

EXTRACTION OIL & GAS

WELD COUNTY

Sec 20-T5N-R65W

GP-J EVANS FED 20W-20-17N

ORIGINAL WELLBORE

Plan: PROPOSAL #1

Standard Planning Report

12 July, 2018

WELL DETAILS: GP-J EVANS FED 20W-20-17N

+N/-S	+E/-W	Northing	Ground Level:	4672.00				
0.00	0.00	1385999.84	Easting	Latitude	Longitude			Slot
			3227709.49	40° 23' 24.324 N	104° 40' 57.036 W			

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V/Sect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
3	250.00	3.00	262.49	249.93	-0.51	-3.89	2.00	262.49	3.90	
4	292.00	3.00	262.49	291.87	-0.80	-6.07	0.00	0.00	6.08	
5	442.00	0.00	0.00	441.81	-1.31	-9.96	2.00	180.00	9.98	
6	2400.19	0.00	0.00	2400.00	-1.31	-9.96	0.00	0.00	9.98	
7	2622.21	4.44	235.88	2621.79	-6.14	-17.08	2.00	235.88	17.15	
8	6383.83	4.44	235.88	6372.12	-169.51	-258.16	0.00	0.00	259.93	
9	717.24	90.00	719.27	6909.00	-19.42	-8.99	10.00	35.57	619.93	GP-J EVA
10	1790.66	90.00	270.37	6908.00	-123.48	-11490.29	0.00	0.00	11490.93	GP-J EVA

FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
3686.00	3689.62	PARKMAN
4425.00	4430.85	SUSSEX
4935.00	4942.38	SHANNON
6740.00	6796.75	SHARON SPRINGS
6775.00	6848.67	NIOBARA
6895.00	7124.90	NIO B TARGET

PROJECT DETAILS: WELD COUNTY

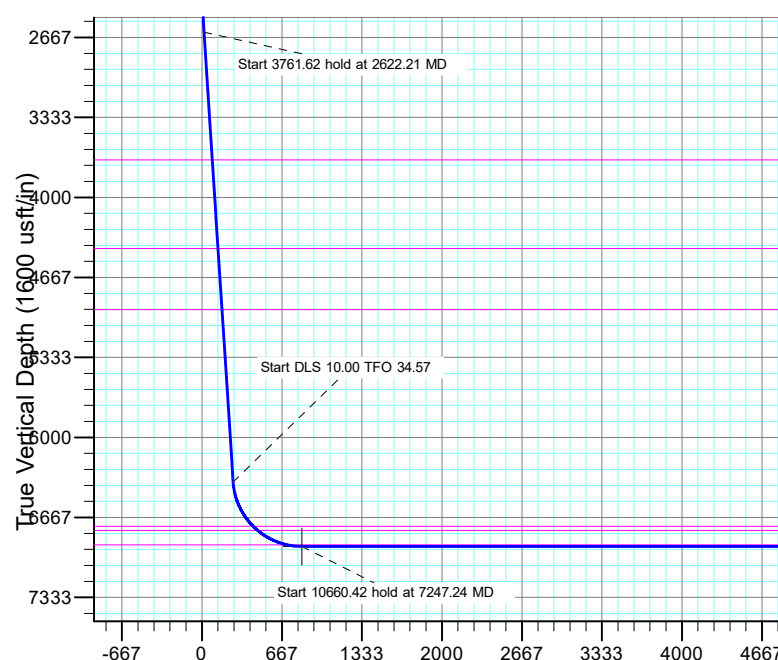
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level

SHL:
646' FNL, 1305' FEL
Sec 20-T5N-R65W

LP:
837' FNL, 2137' FEL
Sec 20-T5N-R65W

BHL:
826' FNL, 2221' FEL
Sec 24-T5N-R66W

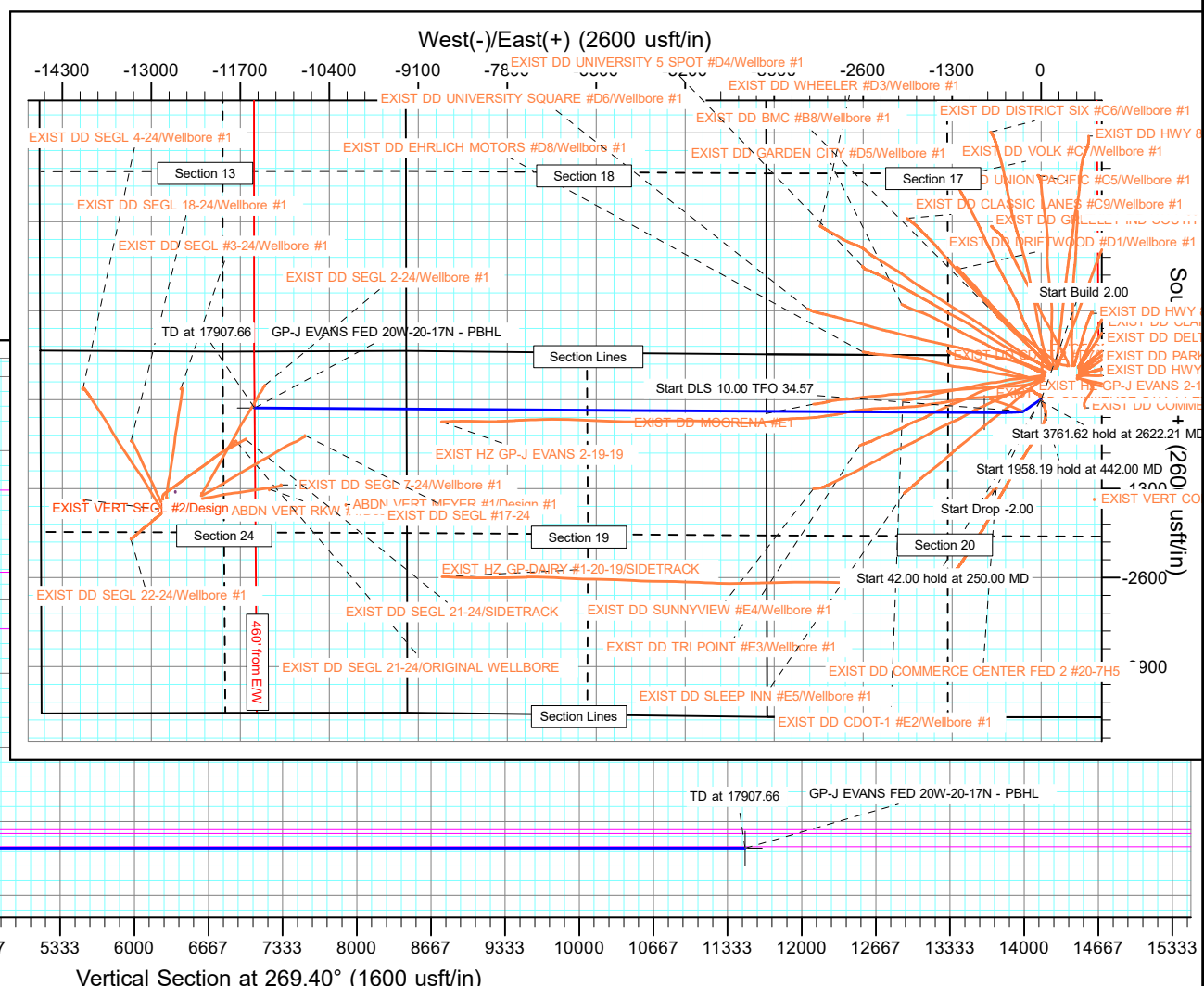


ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	Start Build 2.00
250.00	0.00	262.49	249.93	-0.51	-3.89	-0.51	3.93	Start 42.00 hold at 250.00 MD
292.00	3.00	262.49	291.87	-0.80	-6.07	-0.80	6.12	Start Drop -2.00
440.00	0.00	0.00	440.00	-1.31	-9.96	-1.31	10.05	Start 19.00 hold at 442.00 MD
2400.19	0.00	0.00	2400.00	-1.31	-9.96	-1.31	10.05	Start Build 2.00
2622.21	4.44	235.88	2621.79	-6.14	-17.08	-6.14	18.65	Start 3761.62 hold at 2622.21 MD
6383.83	4.44	235.88	6372.12	-169.51	-258.16	-169.51	309.87	Start DLS 10.00 TFO 34.57
7247.24	90.00	27.37	7247.00	-189.42	-83.09	-189.42	10.05	Start 19.00 hold at 7247.24 MD
17907.58	90.00	27.37	6908.00	121.18	-11490.29	121.18	11543.44	TD at 17807.58

DESIGN TARGET DETAILS

	Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
GP-J EVANS FED 2	GP-J EVANS FED 20W-20-17N	6989.00	-189.42	-830.09	1385802.78	3226881.18	40° 23' 22.452 N	104° 41' 7.764 W	Point
GP-J EVANS FED 2	- plan hits target center								
	GP-J EVANS FED 20W-20-17N	6989.00	-121.18	-11490.29	1385772.73	3216220.80	40° 23' 23.100 N	104° 43' 25.536 W	Point
	- plan hits target center								



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-J EVANS FED 20W-20-17N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4701.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4701.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-J EVANS FED 20W-20-17N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Project	WELD COUNTY		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Sec 20-T5N-R65W			
Site Position:		Northing:	1,386,203.84 usft	Latitude:	40° 23' 26.340 N
From:	Lat/Long	Easting:	3,227,707.61 usft	Longitude:	104° 40' 57.036 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.53 °

Well		GP-J EVANS FED 20W-20-17N				
Well Position	+N/-S	-204.01 usft	Northing:	1,385,999.84 usft	Latitude:	40° 23' 24.324 N
	+E/-W	0.00 usft	Easting:	3,227,709.49 usft	Longitude:	104° 40' 57.036 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,672.00 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/14/2016	8.28	66.89	52,521.52693075

Design	PROPOSAL #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	0.00	

Plan Survey Tool Program	Date	7/12/2018			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	17,907.66	PROPOSAL #1 (ORIGINAL WEL	MWD OWSG	
			OWSG MWD - Standard		

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-J EVANS FED 20W-20-17N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4701.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4701.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-J EVANS FED 20W-20-17N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	3.00	262.49	249.93	-0.51	-3.89	2.00	2.00	0.00	262.49	
292.00	3.00	262.49	291.87	-0.80	-6.07	0.00	0.00	0.00	0.00	
442.00	0.00	0.00	441.81	-1.31	-9.96	2.00	-2.00	0.00	180.00	
2,400.19	0.00	0.00	2,400.00	-1.31	-9.96	0.00	0.00	0.00	0.00	
2,622.21	4.44	235.88	2,621.79	-6.14	-17.08	2.00	2.00	0.00	235.88	
6,383.83	4.44	235.88	6,372.12	-169.51	-258.16	0.00	0.00	0.00	0.00	
7,247.24	90.00	270.37	6,908.00	-189.42	-830.09	10.00	9.91	3.99	34.57	GP-J EVANS FED 20'
17,907.66	90.00	270.37	6,908.00	-121.18	-11,490.29	0.00	0.00	0.00	0.00	GP-J EVANS FED 20'

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-J EVANS FED 20W-20-17N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4701.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4701.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-J EVANS FED 20W-20-17N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
200.00	2.00	262.49	199.98	-0.23	-1.73	-0.23	2.00	2.00	0.00
250.00	3.00	262.49	249.93	-0.51	-3.89	-0.51	2.00	2.00	0.00
Start 42.00 hold at 250.00 MD									
292.00	3.00	262.49	291.87	-0.80	-6.07	-0.80	0.00	0.00	0.00
Start Drop -2.00									
300.00	2.84	262.49	299.86	-0.85	-6.48	-0.85	2.00	-2.00	0.00
400.00	0.84	262.49	399.81	-1.27	-9.66	-1.27	2.00	-2.00	0.00
442.00	0.00	0.00	441.81	-1.31	-9.96	-1.31	2.00	-2.00	0.00
Start 1958.19 hold at 442.00 MD									
500.00	0.00	0.00	499.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
600.00	0.00	0.00	599.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
700.00	0.00	0.00	699.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
800.00	0.00	0.00	799.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
900.00	0.00	0.00	899.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,000.00	0.00	0.00	999.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,100.00	0.00	0.00	1,099.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,200.00	0.00	0.00	1,199.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,300.00	0.00	0.00	1,299.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,400.00	0.00	0.00	1,399.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,500.00	0.00	0.00	1,499.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,600.00	0.00	0.00	1,599.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,700.00	0.00	0.00	1,699.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,800.00	0.00	0.00	1,799.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
1,900.00	0.00	0.00	1,899.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
2,000.00	0.00	0.00	1,999.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
2,100.00	0.00	0.00	2,099.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
2,200.00	0.00	0.00	2,199.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
2,300.00	0.00	0.00	2,299.81	-1.31	-9.96	-1.31	0.00	0.00	0.00
2,400.19	0.00	0.00	2,400.00	-1.31	-9.96	-1.31	0.00	0.00	0.00
Start Build 2.00									
2,500.00	2.00	235.88	2,499.79	-2.29	-11.40	-2.29	2.00	2.00	0.00
2,600.00	4.00	235.88	2,599.64	-5.22	-15.73	-5.22	2.00	2.00	0.00
2,622.21	4.44	235.88	2,621.79	-6.14	-17.08	-6.14	2.00	2.00	0.00
Start 3761.62 hold at 2622.21 MD									
2,700.00	4.44	235.88	2,699.35	-9.52	-22.07	-9.52	0.00	0.00	0.00
2,800.00	4.44	235.88	2,799.05	-13.86	-28.48	-13.86	0.00	0.00	0.00
2,900.00	4.44	235.88	2,898.75	-18.20	-34.89	-18.20	0.00	0.00	0.00
3,000.00	4.44	235.88	2,998.45	-22.55	-41.29	-22.55	0.00	0.00	0.00
3,100.00	4.44	235.88	3,098.15	-26.89	-47.70	-26.89	0.00	0.00	0.00
3,200.00	4.44	235.88	3,197.85	-31.23	-54.11	-31.23	0.00	0.00	0.00
3,300.00	4.44	235.88	3,297.55	-35.58	-60.52	-35.58	0.00	0.00	0.00
3,400.00	4.44	235.88	3,397.25	-39.92	-66.93	-39.92	0.00	0.00	0.00
3,500.00	4.44	235.88	3,496.95	-44.26	-73.34	-44.26	0.00	0.00	0.00
3,600.00	4.44	235.88	3,596.65	-48.60	-79.75	-48.60	0.00	0.00	0.00
3,689.62	4.44	235.88	3,686.00	-52.50	-85.49	-52.50	0.00	0.00	0.00
PARKMAN									
3,700.00	4.44	235.88	3,696.35	-52.95	-86.16	-52.95	0.00	0.00	0.00
3,800.00	4.44	235.88	3,796.05	-57.29	-92.57	-57.29	0.00	0.00	0.00
3,900.00	4.44	235.88	3,895.75	-61.63	-98.97	-61.63	0.00	0.00	0.00
4,000.00	4.44	235.88	3,995.45	-65.98	-105.38	-65.98	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-J EVANS FED 20W-20-17N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4701.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4701.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-J EVANS FED 20W-20-17N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,100.00	4.44	235.88	4,095.15	-70.32	-111.79	-70.32	0.00	0.00	0.00
4,200.00	4.44	235.88	4,194.85	-74.66	-118.20	-74.66	0.00	0.00	0.00
4,300.00	4.44	235.88	4,294.55	-79.01	-124.61	-79.01	0.00	0.00	0.00
4,400.00	4.44	235.88	4,394.25	-83.35	-131.02	-83.35	0.00	0.00	0.00
4,430.85	4.44	235.88	4,425.00	-84.69	-133.00	-84.69	0.00	0.00	0.00
SUSSEX									
4,500.00	4.44	235.88	4,493.95	-87.69	-137.43	-87.69	0.00	0.00	0.00
4,600.00	4.44	235.88	4,593.65	-92.04	-143.84	-92.04	0.00	0.00	0.00
4,700.00	4.44	235.88	4,693.35	-96.38	-150.24	-96.38	0.00	0.00	0.00
4,800.00	4.44	235.88	4,793.05	-100.72	-156.65	-100.72	0.00	0.00	0.00
4,900.00	4.44	235.88	4,892.75	-105.07	-163.06	-105.07	0.00	0.00	0.00
4,942.38	4.44	235.88	4,935.00	-106.91	-165.78	-106.91	0.00	0.00	0.00
SHANNON									
5,000.00	4.44	235.88	4,992.45	-109.41	-169.47	-109.41	0.00	0.00	0.00
5,100.00	4.44	235.88	5,092.15	-113.75	-175.88	-113.75	0.00	0.00	0.00
5,200.00	4.44	235.88	5,191.85	-118.10	-182.29	-118.10	0.00	0.00	0.00
5,300.00	4.44	235.88	5,291.55	-122.44	-188.70	-122.44	0.00	0.00	0.00
5,400.00	4.44	235.88	5,391.25	-126.78	-195.11	-126.78	0.00	0.00	0.00
5,500.00	4.44	235.88	5,490.95	-131.13	-201.52	-131.13	0.00	0.00	0.00
5,600.00	4.44	235.88	5,590.65	-135.47	-207.92	-135.47	0.00	0.00	0.00
5,700.00	4.44	235.88	5,690.35	-139.81	-214.33	-139.81	0.00	0.00	0.00
5,800.00	4.44	235.88	5,790.05	-144.16	-220.74	-144.16	0.00	0.00	0.00
5,900.00	4.44	235.88	5,889.75	-148.50	-227.15	-148.50	0.00	0.00	0.00
6,000.00	4.44	235.88	5,989.45	-152.84	-233.56	-152.84	0.00	0.00	0.00
6,100.00	4.44	235.88	6,089.15	-157.18	-239.97	-157.18	0.00	0.00	0.00
6,200.00	4.44	235.88	6,188.85	-161.53	-246.38	-161.53	0.00	0.00	0.00
6,300.00	4.44	235.88	6,288.55	-165.87	-252.79	-165.87	0.00	0.00	0.00
6,383.83	4.44	235.88	6,372.12	-169.51	-258.16	-169.51	0.00	0.00	0.00
Start DLS 10.00 TFO 34.57									
6,400.00	5.84	244.92	6,388.23	-170.21	-259.42	-170.21	10.00	8.68	55.95
6,450.00	10.58	256.75	6,437.70	-172.34	-266.20	-172.34	10.00	9.46	23.64
6,500.00	15.48	261.23	6,486.40	-174.42	-277.27	-174.42	10.00	9.80	8.97
6,550.00	20.43	263.59	6,533.96	-176.41	-292.54	-176.41	10.00	9.90	4.71
6,600.00	25.39	265.05	6,580.00	-178.31	-311.90	-178.31	10.00	9.94	2.93
6,650.00	30.37	266.06	6,624.18	-180.10	-335.21	-180.10	10.00	9.96	2.02
6,700.00	35.35	266.81	6,666.17	-181.78	-362.28	-181.78	10.00	9.97	1.50
6,750.00	40.34	267.40	6,705.64	-183.32	-392.91	-183.32	10.00	9.97	1.17
6,796.75	45.01	267.85	6,740.00	-184.62	-424.56	-184.62	10.00	9.98	0.96
SHARON SPRINGS									
6,800.00	45.33	267.88	6,742.29	-184.71	-426.86	-184.71	10.00	9.98	0.87
6,848.67	50.19	268.27	6,775.00	-185.92	-462.87	-185.92	10.00	9.98	0.80
NIOBRARA									
6,850.00	50.32	268.28	6,775.85	-185.95	-463.89	-185.95	10.00	9.98	0.74
6,900.00	55.31	268.62	6,806.06	-187.02	-503.69	-187.02	10.00	9.98	0.69
6,950.00	60.31	268.93	6,832.68	-187.92	-545.99	-187.92	10.00	9.99	0.61
7,000.00	65.30	269.21	6,855.53	-188.64	-590.44	-188.64	10.00	9.99	0.56
7,050.00	70.30	269.46	6,874.42	-189.18	-636.71	-189.18	10.00	9.99	0.51
7,100.00	75.29	269.71	6,889.20	-189.52	-684.46	-189.52	10.00	9.99	0.48
7,124.90	77.78	269.82	6,895.00	-189.62	-708.67	-189.62	10.00	9.99	0.46
NIO B TARGET									
7,150.00	80.29	269.94	6,899.78	-189.67	-733.31	-189.67	10.00	9.99	0.46
7,200.00	85.28	270.16	6,906.06	-189.63	-782.90	-189.63	10.00	9.99	0.45
7,247.24	90.00	270.37	6,908.00	-189.42	-830.09	-189.42	10.00	9.99	0.44

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-J EVANS FED 20W-20-17N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4701.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4701.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-J EVANS FED 20W-20-17N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
Start 10660.42 hold at 7247.24 MD										
7,300.00	90.00	270.37	6,908.00	-189.08	-882.85	-189.08	0.00	0.00	0.00	
7,400.00	90.00	270.37	6,908.00	-188.44	-982.84	-188.44	0.00	0.00	0.00	
7,500.00	90.00	270.37	6,908.00	-187.80	-1,082.84	-187.80	0.00	0.00	0.00	
7,600.00	90.00	270.37	6,908.00	-187.16	-1,182.84	-187.16	0.00	0.00	0.00	
7,700.00	90.00	270.37	6,908.00	-186.52	-1,282.84	-186.52	0.00	0.00	0.00	
7,800.00	90.00	270.37	6,908.00	-185.88	-1,382.84	-185.88	0.00	0.00	0.00	
7,900.00	90.00	270.37	6,908.00	-185.24	-1,482.83	-185.24	0.00	0.00	0.00	
8,000.00	90.00	270.37	6,908.00	-184.60	-1,582.83	-184.60	0.00	0.00	0.00	
8,100.00	90.00	270.37	6,908.00	-183.96	-1,682.83	-183.96	0.00	0.00	0.00	
8,200.00	90.00	270.37	6,908.00	-183.32	-1,782.83	-183.32	0.00	0.00	0.00	
8,300.00	90.00	270.37	6,908.00	-182.68	-1,882.83	-182.68	0.00	0.00	0.00	
8,400.00	90.00	270.37	6,908.00	-182.04	-1,982.82	-182.04	0.00	0.00	0.00	
8,500.00	90.00	270.37	6,908.00	-181.40	-2,082.82	-181.40	0.00	0.00	0.00	
8,600.00	90.00	270.37	6,908.00	-180.76	-2,182.82	-180.76	0.00	0.00	0.00	
8,700.00	90.00	270.37	6,908.00	-180.12	-2,282.82	-180.12	0.00	0.00	0.00	
8,800.00	90.00	270.37	6,908.00	-179.48	-2,382.81	-179.48	0.00	0.00	0.00	
8,900.00	90.00	270.37	6,908.00	-178.84	-2,482.81	-178.84	0.00	0.00	0.00	
9,000.00	90.00	270.37	6,908.00	-178.20	-2,582.81	-178.20	0.00	0.00	0.00	
9,100.00	90.00	270.37	6,908.00	-177.56	-2,682.81	-177.56	0.00	0.00	0.00	
9,200.00	90.00	270.37	6,908.00	-176.92	-2,782.81	-176.92	0.00	0.00	0.00	
9,300.00	90.00	270.37	6,908.00	-176.28	-2,882.80	-176.28	0.00	0.00	0.00	
9,400.00	90.00	270.37	6,908.00	-175.64	-2,982.80	-175.64	0.00	0.00	0.00	
9,500.00	90.00	270.37	6,908.00	-175.00	-3,082.80	-175.00	0.00	0.00	0.00	
9,600.00	90.00	270.37	6,908.00	-174.36	-3,182.80	-174.36	0.00	0.00	0.00	
9,700.00	90.00	270.37	6,908.00	-173.72	-3,282.80	-173.72	0.00	0.00	0.00	
9,800.00	90.00	270.37	6,908.00	-173.08	-3,382.79	-173.08	0.00	0.00	0.00	
9,900.00	90.00	270.37	6,908.00	-172.44	-3,482.79	-172.44	0.00	0.00	0.00	
10,000.00	90.00	270.37	6,908.00	-171.80	-3,582.79	-171.80	0.00	0.00	0.00	
10,100.00	90.00	270.37	6,908.00	-171.16	-3,682.79	-171.16	0.00	0.00	0.00	
10,200.00	90.00	270.37	6,908.00	-170.52	-3,782.79	-170.52	0.00	0.00	0.00	
10,300.00	90.00	270.37	6,908.00	-169.88	-3,882.78	-169.88	0.00	0.00	0.00	
10,400.00	90.00	270.37	6,908.00	-169.24	-3,982.78	-169.24	0.00	0.00	0.00	
10,500.00	90.00	270.37	6,908.00	-168.60	-4,082.78	-168.60	0.00	0.00	0.00	
10,600.00	90.00	270.37	6,908.00	-167.96	-4,182.78	-167.96	0.00	0.00	0.00	
10,700.00	90.00	270.37	6,908.00	-167.32	-4,282.78	-167.32	0.00	0.00	0.00	
10,800.00	90.00	270.37	6,908.00	-166.68	-4,382.77	-166.68	0.00	0.00	0.00	
10,900.00	90.00	270.37	6,908.00	-166.04	-4,482.77	-166.04	0.00	0.00	0.00	
11,000.00	90.00	270.37	6,908.00	-165.40	-4,582.77	-165.40	0.00	0.00	0.00	
11,100.00	90.00	270.37	6,908.00	-164.76	-4,682.77	-164.76	0.00	0.00	0.00	
11,200.00	90.00	270.37	6,908.00	-164.12	-4,782.77	-164.12	0.00	0.00	0.00	
11,300.00	90.00	270.37	6,908.00	-163.48	-4,882.76	-163.48	0.00	0.00	0.00	
11,400.00	90.00	270.37	6,908.00	-162.84	-4,982.76	-162.84	0.00	0.00	0.00	
11,500.00	90.00	270.37	6,908.00	-162.20	-5,082.76	-162.20	0.00	0.00	0.00	
11,600.00	90.00	270.37	6,908.00	-161.56	-5,182.76	-161.56	0.00	0.00	0.00	
11,700.00	90.00	270.37	6,908.00	-160.92	-5,282.76	-160.92	0.00	0.00	0.00	
11,800.00	90.00	270.37	6,908.00	-160.28	-5,382.75	-160.28	0.00	0.00	0.00	
11,900.00	90.00	270.37	6,908.00	-159.64	-5,482.75	-159.64	0.00	0.00	0.00	
12,000.00	90.00	270.37	6,908.00	-159.00	-5,582.75	-159.00	0.00	0.00	0.00	
12,100.00	90.00	270.37	6,908.00	-158.36	-5,682.75	-158.36	0.00	0.00	0.00	
12,200.00	90.00	270.37	6,908.00	-157.72	-5,782.75	-157.72	0.00	0.00	0.00	
12,300.00	90.00	270.37	6,908.00	-157.08	-5,882.74	-157.08	0.00	0.00	0.00	
12,400.00	90.00	270.37	6,908.00	-156.44	-5,982.74	-156.44	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-J EVANS FED 20W-20-17N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4701.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4701.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-J EVANS FED 20W-20-17N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,500.00	90.00	270.37	6,908.00	-155.80	-6,082.74	-155.80	0.00	0.00	0.00
12,600.00	90.00	270.37	6,908.00	-155.16	-6,182.74	-155.16	0.00	0.00	0.00
12,700.00	90.00	270.37	6,908.00	-154.52	-6,282.74	-154.52	0.00	0.00	0.00
12,800.00	90.00	270.37	6,908.00	-153.88	-6,382.73	-153.88	0.00	0.00	0.00
12,900.00	90.00	270.37	6,908.00	-153.24	-6,482.73	-153.24	0.00	0.00	0.00
13,000.00	90.00	270.37	6,908.00	-152.60	-6,582.73	-152.60	0.00	0.00	0.00
13,100.00	90.00	270.37	6,908.00	-151.96	-6,682.73	-151.96	0.00	0.00	0.00
13,200.00	90.00	270.37	6,908.00	-151.32	-6,782.72	-151.32	0.00	0.00	0.00
13,300.00	90.00	270.37	6,908.00	-150.68	-6,882.72	-150.68	0.00	0.00	0.00
13,400.00	90.00	270.37	6,908.00	-150.04	-6,982.72	-150.04	0.00	0.00	0.00
13,500.00	90.00	270.37	6,908.00	-149.40	-7,082.72	-149.40	0.00	0.00	0.00
13,600.00	90.00	270.37	6,908.00	-148.76	-7,182.72	-148.76	0.00	0.00	0.00
13,700.00	90.00	270.37	6,908.00	-148.12	-7,282.71	-148.12	0.00	0.00	0.00
13,800.00	90.00	270.37	6,908.00	-147.48	-7,382.71	-147.48	0.00	0.00	0.00
13,900.00	90.00	270.37	6,908.00	-146.84	-7,482.71	-146.84	0.00	0.00	0.00
14,000.00	90.00	270.37	6,908.00	-146.19	-7,582.71	-146.19	0.00	0.00	0.00
14,100.00	90.00	270.37	6,908.00	-145.55	-7,682.71	-145.55	0.00	0.00	0.00
14,200.00	90.00	270.37	6,908.00	-144.91	-7,782.70	-144.91	0.00	0.00	0.00
14,300.00	90.00	270.37	6,908.00	-144.27	-7,882.70	-144.27	0.00	0.00	0.00
14,400.00	90.00	270.37	6,908.00	-143.63	-7,982.70	-143.63	0.00	0.00	0.00
14,500.00	90.00	270.37	6,908.00	-142.99	-8,082.70	-142.99	0.00	0.00	0.00
14,600.00	90.00	270.37	6,908.00	-142.35	-8,182.70	-142.35	0.00	0.00	0.00
14,700.00	90.00	270.37	6,908.00	-141.71	-8,282.69	-141.71	0.00	0.00	0.00
14,800.00	90.00	270.37	6,908.00	-141.07	-8,382.69	-141.07	0.00	0.00	0.00
14,900.00	90.00	270.37	6,908.00	-140.43	-8,482.69	-140.43	0.00	0.00	0.00
15,000.00	90.00	270.37	6,908.00	-139.79	-8,582.69	-139.79	0.00	0.00	0.00
15,100.00	90.00	270.37	6,908.00	-139.15	-8,682.69	-139.15	0.00	0.00	0.00
15,200.00	90.00	270.37	6,908.00	-138.51	-8,782.68	-138.51	0.00	0.00	0.00
15,300.00	90.00	270.37	6,908.00	-137.87	-8,882.68	-137.87	0.00	0.00	0.00
15,400.00	90.00	270.37	6,908.00	-137.23	-8,982.68	-137.23	0.00	0.00	0.00
15,500.00	90.00	270.37	6,908.00	-136.59	-9,082.68	-136.59	0.00	0.00	0.00
15,600.00	90.00	270.37	6,908.00	-135.95	-9,182.68	-135.95	0.00	0.00	0.00
15,700.00	90.00	270.37	6,908.00	-135.31	-9,282.67	-135.31	0.00	0.00	0.00
15,800.00	90.00	270.37	6,908.00	-134.67	-9,382.67	-134.67	0.00	0.00	0.00
15,900.00	90.00	270.37	6,908.00	-134.03	-9,482.67	-134.03	0.00	0.00	0.00
16,000.00	90.00	270.37	6,908.00	-133.39	-9,582.67	-133.39	0.00	0.00	0.00
16,100.00	90.00	270.37	6,908.00	-132.75	-9,682.67	-132.75	0.00	0.00	0.00
16,200.00	90.00	270.37	6,908.00	-132.11	-9,782.66	-132.11	0.00	0.00	0.00
16,300.00	90.00	270.37	6,908.00	-131.47	-9,882.66	-131.47	0.00	0.00	0.00
16,400.00	90.00	270.37	6,908.00	-130.83	-9,982.66	-130.83	0.00	0.00	0.00
16,500.00	90.00	270.37	6,908.00	-130.19	-10,082.66	-130.19	0.00	0.00	0.00
16,600.00	90.00	270.37	6,908.00	-129.55	-10,182.66	-129.55	0.00	0.00	0.00
16,700.00	90.00	270.37	6,908.00	-128.91	-10,282.65	-128.91	0.00	0.00	0.00
16,800.00	90.00	270.37	6,908.00	-128.27	-10,382.65	-128.27	0.00	0.00	0.00
16,900.00	90.00	270.37	6,908.00	-127.63	-10,482.65	-127.63	0.00	0.00	0.00
17,000.00	90.00	270.37	6,908.00	-126.99	-10,582.65	-126.99	0.00	0.00	0.00
17,100.00	90.00	270.37	6,908.00	-126.35	-10,682.65	-126.35	0.00	0.00	0.00
17,200.00	90.00	270.37	6,908.00	-125.71	-10,782.64	-125.71	0.00	0.00	0.00
17,300.00	90.00	270.37	6,908.00	-125.07	-10,882.64	-125.07	0.00	0.00	0.00
17,400.00	90.00	270.37	6,908.00	-124.43	-10,982.64	-124.43	0.00	0.00	0.00
17,500.00	90.00	270.37	6,908.00	-123.79	-11,082.64	-123.79	0.00	0.00	0.00
17,600.00	90.00	270.37	6,908.00	-123.15	-11,182.63	-123.15	0.00	0.00	0.00
17,700.00	90.00	270.37	6,908.00	-122.51	-11,282.63	-122.51	0.00	0.00	0.00
17,800.00	90.00	270.37	6,908.00	-121.87	-11,382.63	-121.87	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-J EVANS FED 20W-20-17N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4701.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4701.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-J EVANS FED 20W-20-17N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
17,907.66	90.00	270.37	6,908.00	-121.18	-11,490.29	-121.18	0.00	0.00	0.00
TD at 17907.66									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
GP-J EVANS FED 20W- - plan hits target center - Point	0.00	0.00	6,908.00	-189.42	-830.09	1,385,802.78	3,226,881.18	40° 23' 22.452 N	104° 41' 7.764 W
GP-J EVANS FED 20W- - plan hits target center - Point	0.00	0.00	6,908.00	-121.18	-11,490.29	1,385,772.73	3,216,220.81	40° 23' 23.100 N	104° 43' 25.536 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,689.62	3,686.00	PARKMAN				
4,430.85	4,425.00	SUSSEX				
4,942.38	4,935.00	SHANNON				
6,796.75	6,740.00	SHARON SPRINGS				
6,848.67	6,775.00	NIOBRARA				
7,124.90	6,895.00	NIO B TARGET				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
100.00	100.00	0.00	0.00	Start Build 2.00
250.00	249.93	-0.51	-3.89	Start 42.00 hold at 250.00 MD
292.00	291.87	-0.80	-6.07	Start Drop -2.00
442.00	441.81	-1.31	-9.96	Start 1958.19 hold at 442.00 MD
2,400.19	2,400.00	-1.31	-9.96	Start Build 2.00
2,622.21	2,621.79	-6.14	-17.08	Start 3761.62 hold at 2622.21 MD
6,383.83	6,372.12	-169.51	-258.16	Start DLS 10.00 TFO 34.57
7,247.24	6,908.00	-189.42	-830.09	Start 10660.42 hold at 7247.24 MD
17,907.66	6,908.00	-121.18	-11,490.29	TD at 17907.66