53	91.61	326.30	-2,326.33	5,459.09	5,100.89	358.19	15.241	
13,300.00	6,040.00	13,771.27	6,177.49	144.81	218.85	91.60	323.33	-2,388.70	5,455.23	5,096.04	359.19	15.188	
13,400.00	6,040.00	13,600.43	6,176.58	146.96	214.24	91.60	314.55	-2,559.30	5,451.10	5,094.42	356.68	15.283	
13,500.00	6,040.00	13,554.10	6,176.90	149.14	212.99	91.60	312.05	-2,605.56	5,446.70	5,088.48	358.22	15.205	
13,600.00	6,040.00	13,498.42	6,176.71	151.36	211.49	91.60	309.59	-2,661.71	5,443.24	5,083.80	359.44	15.144	
13,700.00	6,040.00	13,424.36	6,175.69	153.62	209.49	91.59	306.87	-2,735.18	5,440.47	5,080.41	360.06	15.110	
13,800.00	6,040.00	13,317.48	6,176.25	155.91	206.61	91.59	302.79	-2,841.98	5,437.65	5,077.99	359.66	15.119	
13,900.00	6,040.00	13,267.00	6,176.51	158.22	205.25	91.60	300.98	-2,892.43	5,435.20	5,074.19	361.01	15.055	
14,000.00	6,040.00	13,203.84	6,177.19	160.56	203.54	91.61	299.20	-2,955.56	5,433.51	5,071.55	361.96	15.011	
14,100.00	6,040.00	13,154.83	6,178.38	162.92	202.22	91.62	298.35	-3,004.55	5,432.83	5,069.51	363.31	14.954	
14,124.58	6,040.00	13,142.23	6,178.66	163.50	201.88	91.62	298.21	-3,017.14	5,432.80	5,069.18	363.62	14.941	
14,200.00	6,040.00	12,900.00	6,179.66	165.30	230.46	91.63	297.68	-3,094.04	5,433.05	5,038.95	394.10	13.786	
14,267.65	6,040.00	12,999.00	6,180.17	166.92	198.01	91.64	296.99	-3,160.36	5,433.04	5,069.66	363.37	14.952	
14,300.00	6,040.00	12,999.00	6,180.17	167.70	198.01	91.64	296.99	-3,160.36	5,433.13	5,068.87	364.26	14.915	
14,400.00	6,040.00	12,947.93	6,180.18	170.12	196.63	91.64	296.62	-3,211.43	5,433.77	5,068.26	365.50	14.866	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNLRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNLRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 5-T4N-R62W - STATE SEVENTY HOLES 34-32-34XRLN - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 156-MWD OWSG, 1664-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,500.00	6,040.00	12,910.00	6,179.88	172.55	195.60	91.63	297.17	-3,249.35	5,435.97	5,068.89	367.08	14.809	
14,600.00	6,040.00	12,829.89	6,178.95	175.00	193.44	91.62	298.96	-3,329.43	5,439.07	5,071.61	367.46	14.802	
14,700.00	6,040.00	12,553.00	6,178.50	177.46	185.96	91.62	301.26	-3,606.23	5,441.64	5,079.36	362.28	15.020	
14,735.61	6,040.00	12,530.92	6,178.15	178.35	185.36	91.61	301.01	-3,628.32	5,441.58	5,078.96	362.63	15.006	
14,800.00	6,040.00	12,496.81	6,177.57	179.94	184.44	91.61	300.79	-3,662.41	5,441.76	5,078.35	363.41	14.974	
14,900.00	6,040.00	12,438.43	6,176.59	182.43	182.87	91.60	300.82	-3,720.79	5,442.73	5,078.28	364.45	14.934	
15,000.00	6,040.00	12,369.93	6,177.13	184.92	181.02	91.60	301.25	-3,789.28	5,444.35	5,079.16	365.19	14.908	
15,100.00	6,040.00	12,286.00	6,178.07	187.43	178.75	91.61	302.07	-3,873.20	5,446.35	5,080.85	365.50	14.901	
15,200.00	6,040.00	12,247.48	6,178.24	189.95	177.71	91.61	302.72	-3,911.72	5,449.09	5,082.05	367.04	14.846	
15,300.00	6,040.00	11,920.08	6,182.00	192.48	168.89	91.65	305.80	-4,238.98	5,452.66	5,092.10	360.56	15.123	
15,400.00	6,040.00	11,695.51	6,185.31	195.01	162.86	91.69	297.35	-4,463.31	5,449.00	5,092.22	356.78	15.273	
15,500.00	6,040.00	15,500.00	6,185.38	197.55	265.18	91.69	296.50	-4,488.62	5,446.57	4,984.69	461.88	11.792	
15,600.00	6,040.00	11,573.00	6,185.81	200.10	159.56	91.69	293.82	-4,585.77	5,444.81	5,085.91	358.90	15.171	
15,700.00	6,040.00	11,510.85	6,186.38	202.65	157.89	91.70	292.19	-4,647.90	5,443.29	5,083.38	359.91	15.124	
15,800.00	6,040.00	11,460.72	6,187.17	205.22	156.54	91.71	291.40	-4,698.02	5,442.74	5,081.49	361.25	15.066	
15,810.52	6,040.00	11,455.24	6,187.25	205.49	156.40	91.71	291.34	-4,703.49	5,442.74	5,081.35	361.38	15.061	
15,900.00	6,040.00	11,395.00	6,187.92	207.78	154.78	91.72	291.04	-4,763.73	5,443.12	5,080.99	362.12	15.031	
16,000.00	6,040.00	11,355.07	6,188.26	210.36	153.70	91.72	291.16	-4,803.65	5,444.30	5,080.61	363.69	14.970	
16,100.00	6,040.00	11,287.79	6,188.86	212.93	151.89	91.72	291.90	-4,870.93	5,446.34	5,081.86	364.48	14.943	
16,200.00	6,040.00	11,175.77	6,189.35	215.52	148.88	91.73	292.89	-4,982.94	5,448.19	5,084.12	364.07	14.965	
16,300.00	6,040.00	11,128.00	6,189.73	218.11	147.60	91.73	293.49	-5,030.71	5,450.57	5,085.20	365.37	14.918	
16,400.00	6,040.00	11,063.24	6,190.54	220.70	145.86	91.74	294.80	-5,095.45	5,453.71	5,087.51	366.20	14.893	
16,500.00	6,040.00	10,984.48	6,191.50	223.29	143.75	91.75	297.12	-5,174.17	5,457.64	5,090.98	366.66	14.885	
16,600.00	6,040.00	10,896.86	6,191.59	225.89	141.40	91.75	299.82	-5,261.75	5,461.71	5,094.82	366.89	14.886	
16,700.00	6,040.00	16,700.00	6,192.79	228.50	297.10	91.76	304.52	-5,418.58	5,465.87	4,940.55	525.32	10.405	
16,800.00	6,040.00	10,648.09	6,194.85	231.11	134.73	91.78	306.39	-5,510.39	5,468.97	5,103.47	365.50	14.963	
16,900.00	6,040.00	10,469.09	6,200.20	233.72	129.95	91.84	309.87	-5,689.26	5,472.30	5,108.92	363.38	15.059	
17,000.00	6,040.00	10,294.53	6,207.14	236.33	125.29	91.91	310.91	-5,863.66	5,474.38	5,113.04	361.34	15.150	
17,100.00	6,040.00	10,147.00	6,213.21	238.95	121.36	91.97	309.73	-6,011.05	5,474.81	5,114.80	360.01	15.207	
17,156.66	6,040.00	10,108.23	6,214.56	240.43	120.33	91.98	309.21	-6,049.80	5,474.68	5,114.20	360.48	15.187	
17,200.00	6,040.00	10,082.90	6,215.41	241.57	119.65	91.99	308.97	-6,075.11	5,474.75	5,113.79	360.95	15.167	
17,300.00	6,040.00	10,024.76	6,217.09	244.19	118.10	92.01	308.75	-6,133.23	5,475.45	5,113.42	362.04	15.124	
17,400.00	6,040.00	9,964.86	6,217.65	246.82	116.51	92.02	309.03	-6,193.12	5,476.93	5,113.87	363.06	15.086	
17,500.00	6,040.00	9,880.00	6,217.67	249.45	114.25	92.02	309.69	-6,277.98	5,478.71	5,115.30	363.41	15.076	
17,600.00	6,040.00	9,829.35	6,217.66	252.08	112.90	92.02	310.38	-6,328.63	5,481.16	5,116.52	364.64	15.032	
17,700.00	6,040.00	9,657.17	6,220.57	254.71	108.34	92.04	313.48	-6,500.73	5,484.36	5,121.59	362.77	15.118	
17,800.00	6,040.00	9,346.00	6,233.30	257.35	100.11	92.18	307.82	-6,811.52	5,482.73	5,125.64	357.09	15.354	
17,900.00	6,040.00	9,273.98	6,233.90	259.99	98.21	92.18	305.80	-6,883.51	5,480.91	5,123.04	357.87	15.315	
18,000.00	6,040.00	9,220.22	6,233.17	262.63	96.79	92.18	304.59	-6,937.25	5,479.62	5,120.48	359.14	15.258	
18,069.97	6,040.00	9,187.88	6,232.58	264.48	95.94	92.17	304.14	-6,969.58	5,479.29	5,119.14	360.16	15.214	
18,100.00	6,040.00	9,168.00	6,232.18	265.27	95.42	92.17	303.98	-6,989.46	5,479.31	5,118.88	360.43	15.202	
18,200.00	6,040.00	9,168.00	6,232.18	267.91	95.42	92.17	303.98	-6,989.46	5,480.28	5,117.25	363.03	15.096	
18,300.00	6,040.00	9,120.55	6,230.98	270.56	94.17	92.15	304.30	-7,036.89	5,482.27	5,117.92	364.35	15.047	
18,400.00	6,040.00	9,079.00	6,229.63	273.21	93.08	92.14	305.59	-7,078.40	5,485.89	5,120.11	365.79	14.997	
18,500.00	6,040.00	18,500.00	6,226.26	275.86	341.28	92.10	309.66	-7,191.67	5,490.44	4,873.81	616.64	8.904 SF	
18,600.00	6,040.00	8,723.00	6,220.73	278.51	83.76	92.04	311.51	-7,434.18	5,491.09	5,129.14	361.95	15.171	
18,700.00	6,040.00	8,675.28	6,219.59	281.16	82.52	92.03	311.77	-7,481.88	5,492.58	5,129.28	363.30	15.119	
18,800.00	6,040.00	8,631.06	6,218.52	283.81	81.37	92.02	312.51	-7,526.08	5,495.13	5,130.42	364.71	15.067	
18,900.00	6,040.00	8,522.15	6,216.34	286.47	78.54	92.00	314.62	-7,634.95	5,497.97	5,133.44	364.53	15.082	
18,919.70	6,040.00	8,508.50	6,216.13	286.99	78.19	91.99	314.89	-7,648.60	5,498.55	5,133.86	364.69	15.077	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 9-T4N-R62W - ANSCHUTZ EQUUS FARMS 4-62-9-0108CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 869-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	13,802.00	6,224.50	0.00	208.73	-177.53	-5,767.83	-248.88	8,515.35				
100.00	100.00	13,802.00	6,224.50	0.13	208.73	-177.53	-5,767.83	-248.88	8,442.11	8,289.81	152.30	55.430	
200.00	199.98	13,802.00	6,224.50	0.48	208.73	34.46	-5,767.83	-248.88	8,368.44	8,215.04	153.40	54.554	
300.00	299.84	13,802.00	6,224.50	0.85	208.73	35.77	-5,767.83	-248.88	8,293.37	8,138.85	154.52	53.671	
400.00	399.45	13,802.00	6,224.50	1.22	208.73	37.17	-5,767.83	-248.88	8,216.97	8,061.32	155.65	52.791	
500.00	498.70	13,802.00	6,224.50	1.62	208.73	38.69	-5,767.83	-248.88	8,139.30	7,982.52	156.77	51.918	
600.00	597.47	13,802.00	6,224.50	2.05	208.73	40.32	-5,767.83	-248.88	8,060.40	7,902.51	157.89	51.052	
700.00	695.62	13,825.32	6,224.32	2.51	209.36	41.80	-5,769.09	-225.59	7,980.33	7,820.82	159.51	50.029	
800.00	793.06	13,858.83	6,224.10	3.01	210.27	43.28	-5,770.75	-192.13	7,899.13	7,737.77	161.36	48.954	
900.00	889.64	13,898.07	6,223.92	3.56	211.33	44.81	-5,772.45	-152.93	7,816.81	7,653.49	163.32	47.862	
1,000.00	985.27	13,926.56	6,223.88	4.14	212.10	46.60	-5,773.51	-124.46	7,733.46	7,568.42	165.03	46.860	
1,100.00	1,079.82	13,959.95	6,223.97	4.78	213.01	48.48	-5,774.54	-91.09	7,649.11	7,482.27	166.84	45.847	
1,200.00	1,173.17	13,997.48	6,224.24	5.46	214.03	50.47	-5,775.43	-53.56	7,563.81	7,395.09	168.72	44.830	
1,300.00	1,265.21	1,300.00	6,224.18	6.20	130.95	53.19	-5,775.36	-58.07	7,477.69	7,373.47	104.22	71.749	
1,400.00	1,355.84	14,018.57	6,224.46	6.99	214.60	55.70	-5,775.90	-32.48	7,390.78	7,219.52	171.26	43.156	
1,500.00	1,444.94	14,033.08	6,224.64	7.84	214.99	58.54	-5,776.22	-17.98	7,303.20	7,130.61	172.59	42.316	
1,600.00	1,532.39	14,278.15	6,226.59	8.75	221.63	58.33	-5,778.43	227.05	7,214.86	7,035.93	178.93	40.323	
1,700.00	1,618.11	14,293.08	6,226.63	9.71	222.04	61.61	-5,778.33	241.98	7,125.26	6,945.02	180.24	39.532	
1,800.00	1,701.97	14,311.00	6,226.66	10.74	222.52	65.07	-5,778.26	259.90	7,035.14	6,853.54	181.60	38.740	
1,900.00	1,783.88	14,329.92	6,226.66	11.82	223.03	68.74	-5,778.24	278.82	6,944.57	6,761.61	182.96	37.957	
2,000.00	1,863.74	14,349.83	6,226.64	12.96	223.57	72.59	-5,778.29	298.73	6,853.64	6,669.32	184.32	37.183	
2,100.00	1,941.45	14,444.72	6,225.81	14.16	226.14	75.69	-5,778.85	393.62	6,762.43	6,575.16	187.27	36.110	
2,200.00	2,016.92	14,516.61	6,224.34	15.41	228.09	79.34	-5,779.03	465.49	6,670.50	6,480.81	189.70	35.164	
2,300.00	2,090.05	14,570.21	6,223.22	16.73	229.54	83.44	-5,778.92	519.08	6,578.30	6,386.60	191.69	34.317	
2,400.00	2,160.76	14,601.62	6,222.68	18.10	230.39	87.93	-5,778.73	550.48	6,485.95	6,292.77	193.19	33.573	
2,500.00	2,228.95	14,638.54	6,222.19	19.53	231.39	92.44	-5,778.36	587.40	6,393.59	6,198.84	194.76	32.828	
2,600.00	2,294.55	14,655.00	6,222.03	21.01	231.84	97.10	-5,778.15	603.86	6,301.34	6,105.47	195.88	32.170	
2,700.00	2,357.48	14,685.58	6,221.92	22.55	232.67	101.59	-5,777.70	634.44	6,209.33	6,012.09	197.24	31.482	
2,800.00	2,418.42	14,706.09	6,222.02	24.13	233.22	102.73	-5,777.36	654.94	6,117.65	5,919.28	198.37	30.839	
2,900.00	2,479.25	2,900.00	6,223.25	25.71	86.12	102.55	-5,775.20	741.03	6,026.04	5,946.57	79.47	75.832	
3,000.00	2,540.09	14,879.18	6,224.09	27.31	237.91	102.36	-5,772.25	827.93	5,933.94	5,730.82	203.12	29.214	
3,100.00	2,600.93	14,897.97	6,224.20	28.90	238.41	102.32	-5,771.62	846.71	5,841.79	5,637.53	204.26	28.600	
3,200.00	2,661.77	14,917.06	6,224.34	30.51	238.93	102.27	-5,771.04	865.79	5,749.78	5,544.35	205.43	27.990	
3,300.00	2,722.61	14,939.00	6,224.52	32.11	239.52	102.21	-5,770.47	887.73	5,657.90	5,451.24	206.66	27.378	
3,400.00	2,783.44	14,979.11	6,224.78	33.72	240.61	102.11	-5,769.55	927.82	5,566.09	5,357.85	208.23	26.730	
3,500.00	2,844.28	15,024.92	6,224.86	35.34	241.85	101.97	-5,768.60	973.62	5,474.24	5,264.32	209.92	26.078	
3,600.00	2,905.12	15,078.38	6,224.66	36.95	243.30	101.80	-5,767.61	1,027.08	5,382.32	5,170.58	211.74	25.419	
3,700.00	2,965.96	15,133.03	6,224.13	38.57	244.78	101.61	-5,766.65	1,081.71	5,290.30	5,076.70	213.60	24.768	
3,800.00	3,026.79	15,152.88	6,223.89	40.19	245.32	101.54	-5,766.36	1,101.56	5,198.30	4,983.42	214.88	24.191	
3,900.00	3,087.63	15,175.45	6,223.62	41.81	245.93	101.45	-5,766.12	1,124.13	5,106.43	4,890.19	216.24	23.615	
4,000.00	3,148.47	15,198.34	6,223.34	43.43	246.55	101.36	-5,765.97	1,147.02	5,014.69	4,797.07	217.62	23.043	
4,100.00	3,209.31	15,225.00	6,223.01	45.05	247.27	101.25	-5,765.91	1,173.67	4,923.10	4,704.01	219.09	22.471	
4,200.00	3,270.14	15,247.71	6,222.78	46.68	247.89	101.15	-5,765.92	1,196.38	4,831.63	4,611.11	220.51	21.911	
4,300.00	3,330.98	15,274.65	6,222.61	48.31	248.62	101.04	-5,765.93	1,223.32	4,740.27	4,518.25	222.02	21.351	
4,400.00	3,391.82	15,301.96	6,222.57	49.93	249.36	100.92	-5,765.93	1,250.63	4,649.04	4,425.49	223.55	20.796	
4,500.00	3,452.66	15,330.59	6,222.64	51.56	250.13	100.80	-5,765.95	1,279.26	4,557.94	4,332.81	225.12	20.246	
4,600.00	3,513.49	15,361.09	6,222.80	53.19	250.96	100.66	-5,766.00	1,309.76	4,466.93	4,240.19	226.74	19.701	
4,700.00	3,574.33	15,391.90	6,223.00	54.82	251.80	100.52	-5,766.11	1,340.57	4,376.03	4,147.66	228.38	19.161	
4,800.00	3,635.17	15,424.74	6,223.27	56.45	252.69	100.37	-5,766.28	1,373.41	4,285.24	4,055.17	230.07	18.626	
4,900.00	3,696.01	15,462.70	6,223.65	58.08	253.72	100.19	-5,766.49	1,411.37	4,194.51	3,962.67	231.84	18.092	
5,000.00	3,756.84	15,500.82	6,224.07	59.71	254.75	100.00	-5,766.70	1,449.48	4,103.82	3,870.19	233.64	17.565	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 9-T4N-R62W - ANSCHUTZ EQUUS FARMS 4-62-9-0108CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 869-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	3,817.68	15,547.90	6,224.63	61.34	256.03	99.76	-5,766.93	1,496.56	4,013.15	3,777.60	235.55	17.037	
5,200.00	3,878.52	15,597.41	6,225.18	62.97	257.37	99.49	-5,767.09	1,546.06	3,922.40	3,684.90	237.50	16.515	
5,300.00	3,939.36	15,645.49	6,225.78	64.61	258.68	99.23	-5,767.08	1,594.14	3,831.59	3,592.16	239.43	16.003	
5,400.00	4,000.19	15,693.16	6,226.62	66.24	259.97	98.96	-5,766.78	1,641.80	3,740.72	3,499.36	241.35	15.499	
5,500.00	4,061.03	15,732.37	6,227.50	67.87	261.03	98.74	-5,766.35	1,681.00	3,649.83	3,406.62	243.20	15.007	
5,600.00	4,121.87	15,770.60	6,228.52	69.51	262.07	98.52	-5,765.85	1,719.21	3,558.98	3,313.93	245.05	14.523	
5,700.00	4,182.71	15,802.54	6,229.50	71.14	262.94	98.34	-5,765.38	1,751.14	3,468.20	3,221.32	246.88	14.048	
5,800.00	4,243.54	15,831.60	6,230.54	72.77	263.72	98.17	-5,765.02	1,780.17	3,377.61	3,128.89	248.72	13.580	
5,900.00	4,304.38	15,873.59	6,232.08	74.41	264.86	97.91	-5,764.52	1,822.14	3,287.08	3,036.42	250.66	13.114	
6,000.00	4,365.22	15,880.00	6,232.32	76.04	265.04	97.87	-5,764.45	1,828.54	3,196.77	2,944.30	252.47	12.662	
6,100.00	4,426.06	15,880.00	6,232.32	77.68	265.04	97.87	-5,764.45	1,828.54	3,107.04	2,852.74	254.31	12.218	
6,200.00	4,486.90	15,880.00	6,232.32	79.31	265.04	97.87	-5,764.45	1,828.54	3,017.96	2,761.76	256.20	11.780	
6,300.00	4,547.73	15,880.00	6,232.32	80.95	265.04	97.87	-5,764.45	1,828.54	2,929.59	2,671.44	258.15	11.348	
6,400.00	4,608.57	15,880.00	6,232.32	82.58	265.04	97.87	-5,764.45	1,828.54	2,841.98	2,581.83	260.15	10.924	
6,500.00	4,669.41	15,880.00	6,232.32	84.22	265.04	97.87	-5,764.45	1,828.54	2,755.22	2,493.02	262.20	10.508	
6,600.00	4,730.25	15,880.00	6,232.32	85.86	265.04	97.87	-5,764.45	1,828.54	2,669.39	2,405.09	264.30	10.100	
6,700.00	4,791.08	15,880.00	6,232.32	87.49	265.04	97.87	-5,764.45	1,828.54	2,584.57	2,318.14	266.44	9.700	
6,800.00	4,851.92	15,880.00	6,232.32	89.13	265.04	97.87	-5,764.45	1,828.54	2,500.88	2,232.28	268.60	9.311	
6,900.00	4,912.76	15,880.00	6,232.32	90.76	265.04	97.87	-5,764.45	1,828.54	2,418.43	2,147.64	270.78	8.931	
7,000.00	4,973.60	15,880.00	6,232.32	92.40	265.04	97.87	-5,764.45	1,828.54	2,337.34	2,064.38	272.96	8.563	
7,100.00	5,034.43	15,880.00	6,232.32	94.04	265.04	97.87	-5,764.45	1,828.54	2,257.78	1,982.66	275.12	8.207	
7,200.00	5,095.27	15,880.00	6,232.32	95.67	265.04	97.87	-5,764.45	1,828.54	2,179.89	1,902.67	277.22	7.863	
7,300.00	5,156.11	15,880.00	6,232.32	97.31	265.04	97.87	-5,764.45	1,828.54	2,103.88	1,824.64	279.24	7.534	
7,400.00	5,216.95	15,880.00	6,232.32	98.95	265.04	97.87	-5,764.45	1,828.54	2,029.95	1,748.82	281.13	7.221	
7,500.00	5,277.78	15,880.00	6,232.32	100.59	265.04	97.87	-5,764.45	1,828.54	1,958.34	1,675.50	282.84	6.924	
7,600.00	5,338.62	15,880.00	6,232.32	102.22	265.04	97.87	-5,764.45	1,828.54	1,889.30	1,605.00	284.30	6.646	
7,700.00	5,399.46	15,880.00	6,232.32	103.86	265.04	97.87	-5,764.45	1,828.54	1,823.14	1,537.72	285.43	6.387	
7,800.00	5,460.30	15,880.00	6,232.32	105.50	265.04	97.87	-5,764.45	1,828.54	1,760.18	1,474.05	286.13	6.152	
7,900.00	5,521.24	15,880.00	6,232.32	107.13	265.04	95.95	-5,764.45	1,828.54	1,700.44	1,414.13	286.31	5.939	
8,000.00	5,584.83	15,880.00	6,232.32	108.61	265.04	86.02	-5,764.45	1,828.54	1,635.14	1,349.08	286.06	5.716	
8,100.00	5,650.69	15,880.00	6,232.32	109.85	265.04	74.37	-5,764.45	1,828.54	1,560.87	1,275.30	285.57	5.466	
8,200.00	5,716.83	15,880.00	6,232.32	110.82	265.04	60.83	-5,764.45	1,828.54	1,478.72	1,193.64	285.09	5.187	
8,300.00	5,781.24	15,880.00	6,232.32	111.52	265.04	44.23	-5,764.45	1,828.54	1,390.03	1,105.12	284.91	4.879	
8,400.00	5,841.96	15,880.00	6,232.32	111.98	265.04	20.63	-5,764.45	1,828.54	1,296.43	1,011.02	285.40	4.542	
8,500.00	5,897.14	15,880.00	6,232.32	112.25	265.04	-17.37	-5,764.45	1,828.54	1,199.95	912.98	286.97	4.181	
8,600.00	5,945.12	15,880.00	6,232.32	112.37	265.04	-59.64	-5,764.45	1,828.54	1,103.17	813.15	290.03	3.804	
8,700.00	5,984.42	15,880.00	6,232.32	112.39	265.04	-84.96	-5,764.45	1,828.54	1,009.36	714.52	294.84	3.423	
8,800.00	6,013.86	15,880.00	6,232.32	112.35	265.04	-97.94	-5,764.45	1,828.54	922.70	621.34	301.36	3.062	
8,900.00	6,032.54	15,880.00	6,232.32	112.30	265.04	-104.82	-5,764.45	1,828.54	848.38	539.57	308.81	2.747	
9,000.00	6,039.89	15,880.00	6,232.32	112.24	265.04	-108.24	-5,764.45	1,828.54	792.44	477.01	315.43	2.512	
9,100.00	6,040.00	15,880.00	6,232.32	112.19	265.04	-108.50	-5,764.45	1,828.54	755.01	436.03	318.97	2.367	
9,200.00	6,040.00	15,880.00	6,232.32	112.16	265.04	-108.50	-5,764.45	1,828.54	729.60	411.38	318.22	2.293	
9,300.00	6,040.00	15,880.00	6,232.32	112.15	265.04	-108.50	-5,764.45	1,828.54	717.36	404.80	312.56	2.295	
9,400.00	6,040.00	15,822.32	6,229.81	112.15	263.47	-108.31	-5,765.26	1,760.27	715.70	406.52	309.19	2.315	
9,500.00	6,040.00	15,714.25	6,227.07	112.16	260.54	-108.09	-5,766.56	1,662.89	715.16	407.73	307.43	2.326	
9,600.00	6,040.00	15,608.35	6,225.29	112.19	257.67	-107.97	-5,767.11	1,557.01	714.20	407.72	306.49	2.330	
9,700.00	6,040.00	15,505.38	6,224.13	112.24	254.88	-107.91	-5,766.72	1,454.04	712.56	407.27	305.29	2.334	
9,800.00	6,040.00	15,406.53	6,223.12	112.31	252.19	-107.87	-5,766.18	1,355.20	710.78	406.91	303.87	2.339	
9,900.00	6,040.00	15,311.10	6,222.58	112.39	249.61	-107.86	-5,765.94	1,259.77	709.44	407.15	302.29	2.347	
10,000.00	6,040.00	15,215.41	6,223.13	112.49	247.01	-107.93	-5,765.92	1,164.09	708.66	407.98	300.68	2.357	
10,027.36	6,040.00	15,191.04	6,223.43	112.53	246.35	-107.95	-5,766.00	1,139.72	708.60	408.46	300.14	2.361	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design SEC 9-T4N-R62W - ANSCHUTZ EQUUS FARMS 4-62-9-0108CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 869-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	6,040.00	15,125.98	6,224.22	112.62	244.59	-108.01	-5,766.77	1,074.66	709.01	410.26	298.75	2.373	
10,200.00	6,040.00	15,025.01	6,224.86	112.77	241.85	-108.04	-5,768.60	973.72	709.99	412.27	297.72	2.385	
10,300.00	6,040.00	14,927.70	6,224.42	112.94	239.22	-107.98	-5,770.76	876.43	711.03	414.34	296.69	2.397	
10,400.00	6,040.00	14,837.75	6,223.91	113.14	236.79	-107.88	-5,773.85	786.53	713.18	417.84	295.35	2.415	
10,500.00	6,040.00	14,721.36	6,222.18	113.36	233.64	-107.70	-5,777.08	670.20	714.39	418.67	295.72	2.416	
10,600.00	6,040.00	14,621.24	6,222.40	113.62	230.93	-107.70	-5,778.55	570.11	714.91	420.02	294.89	2.424	
10,700.00	6,040.00	14,516.20	6,224.35	113.91	228.08	-107.87	-5,779.03	465.09	714.98	420.89	294.09	2.431	
10,800.00	6,040.00	14,410.04	6,226.29	114.24	225.20	-108.05	-5,778.67	358.94	714.29	420.98	293.31	2.435	
10,900.00	6,040.00	14,312.90	6,226.66	114.61	222.57	-108.11	-5,778.26	261.80	713.08	420.69	292.39	2.439	
11,000.00	6,040.00	14,212.31	6,226.44	115.02	219.85	-108.11	-5,778.76	161.22	712.56	420.80	291.76	2.442	
11,100.00	6,040.00	14,091.85	6,225.61	115.49	216.58	-108.10	-5,777.62	40.77	710.56	418.78	291.77	2.435	
11,200.00	6,040.00	13,995.89	6,224.22	116.00	213.98	-108.07	-5,775.40	-55.16	706.98	415.90	291.08	2.429	
11,300.00	6,040.00	13,884.07	6,223.98	116.58	210.95	-108.17	-5,771.87	-166.92	702.98	412.39	290.59	2.419	
11,400.00	6,040.00	13,776.94	6,224.75	117.22	208.05	-108.40	-5,766.42	-273.91	697.43	407.67	289.76	2.407	
11,500.00	6,040.00	13,680.49	6,226.24	117.92	205.44	-108.68	-5,761.15	-370.20	691.80	403.11	288.69	2.396	
11,600.00	6,040.00	13,588.06	6,228.28	118.70	202.94	-108.99	-5,756.45	-462.48	686.79	399.26	287.54	2.389	
11,700.00	6,040.00	13,500.91	6,229.62	119.56	200.59	-109.19	-5,753.97	-549.59	683.65	397.15	286.50	2.386	
11,800.00	6,040.00	13,397.84	6,229.41	120.51	197.80	-109.25	-5,752.27	-652.64	681.10	395.08	286.01	2.381	
11,900.00	6,040.00	13,294.18	6,230.04	121.54	194.99	-109.40	-5,749.47	-756.26	677.82	392.43	285.38	2.375	
12,000.00	6,040.00	13,199.69	6,231.36	122.66	192.44	-109.61	-5,746.75	-850.70	674.65	390.10	284.55	2.371	
12,100.00	6,040.00	13,108.42	6,231.47	123.87	189.97	-109.67	-5,745.76	-941.97	672.75	388.82	283.93	2.369	
12,183.93	6,040.00	13,033.22	6,231.68	124.96	187.94	-109.71	-5,745.81	-1,017.16	672.11	388.70	283.41	2.371 CC	
12,200.00	6,040.00	13,019.57	6,231.84	125.17	187.57	-109.72	-5,745.91	-1,030.81	672.14	388.85	283.28	2.373	
12,300.00	6,040.00	12,931.66	6,234.02	126.57	185.19	-109.88	-5,747.30	-1,118.68	673.53	391.09	282.44	2.385	
12,400.00	6,040.00	12,832.23	6,236.31	128.06	182.51	-110.01	-5,750.11	-1,218.04	676.04	394.11	281.93	2.398	
12,500.00	6,040.00	12,721.11	6,237.06	129.63	179.52	-110.03	-5,752.65	-1,329.13	677.50	395.64	281.86	2.404	
12,600.00	6,040.00	12,620.92	6,237.51	131.29	176.81	-110.06	-5,753.86	-1,429.31	677.87	396.32	281.55	2.408	
12,700.00	6,040.00	12,536.97	6,237.02	133.03	174.55	-109.98	-5,756.24	-1,513.22	679.44	398.30	281.14	2.417	
12,800.00	6,040.00	12,443.03	6,236.43	134.84	172.02	-109.82	-5,761.07	-1,607.03	683.13	402.07	281.05	2.431	
12,900.00	6,040.00	12,341.91	6,236.68	136.71	169.30	-109.73	-5,766.00	-1,708.03	686.87	405.84	281.03	2.444	
13,000.00	6,040.00	12,255.92	6,237.71	138.66	166.99	-109.70	-5,770.55	-1,793.89	691.36	410.81	280.55	2.464	
13,100.00	6,040.00	12,155.67	6,239.66	140.66	164.30	-109.70	-5,777.08	-1,893.91	697.24	416.83	280.41	2.487	
13,200.00	6,040.00	12,039.63	6,241.87	142.71	161.19	-109.74	-5,782.85	-2,009.79	701.62	421.11	280.51	2.501	
13,300.00	6,040.00	11,929.11	6,241.30	144.81	158.21	-109.61	-5,787.27	-2,120.21	704.31	423.59	280.72	2.509	
13,400.00	6,040.00	11,817.25	6,239.48	146.96	155.20	-109.43	-5,789.89	-2,232.03	705.02	424.08	280.94	2.510	
13,500.00	6,040.00	11,691.61	6,238.36	149.14	151.82	-109.37	-5,789.89	-2,357.65	703.92	423.08	280.84	2.506	
13,600.00	6,040.00	11,590.63	6,238.74	151.36	149.10	-109.52	-5,786.71	-2,458.58	700.15	419.74	280.41	2.497	
13,700.00	6,040.00	11,496.45	6,239.89	153.62	146.56	-109.70	-5,783.99	-2,552.71	696.91	416.95	279.95	2.489	
13,800.00	6,040.00	11,397.04	6,239.93	155.91	143.89	-109.79	-5,782.01	-2,652.10	694.13	414.48	279.64	2.482	
13,900.00	6,040.00	11,293.08	6,239.71	158.22	141.09	-109.86	-5,779.85	-2,756.03	691.18	411.85	279.33	2.474	
14,000.00	6,040.00	11,190.02	6,239.06	160.56	138.32	-109.93	-5,776.82	-2,859.05	687.27	408.23	279.04	2.463	
14,100.00	6,040.00	11,096.31	6,236.57	162.92	135.80	-109.79	-5,775.48	-2,952.71	684.09	404.94	279.15	2.451	
14,200.00	6,040.00	10,996.14	6,235.08	165.30	133.11	-109.75	-5,773.95	-3,052.86	681.22	402.14	279.08	2.441	
14,300.00	6,040.00	10,908.84	6,234.90	167.70	130.77	-109.80	-5,772.50	-3,140.15	678.75	399.79	278.95	2.433	
14,327.07	6,040.00	10,888.85	6,235.03	168.35	130.23	-109.81	-5,772.54	-3,160.13	678.60	399.69	278.92	2.433	
14,400.00	6,040.00	10,835.22	6,235.66	170.12	128.80	-109.85	-5,773.65	-3,213.75	679.63	400.90	278.74	2.438	
14,500.00	6,040.00	10,763.93	6,236.21	172.55	126.89	-109.79	-5,777.76	-3,284.91	684.46	406.09	278.37	2.459	
14,600.00	6,040.00	10,634.66	6,236.73	175.00	123.44	-109.67	-5,784.70	-3,413.98	688.54	409.68	278.86	2.469	
14,700.00	6,040.00	10,511.84	6,236.98	177.46	120.16	-109.65	-5,787.59	-3,536.76	689.95	411.13	278.82	2.475	
14,800.00	6,040.00	10,409.82	6,237.18	179.94	117.43	-109.69	-5,787.65	-3,638.77	689.15	410.50	278.65	2.473	
14,870.96	6,040.00	10,344.69	6,237.22	181.70	115.69	-109.70	-5,787.98	-3,703.90	688.85	410.24	278.61	2.472	

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

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNNRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNNRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

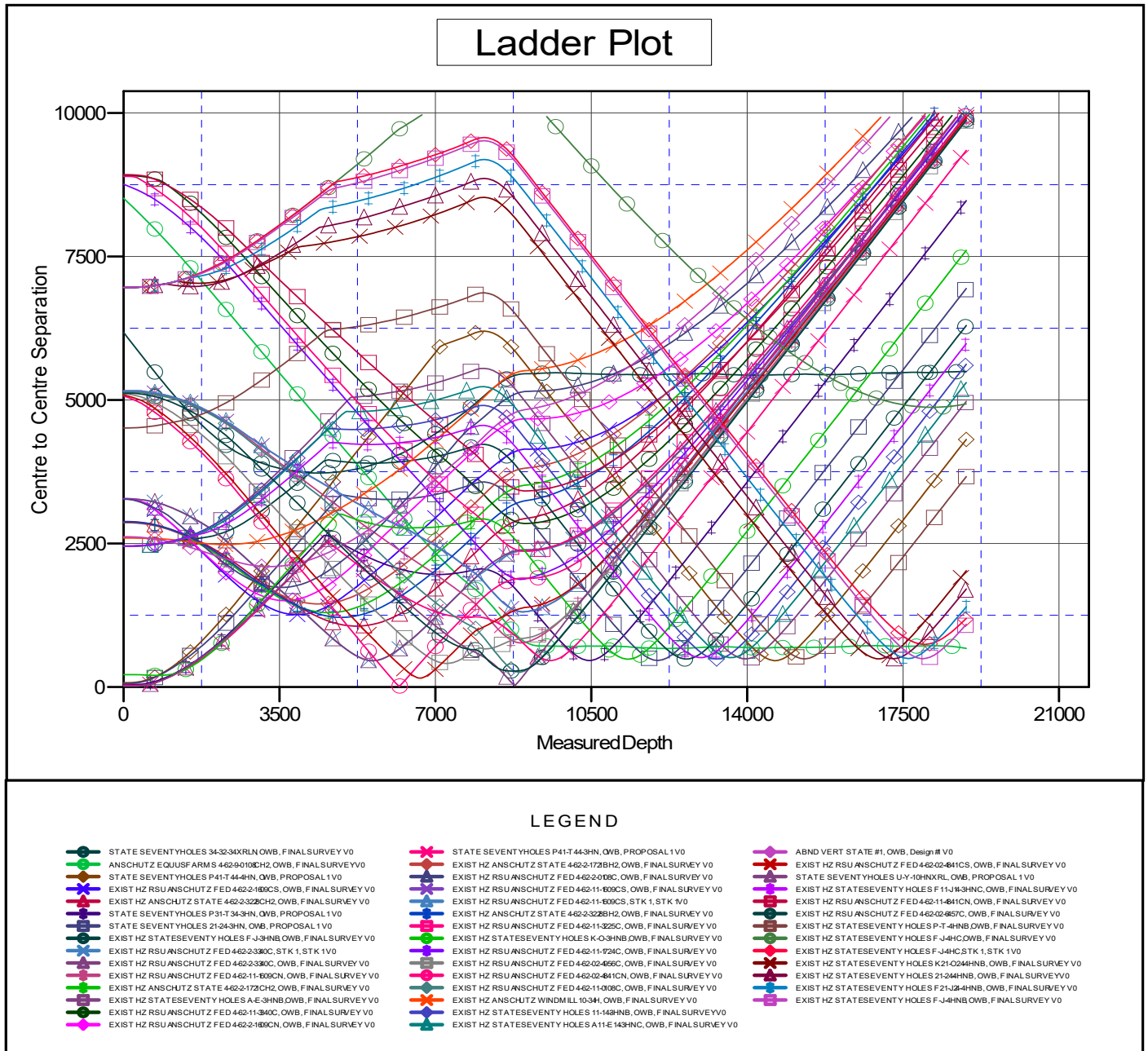
Offset Design SEC 9-T4N-R62W - ANSCHUTZ EQUUS FARMS 4-62-9-0108CH2 - OWB - FINAL SURVEY												Offset Site Error:	0.00 usft
Survey Program: 869-MWD OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,900.00	6,040.00	10,318.13	6,237.33	182.43	114.98	-109.71	-5,788.25	-3,730.46	688.90	410.32	278.58	2.473	
15,000.00	6,040.00	10,222.56	6,239.11	184.92	112.43	-109.85	-5,789.22	-3,826.01	689.57	411.27	278.30	2.478	
15,100.00	6,040.00	10,118.54	6,242.65	187.43	109.66	-110.14	-5,789.71	-3,929.96	690.25	412.50	277.75	2.485	
15,200.00	6,040.00	10,019.47	6,245.28	189.95	107.02	-110.36	-5,790.27	-4,029.00	690.77	413.43	277.35	2.491	
15,300.00	6,040.00	9,918.52	6,247.30	192.48	104.34	-110.52	-5,791.00	-4,129.92	691.23	414.21	277.02	2.495	
15,400.00	6,040.00	9,820.72	6,249.73	195.01	101.74	-110.72	-5,791.67	-4,227.69	691.83	415.17	276.66	2.501	
15,500.00	6,040.00	9,722.71	6,251.69	197.55	99.14	-110.86	-5,792.84	-4,325.68	692.73	416.35	276.39	2.506	
15,600.00	6,040.00	9,623.54	6,252.27	200.10	96.51	-110.88	-5,794.82	-4,424.82	693.89	417.55	276.34	2.511	
15,700.00	6,040.00	9,522.31	6,252.29	202.65	93.83	-110.85	-5,796.95	-4,526.03	694.95	418.59	276.36	2.515	
15,800.00	6,040.00	9,422.22	6,252.04	205.22	91.19	-110.79	-5,799.06	-4,626.10	695.91	419.48	276.43	2.517	
15,900.00	6,040.00	9,324.69	6,251.20	207.78	88.62	-110.69	-5,801.45	-4,723.59	696.99	420.38	276.61	2.520	
16,000.00	6,040.00	9,232.53	6,252.69	210.36	86.19	-110.77	-5,803.54	-4,815.71	698.76	422.26	276.50	2.527	
16,100.00	6,040.00	9,135.57	6,255.71	212.93	83.65	-110.94	-5,806.47	-4,912.58	701.78	425.54	276.23	2.541	
16,200.00	6,040.00	9,039.34	6,257.84	215.52	81.13	-111.04	-5,809.41	-5,008.74	704.52	428.44	276.08	2.552	
16,300.00	6,040.00	8,945.19	6,258.50	218.11	78.67	-110.98	-5,814.30	-5,102.76	708.68	432.47	276.21	2.566	
16,400.00	6,040.00	8,839.43	6,259.53	220.70	75.92	-110.94	-5,819.28	-5,208.40	712.52	436.19	276.33	2.579	
16,500.00	6,040.00	8,726.77	6,259.54	223.29	72.99	-110.85	-5,823.60	-5,320.97	715.20	438.71	276.49	2.587	
16,600.00	6,040.00	8,622.17	6,257.84	225.89	70.28	-110.67	-5,826.58	-5,425.52	716.37	439.56	276.81	2.588	
16,700.00	6,040.00	8,534.34	6,256.86	228.50	68.01	-110.54	-5,829.44	-5,513.29	718.12	440.96	277.15	2.591	
16,800.00	6,040.00	8,428.28	6,258.67	231.11	65.29	-110.61	-5,832.60	-5,619.29	720.60	443.52	277.08	2.601	
16,900.00	6,040.00	8,305.18	6,261.62	233.72	62.14	-110.87	-5,832.56	-5,742.34	720.42	443.91	276.51	2.605	
17,000.00	6,040.00	8,206.53	6,262.95	236.33	59.64	-111.02	-5,831.78	-5,840.98	719.24	442.86	276.38	2.602	
17,100.00	6,040.00	8,104.34	6,263.22	238.95	57.06	-111.08	-5,831.20	-5,943.17	717.89	441.53	276.36	2.598	
17,200.00	6,040.00	8,001.44	6,263.41	241.57	54.49	-111.15	-5,830.39	-6,046.06	716.31	439.98	276.33	2.592	
17,300.00	6,040.00	7,892.35	6,264.31	244.19	51.79	-111.31	-5,828.28	-6,155.13	713.90	437.85	276.05	2.586	
17,400.00	6,040.00	7,796.85	6,265.91	246.82	49.45	-111.55	-5,825.24	-6,250.57	710.66	434.73	275.93	2.576	
17,500.00	6,040.00	7,711.45	6,266.35	249.45	47.38	-111.63	-5,824.51	-6,335.95	709.14	432.90	276.24	2.567	
17,521.11	6,040.00	7,693.59	6,266.42	250.00	46.94	-111.63	-5,824.61	-6,353.82	709.09	432.77	276.32	2.566	
17,600.00	6,040.00	7,623.69	6,266.66	252.08	45.27	-111.64	-5,825.77	-6,423.71	709.68	433.08	276.60	2.566	
17,700.00	6,040.00	7,527.77	6,266.87	254.71	43.00	-111.60	-5,828.41	-6,519.60	711.39	434.42	276.97	2.568	
17,800.00	6,040.00	7,428.44	6,266.43	257.35	40.69	-111.51	-5,831.46	-6,618.87	713.18	435.72	277.46	2.570	
17,900.00	6,040.00	7,331.08	6,269.35	259.99	38.48	-111.69	-5,833.52	-6,716.16	715.34	437.80	277.53	2.577	
18,000.00	6,040.00	7,231.92	6,272.61	262.63	36.29	-111.90	-5,835.73	-6,815.24	717.72	440.10	277.62	2.585	
18,100.00	6,040.00	7,121.85	6,275.68	265.27	33.94	-112.09	-5,837.89	-6,925.25	719.69	441.95	277.75	2.591	
18,200.00	6,040.00	7,016.26	6,276.95	267.91	31.77	-112.18	-5,839.02	-7,030.82	720.23	442.08	278.15	2.589	
18,300.00	6,040.00	6,905.98	6,277.32	270.56	29.66	-112.23	-5,839.52	-7,141.09	719.87	441.18	278.69	2.583	
18,400.00	6,040.00	6,787.88	6,277.69	273.21	27.57	-112.36	-5,837.21	-7,259.17	717.24	438.16	279.08	2.570	
18,500.00	6,040.00	6,683.37	6,268.25	275.86	25.87	-111.68	-5,837.50	-7,363.12	713.19	432.01	281.17	2.536	
18,600.00	6,040.00	6,551.43	6,234.72	278.51	23.99	-109.01	-5,843.46	-7,490.52	707.67	421.60	286.06	2.474	
18,700.00	6,040.00	6,433.00	6,193.41	281.16	22.67	-105.73	-5,846.64	-7,601.41	698.35	406.60	291.75	2.394	
18,800.00	6,040.00	6,309.91	6,139.73	283.81	22.36	-101.37	-5,848.58	-7,712.11	687.82	389.82	298.00	2.308	
18,900.00	6,040.00	6,201.51	6,080.86	286.47	22.28	-96.47	-5,848.21	-7,802.99	676.49	372.34	304.14	2.224	
18,919.70	6,040.00	6,182.95	6,069.18	286.99	22.26	-95.49	-5,848.11	-7,817.42	674.51	369.22	305.29	2.209 ES, SF	

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNLRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNLRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB 25' @ 4574.00usft
Offset Depths are relative to Offset Datum
Central Meridian is 105.500000°W

Coordinates are relative to: STATE SEVENTY HOLES Y-E-10HNLRL
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.77°



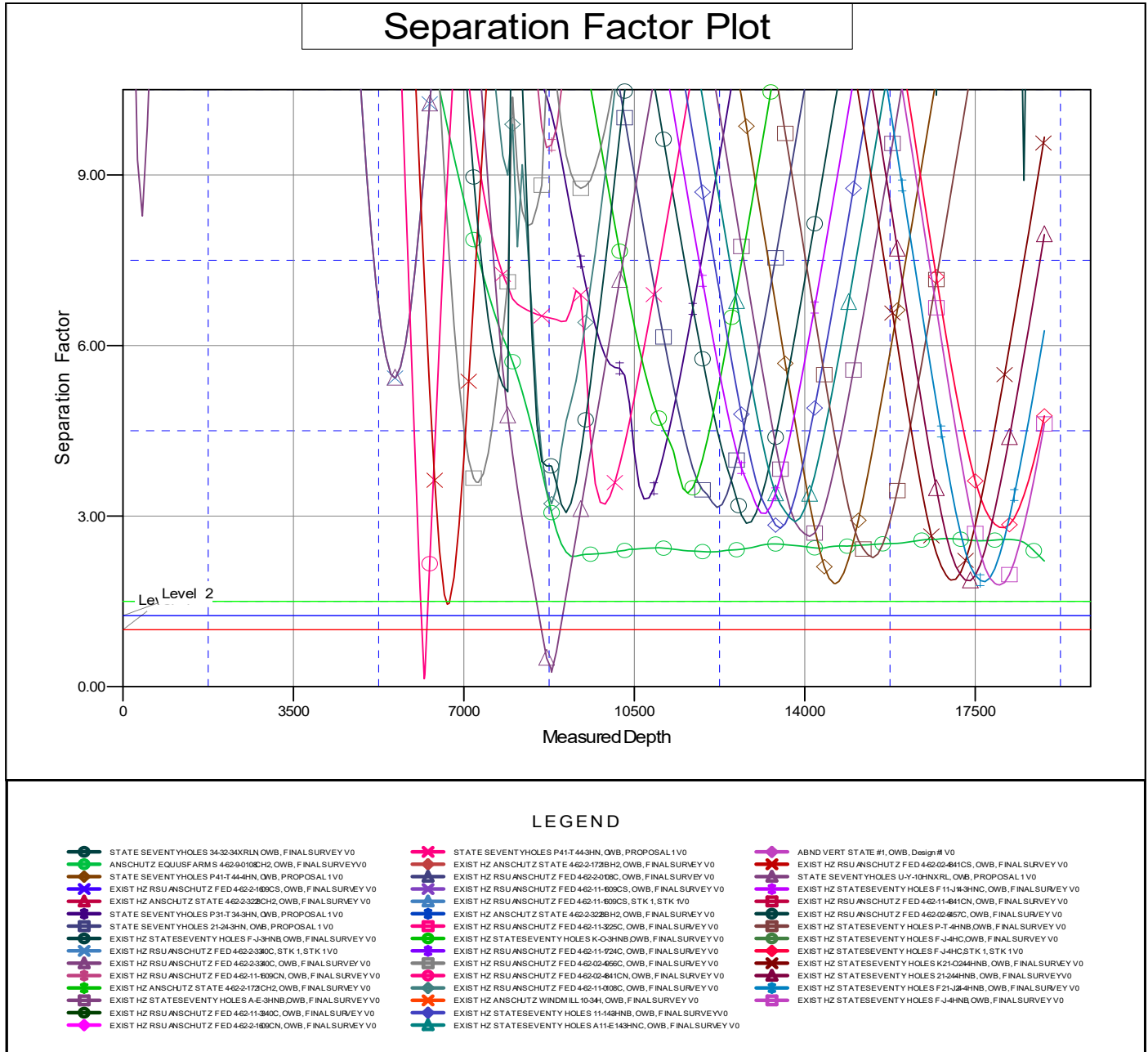
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	BONANZA CREEK ENERGY	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES Y-E-10HNXRL
Project:	WELD COUNTY	TVD Reference:	KB 25' @ 4574.00usft
Reference Site:	SEC 3-T4N-R62W	MD Reference:	KB 25' @ 4574.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	STATE SEVENTY HOLES Y-E-10HNXRL	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB 25' @ 4574.00usft
Offset Depths are relative to Offset Datum
Central Meridian is 105.500000°W

Coordinates are relative to: STATE SEVENTY HOLES Y-E-10HNXRL
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.77°



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