

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

SW NE SEC. 5 T6N R67W 6th P.M.

MICKEY 1

ORIGINAL WELLBORE

07 October, 2016

Plan: PROPOSAL #2

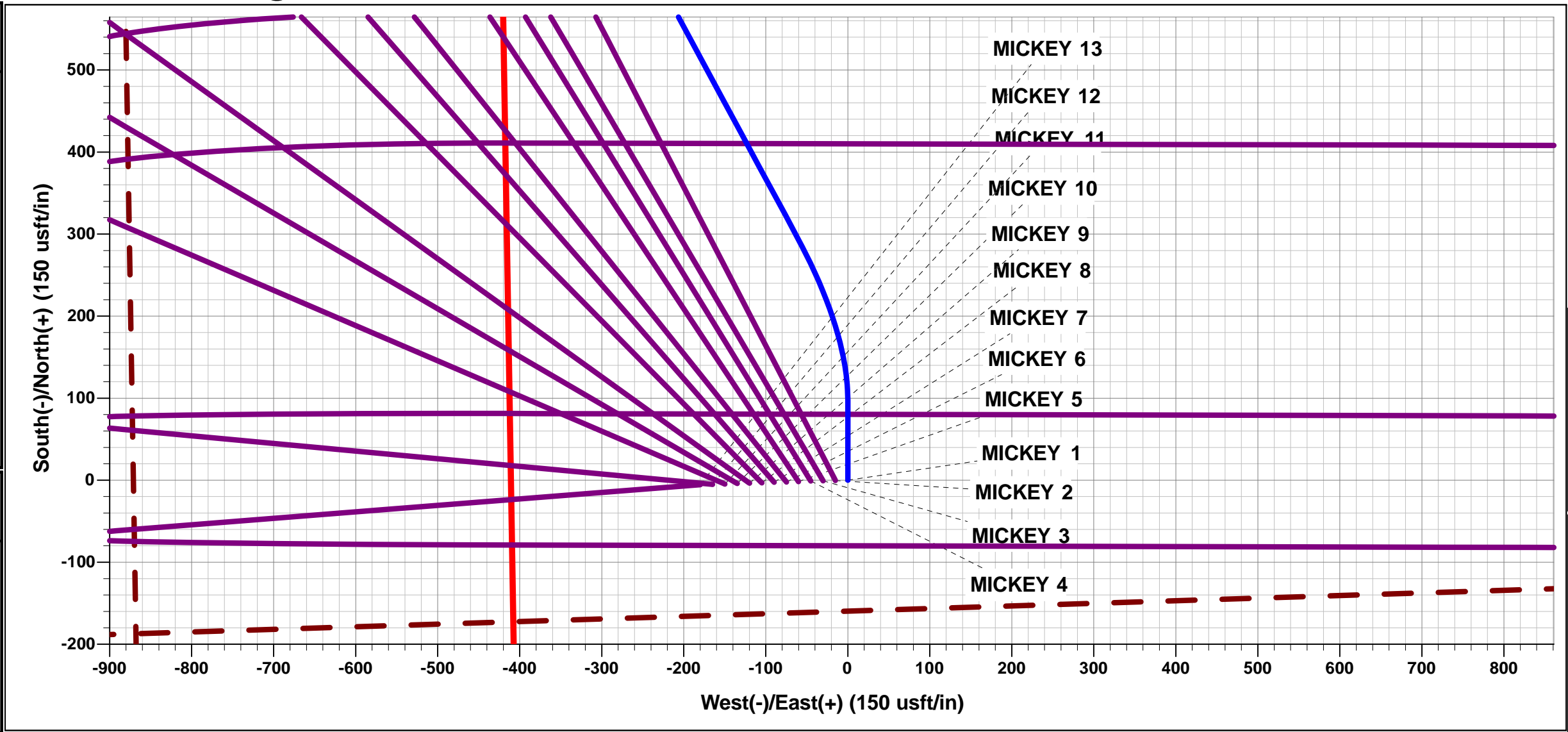




Project: WELD COUNTY, COLORADO (NAD 83)
Site: SW NE SEC. 5 T6N R67W 6th P.M.
Well: MICKEY 1
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

ANNOTATIONS								
TVD	MD	Inc	Azi	+N/-S	+E/-W	V Sect	Dep	Annotation
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 2418ft FNL & 1768ft FEL of Sec 5
1600.0	1600.0	0.00	0.00	0.0	0.0	0.0	0.0	9 5/8" SURFACE CASING
2900.0	2900.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
3641.5	3650.0	15.00	0.00	97.6	0.0	24.5	97.6	EOB TO 15° INC
4253.9	4299.4	24.20	331.65	299.7	-63.5	13.8	311.5	EOB & T TO 24.2° INC & 331.65° AZ
5095.3	5325.3	44.72	331.65	807.8	-337.6	-124.0	888.9	EOB TO 44.72° INC
6486.8	7283.5	44.72	331.65	2020.3	-991.8	-452.9	2266.7	KOP (10°/100ft DGLG)
7064.0	8379.6	90.00	90.13	2521.5	-450.9	196.5	3152.3	HZ LP: 106ft FSL & 2177ft FEL of Sec 32
7064.0	18462.0	90.00	90.13	2497.8	9631.4	9950.1	13234.7	BHL: 19ft FSL & 2633ft FEL of Sec 34

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LP - MICKEY 1	7064.0	2521.5	-450.9	40.523325	-104.915824
BHL - MICKEY 1	7064.0	2497.8	9631.5	40.523255	-104.879558



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3354.0	3355.9	PARKMAN
3954.0	3976.8	SUSSEX
4364.0	4421.3	SHANNON
6709.0	7582.5	SHARON SPRINGS
6744.0	7630.1	NIOBRARA
7014.0	8101.3	FORT HAYS
7054.0	8256.1	CODELL

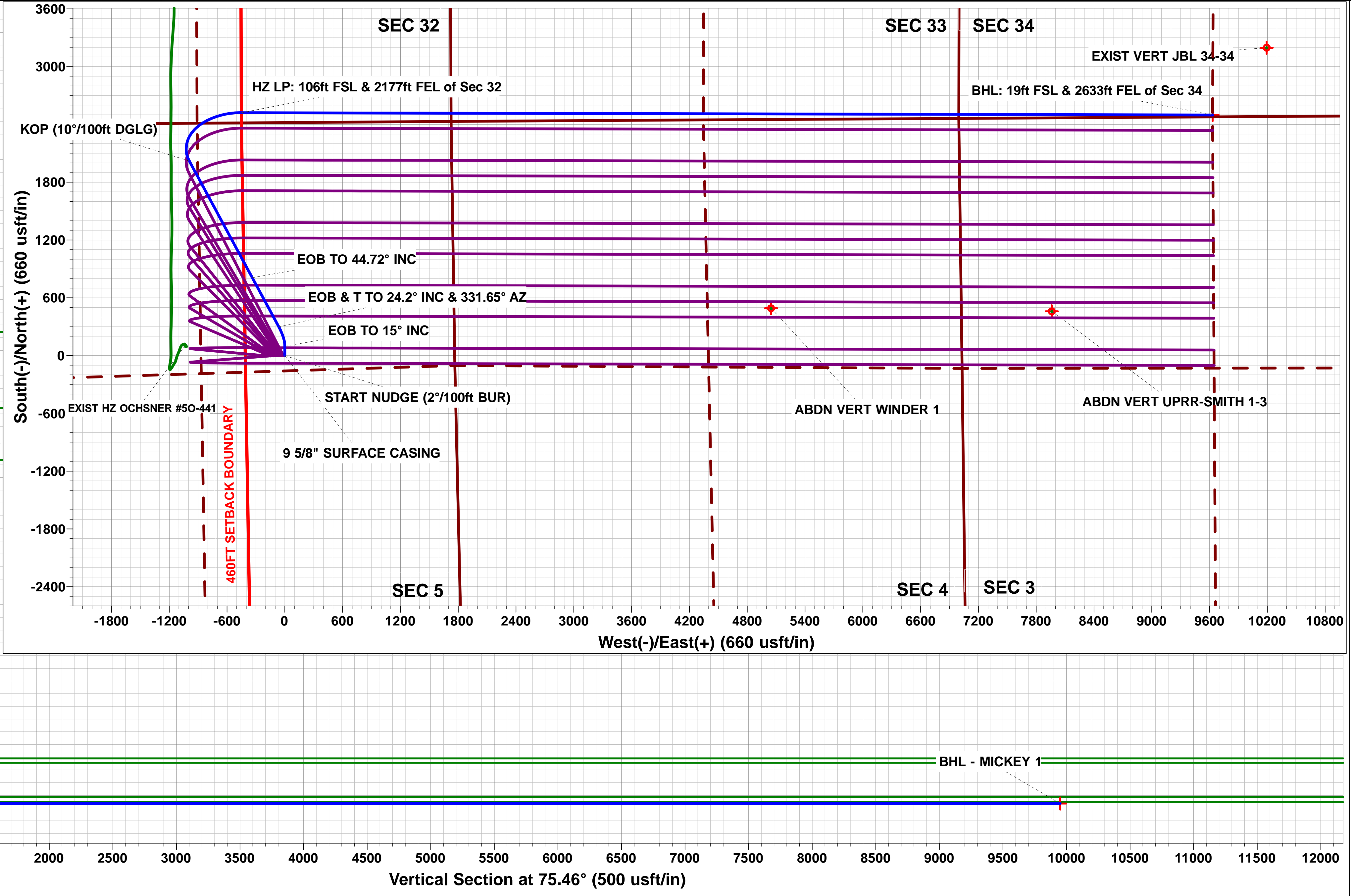
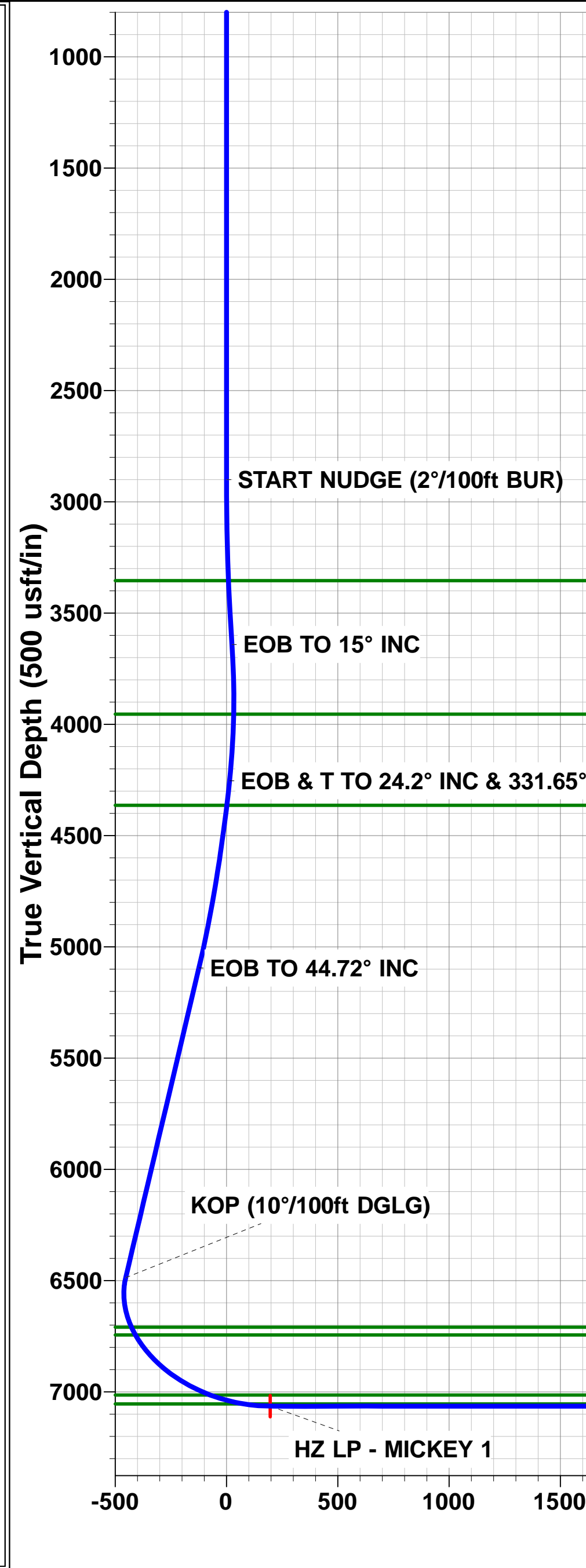
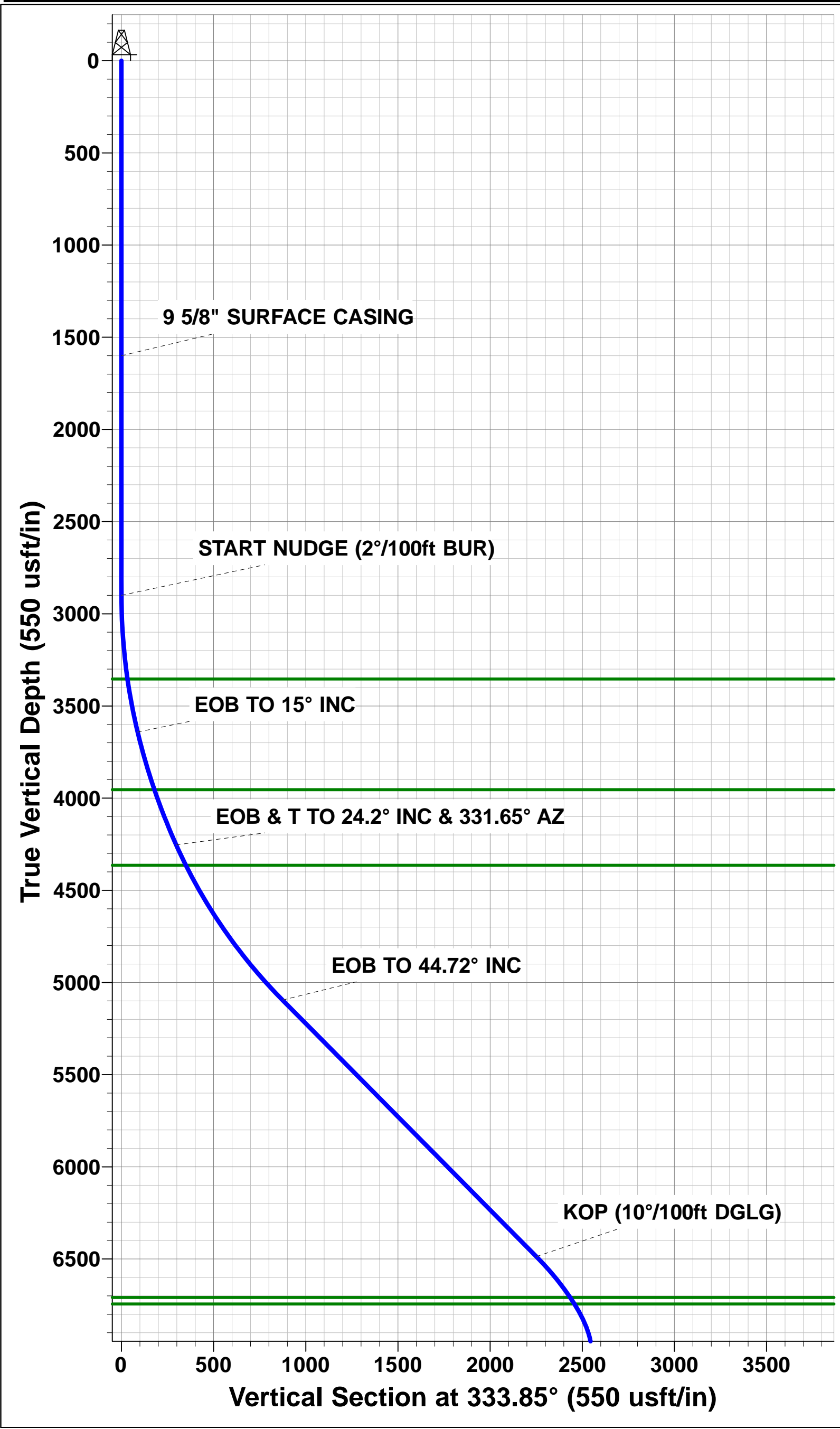
PROPOSED LOCAL COORDINATES	
SHL: 2418ft FNL & 1768ft FEL of Sec 5	
LP: 106ft FSL & 2177ft FEL of Sec 32	
BHL: 19ft FSL & 2633ft FEL of Sec 34	

T

M

Azimuths to True North
Magnetic North: 8.39°

Magnetic Field
Strength: 52533.7snT
Dip Angle: 66.95°
Date: 10/08/2016
Model: IGRF2015



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MICKEY 1
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4897.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4897.0usft
Site:	SW NE SEC. 5 T6N R67W 6th P.M.	North Reference:	True
Well:	MICKEY 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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	SW NE SEC. 5 T6N R67W 6th P.M.		
Site Position:		Northing:	1,431,152.83 usft
From:	Lat/Long	Easting:	3,162,171.69 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.515451
		Longitude:	-104.916720
		Grid Convergence:	0.38 °

Well	MICKEY 1		
Well Position	+N/-S	347.1 usft	Northing:
	+E/-W	700.1 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	40.516404
		Longitude:	-104.914202
		Ground Level:	4,881.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/08/2016	8.39	66.95	52,534

Design	PROPOSAL #2				
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	75.46	

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	-4,897.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	-1,997.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,650.0	15.00	0.00	3,641.5	-1,255.5	97.6	0.0	2.00	2.00	0.00	0.00	
4,299.4	24.20	331.65	4,253.9	-643.1	299.7	-63.5	2.00	1.42	-4.37	300.00	
5,325.3	44.72	331.65	5,095.3	198.3	807.8	-337.6	2.00	2.00	0.00	0.00	
7,283.5	44.72	331.65	6,486.8	1,589.8	2,020.4	-991.9	0.00	0.00	0.00	0.00	
8,379.6	90.00	90.13	7,064.0	2,167.0	2,521.5	-450.9	10.00	4.13	10.81	111.08	HZ LP - MICKEY 1
18,462.0	90.00	90.13	7,064.0	2,167.0	2,497.8	9,631.5	0.00	0.00	0.00	0.00	BHL - MICKEY 1

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MICKEY 1
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4897.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4897.0usft
Site:	SW NE SEC. 5 T6N R67W 6th P.M.	North Reference:	True
Well:	MICKEY 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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)
SHL: 2418ft FNL & 1768ft FEL of Sec 5										
0.0	0.00	0.00	0.0	4,897.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,797.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,697.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,597.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,497.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,397.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,297.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	4,197.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	4,097.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,997.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,897.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,797.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,697.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,597.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,497.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,397.00	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8" SURFACE CASING										
1,600.0	0.00	0.00	1,600.0	3,297.00	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	3,197.00	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	3,097.00	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	2,997.00	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	2,897.00	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	2,797.00	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	2,697.00	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	2,597.00	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	2,497.00	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	2,397.00	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	2,297.00	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	2,197.00	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	2,097.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
2,900.0	0.00	0.00	2,900.0	1,997.00	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	2.00	0.00	3,000.0	1,897.02	1.7	0.0	0.4	2.00	2.00	0.00
3,100.0	4.00	0.00	3,099.8	1,797.16	7.0	0.0	1.8	2.00	2.00	0.00
3,200.0	6.00	0.00	3,199.5	1,697.55	15.7	0.0	3.9	2.00	2.00	0.00
3,300.0	8.00	0.00	3,298.7	1,598.30	27.9	0.0	7.0	2.00	2.00	0.00
PARKMAN										
3,355.9	9.12	0.00	3,354.0	1,543.00	36.2	0.0	9.1	2.00	2.00	0.00
3,400.0	10.00	0.00	3,397.5	1,499.53	43.5	0.0	10.9	2.00	2.00	0.00
3,500.0	12.00	0.00	3,495.6	1,401.38	62.6	0.0	15.7	2.00	2.00	0.00
3,600.0	14.00	0.00	3,593.1	1,303.94	85.1	0.0	21.4	2.00	2.00	0.00
EOB TO 15° INC										
3,650.0	15.00	0.00	3,641.5	1,255.54	97.6	0.0	24.5	2.00	2.00	0.00
3,700.0	15.52	356.76	3,689.7	1,207.30	110.8	-0.4	27.4	2.00	1.05	-6.47
3,800.0	16.70	350.92	3,785.8	1,111.22	138.3	-3.4	31.4	2.00	1.18	-5.84
3,900.0	18.02	345.87	3,881.2	1,015.77	167.5	-9.4	32.9	2.00	1.32	-5.05
SUSSEX										
3,976.8	19.11	342.47	3,954.0	943.00	191.0	-16.1	32.3	2.00	1.42	-4.43
4,000.0	19.45	341.52	3,975.9	921.07	198.3	-18.5	31.9	2.00	1.47	-4.11
4,100.0	20.97	337.75	4,069.8	827.22	230.6	-30.5	28.3	2.00	1.52	-3.77
4,200.0	22.56	334.49	4,162.7	734.35	264.5	-45.6	22.3	2.00	1.59	-3.27
EOB & T TO 24.2° INC & 331.65° AZ										

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MICKEY 1
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4897.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4897.0usft
Site:	SW NE SEC. 5 T6N R67W 6th P.M.	North Reference:	True
Well:	MICKEY 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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)
4,299.4	24.20	331.65	4,253.9	643.11	299.7	-63.5	13.8	2.00	1.65	-2.85
4,300.0	24.21	331.65	4,254.4	642.56	299.9	-63.6	13.7	1.98	1.98	-0.19
4,400.0	26.21	331.65	4,344.9	552.09	337.4	-83.8	3.6	2.00	2.00	0.00
SHANNON										
4,421.3	26.64	331.65	4,364.0	533.00	345.7	-88.3	1.3	2.00	2.00	0.00
4,500.0	28.21	331.65	4,433.8	463.16	377.6	-105.5	-7.4	2.00	2.00	0.00
4,600.0	30.21	331.65	4,521.1	375.88	420.5	-128.7	-19.0	2.00	2.00	0.00
4,700.0	32.21	331.65	4,606.6	290.36	466.1	-153.3	-31.4	2.00	2.00	0.00
4,800.0	34.21	331.65	4,690.3	206.70	514.3	-179.3	-44.4	2.00	2.00	0.00
4,900.0	36.21	331.65	4,772.0	125.00	565.1	-206.7	-58.2	2.00	2.00	0.00
5,000.0	38.21	331.65	4,851.6	45.36	618.3	-235.4	-72.6	2.00	2.00	0.00
5,100.0	40.21	331.65	4,929.1	-32.12	673.9	-265.4	-87.7	2.00	2.00	0.00
5,200.0	42.21	331.65	5,004.3	-107.34	731.9	-296.7	-103.5	2.00	2.00	0.00
5,300.0	44.21	331.65	5,077.2	-180.22	792.2	-329.2	-119.8	2.00	2.00	0.00
EOB TO 44.72° INC										
5,325.3	44.72	331.65	5,095.3	-198.28	807.8	-337.6	-124.0	2.00	2.00	0.00
5,400.0	44.72	331.65	5,148.4	-251.36	854.0	-362.6	-136.6	0.00	0.00	0.00
5,500.0	44.72	331.65	5,219.4	-322.42	915.9	-396.0	-153.4	0.00	0.00	0.00
5,600.0	44.72	331.65	5,290.5	-393.48	977.9	-429.4	-170.2	0.00	0.00	0.00
5,700.0	44.72	331.65	5,361.5	-464.54	1,039.8	-462.8	-187.0	0.00	0.00	0.00
5,800.0	44.72	331.65	5,432.6	-535.60	1,101.7	-496.2	-203.8	0.00	0.00	0.00
5,900.0	44.72	331.65	5,503.7	-606.66	1,163.6	-529.6	-220.5	0.00	0.00	0.00
6,000.0	44.72	331.65	5,574.7	-677.72	1,225.6	-563.0	-237.3	0.00	0.00	0.00
6,100.0	44.72	331.65	5,645.8	-748.77	1,287.5	-596.4	-254.1	0.00	0.00	0.00
6,200.0	44.72	331.65	5,716.8	-819.83	1,349.4	-629.8	-270.9	0.00	0.00	0.00
6,300.0	44.72	331.65	5,787.9	-890.89	1,411.3	-663.3	-287.7	0.00	0.00	0.00
6,400.0	44.72	331.65	5,859.0	-961.95	1,473.3	-696.7	-304.5	0.00	0.00	0.00
6,500.0	44.72	331.65	5,930.0	-1,033.01	1,535.2	-730.1	-321.3	0.00	0.00	0.00
6,600.0	44.72	331.65	6,001.1	-1,104.07	1,597.1	-763.5	-338.1	0.00	0.00	0.00
6,700.0	44.72	331.65	6,072.1	-1,175.13	1,659.0	-796.9	-354.9	0.00	0.00	0.00
6,800.0	44.72	331.65	6,143.2	-1,246.19	1,720.9	-830.3	-371.7	0.00	0.00	0.00
6,900.0	44.72	331.65	6,214.2	-1,317.25	1,782.9	-863.7	-388.5	0.00	0.00	0.00
7,000.0	44.72	331.65	6,285.3	-1,388.30	1,844.8	-897.1	-405.3	0.00	0.00	0.00
7,100.0	44.72	331.65	6,356.4	-1,459.36	1,906.7	-930.5	-422.1	0.00	0.00	0.00
7,200.0	44.72	331.65	6,427.4	-1,530.42	1,968.6	-963.9	-438.9	0.00	0.00	0.00
KOP (10°/100ft DGLG)										
7,283.5	44.72	331.65	6,486.8	-1,589.76	2,020.3	-991.8	-452.9	0.00	0.00	0.00
7,300.0	44.15	333.86	6,498.5	-1,601.54	2,030.6	-997.1	-455.4	9.97	-3.46	13.36
7,400.0	41.66	348.11	6,572.0	-1,674.96	2,094.6	-1,019.4	-460.9	10.00	-2.48	14.25
7,500.0	41.08	3.24	6,647.2	-1,750.19	2,160.0	-1,024.4	-449.3	10.00	-0.59	15.13
SHARON SPRINGS										
7,582.5	42.08	15.59	6,709.0	-1,812.00	2,213.8	-1,015.4	-427.1	10.00	1.22	14.97
7,600.0	42.46	18.13	6,722.0	-1,824.96	2,225.1	-1,012.0	-421.0	10.00	2.17	14.51
NIORARA										
7,630.1	43.24	22.40	6,744.0	-1,847.00	2,244.3	-1,004.9	-409.3	10.00	2.60	14.20
7,700.0	45.64	31.79	6,794.0	-1,896.99	2,287.7	-982.6	-376.8	10.00	3.42	13.43
7,800.0	50.25	43.76	6,861.1	-1,964.09	2,346.0	-937.0	-318.1	10.00	4.61	11.97
7,900.0	55.93	54.08	6,921.2	-2,024.23	2,398.2	-876.7	-246.6	10.00	5.68	10.31
8,000.0	62.36	63.01	6,972.6	-2,075.57	2,442.7	-803.6	-164.6	10.00	6.43	8.94
8,100.0	69.29	70.92	7,013.6	-2,116.55	2,478.2	-719.7	-74.5	10.00	6.93	7.91
FORT HAYS										
8,101.3	69.38	71.02	7,014.0	-2,117.00	2,478.6	-718.6	-73.3	10.00	7.13	7.50
8,200.0	76.55	78.12	7,042.9	-2,145.94	2,503.5	-627.6	20.9	10.00	7.26	7.20

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MICKEY 1
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4897.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4897.0usft
Site:	SW NE SEC. 5 T6N R67W 6th P.M.	North Reference:	True
Well:	MICKEY 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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)
CODELL										
8,256.1	80.72	81.96	7,054.0	-2,157.00	2,513.0	-573.5	75.7	10.00	7.43	6.83
8,300.0	84.00	84.89	7,059.8	-2,162.84	2,518.0	-530.3	118.8	10.00	7.49	6.69
HZ LP: 106ft FSL & 2177ft FEL of Sec 32										
8,379.6	90.00	90.13	7,064.0	-2,167.00	2,521.5	-450.9	196.5	10.00	7.53	6.59
8,400.0	90.00	90.13	7,064.0	-2,167.00	2,521.4	-430.5	216.2	0.00	0.00	0.00
8,500.0	90.00	90.13	7,064.0	-2,167.00	2,521.2	-330.5	313.0	0.00	0.00	0.00
8,600.0	90.00	90.13	7,064.0	-2,167.00	2,520.9	-230.5	409.7	0.00	0.00	0.00
8,700.0	90.00	90.13	7,064.0	-2,167.00	2,520.7	-130.5	506.4	0.00	0.00	0.00
8,800.0	90.00	90.13	7,064.0	-2,167.00	2,520.5	-30.5	603.2	0.00	0.00	0.00
8,900.0	90.00	90.13	7,064.0	-2,167.00	2,520.2	69.5	699.9	0.00	0.00	0.00
9,000.0	90.00	90.13	7,064.0	-2,167.00	2,520.0	169.5	796.7	0.00	0.00	0.00
9,100.0	90.00	90.13	7,064.0	-2,167.00	2,519.8	269.5	893.4	0.00	0.00	0.00
9,200.0	90.00	90.13	7,064.0	-2,167.00	2,519.5	369.5	990.1	0.00	0.00	0.00
9,300.0	90.00	90.13	7,064.0	-2,167.00	2,519.3	469.5	1,086.9	0.00	0.00	0.00
9,400.0	90.00	90.13	7,064.0	-2,167.00	2,519.1	569.5	1,183.6	0.00	0.00	0.00
9,500.0	90.00	90.13	7,064.0	-2,167.00	2,518.8	669.5	1,280.3	0.00	0.00	0.00
9,600.0	90.00	90.13	7,064.0	-2,167.00	2,518.6	769.5	1,377.1	0.00	0.00	0.00
9,700.0	90.00	90.13	7,064.0	-2,167.00	2,518.4	869.5	1,473.8	0.00	0.00	0.00
9,800.0	90.00	90.13	7,064.0	-2,167.00	2,518.1	969.5	1,570.6	0.00	0.00	0.00
9,900.0	90.00	90.13	7,064.0	-2,167.00	2,517.9	1,069.5	1,667.3	0.00	0.00	0.00
10,000.0	90.00	90.13	7,064.0	-2,167.00	2,517.7	1,169.5	1,764.0	0.00	0.00	0.00
10,100.0	90.00	90.13	7,064.0	-2,167.00	2,517.4	1,269.5	1,860.8	0.00	0.00	0.00
10,200.0	90.00	90.13	7,064.0	-2,167.00	2,517.2	1,369.5	1,957.5	0.00	0.00	0.00
10,300.0	90.00	90.13	7,064.0	-2,167.00	2,517.0	1,469.5	2,054.3	0.00	0.00	0.00
10,400.0	90.00	90.13	7,064.0	-2,167.00	2,516.7	1,569.5	2,151.0	0.00	0.00	0.00
10,500.0	90.00	90.13	7,064.0	-2,167.00	2,516.5	1,669.5	2,247.7	0.00	0.00	0.00
10,600.0	90.00	90.13	7,064.0	-2,167.00	2,516.3	1,769.5	2,344.5	0.00	0.00	0.00
10,700.0	90.00	90.13	7,064.0	-2,167.00	2,516.0	1,869.5	2,441.2	0.00	0.00	0.00
10,800.0	90.00	90.13	7,064.0	-2,167.00	2,515.8	1,969.5	2,537.9	0.00	0.00	0.00
10,900.0	90.00	90.13	7,064.0	-2,167.00	2,515.6	2,069.5	2,634.7	0.00	0.00	0.00
11,000.0	90.00	90.13	7,064.0	-2,167.00	2,515.3	2,169.5	2,731.4	0.00	0.00	0.00
11,100.0	90.00	90.13	7,064.0	-2,167.00	2,515.1	2,269.5	2,828.2	0.00	0.00	0.00
11,200.0	90.00	90.13	7,064.0	-2,167.00	2,514.9	2,369.5	2,924.9	0.00	0.00	0.00
11,300.0	90.00	90.13	7,064.0	-2,167.00	2,514.6	2,469.5	3,021.6	0.00	0.00	0.00
11,400.0	90.00	90.13	7,064.0	-2,167.00	2,514.4	2,569.5	3,118.4	0.00	0.00	0.00
11,500.0	90.00	90.13	7,064.0	-2,167.00	2,514.2	2,669.5	3,215.1	0.00	0.00	0.00
11,600.0	90.00	90.13	7,064.0	-2,167.00	2,513.9	2,769.5	3,311.9	0.00	0.00	0.00
11,700.0	90.00	90.13	7,064.0	-2,167.00	2,513.7	2,869.5	3,408.6	0.00	0.00	0.00
11,800.0	90.00	90.13	7,064.0	-2,167.00	2,513.4	2,969.5	3,505.3	0.00	0.00	0.00
11,900.0	90.00	90.13	7,064.0	-2,167.00	2,513.2	3,069.5	3,602.1	0.00	0.00	0.00
12,000.0	90.00	90.13	7,064.0	-2,167.00	2,513.0	3,169.5	3,698.8	0.00	0.00	0.00
12,100.0	90.00	90.13	7,064.0	-2,167.00	2,512.7	3,269.5	3,795.6	0.00	0.00	0.00
12,200.0	90.00	90.13	7,064.0	-2,167.00	2,512.5	3,369.5	3,892.3	0.00	0.00	0.00
12,300.0	90.00	90.13	7,064.0	-2,167.00	2,512.3	3,469.5	3,989.0	0.00	0.00	0.00
12,400.0	90.00	90.13	7,064.0	-2,167.00	2,512.0	3,569.5	4,085.8	0.00	0.00	0.00
12,500.0	90.00	90.13	7,064.0	-2,167.00	2,511.8	3,669.5	4,182.5	0.00	0.00	0.00
12,600.0	90.00	90.13	7,064.0	-2,167.00	2,511.6	3,769.5	4,279.2	0.00	0.00	0.00
12,700.0	90.00	90.13	7,064.0	-2,167.00	2,511.3	3,869.5	4,376.0	0.00	0.00	0.00
12,800.0	90.00	90.13	7,064.0	-2,167.00	2,511.1	3,969.5	4,472.7	0.00	0.00	0.00
12,900.0	90.00	90.13	7,064.0	-2,167.00	2,510.9	4,069.5	4,569.5	0.00	0.00	0.00
13,000.0	90.00	90.13	7,064.0	-2,167.00	2,510.6	4,169.5	4,666.2	0.00	0.00	0.00
13,100.0	90.00	90.13	7,064.0	-2,167.00	2,510.4	4,269.5	4,762.9	0.00	0.00	0.00
13,200.0	90.00	90.13	7,064.0	-2,167.00	2,510.2	4,369.5	4,859.7	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MICKEY 1
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4897.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4897.0usft
Site:	SW NE SEC. 5 T6N R67W 6th P.M.	North Reference:	True
Well:	MICKEY 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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)
13,300.0	90.00	90.13	7,064.0	-2,167.00	2,509.9	4,469.5	4,956.4	0.00	0.00	0.00
13,400.0	90.00	90.13	7,064.0	-2,167.00	2,509.7	4,569.5	5,053.2	0.00	0.00	0.00
13,500.0	90.00	90.13	7,064.0	-2,167.00	2,509.5	4,669.5	5,149.9	0.00	0.00	0.00
13,600.0	90.00	90.13	7,064.0	-2,167.00	2,509.2	4,769.5	5,246.6	0.00	0.00	0.00
13,700.0	90.00	90.13	7,064.0	-2,167.00	2,509.0	4,869.5	5,343.4	0.00	0.00	0.00
13,800.0	90.00	90.13	7,064.0	-2,167.00	2,508.8	4,969.5	5,440.1	0.00	0.00	0.00
13,900.0	90.00	90.13	7,064.0	-2,167.00	2,508.5	5,069.5	5,536.8	0.00	0.00	0.00
14,000.0	90.00	90.13	7,064.0	-2,167.00	2,508.3	5,169.5	5,633.6	0.00	0.00	0.00
14,100.0	90.00	90.13	7,064.0	-2,167.00	2,508.1	5,269.5	5,730.3	0.00	0.00	0.00
14,200.0	90.00	90.13	7,064.0	-2,167.00	2,507.8	5,369.4	5,827.1	0.00	0.00	0.00
14,300.0	90.00	90.13	7,064.0	-2,167.00	2,507.6	5,469.4	5,923.8	0.00	0.00	0.00
14,400.0	90.00	90.13	7,064.0	-2,167.00	2,507.4	5,569.4	6,020.5	0.00	0.00	0.00
14,500.0	90.00	90.13	7,064.0	-2,167.00	2,507.1	5,669.4	6,117.3	0.00	0.00	0.00
14,600.0	90.00	90.13	7,064.0	-2,167.00	2,506.9	5,769.4	6,214.0	0.00	0.00	0.00
14,700.0	90.00	90.13	7,064.0	-2,167.00	2,506.7	5,869.4	6,310.8	0.00	0.00	0.00
14,800.0	90.00	90.13	7,064.0	-2,167.00	2,506.4	5,969.4	6,407.5	0.00	0.00	0.00
14,900.0	90.00	90.13	7,064.0	-2,167.00	2,506.2	6,069.4	6,504.2	0.00	0.00	0.00
15,000.0	90.00	90.13	7,064.0	-2,167.00	2,506.0	6,169.4	6,601.0	0.00	0.00	0.00
15,100.0	90.00	90.13	7,064.0	-2,167.00	2,505.7	6,269.4	6,697.7	0.00	0.00	0.00
15,200.0	90.00	90.13	7,064.0	-2,167.00	2,505.5	6,369.4	6,794.4	0.00	0.00	0.00
15,300.0	90.00	90.13	7,064.0	-2,167.00	2,505.2	6,469.4	6,891.2	0.00	0.00	0.00
15,400.0	90.00	90.13	7,064.0	-2,167.00	2,505.0	6,569.4	6,987.9	0.00	0.00	0.00
15,500.0	90.00	90.13	7,064.0	-2,167.00	2,504.8	6,669.4	7,084.7	0.00	0.00	0.00
15,600.0	90.00	90.13	7,064.0	-2,167.00	2,504.5	6,769.4	7,181.4	0.00	0.00	0.00
15,700.0	90.00	90.13	7,064.0	-2,167.00	2,504.3	6,869.4	7,278.1	0.00	0.00	0.00
15,800.0	90.00	90.13	7,064.0	-2,167.00	2,504.1	6,969.4	7,374.9	0.00	0.00	0.00
15,900.0	90.00	90.13	7,064.0	-2,167.00	2,503.8	7,069.4	7,471.6	0.00	0.00	0.00
16,000.0	90.00	90.13	7,064.0	-2,167.00	2,503.6	7,169.4	7,568.4	0.00	0.00	0.00
16,100.0	90.00	90.13	7,064.0	-2,167.00	2,503.4	7,269.4	7,665.1	0.00	0.00	0.00
16,200.0	90.00	90.13	7,064.0	-2,167.00	2,503.1	7,369.4	7,761.8	0.00	0.00	0.00
16,300.0	90.00	90.13	7,064.0	-2,167.00	2,502.9	7,469.4	7,858.6	0.00	0.00	0.00
16,400.0	90.00	90.13	7,064.0	-2,167.00	2,502.7	7,569.4	7,955.3	0.00	0.00	0.00
16,500.0	90.00	90.13	7,064.0	-2,167.00	2,502.4	7,669.4	8,052.1	0.00	0.00	0.00
16,600.0	90.00	90.13	7,064.0	-2,167.00	2,502.2	7,769.4	8,148.8	0.00	0.00	0.00
16,700.0	90.00	90.13	7,064.0	-2,167.00	2,502.0	7,869.4	8,245.5	0.00	0.00	0.00
16,800.0	90.00	90.13	7,064.0	-2,167.00	2,501.7	7,969.4	8,342.3	0.00	0.00	0.00
16,900.0	90.00	90.13	7,064.0	-2,167.00	2,501.5	8,069.4	8,439.0	0.00	0.00	0.00
17,000.0	90.00	90.13	7,064.0	-2,167.00	2,501.3	8,169.4	8,535.7	0.00	0.00	0.00
17,100.0	90.00	90.13	7,064.0	-2,167.00	2,501.0	8,269.4	8,632.5	0.00	0.00	0.00
17,200.0	90.00	90.13	7,064.0	-2,167.00	2,500.8	8,369.4	8,729.2	0.00	0.00	0.00
17,300.0	90.00	90.13	7,064.0	-2,167.00	2,500.6	8,469.4	8,826.0	0.00	0.00	0.00
17,400.0	90.00	90.13	7,064.0	-2,167.00	2,500.3	8,569.4	8,922.7	0.00	0.00	0.00
17,500.0	90.00	90.13	7,064.0	-2,167.00	2,500.1	8,669.4	9,019.4	0.00	0.00	0.00
17,600.0	90.00	90.13	7,064.0	-2,167.00	2,499.9	8,769.4	9,116.2	0.00	0.00	0.00
17,700.0	90.00	90.13	7,064.0	-2,167.00	2,499.6	8,869.4	9,212.9	0.00	0.00	0.00
17,800.0	90.00	90.13	7,064.0	-2,167.00	2,499.4	8,969.4	9,309.7	0.00	0.00	0.00
17,900.0	90.00	90.13	7,064.0	-2,167.00	2,499.2	9,069.4	9,406.4	0.00	0.00	0.00
18,000.0	90.00	90.13	7,064.0	-2,167.00	2,498.9	9,169.4	9,503.1	0.00	0.00	0.00
18,100.0	90.00	90.13	7,064.0	-2,167.00	2,498.7	9,269.4	9,599.9	0.00	0.00	0.00
18,200.0	90.00	90.13	7,064.0	-2,167.00	2,498.5	9,369.4	9,696.6	0.00	0.00	0.00
18,300.0	90.00	90.13	7,064.0	-2,167.00	2,498.2	9,469.4	9,793.3	0.00	0.00	0.00
18,400.0	90.00	90.13	7,064.0	-2,167.00	2,498.0	9,569.4	9,890.1	0.00	0.00	0.00
BHL: 19ft FSL & 2633ft FEL of Sec 34										

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MICKEY 1
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4897.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4897.0usft
Site:	SW NE SEC. 5 T6N R67W 6th P.M.	North Reference:	True
Well:	MICKEY 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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)
18,462.0	90.00	90.13	7,064.0	-2,167.00	2,497.8	9,631.4	9,950.1	0.00	0.00	0.00

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,355.9	3,354.0	PARKMAN			
3,976.8	3,954.0	SUSSEX			
4,421.3	4,364.0	SHANNON			
7,582.5	6,709.0	SHARON SPRINGS			
7,630.1	6,744.0	NIOBRARA			
8,101.3	7,014.0	FORT HAYS			
8,256.1	7,054.0	CODELL			

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 2418ft FNL & 1768ft FEL of Sec 5
1,600.0	1,600.0	0.0	0.0	9 5/8" SURFACE CASING
2,900.0	2,900.0	0.0	0.0	START NUDGE (2°/100ft BUR)
3,650.0	3,641.5	97.6	0.0	EOB TO 15° INC
4,299.4	4,253.9	299.7	-63.5	EOB & T TO 24.2° INC & 331.65° AZ
5,325.3	5,095.3	807.8	-337.6	EOB TO 44.72° INC
7,283.5	6,486.8	2,020.3	-991.8	KOP (10°/100ft DGLG)
8,379.6	7,064.0	2,521.5	-450.9	HZ LP: 106ft FSL & 2177ft FEL of Sec 32
18,462.0	7,064.0	2,497.8	9,631.4	BHL: 19ft FSL & 2633ft FEL of Sec 34