

EXTRACTION OIL & GAS

WELD COUNTY

Sec 20-T5N-R65W

GP CBJ FED 17W-25-04

OWB

Plan: PROPOSAL 1

Standard Planning Report

25 March, 2021

WELL DETAILS: GP CBJ FED 17W-25-04

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1385959.51	3227760.84	40.389978°N	104.682327°W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	
3	1653.46	17.07	338.09	1640.89	117.08	-47.09	2.00	338.09	-29.79	
4	6626.25	17.07	338.09	6394.63	1471.29	-591.77	0.00	0.00	-374.39	
5	7589.11	90.00	89.99	7006.00	1645.53	-22.28	10.00	111.02	214.22	GP CBJ 17W-04-LP
6	18963.56	90.00	89.99	7006.00	1647.05	11352.17	0.00	0.00	11471.03	GP CBJ 17W-04-PB

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	Start Build 2.00
1653.46	17.07	338.09	1640.89	117.08	-47.09	-29.79	126.19	Start 4972.79 hold at 1653.46 MD
6626.25	17.07	338.09	6394.63	1471.29	-591.77	-374.39	1585.84	Start DLS 10.00 TFO 111.02
7589.11	90.00	89.99	7006.00	1645.53	-22.28	214.22	2224.76	Start 11374.45 hold at 7589.11 MD
18963.56	90.00	89.99	7006.00	1647.05	11352.17	11471.03	13599.21	TD at 18963.56

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
GP CBJ 17W-04-LP	7006.00	1645.53	-22.28	1387604.76	3227723.38	40.394495°N	104.682407°W	Point
- plan hits target center								
GP CBJ 17W-04-PBHL	7006.00	1647.05	11352.17	1387711.16	3239097.34	40.394492°N	104.641570°W	Point
- plan hits target center								

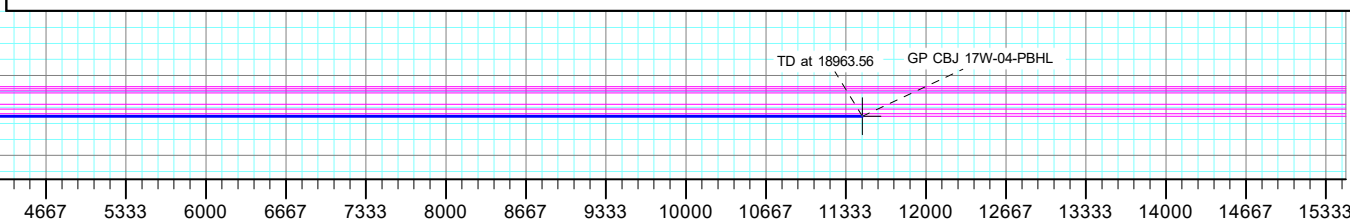
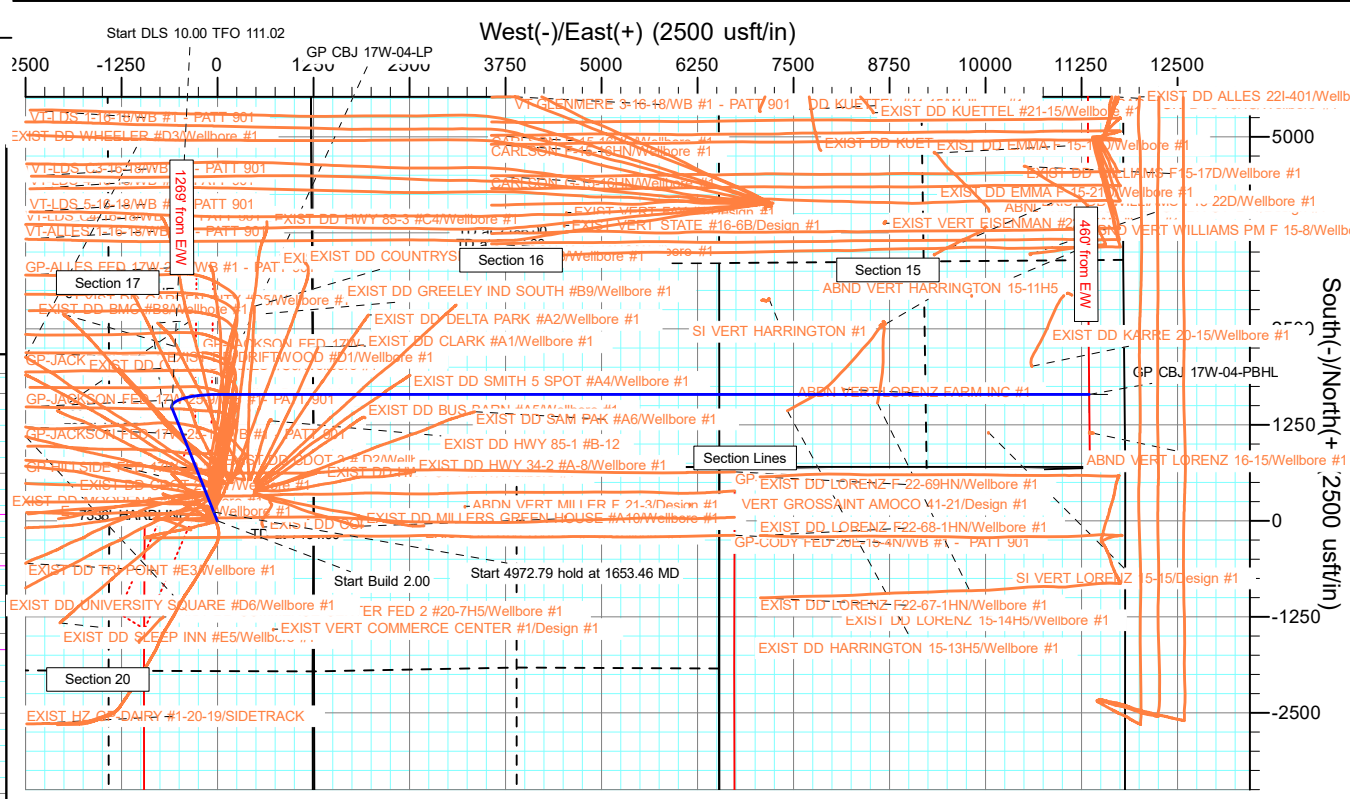
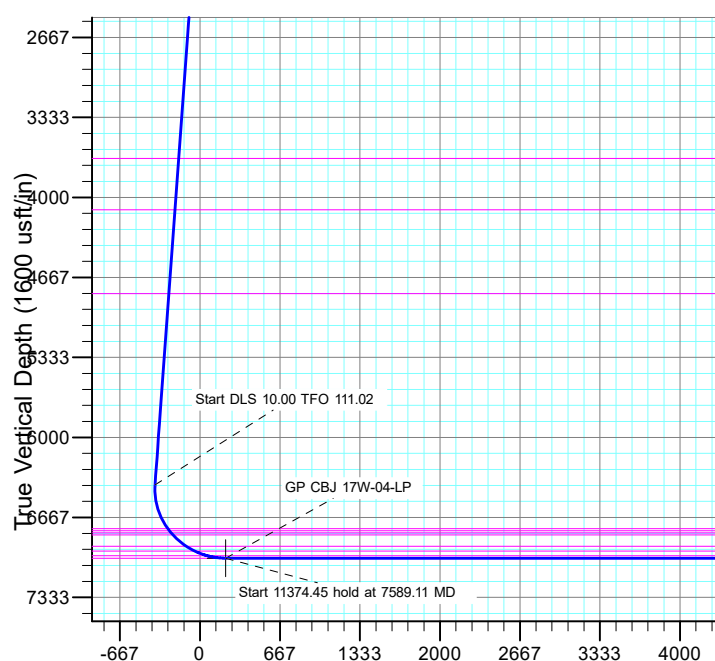
FORMATION TOP DETAILS

TVDPath	MDPath	Formation
852.00	852.00	Fox Hills Base:
3675.00	3781.30	Parkman:
4102.00	4227.97	Sussex:
4802.00	4960.23	Shannon:
6760.00	7025.23	Sharon Springs (Confining Zone):
6777.00	7046.73	Niobrara:
6795.00	7070.14	A Chalk:
6813.00	7094.34	A Marl:
6907.00	7240.29	B2 Chalk:
6947.00	7321.54	B Marl:
6986.00	7434.27	Payzone - C Chalk:
7006.00	7589.11	Landing Point:

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:
686' FSL, 1255' FEL
Sec 20-T5N-R65W
LP:
961' FSL, 1269' FEL
Sec 17-T5N-R65W
BHL:
954' FSL, 460' FEL
Sec 15-T5N-R65W



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference	Well GP CBJ FED 17W-25-04
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-25-04	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-25-04					
Well Position	+N/-S	-244.82 usft	Northing:	1,385,959.51 usft	Latitude:	40.389978°N
	+E/-W	50.97 usft	Easting:	3,227,760.84 usft	Longitude:	104.682327°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	51,988.95564618

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	81.74	

Plan Survey Tool Program	Date	3/25/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	18,963.56	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	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,653.46	17.07	338.09	1,640.89	117.08	-47.09	2.00	2.00	0.00	338.09	
6,626.25	17.07	338.09	6,394.63	1,471.29	-591.77	0.00	0.00	0.00	0.00	
7,589.11	90.00	89.99	7,006.00	1,645.53	-22.28	10.00	7.57	11.62	111.02	GP CBJ 17W-04-LP
18,963.56	90.00	89.99	7,006.00	1,647.05	11,352.17	0.00	0.00	0.00	0.00	GP CBJ 17W-04-PBH

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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-25-04	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
Start Build 2.00									
852.00	1.04	338.09	852.00	0.44	-0.18	-0.11	2.00	2.00	0.00
Fox Hills Base:									
900.00	2.00	338.09	899.98	1.62	-0.65	-0.41	2.00	2.00	0.00
1,000.00	4.00	338.09	999.84	6.47	-2.60	-1.65	2.00	2.00	0.00
1,100.00	6.00	338.09	1,099.45	14.56	-5.86	-3.70	2.00	2.00	0.00
1,200.00	8.00	338.09	1,198.70	25.87	-10.40	-6.58	2.00	2.00	0.00
1,300.00	10.00	338.09	1,297.47	40.38	-16.24	-10.27	2.00	2.00	0.00
1,400.00	12.00	338.09	1,395.62	58.08	-23.36	-14.78	2.00	2.00	0.00
1,500.00	14.00	338.09	1,493.06	78.95	-31.75	-20.09	2.00	2.00	0.00
1,600.00	16.00	338.09	1,589.64	102.96	-41.41	-26.20	2.00	2.00	0.00
1,653.46	17.07	338.09	1,640.89	117.08	-47.09	-29.79	2.00	2.00	0.00
Start 4972.79 hold at 1653.46 MD									
1,700.00	17.07	338.09	1,685.38	129.75	-52.19	-33.02	0.00	0.00	0.00
1,800.00	17.07	338.09	1,780.98	156.98	-63.14	-39.95	0.00	0.00	0.00
1,900.00	17.07	338.09	1,876.57	184.22	-74.09	-46.88	0.00	0.00	0.00
2,000.00	17.07	338.09	1,972.17	211.45	-85.05	-53.81	0.00	0.00	0.00
2,100.00	17.07	338.09	2,067.76	238.68	-96.00	-60.73	0.00	0.00	0.00
2,200.00	17.07	338.09	2,163.36	265.91	-106.95	-67.66	0.00	0.00	0.00
2,300.00	17.07	338.09	2,258.95	293.14	-117.91	-74.59	0.00	0.00	0.00
2,400.00	17.07	338.09	2,354.55	320.38	-128.86	-81.52	0.00	0.00	0.00
2,500.00	17.07	338.09	2,450.14	347.61	-139.81	-88.45	0.00	0.00	0.00
2,600.00	17.07	338.09	2,545.74	374.84	-150.77	-95.38	0.00	0.00	0.00
2,700.00	17.07	338.09	2,641.33	402.07	-161.72	-102.31	0.00	0.00	0.00
2,800.00	17.07	338.09	2,736.93	429.31	-172.67	-109.24	0.00	0.00	0.00
2,900.00	17.07	338.09	2,832.52	456.54	-183.63	-116.17	0.00	0.00	0.00
3,000.00	17.07	338.09	2,928.12	483.77	-194.58	-123.10	0.00	0.00	0.00
3,100.00	17.07	338.09	3,023.71	511.00	-205.53	-130.03	0.00	0.00	0.00
3,200.00	17.07	338.09	3,119.31	538.24	-216.49	-136.96	0.00	0.00	0.00
3,300.00	17.07	338.09	3,214.90	565.47	-227.44	-143.89	0.00	0.00	0.00
3,400.00	17.07	338.09	3,310.50	592.70	-238.39	-150.82	0.00	0.00	0.00
3,500.00	17.07	338.09	3,406.09	619.93	-249.35	-157.75	0.00	0.00	0.00
3,600.00	17.07	338.09	3,501.69	647.17	-260.30	-164.68	0.00	0.00	0.00
3,700.00	17.07	338.09	3,597.28	674.40	-271.25	-171.61	0.00	0.00	0.00
3,781.30	17.07	338.09	3,675.00	696.54	-280.16	-177.24	0.00	0.00	0.00
Parkman:									
3,800.00	17.07	338.09	3,692.88	701.63	-282.21	-178.54	0.00	0.00	0.00
3,900.00	17.07	338.09	3,788.47	728.86	-293.16	-185.47	0.00	0.00	0.00
4,000.00	17.07	338.09	3,884.07	756.10	-304.11	-192.40	0.00	0.00	0.00
4,100.00	17.07	338.09	3,979.66	783.33	-315.07	-199.33	0.00	0.00	0.00
4,200.00	17.07	338.09	4,075.26	810.56	-326.02	-206.26	0.00	0.00	0.00
4,227.97	17.07	338.09	4,102.00	818.18	-329.08	-208.20	0.00	0.00	0.00
Sussex:									

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-25-04	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)	
4,300.00	17.07	338.09	4,170.85	837.79	-336.97	-213.19	0.00	0.00	0.00	
4,400.00	17.07	338.09	4,266.45	865.03	-347.92	-220.12	0.00	0.00	0.00	
4,500.00	17.07	338.09	4,362.04	892.26	-358.88	-227.05	0.00	0.00	0.00	
4,600.00	17.07	338.09	4,457.64	919.49	-369.83	-233.98	0.00	0.00	0.00	
4,700.00	17.07	338.09	4,553.23	946.72	-380.78	-240.91	0.00	0.00	0.00	
4,800.00	17.07	338.09	4,648.83	973.96	-391.74	-247.83	0.00	0.00	0.00	
4,900.00	17.07	338.09	4,744.42	1,001.19	-402.69	-254.76	0.00	0.00	0.00	
4,960.23	17.07	338.09	4,802.00	1,017.59	-409.29	-258.94	0.00	0.00	0.00	
Shannon:										
5,000.00	17.07	338.09	4,840.02	1,028.42	-413.64	-261.69	0.00	0.00	0.00	
5,100.00	17.07	338.09	4,935.61	1,055.65	-424.60	-268.62	0.00	0.00	0.00	
5,200.00	17.07	338.09	5,031.21	1,082.89	-435.55	-275.55	0.00	0.00	0.00	
5,300.00	17.07	338.09	5,126.80	1,110.12	-446.50	-282.48	0.00	0.00	0.00	
5,400.00	17.07	338.09	5,222.40	1,137.35	-457.46	-289.41	0.00	0.00	0.00	
5,500.00	17.07	338.09	5,317.99	1,164.58	-468.41	-296.34	0.00	0.00	0.00	
5,600.00	17.07	338.09	5,413.59	1,191.82	-479.36	-303.27	0.00	0.00	0.00	
5,700.00	17.07	338.09	5,509.19	1,219.05	-490.32	-310.20	0.00	0.00	0.00	
5,800.00	17.07	338.09	5,604.78	1,246.28	-501.27	-317.13	0.00	0.00	0.00	
5,900.00	17.07	338.09	5,700.38	1,273.51	-512.22	-324.06	0.00	0.00	0.00	
6,000.00	17.07	338.09	5,795.97	1,300.74	-523.18	-330.99	0.00	0.00	0.00	
6,100.00	17.07	338.09	5,891.57	1,327.98	-534.13	-337.92	0.00	0.00	0.00	
6,200.00	17.07	338.09	5,987.16	1,355.21	-545.08	-344.85	0.00	0.00	0.00	
6,300.00	17.07	338.09	6,082.76	1,382.44	-556.04	-351.78	0.00	0.00	0.00	
6,400.00	17.07	338.09	6,178.35	1,409.67	-566.99	-358.71	0.00	0.00	0.00	
6,500.00	17.07	338.09	6,273.95	1,436.91	-577.94	-365.64	0.00	0.00	0.00	
6,600.00	17.07	338.09	6,369.54	1,464.14	-588.90	-372.57	0.00	0.00	0.00	
6,626.25	17.07	338.09	6,394.63	1,471.29	-591.77	-374.39	0.00	0.00	0.00	
Start DLS 10.00 TFO 111.02										
6,650.00	16.36	345.98	6,417.38	1,477.77	-593.88	-375.55	10.00	-2.97	33.23	
6,700.00	15.94	3.96	6,465.44	1,491.46	-595.12	-374.80	10.00	-0.85	35.96	
6,750.00	17.00	21.27	6,513.42	1,505.13	-591.99	-369.74	10.00	2.12	34.61	
6,800.00	19.30	35.57	6,560.95	1,518.67	-584.53	-360.41	10.00	4.61	28.61	
6,850.00	22.47	46.46	6,607.68	1,531.98	-572.78	-346.88	10.00	6.34	21.79	
6,900.00	26.19	54.60	6,653.24	1,544.97	-556.85	-329.25	10.00	7.44	16.27	
6,950.00	30.26	60.76	6,697.29	1,557.52	-536.85	-307.65	10.00	8.14	12.33	
7,000.00	34.55	65.56	6,739.50	1,569.55	-512.93	-282.26	10.00	8.59	9.59	
7,025.23	36.78	67.59	6,760.00	1,575.39	-499.44	-268.06	10.00	8.83	8.07	
Sharon Springs (Confining Zone):										
7,046.73	38.70	69.16	6,777.00	1,580.23	-487.20	-255.26	10.00	8.94	7.32	
Niobrara:										
7,050.00	39.00	69.39	6,779.55	1,580.96	-485.28	-253.25	10.00	9.00	6.96	
7,070.14	40.82	70.73	6,795.00	1,585.36	-473.13	-240.60	10.00	9.04	6.66	
A Chalk:										
7,094.34	43.02	72.22	6,813.00	1,590.49	-457.81	-224.70	10.00	9.12	6.14	
A Marl:										
7,100.00	43.54	72.55	6,817.12	1,591.67	-454.11	-220.86	10.00	9.17	5.83	
7,150.00	48.16	75.22	6,851.94	1,601.59	-419.64	-185.33	10.00	9.24	5.33	
7,200.00	52.84	77.52	6,883.74	1,610.66	-382.16	-146.94	10.00	9.35	4.61	
7,240.30	56.63	79.18	6,907.00	1,617.29	-349.94	-114.10	10.00	9.42	4.11	
B2 Chalk:										
7,250.00	57.55	79.56	6,912.27	1,618.79	-341.93	-105.96	10.00	9.45	3.89	
7,300.00	62.29	81.39	6,937.33	1,625.93	-299.28	-62.72	10.00	9.48	3.66	

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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-25-04	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)	
7,321.54	64.34	82.13	6,947.00	1,628.69	-280.23	-43.47	10.00	9.52	3.43	
B Marl:										
7,350.00	67.06	83.07	6,958.71	1,632.03	-254.51	-17.54	10.00	9.54	3.30	
7,400.00	71.84	84.63	6,976.26	1,637.04	-207.98	29.23	10.00	9.56	3.13	
7,434.27	75.12	85.65	6,986.00	1,639.82	-175.24	62.02	10.00	9.58	2.98	
Payzone - C Chalk:										
7,450.00	76.63	86.11	6,989.84	1,640.91	-160.03	77.24	10.00	9.59	2.91	
7,500.00	81.43	87.53	6,999.35	1,643.63	-111.03	126.12	10.00	9.60	2.84	
7,550.00	86.24	88.92	7,004.72	1,645.16	-61.36	175.49	10.00	9.61	2.77	
7,589.11	90.00	89.99	7,006.00	1,645.53	-22.28	214.22	10.00	9.62	2.74	
Start 11374.45 hold at 7589.11 MD - Landing Point:										
7,600.00	90.00	89.99	7,006.00	1,645.54	-11.39	225.00	0.00	0.00	0.00	
7,700.00	90.00	89.99	7,006.00	1,645.55	88.61	323.96	0.00	0.00	0.00	
7,800.00	90.00	89.99	7,006.00	1,645.56	188.61	422.93	0.00	0.00	0.00	
7,900.00	90.00	89.99	7,006.00	1,645.58	288.61	521.90	0.00	0.00	0.00	
8,000.00	90.00	89.99	7,006.00	1,645.59	388.61	620.86	0.00	0.00	0.00	
8,100.00	90.00	89.99	7,006.00	1,645.60	488.61	719.83	0.00	0.00	0.00	
8,200.00	90.00	89.99	7,006.00	1,645.62	588.61	818.79	0.00	0.00	0.00	
8,300.00	90.00	89.99	7,006.00	1,645.63	688.61	917.76	0.00	0.00	0.00	
8,400.00	90.00	89.99	7,006.00	1,645.64	788.61	1,016.72	0.00	0.00	0.00	
8,500.00	90.00	89.99	7,006.00	1,645.66	888.61	1,115.69	0.00	0.00	0.00	
8,600.00	90.00	89.99	7,006.00	1,645.67	988.61	1,214.66	0.00	0.00	0.00	
8,700.00	90.00	89.99	7,006.00	1,645.68	1,088.61	1,313.62	0.00	0.00	0.00	
8,800.00	90.00	89.99	7,006.00	1,645.70	1,188.61	1,412.59	0.00	0.00	0.00	
8,900.00	90.00	89.99	7,006.00	1,645.71	1,288.61	1,511.55	0.00	0.00	0.00	
9,000.00	90.00	89.99	7,006.00	1,645.72	1,388.61	1,610.52	0.00	0.00	0.00	
9,100.00	90.00	89.99	7,006.00	1,645.74	1,488.61	1,709.48	0.00	0.00	0.00	
9,200.00	90.00	89.99	7,006.00	1,645.75	1,588.61	1,808.45	0.00	0.00	0.00	
9,300.00	90.00	89.99	7,006.00	1,645.76	1,688.61	1,907.42	0.00	0.00	0.00	
9,400.00	90.00	89.99	7,006.00	1,645.78	1,788.61	2,006.38	0.00	0.00	0.00	
9,500.00	90.00	89.99	7,006.00	1,645.79	1,888.61	2,105.35	0.00	0.00	0.00	
9,600.00	90.00	89.99	7,006.00	1,645.80	1,988.61	2,204.31	0.00	0.00	0.00	
9,700.00	90.00	89.99	7,006.00	1,645.82	2,088.61	2,303.28	0.00	0.00	0.00	
9,800.00	90.00	89.99	7,006.00	1,645.83	2,188.61	2,402.24	0.00	0.00	0.00	
9,900.00	90.00	89.99	7,006.00	1,645.84	2,288.61	2,501.21	0.00	0.00	0.00	
10,000.00	90.00	89.99	7,006.00	1,645.86	2,388.61	2,600.18	0.00	0.00	0.00	
10,100.00	90.00	89.99	7,006.00	1,645.87	2,488.61	2,699.14	0.00	0.00	0.00	
10,200.00	90.00	89.99	7,006.00	1,645.88	2,588.61	2,798.11	0.00	0.00	0.00	
10,300.00	90.00	89.99	7,006.00	1,645.90	2,688.61	2,897.07	0.00	0.00	0.00	
10,400.00	90.00	89.99	7,006.00	1,645.91	2,788.61	2,996.04	0.00	0.00	0.00	
10,500.00	90.00	89.99	7,006.00	1,645.92	2,888.61	3,095.00	0.00	0.00	0.00	
10,600.00	90.00	89.99	7,006.00	1,645.94	2,988.61	3,193.97	0.00	0.00	0.00	
10,700.00	90.00	89.99	7,006.00	1,645.95	3,088.61	3,292.94	0.00	0.00	0.00	
10,800.00	90.00	89.99	7,006.00	1,645.96	3,188.61	3,391.90	0.00	0.00	0.00	
10,900.00	90.00	89.99	7,006.00	1,645.98	3,288.61	3,490.87	0.00	0.00	0.00	
11,000.00	90.00	89.99	7,006.00	1,645.99	3,388.61	3,589.83	0.00	0.00	0.00	
11,100.00	90.00	89.99	7,006.00	1,646.00	3,488.61	3,688.80	0.00	0.00	0.00	
11,200.00	90.00	89.99	7,006.00	1,646.02	3,588.61	3,787.76	0.00	0.00	0.00	
11,300.00	90.00	89.99	7,006.00	1,646.03	3,688.61	3,886.73	0.00	0.00	0.00	
11,400.00	90.00	89.99	7,006.00	1,646.04	3,788.61	3,985.70	0.00	0.00	0.00	
11,500.00	90.00	89.99	7,006.00	1,646.06	3,888.61	4,084.66	0.00	0.00	0.00	
11,600.00	90.00	89.99	7,006.00	1,646.07	3,988.61	4,183.63	0.00	0.00	0.00	
11,700.00	90.00	89.99	7,006.00	1,646.08	4,088.61	4,282.59	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference	Well GP CBJ FED 17W-25-04
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-25-04	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)	
11,800.00	90.00	89.99	7,006.00	1,646.10	4,188.61	4,381.56	0.00	0.00	0.00	
11,900.00	90.00	89.99	7,006.00	1,646.11	4,288.61	4,480.53	0.00	0.00	0.00	
12,000.00	90.00	89.99	7,006.00	1,646.12	4,388.61	4,579.49	0.00	0.00	0.00	
12,100.00	90.00	89.99	7,006.00	1,646.14	4,488.61	4,678.46	0.00	0.00	0.00	
12,200.00	90.00	89.99	7,006.00	1,646.15	4,588.61	4,777.42	0.00	0.00	0.00	
12,300.00	90.00	89.99	7,006.00	1,646.16	4,688.61	4,876.39	0.00	0.00	0.00	
12,400.00	90.00	89.99	7,006.00	1,646.18	4,788.61	4,975.35	0.00	0.00	0.00	
12,500.00	90.00	89.99	7,006.00	1,646.19	4,888.61	5,074.32	0.00	0.00	0.00	
12,600.00	90.00	89.99	7,006.00	1,646.20	4,988.61	5,173.29	0.00	0.00	0.00	
12,700.00	90.00	89.99	7,006.00	1,646.22	5,088.61	5,272.25	0.00	0.00	0.00	
12,800.00	90.00	89.99	7,006.00	1,646.23	5,188.61	5,371.22	0.00	0.00	0.00	
12,900.00	90.00	89.99	7,006.00	1,646.24	5,288.61	5,470.18	0.00	0.00	0.00	
13,000.00	90.00	89.99	7,006.00	1,646.26	5,388.61	5,569.15	0.00	0.00	0.00	
13,100.00	90.00	89.99	7,006.00	1,646.27	5,488.61	5,668.11	0.00	0.00	0.00	
13,200.00	90.00	89.99	7,006.00	1,646.28	5,588.61	5,767.08	0.00	0.00	0.00	
13,300.00	90.00	89.99	7,006.00	1,646.30	5,688.61	5,866.05	0.00	0.00	0.00	
13,400.00	90.00	89.99	7,006.00	1,646.31	5,788.61	5,965.01	0.00	0.00	0.00	
13,500.00	90.00	89.99	7,006.00	1,646.32	5,888.61	6,063.98	0.00	0.00	0.00	
13,600.00	90.00	89.99	7,006.00	1,646.34	5,988.61	6,162.94	0.00	0.00	0.00	
13,700.00	90.00	89.99	7,006.00	1,646.35	6,088.61	6,261.91	0.00	0.00	0.00	
13,800.00	90.00	89.99	7,006.00	1,646.36	6,188.61	6,360.87	0.00	0.00	0.00	
13,900.00	90.00	89.99	7,006.00	1,646.38	6,288.61	6,459.84	0.00	0.00	0.00	
14,000.00	90.00	89.99	7,006.00	1,646.39	6,388.61	6,558.81	0.00	0.00	0.00	
14,100.00	90.00	89.99	7,006.00	1,646.40	6,488.61	6,657.77	0.00	0.00	0.00	
14,200.00	90.00	89.99	7,006.00	1,646.42	6,588.61	6,756.74	0.00	0.00	0.00	
14,300.00	90.00	89.99	7,006.00	1,646.43	6,688.61	6,855.70	0.00	0.00	0.00	
14,400.00	90.00	89.99	7,006.00	1,646.44	6,788.61	6,954.67	0.00	0.00	0.00	
14,500.00	90.00	89.99	7,006.00	1,646.46	6,888.61	7,053.63	0.00	0.00	0.00	
14,600.00	90.00	89.99	7,006.00	1,646.47	6,988.61	7,152.60	0.00	0.00	0.00	
14,700.00	90.00	89.99	7,006.00	1,646.48	7,088.61	7,251.57	0.00	0.00	0.00	
14,800.00	90.00	89.99	7,006.00	1,646.50	7,188.61	7,350.53	0.00	0.00	0.00	
14,900.00	90.00	89.99	7,006.00	1,646.51	7,288.61	7,449.50	0.00	0.00	0.00	
15,000.00	90.00	89.99	7,006.00	1,646.52	7,388.61	7,548.46	0.00	0.00	0.00	
15,100.00	90.00	89.99	7,006.00	1,646.54	7,488.61	7,647.43	0.00	0.00	0.00	
15,200.00	90.00	89.99	7,006.00	1,646.55	7,588.61	7,746.39	0.00	0.00	0.00	
15,300.00	90.00	89.99	7,006.00	1,646.56	7,688.61	7,845.36	0.00	0.00	0.00	
15,400.00	90.00	89.99	7,006.00	1,646.58	7,788.61	7,944.33	0.00	0.00	0.00	
15,500.00	90.00	89.99	7,006.00	1,646.59	7,888.61	8,043.29	0.00	0.00	0.00	
15,600.00	90.00	89.99	7,006.00	1,646.60	7,988.61	8,142.26	0.00	0.00	0.00	
15,700.00	90.00	89.99	7,006.00	1,646.62	8,088.61	8,241.22	0.00	0.00	0.00	
15,800.00	90.00	89.99	7,006.00	1,646.63	8,188.61	8,340.19	0.00	0.00	0.00	
15,900.00	90.00	89.99	7,006.00	1,646.64	8,288.61	8,439.15	0.00	0.00	0.00	
16,000.00	90.00	89.99	7,006.00	1,646.66	8,388.61	8,538.12	0.00	0.00	0.00	
16,100.00	90.00	89.99	7,006.00	1,646.67	8,488.61	8,637.09	0.00	0.00	0.00	
16,200.00	90.00	89.99	7,006.00	1,646.68	8,588.61	8,736.05	0.00	0.00	0.00	
16,300.00	90.00	89.99	7,006.00	1,646.70	8,688.61	8,835.02	0.00	0.00	0.00	
16,400.00	90.00	89.99	7,006.00	1,646.71	8,788.61	8,933.98	0.00	0.00	0.00	
16,500.00	90.00	89.99	7,006.00	1,646.72	8,888.61	9,032.95	0.00	0.00	0.00	
16,600.00	90.00	89.99	7,006.00	1,646.74	8,988.61	9,131.91	0.00	0.00	0.00	
16,700.00	90.00	89.99	7,006.00	1,646.75	9,088.61	9,230.88	0.00	0.00	0.00	
16,800.00	90.00	89.99	7,006.00	1,646.76	9,188.61	9,329.85	0.00	0.00	0.00	
16,900.00	90.00	89.99	7,006.00	1,646.78	9,288.61	9,428.81	0.00	0.00	0.00	
17,000.00	90.00	89.99	7,006.00	1,646.79	9,388.61	9,527.78	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference	Well GP CBJ FED 17W-25-04
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-25-04	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)	
17,100.00	90.00	89.99	7,006.00	1,646.80	9,488.61	9,626.74	0.00	0.00	0.00	
17,200.00	90.00	89.99	7,006.00	1,646.82	9,588.61	9,725.71	0.00	0.00	0.00	
17,300.00	90.00	89.99	7,006.00	1,646.83	9,688.61	9,824.67	0.00	0.00	0.00	
17,400.00	90.00	89.99	7,006.00	1,646.84	9,788.61	9,923.64	0.00	0.00	0.00	
17,500.00	90.00	89.99	7,006.00	1,646.86	9,888.61	10,022.61	0.00	0.00	0.00	
17,600.00	90.00	89.99	7,006.00	1,646.87	9,988.61	10,121.57	0.00	0.00	0.00	
17,700.00	90.00	89.99	7,006.00	1,646.88	10,088.61	10,220.54	0.00	0.00	0.00	
17,800.00	90.00	89.99	7,006.00	1,646.90	10,188.61	10,319.50	0.00	0.00	0.00	
17,900.00	90.00	89.99	7,006.00	1,646.91	10,288.61	10,418.47	0.00	0.00	0.00	
18,000.00	90.00	89.99	7,006.00	1,646.92	10,388.61	10,517.43	0.00	0.00	0.00	
18,100.00	90.00	89.99	7,006.00	1,646.94	10,488.61	10,616.40	0.00	0.00	0.00	
18,200.00	90.00	89.99	7,006.00	1,646.95	10,588.61	10,715.37	0.00	0.00	0.00	
18,300.00	90.00	89.99	7,006.00	1,646.96	10,688.61	10,814.33	0.00	0.00	0.00	
18,400.00	90.00	89.99	7,006.00	1,646.98	10,788.61	10,913.30	0.00	0.00	0.00	
18,500.00	90.00	89.99	7,006.00	1,646.99	10,888.61	11,012.26	0.00	0.00	0.00	
18,600.00	90.00	89.99	7,006.00	1,647.00	10,988.61	11,111.23	0.00	0.00	0.00	
18,700.00	90.00	89.99	7,006.00	1,647.02	11,088.61	11,210.20	0.00	0.00	0.00	
18,800.00	90.00	89.99	7,006.00	1,647.03	11,188.61	11,309.16	0.00	0.00	0.00	
18,900.00	90.00	89.99	7,006.00	1,647.04	11,288.61	11,408.13	0.00	0.00	0.00	
18,963.56	90.00	89.99	7,006.00	1,647.05	11,352.17	11,471.03	0.00	0.00	0.00	
TD at 18963.56										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
GP CBJ 17W-04-LP - hit/miss target - plan hits target center - Shape	0.00	0.00	7,006.00	1,645.53	-22.28	1,387,604.77	3,227,723.38	40.394495°N	104.682407°W
GP CBJ 17W-04-PBHL - plan hits target center - Point	0.00	0.00	7,006.00	1,647.05	11,352.17	1,387,711.16	3,239,097.34	40.394492°N	104.641570°W

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference	Well GP CBJ FED 17W-25-04
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-25-04	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
852.00	852.00	Fox Hills Base:			
3,781.30	3,675.00	Parkman:			
4,227.97	4,102.00	Sussex:			
4,960.23	4,802.00	Shannon:			
7,025.23	6,760.00	Sharon Springs (Confining Zone):			
7,046.73	6,777.00	Niobrara:			
7,070.14	6,795.00	A Chalk:			
7,094.34	6,813.00	A Marl:			
7,240.30	6,907.00	B2 Chalk:			
7,321.54	6,947.00	B Marl:			
7,434.27	6,986.00	Payzone - C Chalk:			
7,589.11	7,006.00	Landing Point:			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
800.00	800.00	0.00	0.00	Start Build 2.00
1,653.46	1,640.89	117.08	-47.09	Start 4972.79 hold at 1653.46 MD
6,626.25	6,394.63	1,471.29	-591.77	Start DLS 10.00 TFO 111.02
7,589.11	7,006.00	1,645.53	-22.28	Start 11374.45 hold at 7589.11 MD
18,963.56	7,006.00	1,647.05	11,352.17	TD at 18963.56