

EXTRACTION OIL & GAS

WELD COUNTY

Sec 20-T5N-R65W

GP CBJ FED 17W-25-05

OWB

Plan: PROPOSAL 1

Standard Planning Report

25 March, 2021

Vertical Section at 83.61° (1600 usft/in)

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference	Well GP CBJ FED 17W-25-05
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4702.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4702.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP CBJ FED 17W-25-05	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
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:	40.390650°N
From:	Lat/Long	Easting:	3,227,707.61 usft	Longitude:	104.682510°W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.53 °

Well	GP CBJ FED 17W-25-05					
Well Position	+N/-S	-272.87 usft	Northing:	1,385,931.45 usft	Latitude:	40.389901°N
	+E/-W	50.70 usft	Easting:	3,227,760.82 usft	Longitude:	104.682328°W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,673.00 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	3/1/2021	7.84	66.67	51,988.91536459

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	83.61	

Plan Survey Tool Program	Date	3/25/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	18,810.05	PROPOSAL 1 (OWB)	MWD OWSG	
				OWSG MWD - Standard	

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	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,720.59	14.41	331.99	1,713.02	79.59	-42.33	2.00	2.00	0.00	331.99	
6,459.75	14.41	331.99	6,303.04	1,120.98	-596.23	0.00	0.00	0.00	0.00	
7,426.77	90.00	89.96	6,927.00	1,263.03	-27.30	10.00	7.82	12.20	117.21	GP CBJ FED 17W-05
18,810.05	90.00	89.96	6,927.00	1,271.47	11,355.98	0.00	0.00	0.00	0.00	GP CBJ FED 17W-05

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Project:	WELD COUNTY	MD Reference:	KB 29' @ 4702.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP CBJ FED 17W-25-05	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
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
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
852.00	0.00	0.00	852.00	0.00	0.00	0.00	0.00	0.00	0.00
Fox Hills Base:									
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,100.00	2.00	331.99	1,099.98	1.54	-0.82	-0.64	2.00	2.00	0.00
1,200.00	4.00	331.99	1,199.84	6.16	-3.28	-2.57	2.00	2.00	0.00
1,300.00	6.00	331.99	1,299.45	13.86	-7.37	-5.78	2.00	2.00	0.00
1,400.00	8.00	331.99	1,398.70	24.61	-13.09	-10.27	2.00	2.00	0.00
1,500.00	10.00	331.99	1,497.47	38.43	-20.44	-16.04	2.00	2.00	0.00
1,600.00	12.00	331.99	1,595.62	55.27	-29.40	-23.07	2.00	2.00	0.00
1,700.00	14.00	331.99	1,693.06	75.13	-39.96	-31.35	2.00	2.00	0.00
1,720.59	14.41	331.99	1,713.02	79.59	-42.33	-33.21	2.00	2.00	0.00
Start 4739.16 hold at 1720.59 MD									
1,800.00	14.41	331.99	1,789.93	97.04	-51.61	-40.50	0.00	0.00	0.00
1,900.00	14.41	331.99	1,886.78	119.02	-63.30	-49.67	0.00	0.00	0.00
2,000.00	14.41	331.99	1,983.63	140.99	-74.99	-58.84	0.00	0.00	0.00
2,100.00	14.41	331.99	2,080.49	162.96	-86.68	-68.01	0.00	0.00	0.00
2,200.00	14.41	331.99	2,177.34	184.94	-98.37	-77.18	0.00	0.00	0.00
2,300.00	14.41	331.99	2,274.19	206.91	-110.05	-86.35	0.00	0.00	0.00
2,400.00	14.41	331.99	2,371.05	228.89	-121.74	-95.52	0.00	0.00	0.00
2,500.00	14.41	331.99	2,467.90	250.86	-133.43	-104.69	0.00	0.00	0.00
2,600.00	14.41	331.99	2,564.75	272.84	-145.12	-113.86	0.00	0.00	0.00
2,700.00	14.41	331.99	2,661.60	294.81	-156.80	-123.03	0.00	0.00	0.00
2,800.00	14.41	331.99	2,758.46	316.78	-168.49	-132.20	0.00	0.00	0.00
2,900.00	14.41	331.99	2,855.31	338.76	-180.18	-141.37	0.00	0.00	0.00
3,000.00	14.41	331.99	2,952.16	360.73	-191.87	-150.54	0.00	0.00	0.00
3,100.00	14.41	331.99	3,049.02	382.71	-203.55	-159.71	0.00	0.00	0.00
3,200.00	14.41	331.99	3,145.87	404.68	-215.24	-168.88	0.00	0.00	0.00
3,300.00	14.41	331.99	3,242.72	426.65	-226.93	-178.05	0.00	0.00	0.00
3,400.00	14.41	331.99	3,339.58	448.63	-238.62	-187.22	0.00	0.00	0.00
3,500.00	14.41	331.99	3,436.43	470.60	-250.31	-196.39	0.00	0.00	0.00
3,600.00	14.41	331.99	3,533.28	492.58	-261.99	-205.56	0.00	0.00	0.00
3,700.00	14.41	331.99	3,630.14	514.55	-273.68	-214.73	0.00	0.00	0.00
3,746.32	14.41	331.99	3,675.00	524.73	-279.09	-218.98	0.00	0.00	0.00
Parkman:									
3,800.00	14.41	331.99	3,726.99	536.53	-285.37	-223.90	0.00	0.00	0.00
3,900.00	14.41	331.99	3,823.84	558.50	-297.06	-233.07	0.00	0.00	0.00
4,000.00	14.41	331.99	3,920.70	580.47	-308.74	-242.24	0.00	0.00	0.00
4,100.00	14.41	331.99	4,017.55	602.45	-320.43	-251.41	0.00	0.00	0.00
4,187.20	14.41	331.99	4,102.00	621.61	-330.62	-259.40	0.00	0.00	0.00
Sussex:									
4,200.00	14.41	331.99	4,114.40	624.42	-332.12	-260.58	0.00	0.00	0.00

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Wellbore:	OWB		
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)	
4,300.00	14.41	331.99	4,211.26	646.40	-343.81	-269.75	0.00	0.00	0.00	
4,400.00	14.41	331.99	4,308.11	668.37	-355.49	-278.92	0.00	0.00	0.00	
4,500.00	14.41	331.99	4,404.96	690.35	-367.18	-288.09	0.00	0.00	0.00	
4,600.00	14.41	331.99	4,501.81	712.32	-378.87	-297.26	0.00	0.00	0.00	
4,700.00	14.41	331.99	4,598.67	734.29	-390.56	-306.43	0.00	0.00	0.00	
4,800.00	14.41	331.99	4,695.52	756.27	-402.25	-315.60	0.00	0.00	0.00	
4,900.00	14.41	331.99	4,792.37	778.24	-413.93	-324.77	0.00	0.00	0.00	
4,909.94	14.41	331.99	4,802.00	780.43	-415.09	-325.68	0.00	0.00	0.00	
Shannon:										
5,000.00	14.41	331.99	4,889.23	800.22	-425.62	-333.94	0.00	0.00	0.00	
5,100.00	14.41	331.99	4,986.08	822.19	-437.31	-343.11	0.00	0.00	0.00	
5,200.00	14.41	331.99	5,082.93	844.16	-449.00	-352.28	0.00	0.00	0.00	
5,300.00	14.41	331.99	5,179.79	866.14	-460.68	-361.45	0.00	0.00	0.00	
5,400.00	14.41	331.99	5,276.64	888.11	-472.37	-370.62	0.00	0.00	0.00	
5,500.00	14.41	331.99	5,373.49	910.09	-484.06	-379.79	0.00	0.00	0.00	
5,600.00	14.41	331.99	5,470.35	932.06	-495.75	-388.96	0.00	0.00	0.00	
5,700.00	14.41	331.99	5,567.20	954.04	-507.43	-398.13	0.00	0.00	0.00	
5,800.00	14.41	331.99	5,664.05	976.01	-519.12	-407.30	0.00	0.00	0.00	
5,900.00	14.41	331.99	5,760.91	997.98	-530.81	-416.47	0.00	0.00	0.00	
6,000.00	14.41	331.99	5,857.76	1,019.96	-542.50	-425.64	0.00	0.00	0.00	
6,100.00	14.41	331.99	5,954.61	1,041.93	-554.19	-434.81	0.00	0.00	0.00	
6,200.00	14.41	331.99	6,051.47	1,063.91	-565.87	-443.98	0.00	0.00	0.00	
6,300.00	14.41	331.99	6,148.32	1,085.88	-577.56	-453.15	0.00	0.00	0.00	
6,400.00	14.41	331.99	6,245.17	1,107.86	-589.25	-462.32	0.00	0.00	0.00	
6,459.75	14.41	331.99	6,303.04	1,120.98	-596.23	-467.80	0.00	0.00	0.00	
Start DLS 10.00 TFO 117.21										
6,500.00	13.06	348.03	6,342.15	1,129.86	-599.53	-470.09	10.00	-3.36	39.84	
6,550.00	12.99	10.34	6,390.90	1,140.92	-599.69	-469.02	10.00	-0.13	44.63	
6,600.00	14.71	30.10	6,439.47	1,151.95	-595.50	-463.62	10.00	3.42	39.51	
6,650.00	17.69	44.58	6,487.50	1,162.86	-586.98	-453.94	10.00	5.96	28.97	
6,700.00	21.41	54.60	6,534.62	1,173.56	-574.20	-440.05	10.00	7.45	20.03	
6,750.00	25.56	61.63	6,580.48	1,183.98	-557.26	-422.06	10.00	8.30	14.07	
6,800.00	29.96	66.77	6,624.72	1,194.04	-536.28	-400.09	10.00	8.79	10.27	
6,850.00	34.50	70.68	6,667.01	1,203.66	-511.43	-374.32	10.00	9.09	7.82	
6,900.00	39.15	73.77	6,707.02	1,212.76	-482.89	-344.95	10.00	9.29	6.18	
6,950.00	43.86	76.30	6,744.46	1,221.28	-450.89	-312.20	10.00	9.42	5.05	
6,971.94	45.94	77.27	6,760.00	1,224.82	-435.81	-296.82	10.00	9.50	4.44	
Sharon Springs (Confining Zone):										
6,996.93	48.33	78.30	6,777.00	1,228.69	-417.91	-278.60	10.00	9.53	4.12	
Niobrara:										
7,000.00	48.62	78.42	6,779.03	1,229.16	-415.66	-276.31	10.00	9.55	3.95	
7,024.74	50.99	79.36	6,795.00	1,232.79	-397.12	-257.48	10.00	9.57	3.80	
A Chalk:										
7,050.00	53.41	80.26	6,810.48	1,236.32	-377.48	-237.57	10.00	9.60	3.55	
7,054.25	53.82	80.40	6,813.00	1,236.90	-374.11	-234.16	10.00	9.61	3.42	
A Marl:										
7,100.00	58.23	81.88	6,838.56	1,242.73	-336.63	-196.26	10.00	9.64	3.22	
7,150.00	63.07	83.34	6,863.07	1,248.32	-293.42	-152.70	10.00	9.67	2.92	
7,200.00	67.92	84.67	6,883.80	1,253.06	-248.19	-107.22	10.00	9.70	2.68	
7,250.00	72.77	85.92	6,900.62	1,256.91	-201.27	-60.17	10.00	9.72	2.50	
7,273.01	75.01	86.47	6,907.00	1,258.38	-179.22	-38.08	10.00	9.73	2.40	
Payzone - B2 Chalk:										

Planning Report

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Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4702.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4702.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP CBJ FED 17W-25-05	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
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)	
7,300.00	77.64	87.11	6,913.38	1,259.84	-153.04	-11.90	10.00	9.74	2.34	
7,350.00	82.51	88.25	6,921.99	1,261.83	-103.84	37.21	10.00	9.74	2.28	
7,400.00	87.39	89.36	6,926.39	1,262.87	-54.06	86.79	10.00	9.75	2.23	
7,426.77	90.00	89.96	6,927.00	1,263.03	-27.30	113.41	10.00	9.75	2.21	
Start 11383.27 hold at 7426.77 MD - Landing Point:										
7,500.00	90.00	89.96	6,927.00	1,263.08	45.93	186.19	0.00	0.00	0.00	
7,600.00	90.00	89.96	6,927.00	1,263.16	145.93	285.57	0.00	0.00	0.00	
7,700.00	90.00	89.96	6,927.00	1,263.23	245.93	384.96	0.00	0.00	0.00	
7,800.00	90.00	89.96	6,927.00	1,263.30	345.93	484.35	0.00	0.00	0.00	
7,900.00	90.00	89.96	6,927.00	1,263.38	445.93	583.74	0.00	0.00	0.00	
8,000.00	90.00	89.96	6,927.00	1,263.45	545.93	683.12	0.00	0.00	0.00	
8,100.00	90.00	89.96	6,927.00	1,263.53	645.93	782.51	0.00	0.00	0.00	
8,200.00	90.00	89.96	6,927.00	1,263.60	745.93	881.90	0.00	0.00	0.00	
8,300.00	90.00	89.96	6,927.00	1,263.67	845.93	981.28	0.00	0.00	0.00	
8,400.00	90.00	89.96	6,927.00	1,263.75	945.93	1,080.67	0.00	0.00	0.00	
8,500.00	90.00	89.96	6,927.00	1,263.82	1,045.93	1,180.06	0.00	0.00	0.00	
8,600.00	90.00	89.96	6,927.00	1,263.90	1,145.93	1,279.45	0.00	0.00	0.00	
8,700.00	90.00	89.96	6,927.00	1,263.97	1,245.93	1,378.83	0.00	0.00	0.00	
8,800.00	90.00	89.96	6,927.00	1,264.05	1,345.93	1,478.22	0.00	0.00	0.00	
8,900.00	90.00	89.96	6,927.00	1,264.12	1,445.93	1,577.61	0.00	0.00	0.00	
9,000.00	90.00	89.96	6,927.00	1,264.19	1,545.93	1,677.00	0.00	0.00	0.00	
9,100.00	90.00	89.96	6,927.00	1,264.27	1,645.93	1,776.38	0.00	0.00	0.00	
9,200.00	90.00	89.96	6,927.00	1,264.34	1,745.93	1,875.77	0.00	0.00	0.00	
9,300.00	90.00	89.96	6,927.00	1,264.42	1,845.93	1,975.16	0.00	0.00	0.00	
9,400.00	90.00	89.96	6,927.00	1,264.49	1,945.93	2,074.54	0.00	0.00	0.00	
9,500.00	90.00	89.96	6,927.00	1,264.56	2,045.93	2,173.93	0.00	0.00	0.00	
9,600.00	90.00	89.96	6,927.00	1,264.64	2,145.93	2,273.32	0.00	0.00	0.00	
9,700.00	90.00	89.96	6,927.00	1,264.71	2,245.93	2,372.71	0.00	0.00	0.00	
9,800.00	90.00	89.96	6,927.00	1,264.79	2,345.93	2,472.09	0.00	0.00	0.00	
9,900.00	90.00	89.96	6,927.00	1,264.86	2,445.93	2,571.48	0.00	0.00	0.00	
10,000.00	90.00	89.96	6,927.00	1,264.94	2,545.93	2,670.87	0.00	0.00	0.00	
10,100.00	90.00	89.96	6,927.00	1,265.01	2,645.93	2,770.26	0.00	0.00	0.00	
10,200.00	90.00	89.96	6,927.00	1,265.08	2,745.93	2,869.64	0.00	0.00	0.00	
10,300.00	90.00	89.96	6,927.00	1,265.16	2,845.93	2,969.03	0.00	0.00	0.00	
10,400.00	90.00	89.96	6,927.00	1,265.23	2,945.93	3,068.42	0.00	0.00	0.00	
10,500.00	90.00	89.96	6,927.00	1,265.31	3,045.93	3,167.80	0.00	0.00	0.00	
10,600.00	90.00	89.96	6,927.00	1,265.38	3,145.93	3,267.19	0.00	0.00	0.00	
10,700.00	90.00	89.96	6,927.00	1,265.45	3,245.93	3,366.58	0.00	0.00	0.00	
10,800.00	90.00	89.96	6,927.00	1,265.53	3,345.93	3,465.97	0.00	0.00	0.00	
10,900.00	90.00	89.96	6,927.00	1,265.60	3,445.93	3,565.35	0.00	0.00	0.00	
11,000.00	90.00	89.96	6,927.00	1,265.68	3,545.93	3,664.74	0.00	0.00	0.00	
11,100.00	90.00	89.96	6,927.00	1,265.75	3,645.93	3,764.13	0.00	0.00	0.00	
11,200.00	90.00	89.96	6,927.00	1,265.82	3,745.93	3,863.52	0.00	0.00	0.00	
11,300.00	90.00	89.96	6,927.00	1,265.90	3,845.93	3,962.90	0.00	0.00	0.00	
11,400.00	90.00	89.96	6,927.00	1,265.97	3,945.93	4,062.29	0.00	0.00	0.00	
11,500.00	90.00	89.96	6,927.00	1,266.05	4,045.93	4,161.68	0.00	0.00	0.00	
11,600.00	90.00	89.96	6,927.00	1,266.12	4,145.93	4,261.06	0.00	0.00	0.00	
11,700.00	90.00	89.96	6,927.00	1,266.20	4,245.93	4,360.45	0.00	0.00	0.00	
11,800.00	90.00	89.96	6,927.00	1,266.27	4,345.93	4,459.84	0.00	0.00	0.00	
11,900.00	90.00	89.96	6,927.00	1,266.34	4,445.93	4,559.23	0.00	0.00	0.00	
12,000.00	90.00	89.96	6,927.00	1,266.42	4,545.93	4,658.61	0.00	0.00	0.00	
12,100.00	90.00	89.96	6,927.00	1,266.49	4,645.93	4,758.00	0.00	0.00	0.00	
12,200.00	90.00	89.96	6,927.00	1,266.57	4,745.93	4,857.39	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference	Well GP CBJ FED 17W-25-05
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4702.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4702.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP CBJ FED 17W-25-05	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
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)
12,300.00	90.00	89.96	6,927.00	1,266.64	4,845.93	4,956.77	0.00	0.00	0.00
12,400.00	90.00	89.96	6,927.00	1,266.71	4,945.93	5,056.16	0.00	0.00	0.00
12,500.00	90.00	89.96	6,927.00	1,266.79	5,045.93	5,155.55	0.00	0.00	0.00
12,600.00	90.00	89.96	6,927.00	1,266.86	5,145.93	5,254.94	0.00	0.00	0.00
12,700.00	90.00	89.96	6,927.00	1,266.94	5,245.93	5,354.32	0.00	0.00	0.00
12,800.00	90.00	89.96	6,927.00	1,267.01	5,345.93	5,453.71	0.00	0.00	0.00
12,900.00	90.00	89.96	6,927.00	1,267.09	5,445.93	5,553.10	0.00	0.00	0.00
13,000.00	90.00	89.96	6,927.00	1,267.16	5,545.93	5,652.49	0.00	0.00	0.00
13,100.00	90.00	89.96	6,927.00	1,267.23	5,645.93	5,751.87	0.00	0.00	0.00
13,200.00	90.00	89.96	6,927.00	1,267.31	5,745.93	5,851.26	0.00	0.00	0.00
13,300.00	90.00	89.96	6,927.00	1,267.38	5,845.93	5,950.65	0.00	0.00	0.00
13,400.00	90.00	89.96	6,927.00	1,267.46	5,945.93	6,050.03	0.00	0.00	0.00
13,500.00	90.00	89.96	6,927.00	1,267.53	6,045.93	6,149.42	0.00	0.00	0.00
13,600.00	90.00	89.96	6,927.00	1,267.60	6,145.93	6,248.81	0.00	0.00	0.00
13,700.00	90.00	89.96	6,927.00	1,267.68	6,245.93	6,348.20	0.00	0.00	0.00
13,800.00	90.00	89.96	6,927.00	1,267.75	6,345.93	6,447.58	0.00	0.00	0.00
13,900.00	90.00	89.96	6,927.00	1,267.83	6,445.93	6,546.97	0.00	0.00	0.00
14,000.00	90.00	89.96	6,927.00	1,267.90	6,545.93	6,646.36	0.00	0.00	0.00
14,100.00	90.00	89.96	6,927.00	1,267.97	6,645.93	6,745.75	0.00	0.00	0.00
14,200.00	90.00	89.96	6,927.00	1,268.05	6,745.93	6,845.13	0.00	0.00	0.00
14,300.00	90.00	89.96	6,927.00	1,268.12	6,845.93	6,944.52	0.00	0.00	0.00
14,400.00	90.00	89.96	6,927.00	1,268.20	6,945.93	7,043.91	0.00	0.00	0.00
14,500.00	90.00	89.96	6,927.00	1,268.27	7,045.93	7,143.29	0.00	0.00	0.00
14,600.00	90.00	89.96	6,927.00	1,268.35	7,145.93	7,242.68	0.00	0.00	0.00
14,700.00	90.00	89.96	6,927.00	1,268.42	7,245.93	7,342.07	0.00	0.00	0.00
14,800.00	90.00	89.96	6,927.00	1,268.49	7,345.93	7,441.46	0.00	0.00	0.00
14,900.00	90.00	89.96	6,927.00	1,268.57	7,445.93	7,540.84	0.00	0.00	0.00
15,000.00	90.00	89.96	6,927.00	1,268.64	7,545.93	7,640.23	0.00	0.00	0.00
15,100.00	90.00	89.96	6,927.00	1,268.72	7,645.93	7,739.62	0.00	0.00	0.00
15,200.00	90.00	89.96	6,927.00	1,268.79	7,745.93	7,839.01	0.00	0.00	0.00
15,300.00	90.00	89.96	6,927.00	1,268.86	7,845.93	7,938.39	0.00	0.00	0.00
15,400.00	90.00	89.96	6,927.00	1,268.94	7,945.93	8,037.78	0.00	0.00	0.00
15,500.00	90.00	89.96	6,927.00	1,269.01	8,045.93	8,137.17	0.00	0.00	0.00
15,600.00	90.00	89.96	6,927.00	1,269.09	8,145.93	8,236.55	0.00	0.00	0.00
15,700.00	90.00	89.96	6,927.00	1,269.16	8,245.93	8,335.94	0.00	0.00	0.00
15,800.00	90.00	89.96	6,927.00	1,269.24	8,345.93	8,435.33	0.00	0.00	0.00
15,900.00	90.00	89.96	6,927.00	1,269.31	8,445.93	8,534.72	0.00	0.00	0.00
16,000.00	90.00	89.96	6,927.00	1,269.38	8,545.93	8,634.10	0.00	0.00	0.00
16,100.00	90.00	89.96	6,927.00	1,269.46	8,645.93	8,733.49	0.00	0.00	0.00
16,200.00	90.00	89.96	6,927.00	1,269.53	8,745.93	8,832.88	0.00	0.00	0.00
16,300.00	90.00	89.96	6,927.00	1,269.61	8,845.93	8,932.27	0.00	0.00	0.00
16,400.00	90.00	89.96	6,927.00	1,269.68	8,945.93	9,031.65	0.00	0.00	0.00
16,500.00	90.00	89.96	6,927.00	1,269.75	9,045.93	9,131.04	0.00	0.00	0.00
16,600.00	90.00	89.96	6,927.00	1,269.83	9,145.93	9,230.43	0.00	0.00	0.00
16,700.00	90.00	89.96	6,927.00	1,269.90	9,245.93	9,329.81	0.00	0.00	0.00
16,800.00	90.00	89.96	6,927.00	1,269.98	9,345.93	9,429.20	0.00	0.00	0.00
16,900.00	90.00	89.96	6,927.00	1,270.05	9,445.93	9,528.59	0.00	0.00	0.00
17,000.00	90.00	89.96	6,927.00	1,270.12	9,545.93	9,627.98	0.00	0.00	0.00
17,100.00	90.00	89.96	6,927.00	1,270.20	9,645.93	9,727.36	0.00	0.00	0.00
17,200.00	90.00	89.96	6,927.00	1,270.27	9,745.93	9,826.75	0.00	0.00	0.00
17,300.00	90.00	89.96	6,927.00	1,270.35	9,845.93	9,926.14	0.00	0.00	0.00
17,400.00	90.00	89.96	6,927.00	1,270.42	9,945.93	10,025.52	0.00	0.00	0.00
17,500.00	90.00	89.96	6,927.00	1,270.50	10,045.93	10,124.91	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference	Well GP CBJ FED 17W-25-05
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4702.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4702.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP CBJ FED 17W-25-05	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
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)	
17,600.00	90.00	89.96	6,927.00	1,270.57	10,145.93	10,224.30	0.00	0.00	0.00	
17,700.00	90.00	89.96	6,927.00	1,270.64	10,245.93	10,323.69	0.00	0.00	0.00	
17,800.00	90.00	89.96	6,927.00	1,270.72	10,345.93	10,423.07	0.00	0.00	0.00	
17,900.00	90.00	89.96	6,927.00	1,270.79	10,445.93	10,522.46	0.00	0.00	0.00	
18,000.00	90.00	89.96	6,927.00	1,270.87	10,545.93	10,621.85	0.00	0.00	0.00	
18,100.00	90.00	89.96	6,927.00	1,270.94	10,645.93	10,721.24	0.00	0.00	0.00	
18,200.00	90.00	89.96	6,927.00	1,271.01	10,745.93	10,820.62	0.00	0.00	0.00	
18,300.00	90.00	89.96	6,927.00	1,271.09	10,845.93	10,920.01	0.00	0.00	0.00	
18,400.00	90.00	89.96	6,927.00	1,271.16	10,945.93	11,019.40	0.00	0.00	0.00	
18,500.00	90.00	89.96	6,927.00	1,271.24	11,045.93	11,118.78	0.00	0.00	0.00	
18,600.00	90.00	89.96	6,927.00	1,271.31	11,145.93	11,218.17	0.00	0.00	0.00	
18,700.00	90.00	89.96	6,927.00	1,271.39	11,245.93	11,317.56	0.00	0.00	0.00	
18,800.00	90.00	89.96	6,927.00	1,271.46	11,345.93	11,416.95	0.00	0.00	0.00	
18,810.05	90.00	89.96	6,927.00	1,271.47	11,355.98	11,426.93	0.00	0.00	0.00	
TD at 18810.05										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
GP CBJ FED 17W-05 - I - hit/miss target - Shape - Point	0.00	0.00	6,927.00	1,271.47	11,355.98	1,387,307.58	3,239,104.59	40.393384°N	104.641558°W
GP CBJ FED 17W-05 - I - plan hits target center - Point	0.00	0.00	6,927.00	1,263.03	-27.30	1,387,194.17	3,227,721.88	40.393368°N	104.682426°W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
852.00	852.00	Fox Hills Base:				
3,746.32	3,675.00	Parkman:				
4,187.20	4,102.00	Sussex:				
4,909.94	4,802.00	Shannon:				
6,971.94	6,760.00	Sharon Springs (Confining Zone):				
6,996.93	6,777.00	Niobrara:				
7,024.74	6,795.00	A Chalk:				
7,054.25	6,813.00	A Marl:				
7,273.01	6,907.00	Payzone - B2 Chalk:				
7,426.77	6,927.00	Landing Point:				

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference	Well GP CBJ FED 17W-25-05
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4702.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4702.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP CBJ FED 17W-25-05	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00	
1,720.59	1,713.02	79.59	-42.33	Start 4739.16 hold at 1720.59 MD	
6,459.75	6,303.04	1,120.98	-596.23	Start DLS 10.00 TFO 117.21	
7,426.77	6,927.00	1,263.03	-27.30	Start 11383.27 hold at 7426.77 MD	
18,810.05	6,927.00	1,271.47	11,355.98	TD at 18810.05	