EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)
SEC. 22 T4N R68W 6th P.M.
MLD 13

ORIGINAL WELLBORE
29 July, 2014

Plan: PROPOSAL #1

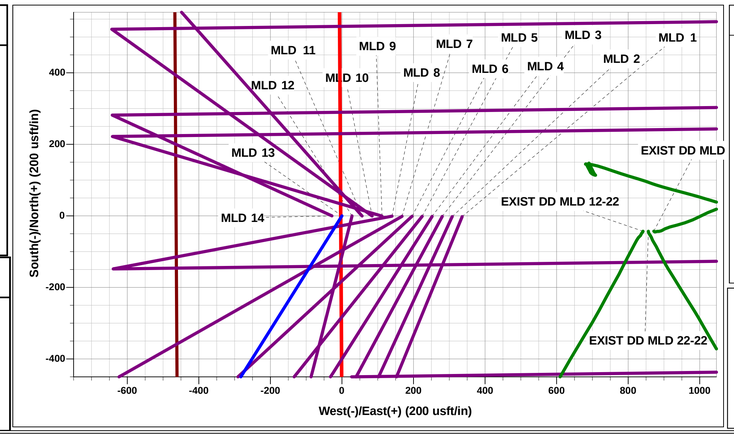
Project: WELD COUNTY, COLORADO (NAD 83)
Site: SEC. 22 T4N R68W 6th P.M.
Well: MLD 13
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
1050.0	1050.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (3°/100ft BUR)
1521.1	1526.0	14.28	212.13	-50.0	-31.4	-19.2	59.0	EOB TO 14.28° INC
6108.3	6259.5	14.28	212.13	-1038.7	-652.4	-399.7	1226.6	END OF TANGENT
6579.4	6735.5	0.00	0.00	-1088.7	-683.8	-418.9	1285.6	EOD TO VERTICAL
6609.4	6765.5	0.00	0.00	-1088.7	-683.8	-418.9	1285.6	KOP (9°/100ft BUR)
7246.0	7765.5	90.00	89.29	-1080.8	-47.2	199.2	1922.3	HZ LANDING POINT
7246.0	7815.5	90.00	89.29	-1080.2	2.8	247.8	1972.3	7" ICP - MLD 13
7246.0	12214.8	90.00	89.28	-1025.5	4401.8	4519.6	6371.6	BHL - MLD 13

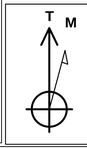
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - MLD 13	6609.4	-1088.7	-683.8	40.300985	-104.999622
BHL - MLD 13	7246.0	-1025.5	4401.8	40.301157	-104.981389
7" ICP - MLD 13	7246.0	-1080.2	2.8	40.301008	-104.997160



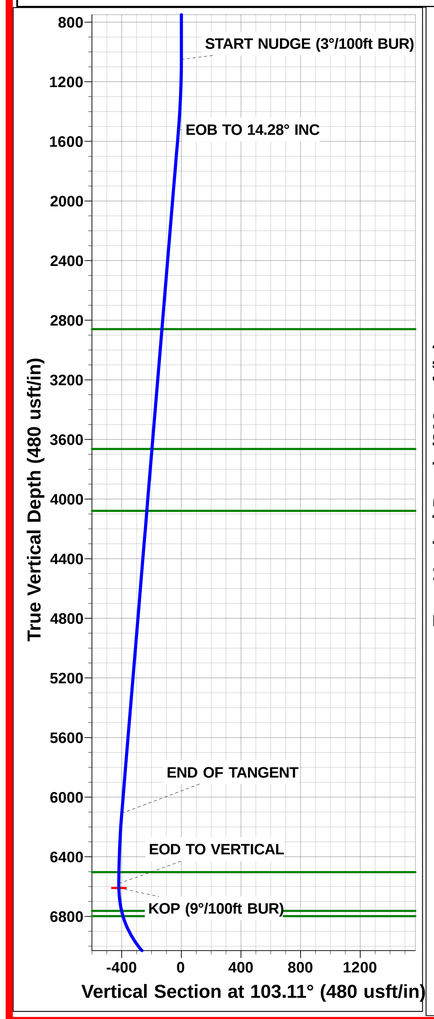
FORMATION TOP DETAILS

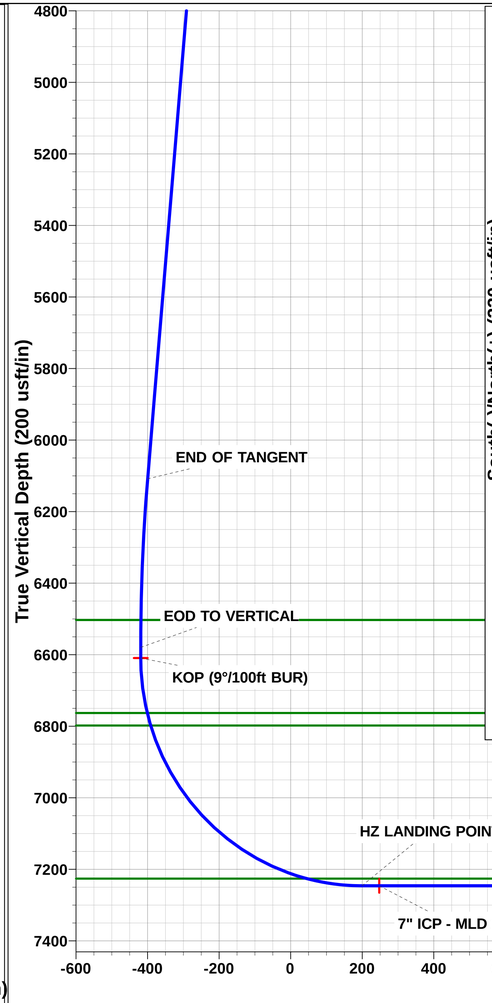
TVDPath	MDPath	Formation
2860.0	2907.6	PARKMAN
3664.0	3737.2	SUSSEX
4079.0	4165.5	SHANNON
6503.0	6659.1	NIOBRARA
6763.0	6920.6	FORT HAYS
6798.0	6957.0	CODELL
7226.0	7605.4	J SAND

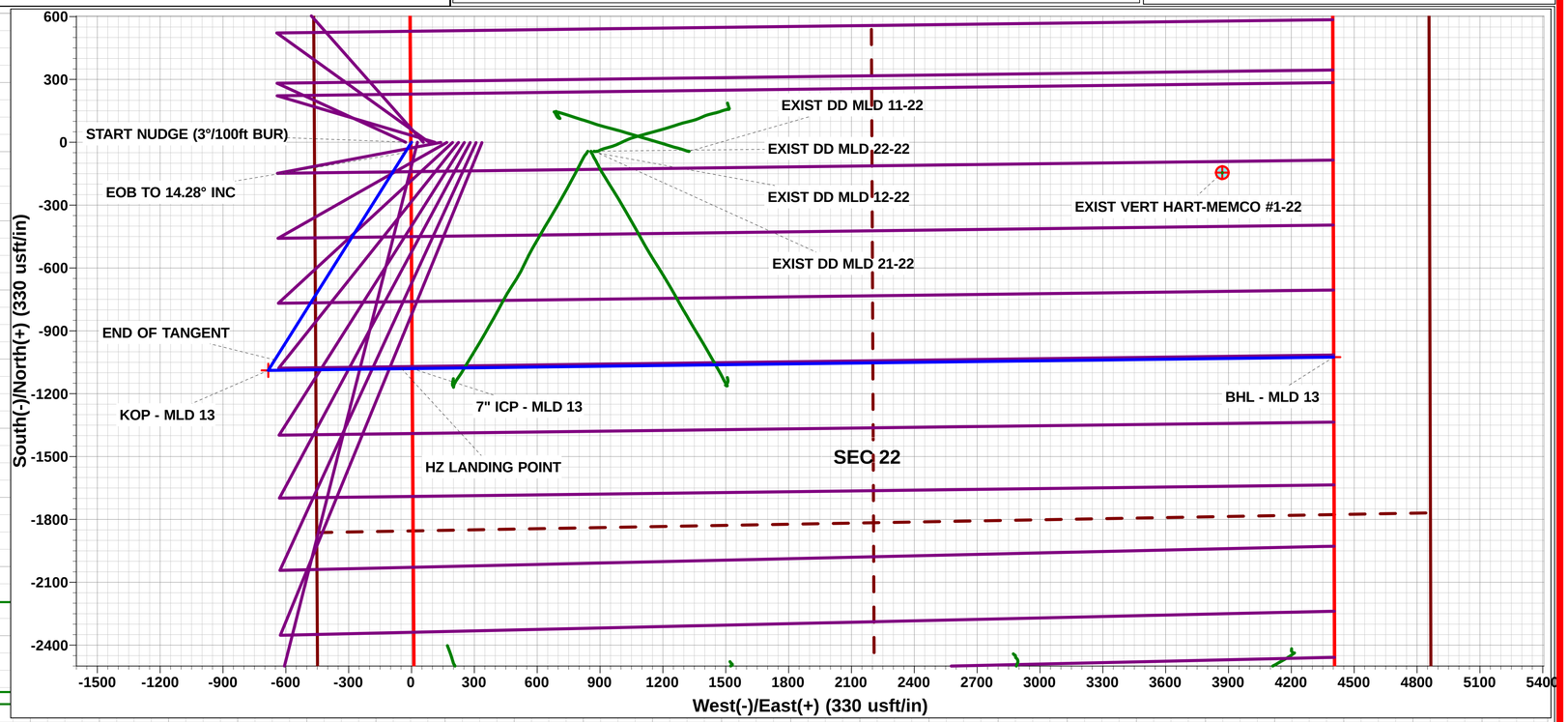


Azimuths to True North
Magnetic North: 8.56°

Magnetic Field
Strength: 52727.2snT
Dip Angle: 66.83°
Date: 29/07/2014
Model: IGRF2010







SETBACK BOUNDARY FALLS 460ft FE/WL of Sec 22

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well MLD 13
Company:	EXTRACTION OIL & GAS	**TVD Reference:**	KB-EST @ 4899.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	**MD Reference:**	KB-EST @ 4899.0usft (Original Well Elev)
Site:	SEC. 22 T4N R68W 6th P.M.	**North Reference:**	True
Well:	MLD 13	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Project WELD COUNTY, COLORADO (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site SEC. 22 T4N R68W 6th P.M.

Site Position:		**Northing:**	1,350,393.80 usft	**Latitude:**	40.294131
From:	Lat/Long	**Easting:**	3,140,798.83 usft	**Longitude:**	-104.995243
Position Uncertainty:	0.0 usft	**Slot Radius:**	1.10000 ft	**Grid Convergence:**	0.33 °

Well MLD 13

Well Position	**+N/-S**	3,585.5 usft	**Northing:**	1,353,976.02 usft	**Latitude:**	40.303973
	+E/-W	-537.5 usft	**Easting:**	3,140,240.98 usft	**Longitude:**	-104.997170
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	4,875.0 usft

Wellbore ORIGINAL WELLBORE

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	29/07/2014	8.56	66.83	52,727

Design PROPOSAL #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	103.11

Plan Sections

MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf	Build Rate (°/100usf	Turn Rate (°/100usf	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,899.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,050.0	0.00	0.00	1,050.0	-3,849.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,526.0	14.28	212.13	1,521.1	-3,377.9	-50.0	-31.4	3.00	3.00	0.00	212.13	
6,259.5	14.28	212.13	6,108.3	1,209.3	-1,038.7	-652.4	0.00	0.00	0.00	0.00	
6,735.5	0.00	0.00	6,579.4	1,680.4	-1,088.7	-683.8	3.00	-3.00	0.00	180.00	
6,765.5	0.00	0.00	6,609.4	1,710.4	-1,088.7	-683.8	0.00	0.00	0.00	0.00	KOP - MLD 13
7,765.5	90.00	89.29	7,246.0	2,347.0	-1,080.8	-47.2	9.00	9.00	0.00	89.29	
7,815.5	90.00	89.29	7,246.0	2,347.0	-1,080.2	2.8	0.00	0.00	0.00	0.00	
12,214.8	90.00	89.28	7,246.0	2,347.0	-1,025.5	4,401.8	0.00	0.00	0.00	-84.17	BHL - MLD 13

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Project:	WELD COUNTY, COLORADO (NAD 83)	**MD Reference:**	KB-EST @ 4899.0usft (Original Well Elev)
Site:	SEC. 22 T4N R68W 6th P.M.	**North Reference:**	True
Well:	MLD 13	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	4,899.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,799.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,699.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,599.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,499.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,399.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,299.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	4,199.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	4,099.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,999.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,899.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (3°/100ft BUR)										
1,050.0	***0.00***	***0.00***	***1,050.0***	***3,849.00***	***0.0***	***0.0***	***0.0***	***0.00***	***0.00***	***0.00***
1,100.0	1.50	212.13	1,100.0	3,799.01	-0.6	-0.3	-0.2	3.00	3.00	0.00
1,200.0	4.50	212.13	1,199.8	3,699.15	-5.0	-3.1	-1.9	3.00	3.00	0.00
1,300.0	7.50	212.13	1,299.3	3,599.71	-13.8	-8.7	-5.3	3.00	3.00	0.00
1,400.0	10.50	212.13	1,398.0	3,500.96	-27.1	-17.0	-10.4	3.00	3.00	0.00
1,500.0	13.50	212.13	1,495.8	3,403.15	-44.7	-28.1	-17.2	3.00	3.00	0.00
EOB TO 14.28° INC										
1,526.0	***14.28***	***212.13***	***1,521.1***	***3,377.90***	***-50.0***	***-31.4***	***-19.2***	***3.00***	***3.00***	***0.00***
1,600.0	14.28	212.13	1,592.8	3,306.20	-65.4	-41.1	-25.2	0.00	0.00	0.00
1,700.0	14.28	212.13	1,689.7	3,209.29	-86.3	-54.2	-33.2	0.00	0.00	0.00
1,800.0	14.28	212.13	1,786.6	3,112.38	-107.2	-67.3	-41.3	0.00	0.00	0.00
1,900.0	14.28	212.13	1,883.5	3,015.47	-128.1	-80.5	-49.3	0.00	0.00	0.00
2,000.0	14.28	212.13	1,980.4	2,918.56	-149.0	-93.6	-57.3	0.00	0.00	0.00
2,100.0	14.28	212.13	2,077.4	2,821.65	-169.9	-106.7	-65.4	0.00	0.00	0.00
2,200.0	14.28	212.13	2,174.3	2,724.74	-190.8	-119.8	-73.4	0.00	0.00	0.00
2,300.0	14.28	212.13	2,271.2	2,627.83	-211.6	-132.9	-81.4	0.00	0.00	0.00
2,400.0	14.28	212.13	2,368.1	2,530.92	-232.5	-146.1	-89.5	0.00	0.00	0.00
2,500.0	14.28	212.13	2,465.0	2,434.01	-253.4	-159.2	-97.5	0.00	0.00	0.00
2,600.0	14.28	212.13	2,561.9	2,337.10	-274.3	-172.3	-105.6	0.00	0.00	0.00
2,700.0	14.28	212.13	2,658.8	2,240.19	-295.2	-185.4	-113.6	0.00	0.00	0.00
2,800.0	14.28	212.13	2,755.7	2,143.28	-316.1	-198.5	-121.6	0.00	0.00	0.00
2,900.0	14.28	212.13	2,852.6	2,046.37	-337.0	-211.7	-129.7	0.00	0.00	0.00
PARKMAN										
2,907.6	***14.28***	***212.13***	***2,860.0***	***2,039.00***	***-338.6***	***-212.7***	***-130.3***	***0.00***	***0.00***	***0.00***
3,000.0	14.28	212.13	2,949.5	1,949.46	-357.9	-224.8	-137.7	0.00	0.00	0.00
3,100.0	14.28	212.13	3,046.5	1,852.55	-378.8	-237.9	-145.8	0.00	0.00	0.00
3,200.0	14.28	212.13	3,143.4	1,755.64	-399.6	-251.0	-153.8	0.00	0.00	0.00
3,300.0	14.28	212.13	3,240.3	1,658.73	-420.5	-264.1	-161.8	0.00	0.00	0.00
3,400.0	14.28	212.13	3,337.2	1,561.82	-441.4	-277.3	-169.9	0.00	0.00	0.00
3,500.0	14.28	212.13	3,434.1	1,464.91	-462.3	-290.4	-177.9	0.00	0.00	0.00
3,600.0	14.28	212.13	3,531.0	1,368.00	-483.2	-303.5	-185.9	0.00	0.00	0.00
3,700.0	14.28	212.13	3,627.9	1,271.09	-504.1	-316.6	-194.0	0.00	0.00	0.00
SUSSEX										
3,737.2	***14.28***	***212.13***	***3,664.0***	***1,235.00***	***-511.9***	***-321.5***	***-197.0***	***0.00***	***0.00***	***0.00***
3,800.0	14.28	212.13	3,724.8	1,174.18	-525.0	-329.7	-202.0	0.00	0.00	0.00
3,900.0	14.28	212.13	3,821.7	1,077.27	-545.9	-342.9	-210.1	0.00	0.00	0.00
4,000.0	14.28	212.13	3,918.6	980.36	-566.8	-356.0	-218.1	0.00	0.00	0.00
4,100.0	14.28	212.13	4,015.5	883.45	-587.6	-369.1	-226.1	0.00	0.00	0.00
SHANNON										
4,165.5	***14.28***	***212.13***	***4,079.0***	***820.00***	***-601.3***	***-377.7***	***-231.4***	***0.00***	***0.00***	***0.00***
4,200.0	14.28	212.13	4,112.5	786.54	-608.5	-382.2	-234.2	0.00	0.00	0.00
4,300.0	14.28	212.13	4,209.4	689.63	-629.4	-395.3	-242.2	0.00	0.00	0.00

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Project:	WELD COUNTY, COLORADO (NAD 83)	**MD Reference:**	KB-EST @ 4899.0usft (Original Well Elev)
Site:	SEC. 22 T4N R68W 6th P.M.	**North Reference:**	True
Well:	MLD 13	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,400.0	14.28	212.13	4,306.3	592.72	-650.3	-408.5	-250.2	0.00	0.00	0.00
4,500.0	14.28	212.13	4,403.2	495.81	-671.2	-421.6	-258.3	0.00	0.00	0.00
4,600.0	14.28	212.13	4,500.1	398.90	-692.1	-434.7	-266.3	0.00	0.00	0.00
4,700.0	14.28	212.13	4,597.0	301.99	-713.0	-447.8	-274.4	0.00	0.00	0.00
4,800.0	14.28	212.13	4,693.9	205.08	-733.9	-460.9	-282.4	0.00	0.00	0.00
4,900.0	14.28	212.13	4,790.8	108.17	-754.8	-474.1	-290.4	0.00	0.00	0.00
5,000.0	14.28	212.13	4,887.7	11.26	-775.6	-487.2	-298.5	0.00	0.00	0.00
5,100.0	14.28	212.13	4,984.6	-85.65	-796.5	-500.3	-306.5	0.00	0.00	0.00
5,200.0	14.28	212.13	5,081.6	-182.56	-817.4	-513.4	-314.6	0.00	0.00	0.00
5,300.0	14.28	212.13	5,178.5	-279.47	-838.3	-526.5	-322.6	0.00	0.00	0.00
5,400.0	14.28	212.13	5,275.4	-376.38	-859.2	-539.6	-330.6	0.00	0.00	0.00
5,500.0	14.28	212.13	5,372.3	-473.29	-880.1	-552.8	-338.7	0.00	0.00	0.00
5,600.0	14.28	212.13	5,469.2	-570.20	-901.0	-565.9	-346.7	0.00	0.00	0.00
5,700.0	14.28	212.13	5,566.1	-667.11	-921.9	-579.0	-354.7	0.00	0.00	0.00
5,800.0	14.28	212.13	5,663.0	-764.02	-942.7	-592.1	-362.8	0.00	0.00	0.00
5,900.0	14.28	212.13	5,759.9	-860.93	-963.6	-605.2	-370.8	0.00	0.00	0.00
6,000.0	14.28	212.13	5,856.8	-957.84	-984.5	-618.4	-378.9	0.00	0.00	0.00
6,100.0	14.28	212.13	5,953.7	-1,054.75	-1,005.4	-631.5	-386.9	0.00	0.00	0.00
6,200.0	14.28	212.13	6,050.7	-1,151.66	-1,026.3	-644.6	-394.9	0.00	0.00	0.00
END OF TANGENT										
6,259.5	***14.28***	***212.13***	***6,108.3***	***-1,209.30***	***-1,038.7***	***-652.4***	***-399.7***	***0.00***	***0.00***	***0.00***
6,300.0	13.06	212.13	6,147.7	-1,248.67	-1,046.8	-657.5	-402.8	3.00	-3.00	0.00
6,400.0	10.06	212.13	6,245.6	-1,346.63	-1,063.8	-668.2	-409.4	3.00	-3.00	0.00
6,500.0	7.06	212.13	6,344.5	-1,445.50	-1,076.4	-676.1	-414.2	3.00	-3.00	0.00
6,600.0	4.06	212.13	6,444.0	-1,545.02	-1,084.6	-681.2	-417.4	3.00	-3.00	0.00
NIOBRARA										
6,659.1	***2.29***	***212.13***	***6,503.0***	***-1,604.00***	***-1,087.4***	***-683.0***	***-418.4***	***3.00***	***-3.00***	***0.00***
6,700.0	1.06	212.13	6,543.9	-1,644.91	-1,088.4	-683.6	-418.8	3.00	-3.00	0.00
EOD TO VERTICAL										
6,735.5	***0.00***	***0.00***	***6,579.4***	***-1,680.40***	***-1,088.7***	***-683.8***	***-418.9***	***3.00***	***-3.00***	***0.00***
KOP (9°/100ft BUR)										
6,765.5	***0.00***	***0.00***	***6,609.4***	***-1,710.40***	***-1,088.7***	***-683.8***	***-418.9***	***0.00***	***0.00***	***0.00***
6,800.0	3.11	89.29	6,643.9	-1,744.89	-1,088.7	-682.9	-418.0	9.00	9.00	0.00
6,900.0	12.11	89.29	6,742.9	-1,843.91	-1,088.5	-669.6	-405.2	9.00	9.00	0.00
FORT HAYS										
6,920.6	***13.96***	***89.29***	***6,763.0***	***-1,864.00***	***-1,088.5***	***-665.0***	***-400.7***	***9.00***	***9.00***	***0.00***
CODELL										
6,957.0	***17.23***	***89.29***	***6,798.0***	***-1,899.00***	***-1,088.3***	***-655.2***	***-391.2***	***9.00***	***9.00***	***0.00***
7,000.0	21.11	89.29	6,838.6	-1,939.64	-1,088.2	-641.1	-377.5	9.00	9.00	0.00
7,100.0	30.11	89.29	6,928.7	-2,029.73	-1,087.6	-597.9	-335.6	9.00	9.00	0.00
7,200.0	39.11	89.29	7,010.9	-2,111.95	-1,086.9	-541.2	-280.5	9.00	9.00	0.00
7,300.0	48.11	89.29	7,083.3	-2,184.29	-1,086.1	-472.3	-213.6	9.00	9.00	0.00
7,400.0	57.11	89.29	7,144.0	-2,244.95	-1,085.1	-392.9	-136.5	9.00	9.00	0.00
7,500.0	66.11	89.29	7,191.5	-2,292.46	-1,084.0	-305.1	-51.2	9.00	9.00	0.00
7,600.0	75.11	89.29	7,224.6	-2,325.63	-1,082.8	-210.9	40.3	9.00	9.00	0.00
J SAND										
7,605.4	***75.59***	***89.29***	***7,226.0***	***-2,327.00***	***-1,082.8***	***-205.6***	***45.4***	***9.00***	***9.00***	***0.00***
7,700.0	84.11	89.29	7,242.7	-2,343.65	-1,081.6	-112.6	135.8	9.00	9.00	0.00
HZ LANDING POINT										
7,765.5	***90.00***	***89.29***	***7,246.0***	***-2,347.02***	***-1,080.8***	***-47.2***	***199.2***	***9.00***	***9.00***	***0.00***
7,800.0	90.00	89.29	7,246.0	-2,347.02	-1,080.4	-12.7	232.7	0.00	0.00	0.00
7" ICP - MLD 13										
7,815.5	***90.00***	***89.29***	***7,246.0***	***-2,347.02***	***-1,080.2***	***2.8***	***247.8***	***0.00***	***0.00***	***0.00***

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well MLD 13
Company:	EXTRACTION OIL & GAS	**TVD Reference:**	KB-EST @ 4899.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	**MD Reference:**	KB-EST @ 4899.0usft (Original Well Elev)
Site:	SEC. 22 T4N R68W 6th P.M.	**North Reference:**	True
Well:	MLD 13	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,900.0	90.00	89.29	7,246.0	-2,347.02	-1,079.1	87.3	329.8	0.00	0.00	0.00
8,000.0	90.00	89.29	7,246.0	-2,347.02	-1,077.9	187.3	426.9	0.00	0.00	0.00
8,100.0	90.00	89.29	7,246.0	-2,347.02	-1,076.7	287.3	524.1	0.00	0.00	0.00
8,200.0	90.00	89.29	7,246.0	-2,347.02	-1,075.4	387.2	621.2	0.00	0.00	0.00
8,300.0	90.00	89.29	7,246.0	-2,347.02	-1,074.2	487.2	718.3	0.00	0.00	0.00
8,400.0	90.00	89.29	7,246.0	-2,347.02	-1,072.9	587.2	815.4	0.00	0.00	0.00
8,500.0	90.00	89.29	7,246.0	-2,347.02	-1,071.7	687.2	912.5	0.00	0.00	0.00
8,600.0	90.00	89.29	7,246.0	-2,347.02	-1,070.5	787.2	1,009.6	0.00	0.00	0.00
8,700.0	90.00	89.29	7,246.0	-2,347.02	-1,069.2	887.2	1,106.7	0.00	0.00	0.00
8,800.0	90.00	89.29	7,246.0	-2,347.02	-1,068.0	987.2	1,203.8	0.00	0.00	0.00
8,900.0	90.00	89.29	7,246.0	-2,347.02	-1,066.7	1,087.2	1,300.9	0.00	0.00	0.00
9,000.0	90.00	89.29	7,246.0	-2,347.02	-1,065.5	1,187.2	1,398.0	0.00	0.00	0.00
9,100.0	90.00	89.29	7,246.0	-2,347.02	-1,064.3	1,287.2	1,495.1	0.00	0.00	0.00
9,200.0	90.00	89.29	7,246.0	-2,347.02	-1,063.0	1,387.2	1,592.2	0.00	0.00	0.00
9,300.0	90.00	89.29	7,246.0	-2,347.02	-1,061.8	1,487.2	1,689.3	0.00	0.00	0.00
9,400.0	90.00	89.29	7,246.0	-2,347.02	-1,060.5	1,587.2	1,786.4	0.00	0.00	0.00
9,500.0	90.00	89.29	7,246.0	-2,347.02	-1,059.3	1,687.1	1,883.5	0.00	0.00	0.00
9,600.0	90.00	89.29	7,246.0	-2,347.02	-1,058.0	1,787.1	1,980.6	0.00	0.00	0.00
9,700.0	90.00	89.29	7,246.0	-2,347.02	-1,056.8	1,887.1	2,077.7	0.00	0.00	0.00
9,800.0	90.00	89.29	7,246.0	-2,347.02	-1,055.6	1,987.1	2,174.8	0.00	0.00	0.00
9,900.0	90.00	89.29	7,246.0	-2,347.02	-1,054.3	2,087.1	2,271.9	0.00	0.00	0.00
10,000.0	90.00	89.29	7,246.0	-2,347.01	-1,053.1	2,187.1	2,369.0	0.00	0.00	0.00
10,100.0	90.00	89.29	7,246.0	-2,347.01	-1,051.8	2,287.1	2,466.1	0.00	0.00	0.00
10,200.0	90.00	89.29	7,246.0	-2,347.01	-1,050.6	2,387.1	2,563.2	0.00	0.00	0.00
10,300.0	90.00	89.29	7,246.0	-2,347.01	-1,049.3	2,487.1	2,660.3	0.00	0.00	0.00
10,400.0	90.00	89.29	7,246.0	-2,347.01	-1,048.1	2,587.1	2,757.4	0.00	0.00	0.00
10,500.0	90.00	89.29	7,246.0	-2,347.01	-1,046.9	2,687.1	2,854.5	0.00	0.00	0.00
10,600.0	90.00	89.29	7,246.0	-2,347.01	-1,045.6	2,787.1	2,951.6	0.00	0.00	0.00
10,700.0	90.00	89.29	7,246.0	-2,347.01	-1,044.4	2,887.1	3,048.7	0.00	0.00	0.00
10,800.0	90.00	89.29	7,246.0	-2,347.01	-1,043.1	2,987.0	3,145.8	0.00	0.00	0.00
10,900.0	90.00	89.29	7,246.0	-2,347.01	-1,041.9	3,087.0	3,242.9	0.00	0.00	0.00
11,000.0	90.00	89.29	7,246.0	-2,347.01	-1,040.6	3,187.0	3,340.0	0.00	0.00	0.00
11,100.0	90.00	89.29	7,246.0	-2,347.01	-1,039.4	3,287.0	3,437.1	0.00	0.00	0.00
11,200.0	90.00	89.29	7,246.0	-2,347.01	-1,038.1	3,387.0	3,534.2	0.00	0.00	0.00
11,300.0	90.00	89.29	7,246.0	-2,347.01	-1,036.9	3,487.0	3,631.3	0.00	0.00	0.00
11,400.0	90.00	89.29	7,246.0	-2,347.01	-1,035.6	3,587.0	3,728.4	0.00	0.00	0.00
11,500.0	90.00	89.29	7,246.0	-2,347.01	-1,034.4	3,687.0	3,825.5	0.00	0.00	0.00
11,600.0	90.00	89.29	7,246.0	-2,347.01	-1,033.2	3,787.0	3,922.6	0.00	0.00	0.00
11,700.0	90.00	89.29	7,246.0	-2,347.00	-1,031.9	3,887.0	4,019.7	0.00	0.00	0.00
11,800.0	90.00	89.29	7,246.0	-2,347.00	-1,030.7	3,987.0	4,116.8	0.00	0.00	0.00
11,900.0	90.00	89.29	7,246.0	-2,347.00	-1,029.4	4,087.0	4,213.9	0.00	0.00	0.00
12,000.0	90.00	89.29	7,246.0	-2,347.00	-1,028.2	4,187.0	4,311.0	0.00	0.00	0.00
12,100.0	90.00	89.29	7,246.0	-2,347.00	-1,026.9	4,286.9	4,408.1	0.00	0.00	0.00
12,200.0	90.00	89.28	7,246.0	-2,347.00	-1,025.7	4,386.9	4,505.2	0.00	0.00	0.00
BHL - MLD 13										
12,214.8	***90.00***	***89.28***	***7,246.0***	***-2,347.00***	***-1,025.5***	***4,401.8***	***4,519.6***	***0.00***	***0.00***	***0.00***

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well MLD 13
Company:	EXTRACTION OIL & GAS	**TVD Reference:**	KB-EST @ 4899.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	**MD Reference:**	KB-EST @ 4899.0usft (Original Well Elev)
Site:	SEC. 22 T4N R68W 6th P.M.	**North Reference:**	True
Well:	MLD 13	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,907.6	2,860.0	PARKMAN		0.00	
3,737.2	3,664.0	SUSSEX		0.00	
4,165.5	4,079.0	SHANNON		0.00	
6,659.1	6,503.0	NIOBRARA		0.00	
6,920.6	6,763.0	FORT HAYS		0.00	
6,957.0	6,798.0	CODELL		0.00	
7,605.4	7,226.0	J SAND		0.00	

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,050.0	1,050.0	0.0	0.0	START NUDGE (3°/100ft BUR)
1,526.0	1,521.1	-50.0	-31.4	EOB TO 14.28° INC
6,259.5	6,108.3	-1,038.7	-652.4	END OF TANGENT
6,735.5	6,579.4	-1,088.7	-683.8	EOD TO VERTICAL
6,765.5	6,609.4	-1,088.7	-683.8	KOP (9°/100ft BUR)
7,765.5	7,246.0	-1,080.8	-47.2	HZ LANDING POINT
7,815.5	7,246.0	-1,080.2	2.8	7" ICP - MLD 13
12,214.8	7,246.0	-1,025.5	4,401.8	BHL - MLD 13