

EXTRACTION OIL & GAS

Weld County

Sec 21-T5N-R65W

AD-J EVANS C4-20-24

ORIGINAL WELLBORE

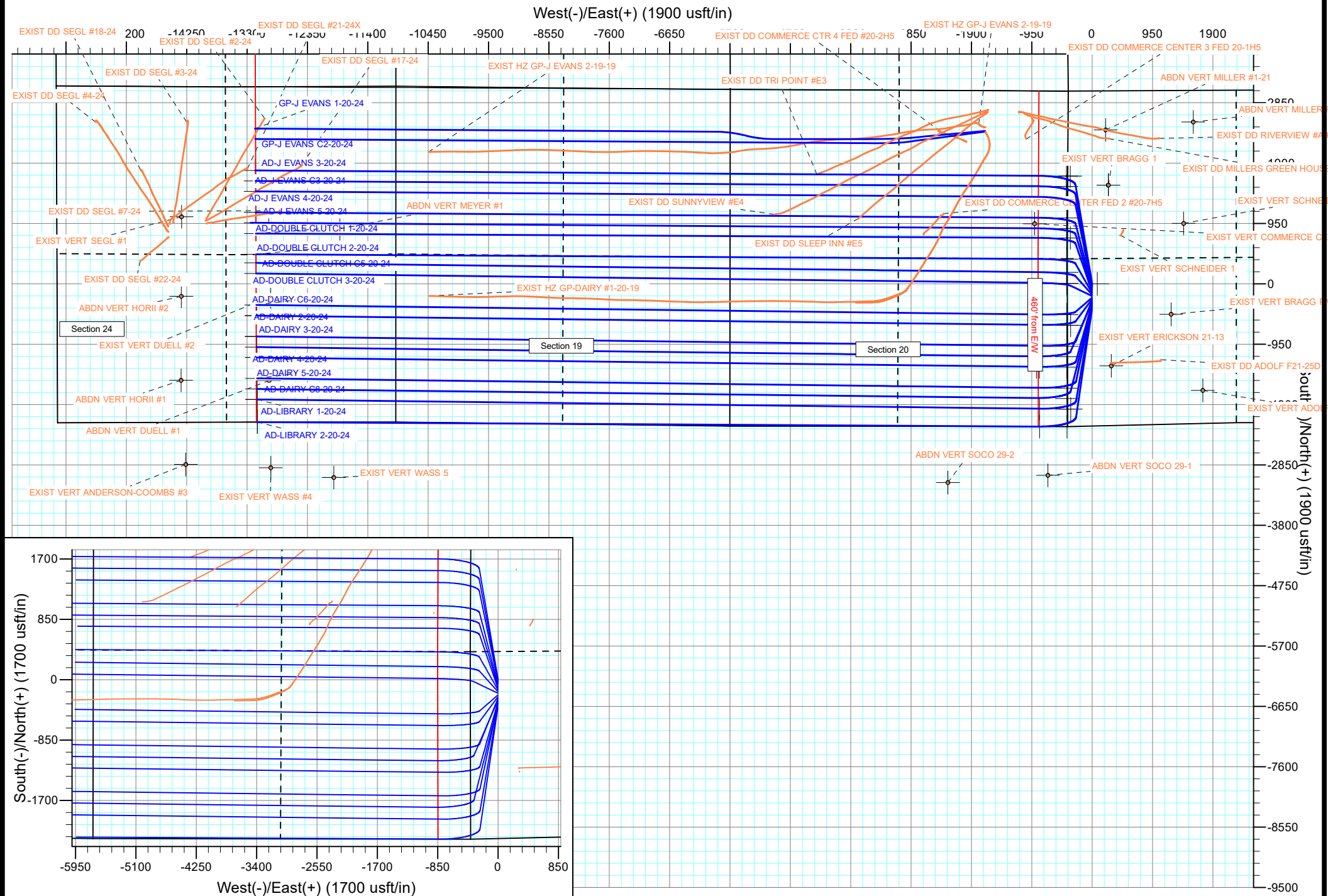
PROPOSAL #1

Anticollision Report

14 February, 2017



Project: Weld County
Site: Sec 21-T5N-R65W
Well: ARDREY SPIDER
ORIGINAL WELLBORE
PROPOSAL #1



Anticollision Report

Company:	EXTRACTION OIL & GAS	Local Co-ordinate Reference:	Well AD-J EVANS C4-20-24
Project:	Weld County	TVD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Reference Site:	Sec 21-T5N-R65W	MD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	AD-J EVANS C4-20-24	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 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 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	2/14/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	19,960.4	PROPOSAL #1 (ORIGINAL WELLBORE)	MWD OWSG Rev 2	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 20-T5N-R65W						
ABDN VERT MEYER #1 - Wellbore #1 - Design #1	18,636.7	7,355.0	84.2	-377.0	0.183	Level 1, CC, ES, SF
EXIST DD COMMERCE CENTER 3 FED 20-1H5 - Wellb	7,846.1	7,297.8	1,401.9	1,351.9	28.054	CC
EXIST DD COMMERCE CENTER 3 FED 20-1H5 - Wellb	7,900.0	7,297.5	1,402.9	1,351.8	27.417	ES
EXIST DD COMMERCE CENTER 3 FED 20-1H5 - Wellb	8,500.0	7,293.6	1,546.9	1,482.8	24.134	SF
EXIST DD COMMERCE CENTER FED 2 #20-7H5 - Wel	9,136.6	7,269.6	223.4	144.2	2.822	CC, ES, SF
EXIST DD COMMERCE CTR 4 FED #20-2H5 - Wellbore	9,200.6	7,300.0	1,518.4	1,437.1	18.674	CC, ES
EXIST DD COMMERCE CTR 4 FED #20-2H5 - Wellbore	9,700.0	7,300.0	1,598.4	1,504.5	17.025	SF
EXIST DD MILLERS GREEN HOUSE #A10 - Wellbore #	6,965.6	7,118.5	1,580.1	1,522.1	27.244	CC, ES
EXIST DD MILLERS GREEN HOUSE #A10 - Wellbore #	7,250.0	7,332.8	1,616.8	1,556.4	26.758	SF
EXIST DD RIVERVIEW #A9 - Wellbore #1 - Wellbore #1	6,843.9	7,300.7	2,001.0	1,931.1	28.632	CC, ES
EXIST DD RIVERVIEW #A9 - Wellbore #1 - Wellbore #1	6,900.0	7,348.0	2,003.0	1,932.9	28.576	SF
EXIST DD SLEEP INN #E5 - Wellbore #1 - Wellbore #1	10,481.9	7,840.5	133.3	-5.9	0.958	Level 1, CC, ES, SF
EXIST DD SUNNYVIEW #E4 - Wellbore #1 - Wellbore #	11,800.0	8,289.9	191.8	-10.2	0.950	Level 1, ES, SF
EXIST DD SUNNYVIEW #E4 - Wellbore #1 - Wellbore #	11,803.4	8,290.5	191.8	-10.0	0.950	Level 1, CC
EXIST DD TRI POINT #E3 - Wellbore #1 - Wellbore #1	11,137.5	7,893.0	826.4	656.7	4.872	CC, ES
EXIST DD TRI POINT #E3 - Wellbore #1 - Wellbore #1	11,200.0	7,893.0	828.7	658.4	4.865	SF
EXIST HZ GP-DAIRY #1-20-19 - ORIGINAL WELLBORE	9,811.4	7,432.0	1,212.7	1,111.9	12.021	CC
EXIST HZ GP-DAIRY #1-20-19 - ORIGINAL WELLBORE	10,600.0	8,205.0	1,249.4	1,105.5	8.686	ES
EXIST HZ GP-DAIRY #1-20-19 - ORIGINAL WELLBORE	10,800.0	8,205.0	1,279.8	1,129.7	8.527	SF
EXIST HZ GP-DAIRY #1-20-19 - SIDETRACK - SIDETR	9,856.0	7,579.6	1,156.3	1,048.9	10.768	CC
EXIST HZ GP-DAIRY #1-20-19 - SIDETRACK - SIDETR	17,300.0	15,000.0	1,181.3	690.2	2.405	ES, SF
EXIST HZ GP-J EVANS 2-19-19 - MWD SURVEYS - MW	17,249.2	13,082.0	1,164.6	677.4	2.391	CC, ES
EXIST HZ GP-J EVANS 2-19-19 - MWD SURVEYS - MW	17,300.0	13,082.0	1,165.7	677.7	2.389	SF
EXIST HZ GP-J EVANS 2-19-19 - SURFACE GYROS - S	0.0	18.6	3,062.7			
EXIST HZ GP-J EVANS 2-19-19 - SURFACE GYROS - S	13,400.0	1,163.0	7,923.8	7,860.8	125.731	SF
EXIST VERT COMMERCE CENTER #1 - Wellbore #1 - D	7,704.2	7,200.0	77.2	-90.6	0.460	Level 1, CC, ES, SF
GP-J EVANS 1-20-24 - ORIGINAL WELLBORE - PROPO	11,819.7	8,948.3	1,421.6	1,213.8	6.840	CC
GP-J EVANS 1-20-24 - ORIGINAL WELLBORE - PROPO	19,960.4	17,101.7	1,525.6	882.6	2.373	ES, SF
GP-J EVANS C2-20-24 - ORIGINAL WELLBORE - PROP	19,930.2	17,237.1	1,328.8	675.9	2.035	CC
GP-J EVANS C2-20-24 - ORIGINAL WELLBORE - PROP	19,960.4	17,267.4	1,328.8	674.3	2.030	ES, SF

Anticollision Report

Company:	EXTRACTION OIL & GAS	Local Co-ordinate Reference:	Well AD-J EVANS C4-20-24
Project:	Weld County	TVD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Reference Site:	Sec 21-T5N-R65W	MD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	AD-J EVANS C4-20-24	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 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 21-T5N-R65W						
ABDN VERT MILLER #1-21 - Wellbore #1 - Design #1	6,996.0	6,911.1	1,691.0	1,525.8	10.235	CC
ABDN VERT MILLER #1-21 - Wellbore #1 - Design #1	7,050.0	6,957.6	1,692.1	1,525.6	10.160	ES
ABDN VERT MILLER #1-21 - Wellbore #1 - Design #1	7,250.0	7,103.7	1,717.7	1,546.4	10.025	SF
ABDN VERT MILLER F 21-3 - Wellbore #1 - Design #1	6,818.9	6,732.2	2,557.1	2,394.6	15.735	CC
ABDN VERT MILLER F 21-3 - Wellbore #1 - Design #1	6,850.0	6,762.4	2,557.7	2,394.4	15.665	ES
ABDN VERT MILLER F 21-3 - Wellbore #1 - Design #1	7,100.0	6,985.3	2,608.6	2,439.2	15.405	SF
ABDN VERT SOCO 29-1 - Wellbore #1 - Design #1	1,100.0	1,103.0	2,999.3	2,974.2	119.360	CC
ABDN VERT SOCO 29-1 - Wellbore #1 - Design #1	1,200.0	1,203.0	3,000.9	2,973.4	109.120	ES
ABDN VERT SOCO 29-1 - Wellbore #1 - Design #1	8,900.0	7,190.0	4,141.9	3,946.6	21.203	SF
ABDN VERT SOCO 29-2 - Wellbore #1 - Design #1	1,100.0	1,102.0	3,785.4	3,760.4	151.061	CC
ABDN VERT SOCO 29-2 - Wellbore #1 - Design #1	1,200.0	1,202.0	3,786.5	3,759.0	138.042	ES
ABDN VERT SOCO 29-2 - Wellbore #1 - Design #1	10,300.0	7,197.0	4,203.3	3,973.5	18.293	SF
AD-DAIRY 2-20-24 - ORIGINAL WELLBORE - PROPOS	1,100.0	1,101.0	145.7	138.2	19.497	CC, ES
AD-DAIRY 2-20-24 - ORIGINAL WELLBORE - PROPOS	19,960.4	19,696.1	1,476.0	778.9	2.117	SF
AD-DAIRY 3-20-24 - ORIGINAL WELLBORE - PROPOS	1,100.0	1,101.0	167.6	160.1	22.421	CC, ES
AD-DAIRY 3-20-24 - ORIGINAL WELLBORE - PROPOS	19,960.4	19,719.6	1,801.1	1,101.9	2.576	SF
AD-DAIRY 4-20-24 - ORIGINAL WELLBORE - PROPOS	700.0	701.0	214.9	210.3	46.679	CC, ES
AD-DAIRY 4-20-24 - ORIGINAL WELLBORE - PROPOS	19,960.4	19,741.5	2,130.7	1,430.2	3.042	SF
AD-DAIRY 5-20-24 - ORIGINAL WELLBORE - PROPOS	400.0	401.0	240.4	238.0	97.989	CC, ES
AD-DAIRY 5-20-24 - ORIGINAL WELLBORE - PROPOS	19,960.4	19,791.8	2,457.2	1,755.9	3.504	SF
AD-DAIRY C6-20-24 - ORIGINAL WELLBORE - PROPO	1,100.0	1,100.0	120.2	112.8	16.093	CC, ES
AD-DAIRY C6-20-24 - ORIGINAL WELLBORE - PROPO	19,944.8	19,905.8	1,293.2	588.8	1.836	SF
AD-DAIRY C7-20-24 - ORIGINAL WELLBORE - PROPO	1,100.0	1,101.0	193.1	185.6	25.833	CC, ES
AD-DAIRY C7-20-24 - ORIGINAL WELLBORE - PROPO	19,960.4	19,866.3	1,956.3	1,253.7	2.784	SF
AD-DAIRY C8-20-24 - ORIGINAL WELLBORE - PROPO	300.0	301.0	262.3	260.6	150.876	CC, ES
AD-DAIRY C8-20-24 - ORIGINAL WELLBORE - PROPO	19,960.4	19,943.7	2,615.7	1,913.3	3.724	SF
AD-DOUBLE CLUTCH 1-20-24 - ORIGINAL WELLBORE	1,100.0	1,100.0	25.5	18.0	3.414	CC
AD-DOUBLE CLUTCH 1-20-24 - ORIGINAL WELLBORE	19,960.4	19,743.0	268.7	-194.7	0.580	Level 1, ES, SF
AD-DOUBLE CLUTCH 2-20-24 - ORIGINAL WELLBORE	1,100.0	1,100.0	47.4	39.9	6.339	CC
AD-DOUBLE CLUTCH 2-20-24 - ORIGINAL WELLBORE	19,960.4	19,710.6	538.1	-113.3	0.826	Level 1, ES, SF
AD-DOUBLE CLUTCH 3-20-24 - ORIGINAL WELLBORE	1,100.0	1,101.0	94.7	87.2	12.673	CC, ES
AD-DOUBLE CLUTCH 3-20-24 - ORIGINAL WELLBORE	19,960.4	19,614.5	825.3	144.3	1.212	Level 2, SF
AD-DOUBLE CLUTCH C5-20-24 - ORIGINAL WELLBOR	1,100.0	1,100.0	72.9	65.4	9.753	CC
AD-DOUBLE CLUTCH C5-20-24 - ORIGINAL WELLBOR	19,960.4	19,916.1	630.2	-75.0	0.894	Level 1, ES, SF
AD-J EVANS 3-20-24 - ORIGINAL WELLBORE - PROPO	100.0	100.0	94.8	94.5	314.688	CC, ES
AD-J EVANS 3-20-24 - ORIGINAL WELLBORE - PROPO	19,960.4	19,877.0	849.6	162.9	1.237	Level 2, SF
AD-J EVANS 4-20-24 - ORIGINAL WELLBORE - PROPO	300.0	300.0	47.4	45.7	27.341	CC
AD-J EVANS 4-20-24 - ORIGINAL WELLBORE - PROPO	19,960.4	19,818.7	538.1	-118.4	0.820	Level 1, ES, SF
AD-J EVANS 5-20-24 - ORIGINAL WELLBORE - PROPO	400.0	400.0	25.5	23.0	10.399	CC
AD-J EVANS 5-20-24 - ORIGINAL WELLBORE - PROPO	19,960.4	19,765.7	266.4	-200.9	0.570	Level 1, ES, SF
AD-J EVANS C3-20-24 - ORIGINAL WELLBORE - PROP	200.0	200.0	72.9	71.9	71.619	CC
AD-J EVANS C3-20-24 - ORIGINAL WELLBORE - PROP	19,960.4	20,050.9	659.3	-45.5	0.936	Level 1, ES, SF
AD-LIBRARY 1-20-24 - ORIGINAL WELLBORE - PROP	200.0	201.0	287.8	286.8	281.714	CC, ES
AD-LIBRARY 1-20-24 - ORIGINAL WELLBORE - PROP	19,960.4	19,845.8	2,787.7	2,085.8	3.972	SF
AD-LIBRARY 2-20-24 - ORIGINAL WELLBORE - PROP	100.0	101.0	313.3	313.0	1,035.320	CC, ES
AD-LIBRARY 2-20-24 - ORIGINAL WELLBORE - PROP	19,960.4	19,903.3	3,143.8	2,441.7	4.478	SF
EXIST DD ADOLF F21-25D - Wellbore #1 - Wellbore #1	781.4	777.4	1,185.2	1,181.1	289.813	CC
EXIST DD ADOLF F21-25D - Wellbore #1 - Wellbore #1	900.0	887.2	1,185.7	1,180.9	249.624	ES
EXIST DD ADOLF F21-25D - Wellbore #1 - Wellbore #1	6,850.0	6,858.4	2,409.6	2,365.3	54.436	SF
EXIST VERT ADOLF F 21-14 - Wellbore #1 - Design #1	1,100.0	1,090.0	2,354.0	2,329.0	94.400	CC
EXIST VERT ADOLF F 21-14 - Wellbore #1 - Design #1	1,200.0	1,190.0	2,355.4	2,328.1	86.259	ES
EXIST VERT ADOLF F 21-14 - Wellbore #1 - Design #1	7,000.0	6,900.6	3,238.4	3,074.4	19.748	SF
EXIST VERT BRAGG 1 - Wellbore #1 - Design #1	6,862.6	6,764.6	923.9	761.1	5.674	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 AD-J EVANS C4-20-24
Project:	Weld County	TVD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Reference Site:	Sec 21-T5N-R65W	MD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	AD-J EVANS C4-20-24	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 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 21-T5N-R65W						
EXIST VERT BRAGG 1 - Wellbore #1 - Design #1	6,900.0	6,800.2	924.7	760.9	5.646	ES
EXIST VERT BRAGG 1 - Wellbore #1 - Design #1	7,000.0	6,908.4	934.9	768.2	5.608	SF
EXIST VERT BRAGG PM F 21-11 - Wellbore #1 - Design	1,100.0	1,089.0	1,302.4	1,277.1	51.448	CC
EXIST VERT BRAGG PM F 21-11 - Wellbore #1 - Design	1,200.0	1,189.0	1,303.4	1,275.7	47.078	ES
EXIST VERT BRAGG PM F 21-11 - Wellbore #1 - Design	6,850.0	6,760.4	1,979.5	1,817.9	12.245	SF
EXIST VERT ERICKSON 21-13 - Wellbore #1 - Design #	1,100.0	1,089.0	1,232.9	1,208.0	49.462	CC
EXIST VERT ERICKSON 21-13 - Wellbore #1 - Design #	1,200.0	1,189.0	1,234.6	1,207.3	45.229	ES
EXIST VERT ERICKSON 21-13 - Wellbore #1 - Design #	7,000.0	6,900.4	2,199.8	2,036.2	13.448	SF
EXIST VERT SCHNEIDER 1 - Wellbore #1 - Wellbore #1	5,664.1	5,609.5	673.8	648.9	27.070	CC
EXIST VERT SCHNEIDER 1 - Wellbore #1 - Wellbore #1	5,700.0	5,644.1	673.8	648.8	26.896	ES
EXIST VERT SCHNEIDER 1 - Wellbore #1 - Wellbore #1	6,800.0	6,723.2	709.3	679.6	23.922	SF
EXIST VERT SCHNEIDER 22-21 - Wellbore #1 - Design	4,878.6	4,818.1	1,679.5	1,563.5	14.484	CC
EXIST VERT SCHNEIDER 22-21 - Wellbore #1 - Design	6,300.0	6,219.0	1,696.5	1,546.1	11.279	ES
EXIST VERT SCHNEIDER 22-21 - Wellbore #1 - Design	6,900.0	6,808.2	1,730.9	1,566.1	10.498	SF
EXIST VERT WASS 5 - Wellbore #1 - Design #1	18,705.5	7,280.0	3,999.1	3,536.8	8.649	CC
EXIST VERT WASS 5 - Wellbore #1 - Design #1	18,800.0	7,280.0	4,000.3	3,535.7	8.610	ES
EXIST VERT WASS 5 - Wellbore #1 - Design #1	19,200.0	7,280.0	4,029.6	3,557.6	8.537	SF
EXIST VERT WASS 6 - Wellbore #1 - Design #1	18,384.8	7,280.0	5,308.5	4,854.8	11.701	CC
EXIST VERT WASS 6 - Wellbore #1 - Design #1	18,500.0	7,280.0	5,309.8	4,853.3	11.632	ES
EXIST VERT WASS 6 - Wellbore #1 - Design #1	19,300.0	7,280.0	5,386.8	4,914.9	11.415	SF
SW NE SEC. 26 T5N R66W 6th P.M.						
ABDN VERT DUELL #1 - Wellbore #1 - Design #1	19,735.2	7,313.0	2,481.3	1,988.8	5.038	CC
ABDN VERT DUELL #1 - Wellbore #1 - Design #1	19,800.0	7,313.0	2,482.1	1,988.2	5.025	ES
ABDN VERT DUELL #1 - Wellbore #1 - Design #1	19,900.0	7,313.0	2,486.8	1,991.2	5.018	SF
ABDN VERT HORII #1 - Wellbore #1 - Design #1	19,960.4	7,365.0	2,743.7	2,273.8	5.839	CC, ES, SF
ABDN VERT HORII #2 - Wellbore #1 - Design #1	19,960.4	7,335.0	1,647.3	1,243.5	4.079	CC, ES, SF
ABDN VERT RKW #1 - Wellbore #1 - Design #1	19,757.9	7,357.0	130.6	-363.0	0.265	Level 1, CC, ES, SF
EXIST DD SEGL #17-24 - Wellbore #1 - Wellbore #1	19,242.6	7,636.8	920.6	555.5	2.522	CC, ES
EXIST DD SEGL #17-24 - Wellbore #1 - Wellbore #1	19,300.0	7,637.2	922.4	556.6	2.521	SF
EXIST DD SEGL #18-24 - Wellbore #1 - Wellbore #1	19,960.4	7,496.4	1,996.8	1,838.7	12.633	CC, ES, SF
EXIST DD SEGL #21-24X - Wellbore #1 - Wellbore #1	19,960.4	7,653.6	860.4	485.6	2.296	CC, ES, SF
EXIST DD SEGL #22-24 - Wellbore #1 - Wellbore #1	19,960.4	7,429.7	1,916.4	1,773.7	13.435	CC, ES, SF
EXIST DD SEGL #2-24 - Wellbore #1 - Wellbore #1	19,834.8	7,735.1	1,646.0	1,273.0	4.413	CC, ES
EXIST DD SEGL #2-24 - Wellbore #1 - Wellbore #1	19,900.0	7,734.9	1,647.3	1,273.0	4.401	SF
EXIST DD SEGL #3-24 - Wellbore #1 - Wellbore #1	19,960.4	7,724.0	1,929.0	1,620.2	6.247	CC, ES, SF
EXIST DD SEGL #4-24 - Wellbore #1 - Wellbore #1	19,960.4	7,860.0	2,979.3	2,775.5	14.614	CC, ES, SF
EXIST DD SEGL #7-24 - Wellbore #1 - Wellbore #1	19,587.5	7,578.9	194.8	-173.8	0.528	Level 1, CC, ES, SF
EXIST VERT ANDERSON-COOMBS #2 - Wellbore #1 -	19,960.4	7,100.0	5,237.8	4,890.3	15.074	CC, ES, SF
EXIST VERT ANDERSON-COOMBS #3 - Wellbore #1 -	19,960.4	7,350.0	3,959.3	3,470.5	8.101	CC, ES, SF
EXIST VERT DUELL #2 - Wellbore #1 - Design #1	19,721.9	7,336.0	1,161.0	668.6	2.358	CC, ES, SF
EXIST VERT SEGL #1 - Wellbore #1 - Design #1	19,960.4	7,323.0	1,174.9	991.1	6.391	CC, ES, SF
EXIST VERT WASS #2 - Wellbore #1 - Design #1	19,704.0	7,316.0	5,124.1	4,632.4	10.421	CC
EXIST VERT WASS #2 - Wellbore #1 - Design #1	19,800.0	7,316.0	5,125.0	4,630.9	10.373	ES
EXIST VERT WASS #2 - Wellbore #1 - Design #1	19,960.4	7,316.0	5,130.5	4,632.8	10.308	SF
EXIST VERT WASS #4 - Wellbore #1 - Design #1	19,698.4	7,312.3	3,852.7	3,361.1	7.838	CC
EXIST VERT WASS #4 - Wellbore #1 - Design #1	19,800.0	7,312.3	3,854.0	3,360.1	7.803	ES
EXIST VERT WASS #4 - Wellbore #1 - Design #1	19,960.4	7,312.3	3,861.5	3,364.4	7.768	SF

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