PDC ENERGY

Project: WELD COUNTY, COLORADO (TRUE)
Site: SW NE SEC. 6 T3N R65W 6th P.M.
Well: ELKHEAD 3N
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 2389ft FNL & 2200ft FEL of Sec 6
500.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)
1095.58	1099.95	12.00	149.31	-53.83	31.95	-51.45	62.59	EOB TO 12° INC
5186.22	5281.97	12.00	149.31	-801.48	475.70	-766.08	932.02	END OF TANGENT
5781.80	5881.92	0.00	0.00	-855.30	507.65	-817.53	994.61	EOD TO VERTICAL
6471.80	6571.92	0.00	0.00	-855.30	507.65	-817.53	994.61	KOP (8°/100ft BUR)
7188.00	7696.92	90.00	0.15	-139.11	509.50	-102.97	1710.80	EP: 2530ft FNL & 1690ft FEL of Sec 6
7188.00	15362.58	90.00	0.16	7526.52	530.02	7545.15	9376.46	BHL: 150ft FNL & 1690ft FEL of Sec 31

PROPOSED LOCAL COORDINATES:

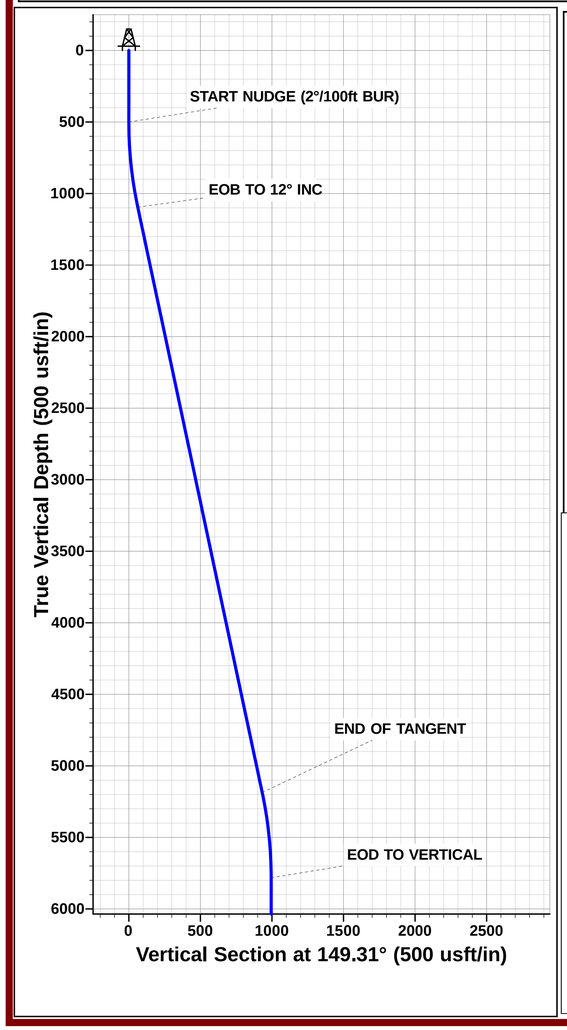
SHL: 2389ft FNL & 2200ft FEL of Sec 6

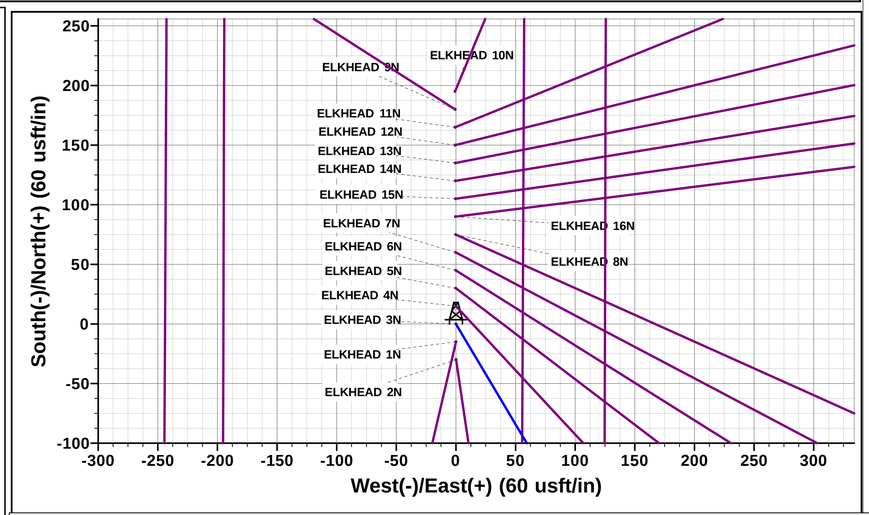
EP: 2530ft FNL & 1690ft FEL of Sec 6

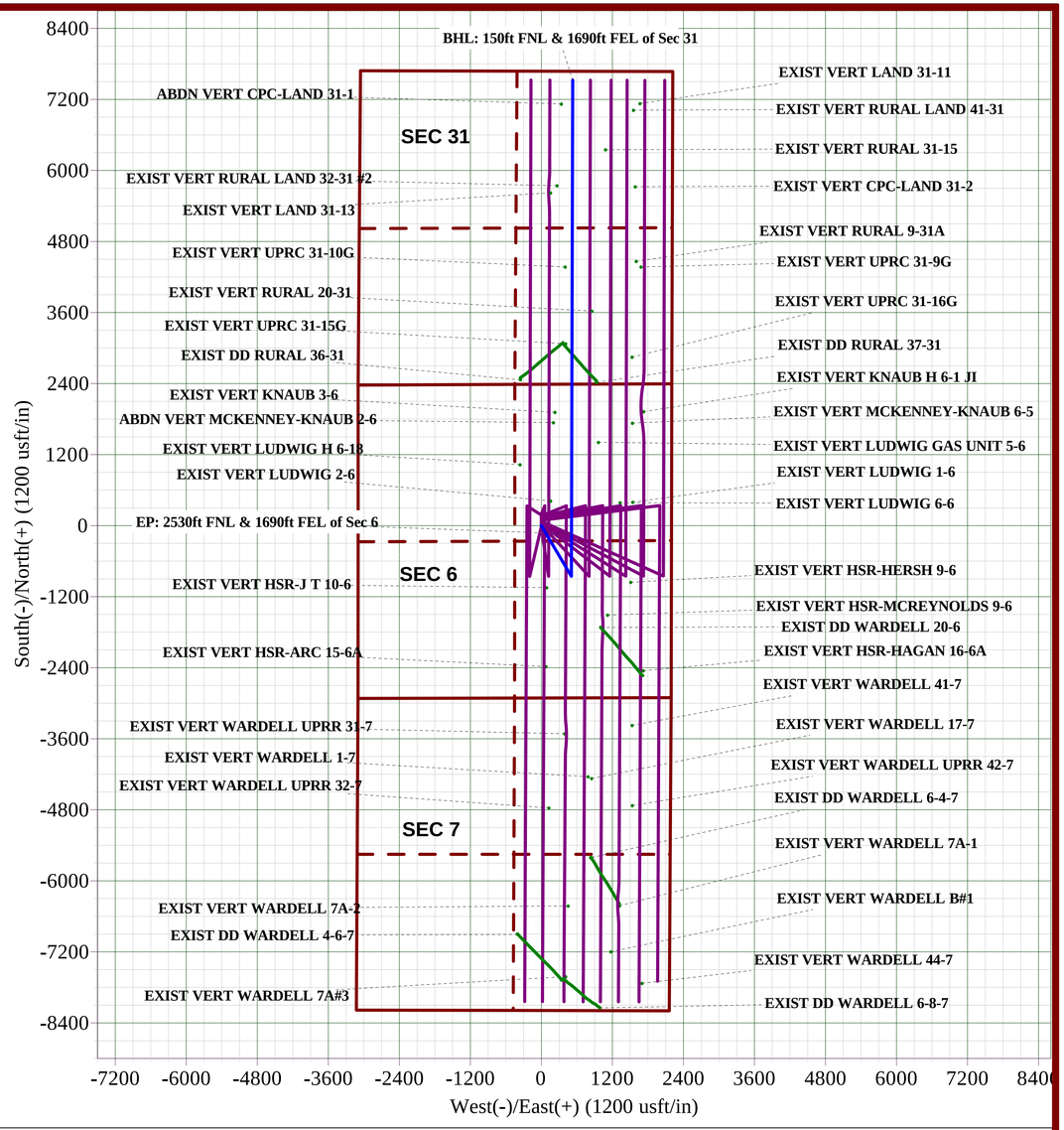
BHL: 150ft FNL & 1690ft FEL of Sec 31

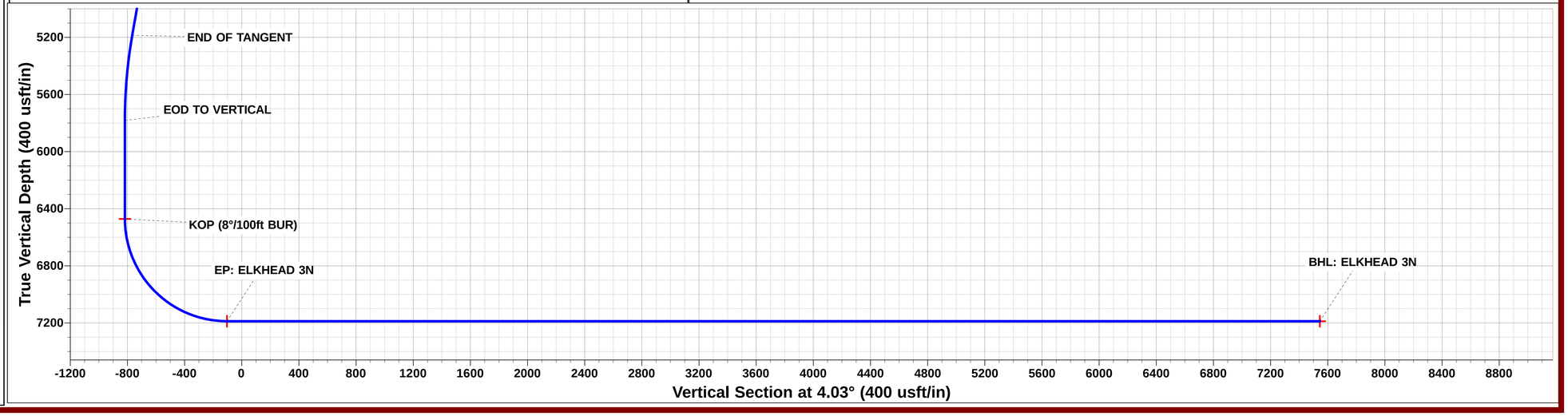
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP: ELKHEAD 3N	6471.80	-855.30	507.65	40.252774	-104.702746
EP: ELKHEAD 3N	7188.00	-139.11	509.50	40.254740	-104.702739
BHL: ELKHEAD 3N	7188.00	7526.52	530.02	40.275782	-104.702665









PDC ENERGY

WELD COUNTY, COLORADO (TRUE)
SW NE SEC. 6 T3N R65W 6th P.M. (Elkhead)
ELKHEAD 3N

ORIGINAL WELLBORE
PROPOSAL #1

Anticollision Report

29 January, 2018

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well ELKHEAD 3N
Project:	WELD COUNTY, COLORADO (TRUE)	**TVD Reference:**	WELL @ 4998.00usft (Original Well Elev)
Reference Site:	SW NE SEC. 6 T3N R65W 6th P.M. (Elkhead)	**MD Reference:**	WELL @ 4998.00usft (Original Well Elev)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	ELKHEAD 3N	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
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:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 29/01/2018

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,362.58	PROPOSAL #1 (ORIGINAL WELLBORE)	MWD	MWD - Standard

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
SW NE SEC. 6 T3N R65W 6th P.M. (Elkhead)						
ABDN VERT CPC-LAND 31-1 - Wellbore #1 - Design #1	14,959.81	7,188.00	189.55	35.63	1.231	Level 2, CC, ES, SF
ABDN VERT MCKENNEY-KNAUB 2-6 - Wellbore #1 - D	500.00	478.00	1,752.63	1,750.68	900.410	CC, ES
ABDN VERT MCKENNEY-KNAUB 2-6 - Wellbore #1 - D	11,000.00	4,975.00	2,631.46	2,595.31	72.794	SF
ELKHEAD 10N - ORIGINAL WELLBORE - PROPOSAL	300.00	300.00	194.98	193.91	181.862	CC, ES
ELKHEAD 10N - ORIGINAL WELLBORE - PROPOSAL	7,350.00	7,772.90	481.32	441.64	12.128	SF
ELKHEAD 11N - ORIGINAL WELLBORE - PROPOSAL #	7,450.00	7,589.36	90.60	51.66	2.327	ES, SF
ELKHEAD 11N - ORIGINAL WELLBORE - PROPOSAL #	7,487.78	7,553.49	89.71	51.68	2.359	CC
ELKHEAD 12N - ORIGINAL WELLBORE - PROPOSAL	500.00	500.00	149.99	148.02	76.090	CC, ES
ELKHEAD 12N - ORIGINAL WELLBORE - PROPOSAL	7,800.00	7,397.45	236.13	199.94	6.526	SF
ELKHEAD 13N - ORIGINAL WELLBORE - PROPOSAL	500.00	500.00	134.98	133.01	68.476	CC, ES
ELKHEAD 13N - ORIGINAL WELLBORE - PROPOSAL	7,350.00	7,770.12	527.50	487.98	13.348	SF
ELKHEAD 14N - ORIGINAL WELLBORE - PROPOSAL	500.00	500.00	120.01	118.03	60.880	CC, ES
ELKHEAD 14N - ORIGINAL WELLBORE - PROPOSAL	7,350.00	7,947.57	844.61	805.76	21.736	SF
ELKHEAD 15N - ORIGINAL WELLBORE - PROPOSAL	500.00	500.00	105.00	103.03	53.265	CC, ES
ELKHEAD 15N - ORIGINAL WELLBORE - PROPOSAL	6,571.92	8,347.70	1,362.36	1,313.95	28.139	SF
ELKHEAD 16N - ORIGINAL WELLBORE - PROPOSAL	500.00	500.00	89.99	88.02	45.651	CC, ES
ELKHEAD 16N - ORIGINAL WELLBORE - PROPOSAL	2,500.00	2,417.75	475.65	460.03	30.447	SF
ELKHEAD 1N - ORIGINAL WELLBORE - PROPOSAL #	2,245.34	2,277.99	155.15	143.52	13.338	CC
ELKHEAD 1N - ORIGINAL WELLBORE - PROPOSAL #	2,300.00	2,331.63	155.51	143.51	12.960	ES
ELKHEAD 1N - ORIGINAL WELLBORE - PROPOSAL #	15,362.58	15,384.95	704.84	414.50	2.428	SF
ELKHEAD 2N - ORIGINAL PROPOSAL - PROPOSAL #1	300.00	300.00	29.98	28.91	27.961	CC, ES
ELKHEAD 2N - ORIGINAL PROPOSAL - PROPOSAL #1	15,362.58	15,434.13	394.20	105.12	1.364	Level 3, SF
ELKHEAD 4N - ORIGINAL WELLBORE - PROPOSAL #	500.00	500.00	15.01	13.04	7.616	CC, ES
ELKHEAD 4N - ORIGINAL WELLBORE - PROPOSAL #	15,362.58	15,473.69	311.74	31.22	1.111	Level 2, SF
ELKHEAD 5N - ORIGINAL WELLBORE - PROPOSAL #	500.00	500.00	30.02	28.05	15.229	CC, ES
ELKHEAD 5N - ORIGINAL WELLBORE - PROPOSAL #	15,362.58	15,461.44	649.92	358.42	2.230	SF
ELKHEAD 6N - ORIGINAL WELLBORE - PROPOSAL #	500.00	500.00	45.00	43.02	22.827	CC, ES
ELKHEAD 6N - ORIGINAL WELLBORE - PROPOSAL #	15,362.58	15,618.09	923.81	634.28	3.191	SF
ELKHEAD 7N - ORIGINAL WELLBORE - PROPOSAL #	500.00	500.00	60.01	58.03	30.441	CC, ES
ELKHEAD 7N - ORIGINAL WELLBORE - PROPOSAL #	15,362.58	15,652.45	1,219.82	927.77	4.177	SF
ELKHEAD 8N - ORIGINAL WELLBORE - PROPOSAL #	500.00	500.00	75.01	73.04	38.055	CC, ES
ELKHEAD 8N - ORIGINAL WELLBORE - PROPOSAL #	15,362.58	15,872.94	1,557.07	1,265.67	5.343	SF
ELKHEAD 9N - ORIGINAL WELLBORE - PROPOSAL #	400.00	400.00	179.97	178.45	118.272	CC, ES
ELKHEAD 9N - ORIGINAL WELLBORE - PROPOSAL #	7,050.00	7,908.89	793.37	749.62	18.135	SF
EXIST DD RURAL 36-31 - Wellbore #1 - Wellbore #1	10,317.14	7,283.05	869.06	798.69	12.349	CC, ES
EXIST DD RURAL 36-31 - Wellbore #1 - Wellbore #1	10,500.00	7,280.00	888.09	814.46	12.061	SF

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

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well ELKHEAD 3N
Project:	WELD COUNTY, COLORADO (TRUE)	**TVD Reference:**	WELL @ 4998.00usft (Original Well Elev)
Reference Site:	SW NE SEC. 6 T3N R65W 6th P.M. (Elkhead)	**MD Reference:**	WELL @ 4998.00usft (Original Well Elev)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	ELKHEAD 3N	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
SW NE SEC. 6 T3N R65W 6th P.M. (Elkhead)						
EXIST DD RURAL 37-31 - Wellbore #1 - Wellbore #1	10,259.30	7,251.26	412.66	343.06	5.929	CC, ES
EXIST DD RURAL 37-31 - Wellbore #1 - Wellbore #1	10,300.00	7,251.13	414.67	344.34	5.897	SF
EXIST DD WARDELL 20-6 - Wellbore #1 - Wellbore #1	6,572.85	6,593.23	992.15	961.64	32.519	CC, ES
EXIST DD WARDELL 20-6 - Wellbore #1 - Wellbore #1	6,600.00	6,619.96	992.60	962.02	32.449	SF
EXIST DD WARDELL 4-6-7 - Wellbore #1 - Wellbore #1	6,602.10	6,862.00	6,121.82	6,082.02	153.812	CC, ES
EXIST DD WARDELL 4-6-7 - Wellbore #1 - Wellbore #1	10,800.00	7,241.23	9,903.31	9,823.12	123.498	SF
EXIST DD WARDELL 6-4-7 - Wellbore #1 - Wellbore #1	6,598.97	6,744.00	4,772.98	4,739.50	142.550	CC, ES
EXIST DD WARDELL 6-4-7 - Wellbore #1 - Wellbore #1	12,200.00	7,318.00	9,975.62	9,871.27	95.603	SF
EXIST DD WARDELL 6-8-7 - Wellbore #1 - Wellbore #1	5,543.96	4,731.72	7,175.70	7,148.29	261.829	CC, ES
EXIST DD WARDELL 6-8-7 - Wellbore #1 - Wellbore #1	6,600.00	6,124.58	7,244.82	7,212.24	222.360	SF
EXIST VERT CPC-LAND 31-2 - Wellbore #1 - Design #1	13,565.07	7,183.01	1,061.10	933.63	8.324	CC
EXIST VERT CPC-LAND 31-2 - Wellbore #1 - Design #1	13,600.00	7,183.01	1,061.68	933.54	8.286	ES
EXIST VERT CPC-LAND 31-2 - Wellbore #1 - Design #1	13,700.00	7,183.01	1,069.64	939.62	8.227	SF
EXIST VERT HSR-ARC 15-6A - Wellbore #1 - Design #1	6,571.92	6,449.80	1,583.38	1,549.02	46.076	CC, ES
EXIST VERT HSR-ARC 15-6A - Wellbore #1 - Design #1	6,600.00	6,477.87	1,583.91	1,549.49	46.012	SF
EXIST VERT HSR-HAGAN 16-6A - Wellbore #1 - Design	6,571.92	6,449.80	2,004.39	1,974.51	67.082	CC, ES
EXIST VERT HSR-HAGAN 16-6A - Wellbore #1 - Design	15,300.00	7,166.00	9,984.36	9,823.99	62.260	SF
EXIST VERT HSR-HERSH 9-6 - Wellbore #1 - Design #1	6,571.92	6,449.80	1,008.57	973.07	28.415	CC
EXIST VERT HSR-HERSH 9-6 - Wellbore #1 - Design #1	6,600.00	6,477.87	1,008.62	973.06	28.363	ES
EXIST VERT HSR-HERSH 9-6 - Wellbore #1 - Design #1	6,700.00	6,577.19	1,009.73	974.01	28.267	SF
EXIST VERT HSR-J T 10-6 - Wellbore #1 - Design #1	5,353.15	5,234.02	456.21	422.80	13.654	CC
EXIST VERT HSR-J T 10-6 - Wellbore #1 - Design #1	6,571.92	6,449.80	458.80	420.92	12.113	ES
EXIST VERT HSR-J T 10-6 - Wellbore #1 - Design #1	6,600.00	6,477.87	459.03	421.07	12.092	SF
EXIST VERT HSR-MCREYNOLDS 9-6 - Wellbore #1 - D	6,571.92	6,449.80	896.01	865.78	29.631	CC, ES
EXIST VERT HSR-MCREYNOLDS 9-6 - Wellbore #1 - D	6,600.00	6,477.87	896.42	866.15	29.617	SF
EXIST VERT KNAUB 3-6 - Wellbore #1 - Design #1	9,750.76	7,166.01	284.85	227.48	4.965	CC, ES, SF
EXIST VERT KNAUB H 6-1 JI - Wellbore #1 - Design #1	9,765.70	7,166.01	1,213.86	1,156.24	21.066	CC
EXIST VERT KNAUB H 6-1 JI - Wellbore #1 - Design #1	9,800.00	7,166.01	1,214.35	1,156.15	20.864	ES
EXIST VERT KNAUB H 6-1 JI - Wellbore #1 - Design #1	10,200.00	7,166.01	1,289.22	1,224.07	19.790	SF
EXIST VERT LAND 31-11 - Wellbore #1 - Design #1	14,970.44	7,183.00	1,138.09	983.97	7.385	CC
EXIST VERT LAND 31-11 - Wellbore #1 - Design #1	15,000.00	7,183.00	1,138.47	983.79	7.360	ES
EXIST VERT LAND 31-11 - Wellbore #1 - Design #1	15,100.00	7,183.00	1,145.44	988.86	7.315	SF
EXIST VERT LAND 31-13 - Wellbore #1 - Design #1	13,457.31	7,183.01	368.20	242.77	2.935	CC, ES, SF
EXIST VERT LUDWIG 1-6 - Wellbore #1 - Design #1	2,951.57	2,884.74	1,530.63	1,513.51	89.410	CC
EXIST VERT LUDWIG 1-6 - Wellbore #1 - Design #1	3,200.00	3,127.74	1,531.50	1,512.70	81.448	ES
EXIST VERT LUDWIG 1-6 - Wellbore #1 - Design #1	5,200.00	4,800.00	1,625.42	1,594.08	51.857	SF
EXIST VERT LUDWIG 2-6 - Wellbore #1 - Design #1	8,253.31	7,166.00	353.48	316.53	9.566	CC, ES
EXIST VERT LUDWIG 2-6 - Wellbore #1 - Design #1	8,300.00	7,166.00	356.55	319.27	9.564	SF
EXIST VERT LUDWIG 6-6 - Wellbore #1 - Design #1	8,227.24	7,166.00	818.87	782.11	22.273	CC, ES
EXIST VERT LUDWIG 6-6 - Wellbore #1 - Design #1	8,400.00	7,166.00	836.90	798.76	21.948	SF
EXIST VERT LUDWIG GAS UNIT 5-6 - Wellbore #1 - De	9,246.33	7,166.01	450.53	401.39	9.169	CC, ES
EXIST VERT LUDWIG GAS UNIT 5-6 - Wellbore #1 - De	9,300.00	7,166.01	453.71	403.74	9.079	SF
EXIST VERT LUDWIG H 6-18 - Wellbore #1 - Design #1	8,865.43	7,166.01	872.26	828.71	20.028	CC, ES
EXIST VERT LUDWIG H 6-18 - Wellbore #1 - Design #1	9,100.00	7,166.01	903.26	856.35	19.259	SF
EXIST VERT MCKENNEY-KNAUB 6-5 - Wellbore #1 - D	500.00	478.00	2,317.99	2,316.05	1,190.867	CC, ES
EXIST VERT MCKENNEY-KNAUB 6-5 - Wellbore #1 - D	11,700.00	4,795.00	3,346.54	3,294.78	64.653	SF
EXIST VERT RURAL 20-31 - Wellbore #1 - Design #1	11,461.01	7,183.01	338.52	250.48	3.845	CC, ES
EXIST VERT RURAL 20-31 - Wellbore #1 - Design #1	11,500.00	7,183.01	340.76	252.00	3.839	SF
EXIST VERT RURAL 31-15 - Wellbore #1 - Design #1	14,190.28	7,183.01	557.07	417.76	3.999	CC
EXIST VERT RURAL 31-15 - Wellbore #1 - Design #1	14,200.00	7,183.01	557.16	417.66	3.994	ES, SF
EXIST VERT RURAL 9-31A - Wellbore #1 - Design #1	12,304.61	7,183.01	1,081.34	977.59	10.423	CC, ES
EXIST VERT RURAL 9-31A - Wellbore #1 - Design #1	12,500.00	7,183.01	1,098.85	991.44	10.231	SF

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Site Error:	0.00 usft	**North Reference:**	True
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Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
SW NE SEC. 6 T3N R65W 6th P.M. (Elkhead)						
EXIST VERT RURAL LAND 32-31 #2 - Wellbore #1 - De	13,579.65	7,183.01	258.86	131.12	2.026	CC, ES, SF
EXIST VERT RURAL LAND 41-31 - Wellbore #1 - Design	14,858.29	7,183.00	1,026.79	874.80	6.756	CC, ES
EXIST VERT RURAL LAND 41-31 - Wellbore #1 - Design	15,000.00	7,183.00	1,036.52	881.84	6.701	SF
EXIST VERT UPRC 31-10G - Wellbore #1 - Design #1	12,206.60	7,183.01	118.39	16.48	1.162	Level 2, CC, ES, SF
EXIST VERT UPRC 31-15G - Wellbore #1 - Design #1	10,909.73	7,183.01	104.29	26.38	1.339	Level 3, CC, ES, SF
EXIST VERT UPRC 31-16G - Wellbore #1 - Design #1	10,686.87	7,183.01	1,016.00	942.13	13.754	CC
EXIST VERT UPRC 31-16G - Wellbore #1 - Design #1	10,700.00	7,183.01	1,016.08	941.98	13.711	ES
EXIST VERT UPRC 31-16G - Wellbore #1 - Design #1	10,900.00	7,183.01	1,038.11	960.37	13.354	SF
EXIST VERT UPRC 31-9G - Wellbore #1 - Design #1	12,210.10	7,183.01	1,162.53	1,060.55	11.400	CC, ES
EXIST VERT UPRC 31-9G - Wellbore #1 - Design #1	12,500.00	7,183.01	1,198.13	1,090.72	11.155	SF
EXIST VERT WARDELL 1-7 - Wellbore #1 - Design #1	6,571.92	6,449.80	3,396.73	3,365.22	107.798	CC, ES
EXIST VERT WARDELL 1-7 - Wellbore #1 - Design #1	13,500.00	7,166.01	9,907.67	9,781.45	78.495	SF
EXIST VERT WARDELL 17-7 - Wellbore #1 - Design #1	6,571.92	6,449.80	3,432.16	3,400.77	109.321	CC, ES
EXIST VERT WARDELL 17-7 - Wellbore #1 - Design #1	13,500.00	7,166.01	9,939.62	9,813.40	78.748	SF
EXIST VERT WARDELL 41-7 - Wellbore #1 - Design #1	6,571.92	6,449.80	2,718.79	2,688.88	90.904	CC, ES
EXIST VERT WARDELL 41-7 - Wellbore #1 - Design #1	14,400.00	7,166.01	9,987.55	9,844.29	69.714	SF
EXIST VERT WARDELL 44-7 - Wellbore #1 - Design #1	6,571.92	6,449.80	6,977.87	6,946.96	225.733	CC, ES
EXIST VERT WARDELL 44-7 - Wellbore #1 - Design #1	10,000.00	7,166.01	9,965.01	9,903.36	161.651	SF
EXIST VERT WARDELL 7A#3 - Wellbore #1 - Design #1	6,571.92	6,449.80	6,763.67	6,731.42	209.717	CC, ES
EXIST VERT WARDELL 7A#3 - Wellbore #1 - Design #1	10,200.00	7,166.01	9,982.80	9,917.65	153.235	SF
EXIST VERT WARDELL 7A-1 - Wellbore #1 - Design #1	6,571.92	6,449.80	5,623.66	5,592.57	180.913	CC, ES
EXIST VERT WARDELL 7A-1 - Wellbore #1 - Design #1	11,300.00	7,166.01	9,916.22	9,831.17	116.593	SF
EXIST VERT WARDELL 7A-2 - Wellbore #1 - Design #1	6,571.92	6,449.80	5,568.37	5,536.15	172.830	CC, ES
EXIST VERT WARDELL 7A-2 - Wellbore #1 - Design #1	11,400.00	7,166.01	9,987.57	9,900.68	114.940	SF
EXIST VERT WARDELL B#1 - Wellbore #1 - Design #1	6,571.92	6,449.80	6,374.98	6,343.62	203.280	CC, ES
EXIST VERT WARDELL B#1 - Wellbore #1 - Design #1	10,600.00	7,166.01	9,980.95	9,908.66	138.084	SF
EXIST VERT WARDELL UPRR 31-7 - Wellbore #1 - Des	6,571.92	6,449.80	2,661.58	2,629.10	81.946	CC, ES
EXIST VERT WARDELL UPRR 31-7 - Wellbore #1 - Des	14,300.00	7,166.01	9,979.28	9,837.91	70.591	SF
EXIST VERT WARDELL UPRR 32-7 - Wellbore #1 - Des	6,571.92	6,449.80	3,931.46	3,898.54	119.435	CC, ES
EXIST VERT WARDELL UPRR 32-7 - Wellbore #1 - Des	13,000.00	7,166.01	9,940.20	9,823.42	85.114	SF
EXIST VERT WARDELL UPRR 42-7 - Wellbore #1 - Des	6,571.92	6,449.80	4,005.83	3,975.42	131.710	CC, ES
EXIST VERT WARDELL UPRR 42-7 - Wellbore #1 - Des	13,000.00	7,166.01	9,942.47	9,825.68	85.134	SF

Offset Design SW NE SEC. 6 T3N R65W 6th P.M. (Elkhead) - ABDN VERT CPC-LAND 31-1 - Wellbore #1 - Design #

Survey Program: 0-MWD

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	2.73	7,124.27	339.37	7,132.35				
100.00	100.00	100.00	100.00	0.09	0.09	2.73	7,124.27	339.37	7,132.35	7,132.17	0.17	N/A	
200.00	200.00	200.00	200.00	0.31	0.31	2.73	7,124.27	339.37	7,132.35	7,131.72	0.62	N/A	
300.00	300.00	300.00	300.00	0.54	0.54	2.73	7,124.27	339.37	7,132.35	7,131.27	1.07	6,652.476	
400.00	400.00	400.00	400.00	0.76	0.76	2.73	7,124.27	339.37	7,132.35	7,130.83	1.52	4,687.195	
500.00	500.00	500.00	500.00	0.99	0.99	2.73	7,124.27	339.37	7,132.35	7,130.38	1.97	3,618.280	
600.00	599.98	599.98	599.98	1.19	1.21	-146.57	7,124.27	339.37	7,133.80	7,131.41	2.40	2,975.142	
700.00	699.84	699.84	699.84	1.38	1.43	-146.55	7,124.27	339.37	7,138.17	7,135.36	2.81	2,537.317	
800.00	799.45	799.45	799.45	1.59	1.66	-146.51	7,124.27	339.37	7,145.45	7,142.21	3.24	2,203.290	
900.00	898.70	898.70	898.70	1.85	1.88	-146.45	7,124.27	339.37	7,155.63	7,151.95	3.69	1,940.579	
1,000.00	997.47	997.47	997.47	2.15	2.10	-146.37	7,124.27	339.37	7,168.71	7,164.57	4.15	1,728.181	

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