

EXTRACTION OIL & GAS

Weld County

Sec 18-T2N-R68W

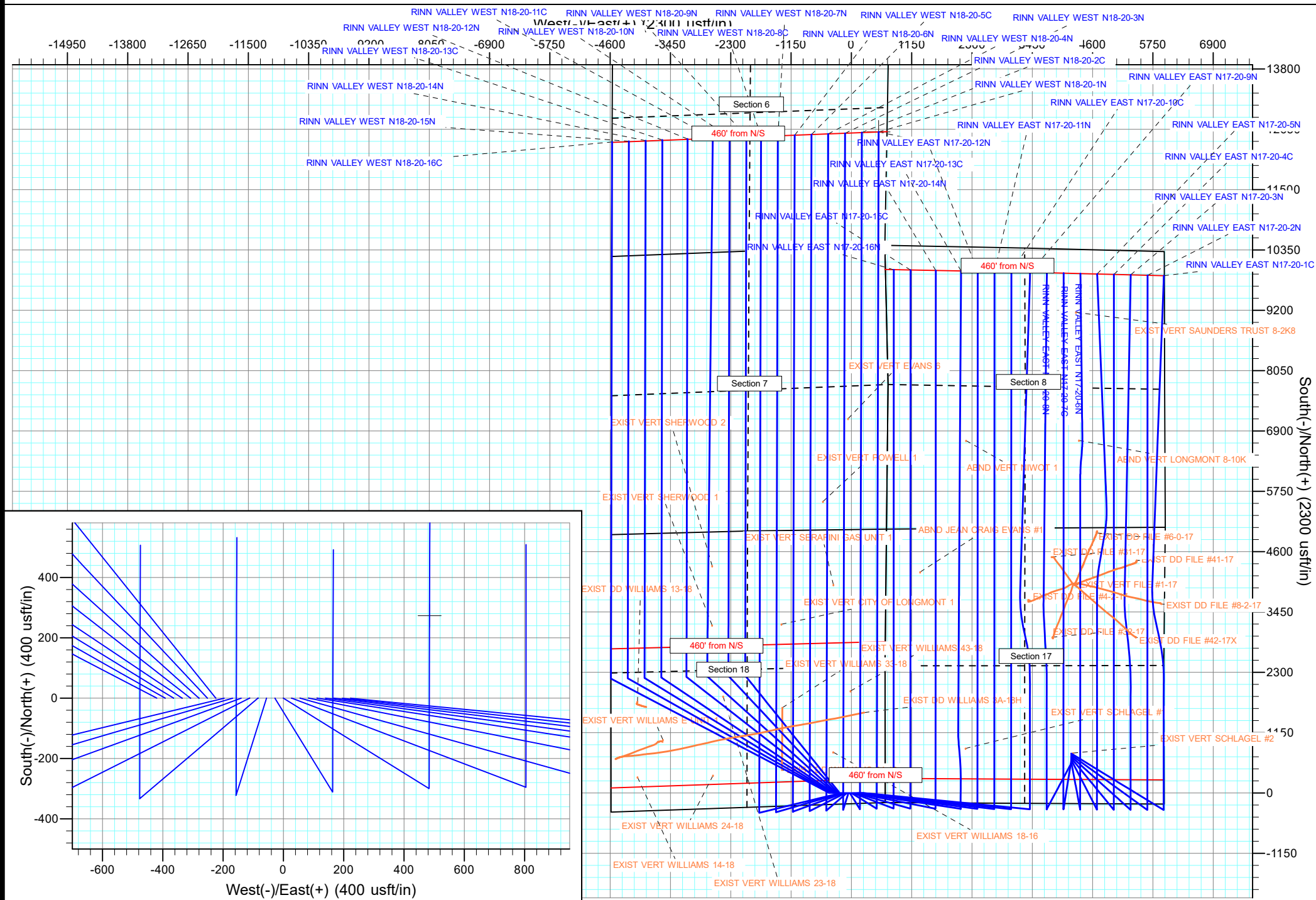
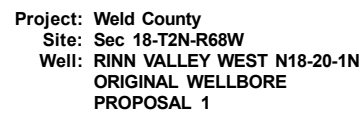
RINN VALLEY EAST N17-20-12N

ORIGINAL WELLBORE

PROPOSAL 1

Anticollision Report

19 March, 2018



Anticollision Report

Company:	EXTRACTION OIL & GAS	Local Co-ordinate Reference:	Well RINN VALLEY EAST N17-20-12N
Project:	Weld County	TVD Reference:	KB 25' @ 4963.00usft
Reference Site:	Sec 18-T2N-R68W	MD Reference:	KB 25' @ 4963.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RINN VALLEY EAST N17-20-12N	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	3/19/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	17,737.60	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 17-T2N-R68W						
ABND JEAN CRAIG EVANS #1 - Wellbore #1 - Design #	12,006.30	4,838.00	2,615.26	2,528.43	30.119	CC, ES
ABND JEAN CRAIG EVANS #1 - Wellbore #1 - Design #	13,500.00	4,838.00	3,011.76	2,901.25	27.253	SF
ABND VERT FILE 42-17 - Wellbore #1 - Design #1	2,543.24	1,020.00	5,511.65	5,478.83	167.929	CC
ABND VERT FILE 42-17 - Wellbore #1 - Design #1	2,600.00	1,020.00	5,511.95	5,478.76	166.079	ES
ABND VERT FILE 42-17 - Wellbore #1 - Design #1	15,800.00	1,020.00	7,639.00	7,542.78	79.393	SF
EXIST DD FILE #31-17 - Wellbore #1 - Wellbore #1	12,288.85	7,298.77	1,425.72	1,312.43	12.585	CC
EXIST DD FILE #31-17 - Wellbore #1 - Wellbore #1	12,300.00	7,298.74	1,425.76	1,312.12	12.547	ES
EXIST DD FILE #31-17 - Wellbore #1 - Wellbore #1	12,600.00	7,297.93	1,459.28	1,337.78	12.011	SF
EXIST DD FILE #32-17 - Wellbore #1 - Wellbore #1	10,765.57	7,336.77	1,442.57	1,349.46	15.494	CC
EXIST DD FILE #32-17 - Wellbore #1 - Wellbore #1	10,800.00	7,337.50	1,442.98	1,348.78	15.318	ES
EXIST DD FILE #32-17 - Wellbore #1 - Wellbore #1	11,200.00	7,345.69	1,506.54	1,401.50	14.343	SF
EXIST DD FILE #41-17 - Wellbore #1 - Wellbore #1	12,206.48	7,285.33	3,030.62	2,917.82	26.865	CC
EXIST DD FILE #41-17 - Wellbore #1 - Wellbore #1	12,300.00	7,283.83	3,032.07	2,916.87	26.322	ES
EXIST DD FILE #41-17 - Wellbore #1 - Wellbore #1	13,400.00	7,266.11	3,257.09	3,119.17	23.616	SF
EXIST DD FILE #4-2-17 - Wellbore #1 - Wellbore #1	11,474.47	7,288.79	967.67	867.64	9.674	CC
EXIST DD FILE #4-2-17 - Wellbore #1 - Wellbore #1	11,500.00	7,288.90	968.00	866.92	9.576	ES
EXIST DD FILE #4-2-17 - Wellbore #1 - Wellbore #1	11,700.00	7,289.72	993.60	885.34	9.178	SF
EXIST DD FILE #42-17X - Wellbore #1 - Wellbore #1	10,767.12	7,380.07	3,015.44	2,921.11	31.966	CC
EXIST DD FILE #42-17X - Wellbore #1 - Wellbore #1	10,800.00	7,379.73	3,015.62	2,920.67	31.759	ES
EXIST DD FILE #42-17X - Wellbore #1 - Wellbore #1	12,000.00	7,368.15	3,257.72	3,142.99	28.395	SF
EXIST DD FILE #6-0-17 - Wellbore #1 - Wellbore #1	12,773.61	7,423.51	2,276.42	2,151.46	18.218	CC
EXIST DD FILE #6-0-17 - Wellbore #1 - Wellbore #1	12,800.00	7,421.78	2,276.57	2,150.86	18.109	ES
EXIST DD FILE #6-0-17 - Wellbore #1 - Wellbore #1	13,400.00	7,386.74	2,360.76	2,221.16	16.910	SF
EXIST DD FILE #8-2-17 - Wellbore #1 - Wellbore #1	11,409.15	7,389.27	3,488.72	3,388.09	34.670	CC
EXIST DD FILE #8-2-17 - Wellbore #1 - Wellbore #1	11,500.00	7,387.91	3,489.90	3,387.41	34.053	ES
EXIST DD FILE #8-2-17 - Wellbore #1 - Wellbore #1	13,000.00	7,369.71	3,834.18	3,704.83	29.643	SF
EXIST VERT FILE #1-17 - Wellbore #1 - Design #1	11,763.01	7,211.99	1,850.76	1,747.21	17.873	CC
EXIST VERT FILE #1-17 - Wellbore #1 - Design #1	11,800.00	7,211.99	1,851.13	1,746.54	17.699	ES
EXIST VERT FILE #1-17 - Wellbore #1 - Design #1	12,300.00	7,211.99	1,927.09	1,810.79	16.570	SF
EXIST VERT SCHLAGEL #1 - Wellbore #1 - Design #1	8,643.16	7,227.00	228.03	48.77	1.272	Level 3, CC, ES, SF
EXIST VERT SCHLAGEL #2 - Wellbore #1 - Design #1	8,556.96	7,238.00	1,822.36	1,643.59	10.194	CC
EXIST VERT SCHLAGEL #2 - Wellbore #1 - Design #1	8,600.00	7,238.00	1,822.87	1,643.58	10.167	ES
EXIST VERT SCHLAGEL #2 - Wellbore #1 - Design #1	8,900.00	7,238.00	1,854.37	1,670.10	10.064	SF
RINN VALLEY EAST N17-20-1C - ORIGINAL WELLBOR	11,680.83	11,846.16	3,340.84	3,193.99	22.750	CC
RINN VALLEY EAST N17-20-1C - ORIGINAL WELLBOR	11,900.00	11,951.62	3,344.71	3,191.68	21.857	ES
RINN VALLEY EAST N17-20-1C - ORIGINAL WELLBOR	17,737.60	17,776.29	3,559.10	3,208.72	10.158	SF
RINN VALLEY EAST N17-20-2N - ORIGINAL WELLBOR	6,420.62	5,406.34	3,153.88	3,099.43	57.918	CC

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

Anticollision Report

Company:	EXTRACTION OIL & GAS	Local Co-ordinate Reference:	Well RINN VALLEY EAST N17-20-12N
Project:	Weld County	TVD Reference:	KB 25' @ 4963.00usft
Reference Site:	Sec 18-T2N-R68W	MD Reference:	KB 25' @ 4963.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RINN VALLEY EAST N17-20-12N	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

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 17-T2N-R68W						
RINN VALLEY EAST N17-20-2N - ORIGINAL WELLBOR	17,737.60	17,489.99	3,237.84	2,884.86	9.173	ES, SF
RINN VALLEY EAST N17-20-3N - ORIGINAL WELLBOR	11,442.31	11,200.00	2,802.61	2,662.84	20.051	CC
RINN VALLEY EAST N17-20-3N - ORIGINAL WELLBOR	17,737.60	17,430.94	2,917.72	2,564.46	8.259	ES, SF
RINN VALLEY EAST N17-20-4C - ORIGINAL WELLBOR	6,754.31	6,065.67	2,555.02	2,499.25	45.820	CC
RINN VALLEY EAST N17-20-4C - ORIGINAL WELLBOR	17,737.60	17,618.90	2,611.51	2,260.28	7.435	ES, SF
RINN VALLEY EAST N17-20-5N - ORIGINAL WELLBOR	17,687.68	17,358.43	2,276.67	1,923.87	6.453	CC
RINN VALLEY EAST N17-20-5N - ORIGINAL WELLBOR	17,737.60	17,358.43	2,277.46	1,923.21	6.429	ES, SF
RINN VALLEY EAST N17-20-6N - ORIGINAL WELLBOR	17,695.42	17,327.22	1,956.64	1,602.98	5.533	CC
RINN VALLEY EAST N17-20-6N - ORIGINAL WELLBOR	17,737.60	17,327.22	1,957.34	1,602.44	5.515	ES, SF
RINN VALLEY EAST N17-20-7C - ORIGINAL WELLBOR	7,310.15	6,914.28	1,639.61	1,581.84	28.383	CC
RINN VALLEY EAST N17-20-7C - ORIGINAL WELLBOR	17,737.60	17,574.73	1,658.28	1,307.70	4.730	ES, SF
RINN VALLEY EAST N17-20-8N - ORIGINAL WELLBOR	11,361.26	11,000.00	1,257.53	1,120.15	9.154	CC
RINN VALLEY EAST N17-20-8N - ORIGINAL WELLBOR	17,737.60	17,350.72	1,317.10	962.09	3.710	ES, SF

Anticollision Report

Company:	EXTRACTION OIL & GAS	Local Co-ordinate Reference:	Well RINN VALLEY EAST N17-20-12N
Project:	Weld County	TVD Reference:	KB 25' @ 4963.00usft
Reference Site:	Sec 18-T2N-R68W	MD Reference:	KB 25' @ 4963.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RINN VALLEY EAST N17-20-12N	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

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 18-T2N-R68W						
EXIST DD WILLIAMS 13-18 - Wellbore #1 - Wellbore #1	0.00	0.00	4,371.51			
EXIST DD WILLIAMS 13-18 - Wellbore #1 - Wellbore #1	100.00	80.29	4,371.72	4,371.45	10,000.000	ES
EXIST DD WILLIAMS 13-18 - Wellbore #1 - Wellbore #1	13,300.00	7,345.34	7,506.90	7,400.06	70.263	SF
EXIST DD WILLIAMS 34-18 - Wellbore #1 - Design #1	443.36	440.47	2,176.14	2,173.40	795.377	CC
EXIST DD WILLIAMS 34-18 - Wellbore #1 - Design #1	500.00	500.51	2,176.52	2,173.37	691.068	ES
EXIST DD WILLIAMS 34-18 - Wellbore #1 - Design #1	9,700.00	7,023.30	3,913.95	3,844.24	56.151	SF
EXIST DD WILLIAMS 3A-18H - Wellbore #1 - Wellbore #	7,900.00	12,015.00	2,585.90	2,461.07	20.716	SF
EXIST DD WILLIAMS 3A-18H - Wellbore #1 - Wellbore #	9,300.00	12,015.00	2,157.10	2,081.22	28.427	ES
EXIST DD WILLIAMS 3A-18H - Wellbore #1 - Wellbore #	9,328.33	12,015.00	2,156.91	2,081.93	28.767	CC
EXIST VERT CITY OF LONGMONT 1 - Wellbore #1 - De	400.00	343.00	3,537.38	3,529.74	463.372	CC
EXIST VERT CITY OF LONGMONT 1 - Wellbore #1 - De	500.00	442.98	3,538.31	3,528.29	353.117	ES
EXIST VERT CITY OF LONGMONT 1 - Wellbore #1 - De	11,600.00	7,222.99	3,788.35	3,572.27	17.532	SF
EXIST VERT SERAFINI GAS UNIT 1 - Wellbore #1 - De	11,761.11	7,214.99	2,749.22	2,526.62	12.350	CC
EXIST VERT SERAFINI GAS UNIT 1 - Wellbore #1 - De	11,800.00	7,214.99	2,749.50	2,526.58	12.334	ES
EXIST VERT SERAFINI GAS UNIT 1 - Wellbore #1 - De	12,000.00	7,214.99	2,759.58	2,535.23	12.300	SF
EXIST VERT SHERWOOD 1 - Wellbore #1 - Design #1	400.00	348.00	4,248.16	4,240.42	549.134	CC
EXIST VERT SHERWOOD 1 - Wellbore #1 - Design #1	500.00	447.98	4,249.47	4,239.35	419.839	ES
EXIST VERT SHERWOOD 1 - Wellbore #1 - Design #1	12,100.00	7,227.99	5,184.63	4,962.42	23.333	SF
EXIST VERT SHERWOOD 2 - Wellbore #1 - Design #1	12,118.20	7,219.99	5,061.99	4,833.41	22.145	CC
EXIST VERT SHERWOOD 2 - Wellbore #1 - Design #1	12,200.00	7,219.99	5,062.65	4,833.10	22.054	ES
EXIST VERT SHERWOOD 2 - Wellbore #1 - Design #1	13,100.00	7,219.99	5,156.33	4,917.27	21.569	SF
EXIST VERT WILLIAMS 14-18 - Wellbore #1 - Design #1	400.00	448.00	4,229.11	4,219.38	434.558	CC
EXIST VERT WILLIAMS 14-18 - Wellbore #1 - Design #1	500.00	547.98	4,230.85	4,218.74	349.435	ES
EXIST VERT WILLIAMS 14-18 - Wellbore #1 - Design #1	10,300.00	7,327.99	6,849.26	6,654.10	35.095	SF
EXIST VERT WILLIAMS 18-16 - Wellbore #1 - Design #1	400.00	366.00	917.02	908.91	113.020	CC
EXIST VERT WILLIAMS 18-16 - Wellbore #1 - Design #1	500.00	465.98	918.14	907.64	87.467	ES
EXIST VERT WILLIAMS 18-16 - Wellbore #1 - Design #1	8,800.00	7,246.00	2,762.96	2,582.57	15.316	SF
EXIST VERT WILLIAMS 23-18 - Wellbore #1 - Design #1	400.00	373.00	3,172.87	3,164.67	386.629	CC
EXIST VERT WILLIAMS 23-18 - Wellbore #1 - Design #1	500.00	472.98	3,174.42	3,163.83	299.788	ES
EXIST VERT WILLIAMS 23-18 - Wellbore #1 - Design #1	10,800.00	7,252.99	4,988.93	4,786.52	24.647	SF
EXIST VERT WILLIAMS 24-18 - Wellbore #1 - Design #1	400.00	428.00	2,797.44	2,788.11	299.956	CC
EXIST VERT WILLIAMS 24-18 - Wellbore #1 - Design #1	500.00	527.98	2,799.18	2,787.48	239.182	ES
EXIST VERT WILLIAMS 24-18 - Wellbore #1 - Design #1	9,300.00	7,308.00	5,177.75	4,992.63	27.970	SF
EXIST VERT WILLIAMS 33-18 - Wellbore #1 - Design #1	400.00	373.00	2,183.00	2,174.79	266.008	CC
EXIST VERT WILLIAMS 33-18 - Wellbore #1 - Design #1	500.00	472.98	2,184.33	2,173.74	206.285	ES
EXIST VERT WILLIAMS 33-18 - Wellbore #1 - Design #1	10,000.00	7,252.99	3,766.26	3,573.12	19.500	SF
EXIST VERT WILLIAMS 43-18 - Wellbore #1 - Design #1	400.00	362.00	1,949.99	1,942.01	244.304	CC
EXIST VERT WILLIAMS 43-18 - Wellbore #1 - Design #1	700.00	661.45	1,953.38	1,938.27	129.258	ES
EXIST VERT WILLIAMS 43-18 - Wellbore #1 - Design #1	9,900.00	7,241.99	2,426.83	2,233.70	12.566	SF
EXIST VERT WILLIAMS E UNIT 1 - Wellbore #1 - Desig	400.00	261.00	3,868.67	3,862.72	650.735	CC
EXIST VERT WILLIAMS E UNIT 1 - Wellbore #1 - Desig	500.00	360.98	3,870.40	3,862.04	463.454	ES
EXIST VERT WILLIAMS E UNIT 1 - Wellbore #1 - Desig	10,700.00	7,140.99	6,291.02	6,093.96	31.925	SF
RINN VALLEY EAST N17-20-10C - ORIGINAL WELLBO	200.00	199.00	55.92	54.94	56.936	CC
RINN VALLEY EAST N17-20-10C - ORIGINAL WELLBO	17,626.69	48,030.70	687.47	-136.56	0.834	Level 1, ES, SF
RINN VALLEY EAST N17-20-11N - ORIGINAL WELLBO	300.00	299.00	27.96	26.26	16.456	CC
RINN VALLEY EAST N17-20-11N - ORIGINAL WELLBO	17,737.60	17,849.98	320.08	-41.53	0.885	Level 1, ES, SF
RINN VALLEY EAST N17-20-13C - ORIGINAL WELLBO	400.00	400.00	27.96	25.54	11.556	CC, ES
RINN VALLEY EAST N17-20-13C - ORIGINAL WELLBO	17,737.60	17,864.70	406.15	93.24	1.298	Level 3, SF
RINN VALLEY EAST N17-20-14N - ORIGINAL WELLBO	400.00	401.00	55.92	53.50	23.077	CC, ES
RINN VALLEY EAST N17-20-14N - ORIGINAL WELLBO	17,737.60	17,489.68	800.27	440.04	2.222	SF
RINN VALLEY EAST N17-20-15C - ORIGINAL WELLBO	400.00	401.00	84.16	81.74	34.731	CC, ES
RINN VALLEY EAST N17-20-15C - ORIGINAL WELLBO	17,737.60	17,628.46	1,304.70	947.17	3.649	SF
RINN VALLEY EAST N17-20-16N - ORIGINAL WELLBO	400.00	402.00	112.12	109.70	46.201	CC, ES

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

Anticollision Report

Company:	EXTRACTION OIL & GAS	Local Co-ordinate Reference:	Well RINN VALLEY EAST N17-20-12N
Project:	Weld County	TVD Reference:	KB 25' @ 4963.00usft
Reference Site:	Sec 18-T2N-R68W	MD Reference:	KB 25' @ 4963.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RINN VALLEY EAST N17-20-12N	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

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 18-T2N-R68W						
RINN VALLEY EAST N17-20-16N - ORIGINAL WELLBO	17,737.60	17,336.69	1,601.06	1,240.95	4.446	SF
RINN VALLEY EAST N17-20-9N - ORIGINAL WELLBOR	100.00	98.00	83.88	83.62	315.158	CC, ES
RINN VALLEY EAST N17-20-9N - ORIGINAL WELLBOR	17,737.60	18,132.74	996.81	634.50	2.751	SF
RINN VALLEY WEST N18-20-10N - ORIGINAL WELLBO	400.00	404.00	392.01	389.58	161.056	CC, ES
RINN VALLEY WEST N18-20-10N - ORIGINAL WELLBO	17,737.60	15,645.01	4,739.17	4,380.48	13.212	SF
RINN VALLEY WEST N18-20-11C - ORIGINAL WELLBO	400.00	405.00	419.98	417.54	172.290	CC, ES
RINN VALLEY WEST N18-20-13C - ORIGINAL WELLBO	17,737.60	15,954.13	5,065.31	4,706.60	14.121	SF
RINN VALLEY WEST N18-20-12N - ORIGINAL WELLBO	400.00	405.00	447.94	445.50	183.761	CC, ES
RINN VALLEY WEST N18-20-12N - ORIGINAL WELLBO	17,737.60	15,962.69	5,539.58	5,179.89	15.401	SF
RINN VALLEY WEST N18-20-13C - ORIGINAL WELLBO	400.00	405.00	475.90	473.46	195.232	CC, ES
RINN VALLEY WEST N18-20-16C - ORIGINAL WELLBO	17,737.60	16,376.29	6,024.54	5,664.64	16.739	SF
RINN VALLEY WEST N18-20-14N - ORIGINAL WELLBO	300.00	305.00	504.14	502.42	292.991	CC, ES
RINN VALLEY WEST N18-20-14N - ORIGINAL WELLBO	17,737.60	16,349.66	6,339.44	5,978.87	17.581	SF
RINN VALLEY WEST N18-20-15N - ORIGINAL WELLBO	200.00	206.00	532.10	531.09	528.241	CC, ES
RINN VALLEY WEST N18-20-15N - ORIGINAL WELLBO	17,737.60	16,508.67	6,659.67	6,298.80	18.455	SF
RINN VALLEY WEST N18-20-16C - ORIGINAL WELLBO	100.00	107.00	560.06	559.78	2,012.698	CC, ES
RINN VALLEY WEST N18-20-16C - ORIGINAL WELLBO	17,737.60	16,839.34	6,983.52	6,622.71	19.355	SF
RINN VALLEY WEST N18-20-1N - ORIGINAL WELLBOR	400.00	402.00	140.09	137.66	57.723	CC, ES
RINN VALLEY WEST N18-20-1N - ORIGINAL WELLBOR	17,737.60	17,314.88	1,898.60	1,538.46	5.272	SF
RINN VALLEY WEST N18-20-2C - ORIGINAL WELLBOR	400.00	403.00	168.05	165.62	69.142	CC, ES
RINN VALLEY WEST N18-20-2C - ORIGINAL WELLBOR	17,737.60	17,556.52	2,232.07	1,871.94	6.198	SF
RINN VALLEY WEST N18-20-3N - ORIGINAL WELLBOR	400.00	403.00	196.01	193.58	80.647	CC, ES
RINN VALLEY WEST N18-20-3N - ORIGINAL WELLBOR	17,737.60	17,317.19	2,538.51	2,177.52	7.032	SF
RINN VALLEY WEST N18-20-4N - ORIGINAL WELLBOR	400.00	404.00	223.97	221.53	92.016	CC, ES
RINN VALLEY WEST N18-20-4N - ORIGINAL WELLBOR	17,737.60	17,343.38	2,858.72	2,498.12	7.928	SF
RINN VALLEY WEST N18-20-5C - ORIGINAL WELLBOR	400.00	406.00	251.93	249.49	103.199	CC, ES
RINN VALLEY WEST N18-20-5C - ORIGINAL WELLBOR	17,737.60	17,633.35	3,188.72	2,828.56	8.854	SF
RINN VALLEY WEST N18-20-6N - ORIGINAL WELLBOR	400.00	407.00	279.89	277.45	114.485	CC, ES
RINN VALLEY WEST N18-20-6N - ORIGINAL WELLBOR	17,737.60	17,444.95	3,499.57	3,139.33	9.714	SF
RINN VALLEY WEST N18-20-7N - ORIGINAL WELLBOR	400.00	407.00	308.13	305.69	126.037	CC, ES
RINN VALLEY WEST N18-20-7N - ORIGINAL WELLBOR	17,737.60	17,519.31	3,819.73	3,459.51	10.604	SF
RINN VALLEY WEST N18-20-8C - ORIGINAL WELLBOR	400.00	408.00	336.09	333.64	137.272	CC, ES
RINN VALLEY WEST N18-20-8C - ORIGINAL WELLBOR	17,737.60	17,846.56	4,147.18	3,787.09	11.517	SF
RINN VALLEY WEST N18-20-9N - ORIGINAL WELLBOR	400.00	403.00	364.05	361.62	149.789	CC, ES
RINN VALLEY WEST N18-20-9N - ORIGINAL WELLBOR	17,737.60	15,546.14	4,419.20	4,060.91	12.334	SF
Sec 8-T2N-R68W						
ABND VERT LONGMONT 8-10K - Wellbore #1 - Design	14,515.95	7,207.02	1,931.24	1,662.30	7.181	CC
ABND VERT LONGMONT 8-10K - Wellbore #1 - Design	14,600.00	7,207.02	1,933.07	1,661.71	7.124	ES
ABND VERT LONGMONT 8-10K - Wellbore #1 - Design	14,800.00	7,207.02	1,952.02	1,675.80	7.067	SF
ABND VERT NIWOT 1 - Wellbore #1 - Design #1	14,500.00	7,202.98	222.29	-47.39	0.824	Level 1, ES, SF
ABND VERT NIWOT 1 - Wellbore #1 - Design #1	14,510.99	7,202.98	222.02	-46.77	0.826	Level 1, CC
EXIST VERT SAUNDERS TRUST 8-2K8 - Wellbore #1 -	16,958.04	7,288.97	1,870.81	1,557.87	5.978	CC
EXIST VERT SAUNDERS TRUST 8-2K8 - Wellbore #1 -	17,000.00	7,288.97	1,871.28	1,557.08	5.956	ES
EXIST VERT SAUNDERS TRUST 8-2K8 - Wellbore #1 -	17,200.00	7,288.97	1,886.39	1,567.28	5.911	SF