

EXTRACTION OIL & GAS

Weld County

Sec 32-T6N-R65W

WS-SUNRISE 1-5-5

ORIGINAL WELLBORE

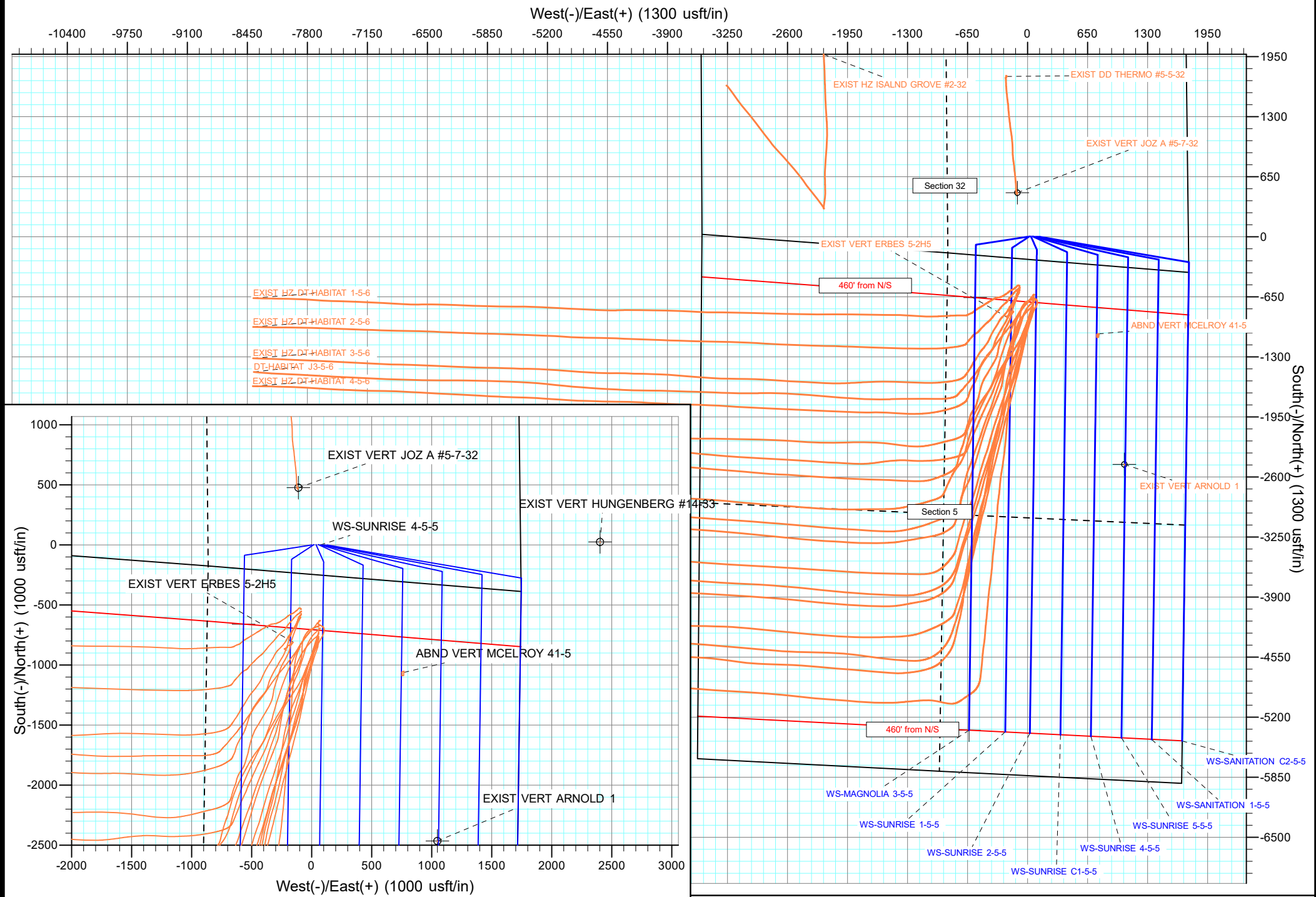
PROPOSAL 1

Anticollision Report

03 October, 2017



Project: Weld County
Site: Sec 32-T6N-R65W
Well: WS-MAGNOLIA 3-5-5
ORIGINAL WELLBORE
PROPOSAL 1



Anticollision Report

Company:	EXTRACTION OIL & GAS	Local Co-ordinate Reference:	Well WS-SUNRISE 1-5-5
Project:	Weld County	TVD Reference:	KB 25' @ 4666.00usft
Reference Site:	Sec 32-T6N-R65W	MD Reference:	KB 25' @ 4666.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	WS-SUNRISE 1-5-5	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	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 + Stations Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	10/3/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	11,888.79	PROPOSAL 1 (ORIGINAL WELLBORE)	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 32-T6N-R65W						
EXIST DD THERMO #5-5-32 - Wellbore #1 - Wellbore #1	0.00	0.00	478.13			
EXIST DD THERMO #5-5-32 - Wellbore #1 - Wellbore #1	200.00	187.04	478.62	477.91	681.798	ES
EXIST DD THERMO #5-5-32 - Wellbore #1 - Wellbore #1	6,450.00	6,572.18	1,872.07	1,833.64	48.716	SF
EXIST HZ ISALND GROVE #2-32 - Wellbore #1 - Wellbo	6,254.61	6,499.33	2,082.04	2,034.43	43.734	CC, ES
EXIST HZ ISALND GROVE #2-32 - Wellbore #1 - Wellbo	6,450.00	6,683.10	2,087.01	2,038.67	43.174	SF
EXIST VERT HUNGENBERG #14-33 - Wellbore #1 - De	1,300.00	1,315.00	2,382.84	2,352.54	78.653	CC
EXIST VERT HUNGENBERG #14-33 - Wellbore #1 - De	1,400.00	1,414.98	2,384.31	2,351.65	73.021	ES
EXIST VERT HUNGENBERG #14-33 - Wellbore #1 - De	7,100.00	6,907.98	2,644.03	2,479.89	16.109	SF
EXIST VERT JOZ A #5-7-32 - Wellbore #1 - Design #1	1,300.00	1,290.00	491.18	461.13	16.349	CC
EXIST VERT JOZ A #5-7-32 - Wellbore #1 - Design #1	4,200.00	4,187.03	545.61	447.02	5.534	ES
EXIST VERT JOZ A #5-7-32 - Wellbore #1 - Design #1	6,400.00	6,384.67	604.32	453.62	4.010	SF
WS-MAGNOLIA 3-5-5 - ORIGINAL WELLBORE - PROP	1,603.16	1,601.53	12.33	1.37	1.125	Level 2, CC, ES, SF
WS-SANITATION 1-5-5 - ORIGINAL WELLBORE - PRO	300.00	301.00	89.15	87.44	52.246	CC, ES
WS-SANITATION 1-5-5 - ORIGINAL WELLBORE - PRO	11,889.35	11,939.69	1,588.08	1,392.01	8.100	SF
WS-SANITATION C2-5-5 - ORIGINAL WELLBORE - PR	100.00	100.00	108.62	108.35	404.014	CC, ES
WS-SANITATION C2-5-5 - ORIGINAL WELLBORE - PR	11,889.35	12,124.29	1,921.85	1,726.32	9.829	SF
WS-SUNRISE 2-5-5 - ORIGINAL WELLBORE - PROPO	1,100.00	1,100.00	16.70	9.26	2.245	CC, ES
WS-SUNRISE 2-5-5 - ORIGINAL WELLBORE - PROPO	11,889.35	11,868.68	267.46	71.09	1.362	Level 3, SF
WS-SUNRISE 4-5-5 - ORIGINAL WELLBORE - PROPO	700.00	701.00	53.01	48.44	11.590	CC, ES
WS-SUNRISE 4-5-5 - ORIGINAL WELLBORE - PROPO	11,889.35	11,868.82	927.72	731.88	4.737	SF
WS-SUNRISE 5-5-5 - ORIGINAL WELLBORE - PROPO	500.00	500.00	72.46	69.33	23.103	CC, ES
WS-SUNRISE 5-5-5 - ORIGINAL WELLBORE - PROPO	11,889.35	11,894.62	1,259.23	1,063.33	6.428	SF
WS-SUNRISE C1-5-5 - ORIGINAL WELLBORE - PROP	900.00	900.00	36.19	30.18	6.027	CC, ES
WS-SUNRISE C1-5-5 - ORIGINAL WELLBORE - PROP	11,889.35	12,000.65	615.14	423.47	3.209	SF

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

Anticollision Report

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Site Error:	0.00 usft	North Reference:	True
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Reference Wellbore	ORIGINAL WELLBORE	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 5-T5N-R65W						
ABND VERT MCELROY 41-5 - Wellbore #1 - Wellbore #	7,567.48	6,800.00	952.80	919.71	28.793	CC, ES
ABND VERT MCELROY 41-5 - Wellbore #1 - Wellbore #	7,700.00	6,800.00	961.97	927.81	28.164	SF
DT-FORBES 1-5-6 - ORIGINAL WELLBORE - WB #1 - P	10,053.43	7,297.00	717.10	605.00	6.397	CC, ES
DT-FORBES 1-5-6 - ORIGINAL WELLBORE - WB #1 - P	10,200.00	7,326.47	730.59	613.82	6.256	SF
DT-FORBES 2-5-6 - ORIGINAL WELLBORE - WB #1 - P	10,361.25	7,378.12	751.43	632.88	6.338	CC
DT-FORBES 2-5-6 - ORIGINAL WELLBORE - WB #1 - P	10,400.00	7,391.00	752.33	631.89	6.247	ES
DT-FORBES 4-5-6 - ORIGINAL WELLBORE - WB #1 - P	10,500.00	7,409.97	762.87	639.44	6.181	SF
DT-FORBES 3-5-6 - ORIGINAL WELLBORE - WB #1 - P	10,680.39	7,581.00	693.15	562.06	5.287	CC
DT-FORBES 3-5-6 - ORIGINAL WELLBORE - WB #1 - P	10,700.00	7,581.00	693.43	561.76	5.266	ES, SF
DT-FORBES 4-5-6 - ORIGINAL WELLBORE - WB #1 - P	11,058.95	7,656.50	788.24	656.73	5.994	CC
DT-FORBES 4-5-6 - ORIGINAL WELLBORE - WB #1 - P	11,100.00	7,677.00	788.54	654.41	5.879	ES
DT-FORBES 4-5-6 - ORIGINAL WELLBORE - WB #1 - P	11,300.00	7,740.82	813.59	672.04	5.748	SF
DT-FORBES C6-5-6 - ORIGINAL WELLBORE - WB #1 -	10,206.51	7,441.53	639.68	518.54	5.281	CC, ES
DT-FORBES C6-5-6 - ORIGINAL WELLBORE - WB #1 -	10,300.00	7,466.56	645.61	520.89	5.176	SF
DT-FORBES C7-5-6 - ORIGINAL WELLBORE - ORIGIN	10,856.39	7,731.85	633.00	490.48	4.441	CC
DT-FORBES C7-5-6 - ORIGINAL WELLBORE - ORIGIN	10,900.00	7,747.63	634.18	489.60	4.386	ES, SF
DT-HABITAT C4-5-6 - ORIGINAL WELLBORE - WB #1 -	8,878.58	7,043.92	511.04	427.61	6.126	CC
DT-HABITAT C4-5-6 - ORIGINAL WELLBORE - WB #1 -	8,900.00	7,046.74	511.47	427.26	6.074	ES
DT-HABITAT C4-5-6 - ORIGINAL WELLBORE - WB #1 -	9,000.00	7,074.00	525.18	437.77	6.008	SF
DT-HABITAT J3-5-6 - ORIGINAL WELLBORE - WB #1 -	8,203.43	6,944.68	535.66	466.85	7.785	CC, ES
DT-HABITAT J3-5-6 - ORIGINAL WELLBORE - WB #1 -	8,300.00	6,959.12	544.07	472.67	7.619	SF
DT-MARTINEZ 1-5-6 - ORIGINAL WELLBORE - WB #1	9,047.17	6,986.00	652.02	567.00	7.669	CC, ES
DT-MARTINEZ 1-5-6 - ORIGINAL WELLBORE - WB #1	9,200.00	7,025.45	666.82	576.71	7.400	SF
DT-MARTINEZ 2-5-6 - ORIGINAL WELLBORE - WB #1	872.53	861.66	681.49	675.60	115.595	CC
DT-MARTINEZ 2-5-6 - ORIGINAL WELLBORE - WB #1	900.00	886.83	681.54	675.46	112.015	ES
DT-MARTINEZ 2-5-6 - ORIGINAL WELLBORE - WB #1	9,600.00	7,080.00	867.53	767.39	8.663	SF
DT-MARTINEZ 3-5-6 - ORIGINAL WELLBORE - WB #1	9,690.85	7,152.18	707.56	607.65	7.082	CC
DT-MARTINEZ 3-5-6 - ORIGINAL WELLBORE - WB #1	9,700.00	7,153.53	707.61	607.37	7.059	ES
DT-MARTINEZ 3-5-6 - ORIGINAL WELLBORE - WB #1	9,800.00	7,168.19	715.46	612.18	6.927	SF
DT-MARTINEZ C5-5-6 - ORIGINAL WELLBORE - WB #	9,517.75	7,214.95	600.24	499.33	5.948	CC, ES
DT-MARTINEZ C5-5-6 - ORIGINAL WELLBORE - WB #	9,600.00	7,224.48	605.64	502.18	5.854	SF
EXIST HZ DT-FORBES 5-5-6 - Wellbore #1 - Wellbore #	11,584.27	8,057.80	630.05	482.14	4.260	CC
EXIST HZ DT-FORBES 5-5-6 - Wellbore #1 - Wellbore #	11,600.00	8,060.81	630.24	481.59	4.240	ES
EXIST HZ DT-FORBES 5-5-6 - Wellbore #1 - Wellbore #	11,700.00	8,076.51	640.27	489.06	4.234	SF
EXIST HZ DT-HABITAT 1-5-6 - Wellbore #1 - Wellbore #	1,966.83	1,947.89	523.37	512.74	49.218	CC, ES
EXIST HZ DT-HABITAT 1-5-6 - Wellbore #1 - Wellbore #	7,500.00	6,668.38	625.09	582.43	14.654	SF
EXIST HZ DT-HABITAT 2-5-6 - Wellbore #1 - Wellbore #	845.03	843.06	565.57	561.17	128.347	CC
EXIST HZ DT-HABITAT 2-5-6 - Wellbore #1 - Wellbore #	7,720.08	6,700.25	606.15	559.34	12.947	ES
EXIST HZ DT-HABITAT 2-5-6 - Wellbore #1 - Wellbore #	7,900.00	6,711.41	632.10	581.59	12.515	SF
EXIST HZ DT-HABITAT 3-5-6 - Wellbore #1 - Wellbore #	263.82	261.83	582.53	581.43	529.078	CC
EXIST HZ DT-HABITAT 3-5-6 - Wellbore #1 - Wellbore #	8,100.00	6,720.93	618.36	563.89	11.353	ES
EXIST HZ DT-HABITAT 3-5-6 - Wellbore #1 - Wellbore #	8,200.00	6,731.00	629.58	572.64	11.056	SF
EXIST HZ DT-HABITAT 4-5-6 - Wellbore #1 - Wellbore #	434.25	432.26	598.51	596.44	288.727	CC
EXIST HZ DT-HABITAT 4-5-6 - Wellbore #1 - Wellbore #	8,364.96	6,731.00	639.52	580.02	10.749	ES
EXIST HZ DT-HABITAT 4-5-6 - Wellbore #1 - Wellbore #	8,500.00	6,753.09	652.70	589.35	10.302	SF
EXIST HZ DT-HABITAT 5-5-6 - Wellbore #1 - Wellbore #	191.61	189.61	613.99	613.29	883.823	CC
EXIST HZ DT-HABITAT 5-5-6 - Wellbore #1 - Wellbore #	8,716.83	6,864.09	619.87	548.51	8.686	ES
EXIST HZ DT-HABITAT 5-5-6 - Wellbore #1 - Wellbore #	8,800.00	6,874.00	625.31	551.47	8.468	SF
EXIST VERT ARNOLD 1 - Wellbore #1 - Design #1	8,976.45	6,866.96	1,247.90	1,173.79	16.837	CC
EXIST VERT ARNOLD 1 - Wellbore #1 - Design #1	9,000.00	6,866.96	1,248.12	1,173.70	16.771	ES
EXIST VERT ARNOLD 1 - Wellbore #1 - Design #1	9,200.00	6,866.96	1,267.77	1,191.29	16.578	SF
EXIST VERT ERBES 5-2H5 - Wellbore #1 - Wellbore #1	7,405.26	6,876.74	35.83	5.07	1.165	Level 2, CC, ES, SF

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