

# **EXTRACTION OIL & GAS**

**WELD COUNTY**

**Sec 21-T5N-R65W**

**AD FED J EVANS 20W-25-02**

**ORIGINAL WELLBORE**

**Plan: PROPOSAL #1**

## **Standard Planning Report**

**17 April, 2019**



Project: WELD COUNTY  
Site: Sec 21-T5N-R65W  
Well: AD FED J EVANS 20W-25-02  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1



Azimuths to True North  
Magnetic North: 8.28°  
Magnetic Field  
Strength: 52516.6nT  
Dip Angle: 66.88°  
Date: 5/22/2016  
Model: IGRF2015

#### WELL DETAILS: AD FED J EVANS 20W-25-02

+N/-S	+E/-W	Northing	Ground Level: Easting	4638.00 Latitude	Longitude	Slot
0.00	0.00	1383596.58	3229414.33	40.383450°N	104.676470°W	

#### ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	Start Build 2.00
887.51	13.75	349.51	880.93	80.73	-14.94	24.82	82.10	Start 5762.09 hold at 887.51 MD
6649.60	13.75	349.51	6477.88	1427.45	-264.18	438.88	1451.69	Start DLS 10.00 TFO -79.43
7523.90	90.00	270.39	7010.00	1559.21	-835.68	1022.29	2056.06	Start 12332.13 hold at 7523.90 MD
19856.02	90.00	270.39	7010.00	1642.89	-13167.52	13269.62	14388.19	TD at 19856.02

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Target
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	887.51	13.75	349.51	880.93	80.73	-14.94	2.00	349.51	24.82	
4	6649.60	13.75	349.51	6477.88	1427.45	-264.18	0.00	0.00	438.88	
5	7523.90	90.00	270.39	7010.00	1559.21	-835.68	10.00	-79.43	1022.29	HZ LANDING PNT - AC
6	19856.02	90.00	270.39	7010.00	1642.85	-13167.52	0.00	0.00	13269.61	BHL - AD-J EVANS C3

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL - AD-J EVANS C3-20-24	7010.00	1642.85	-13167.52	1385117.07	3216232.12	40.387950°N	104.723740°W	Point
	- plan hits target center							
HZ LANDING PNT - AD-J EVANS C3-20-24	1559.21	-835.68	1385147.96	3228564.20	40.387730°N	104.679470°W	Point	
	- plan hits target center							

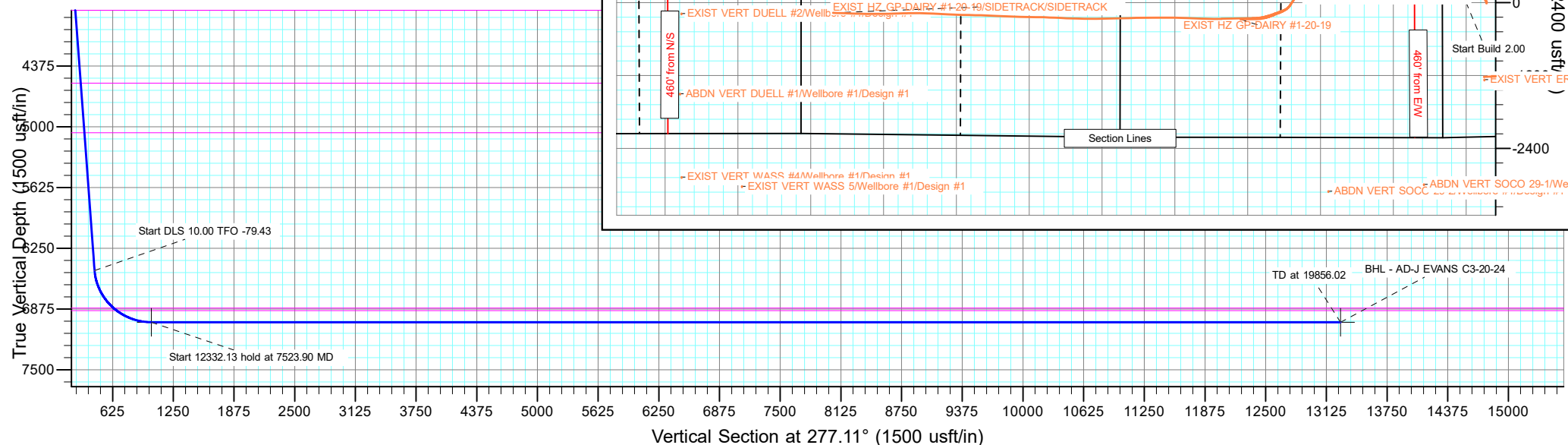
#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3800.00	3892.71	PARKMAN
4550.00	4664.83	SUSSEX
5060.00	5189.88	SHANNON
6865.00	7100.98	SHARON SPRINGS
6890.00	7140.73	NIOBRARA

#### 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:  
371' FNL, 2212' FSL  
Sec 21-T5N-R65W  
LP:  
1502' FNL, 460' FEL  
Sec 20-T5N-R65W  
BHL:  
1482' FNL, 2219' FEL  
Sec 24-T5N-R66W



## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well AD FED J EVANS 20W-25-02
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Site:</b>	Sec 21-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	AD FED J EVANS 20W-25-02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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

<b>Site</b>	Sec 21-T5N-R65W			
<b>Site Position:</b>		<b>Northing:</b>	1,383,619.20 usft	<b>Latitude:</b> 40.383510°N
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,229,494.91 usft	<b>Longitude:</b> 104.676180°W
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> 0.53 °

<b>Well</b>	AD FED J EVANS 20W-25-02			
<b>Well Position</b>	<b>+N/-S</b>	-21.87 usft	<b>Northing:</b>	1,383,596.58 usft
	<b>+E/-W</b>	-80.79 usft	<b>Easting:</b>	3,229,414.33 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b> 4,638.00 usft

<b>Wellbore</b>	ORIGINAL WELLBORE				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	5/22/2016	8.28	66.88	52,516.59330804

<b>Design</b>	PROPOSAL #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	277.11

<b>Plan Survey Tool Program</b>	<b>Date</b>	4/17/2019		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	19,856.02	PROPOSAL #1 (ORIGINAL WEL	MWD OWSG
			OWSG MWD - Standard	

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	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	
887.51	13.75	349.51	880.93	80.73	-14.94	2.00	2.00	0.00	349.51	
6,649.60	13.75	349.51	6,477.88	1,427.45	-264.18	0.00	0.00	0.00	0.00	
7,523.90	90.00	270.39	7,010.00	1,559.21	-835.68	10.00	8.72	-9.05	-79.43	HZ LANDING PNT - F
19,856.02	90.00	270.39	7,010.00	1,642.85	-13,167.52	0.00	0.00	0.00	0.00	BHL - AD-J EVANS C

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well AD FED J EVANS 20W-25-02
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Site:</b>	Sec 21-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	AD FED J EVANS 20W-25-02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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
Start Build 2.00									
300.00	2.00	349.51	299.98	1.72	-0.32	0.53	2.00	2.00	0.00
400.00	4.00	349.51	399.84	6.86	-1.27	2.11	2.00	2.00	0.00
500.00	6.00	349.51	499.45	15.43	-2.86	4.74	2.00	2.00	0.00
600.00	8.00	349.51	598.70	27.41	-5.07	8.43	2.00	2.00	0.00
700.00	10.00	349.51	697.47	42.80	-7.92	13.16	2.00	2.00	0.00
800.00	12.00	349.51	795.62	61.56	-11.39	18.93	2.00	2.00	0.00
887.51	13.75	349.51	880.93	80.73	-14.94	24.82	2.00	2.00	0.00
Start 5762.09 hold at 887.51 MD									
900.00	13.75	349.51	893.06	83.65	-15.48	25.72	0.00	0.00	0.00
1,000.00	13.75	349.51	990.20	107.02	-19.81	32.90	0.00	0.00	0.00
1,100.00	13.75	349.51	1,087.33	130.39	-24.13	40.09	0.00	0.00	0.00
1,200.00	13.75	349.51	1,184.46	153.77	-28.46	47.28	0.00	0.00	0.00
1,300.00	13.75	349.51	1,281.60	177.14	-32.78	54.46	0.00	0.00	0.00
1,400.00	13.75	349.51	1,378.73	200.51	-37.11	61.65	0.00	0.00	0.00
1,500.00	13.75	349.51	1,475.87	223.88	-41.43	68.83	0.00	0.00	0.00
1,600.00	13.75	349.51	1,573.00	247.25	-45.76	76.02	0.00	0.00	0.00
1,700.00	13.75	349.51	1,670.13	270.63	-50.09	83.21	0.00	0.00	0.00
1,800.00	13.75	349.51	1,767.27	294.00	-54.41	90.39	0.00	0.00	0.00
1,900.00	13.75	349.51	1,864.40	317.37	-58.74	97.58	0.00	0.00	0.00
2,000.00	13.75	349.51	1,961.54	340.74	-63.06	104.76	0.00	0.00	0.00
2,100.00	13.75	349.51	2,058.67	364.12	-67.39	111.95	0.00	0.00	0.00
2,200.00	13.75	349.51	2,155.80	387.49	-71.71	119.13	0.00	0.00	0.00
2,300.00	13.75	349.51	2,252.94	410.86	-76.04	126.32	0.00	0.00	0.00
2,400.00	13.75	349.51	2,350.07	434.23	-80.36	133.51	0.00	0.00	0.00
2,500.00	13.75	349.51	2,447.21	457.60	-84.69	140.69	0.00	0.00	0.00
2,600.00	13.75	349.51	2,544.34	480.98	-89.02	147.88	0.00	0.00	0.00
2,700.00	13.75	349.51	2,641.48	504.35	-93.34	155.06	0.00	0.00	0.00
2,800.00	13.75	349.51	2,738.61	527.72	-97.67	162.25	0.00	0.00	0.00
2,900.00	13.75	349.51	2,835.74	551.09	-101.99	169.44	0.00	0.00	0.00
3,000.00	13.75	349.51	2,932.88	574.46	-106.32	176.62	0.00	0.00	0.00
3,100.00	13.75	349.51	3,030.01	597.84	-110.64	183.81	0.00	0.00	0.00
3,200.00	13.75	349.51	3,127.15	621.21	-114.97	190.99	0.00	0.00	0.00
3,300.00	13.75	349.51	3,224.28	644.58	-119.29	198.18	0.00	0.00	0.00
3,400.00	13.75	349.51	3,321.41	667.95	-123.62	205.36	0.00	0.00	0.00
3,500.00	13.75	349.51	3,418.55	691.33	-127.94	212.55	0.00	0.00	0.00
3,600.00	13.75	349.51	3,515.68	714.70	-132.27	219.74	0.00	0.00	0.00
3,700.00	13.75	349.51	3,612.82	738.07	-136.60	226.92	0.00	0.00	0.00
3,800.00	13.75	349.51	3,709.95	761.44	-140.92	234.11	0.00	0.00	0.00
3,892.71	13.75	349.51	3,800.00	783.11	-144.93	240.77	0.00	0.00	0.00
PARKMAN									
3,900.00	13.75	349.51	3,807.08	784.81	-145.25	241.29	0.00	0.00	0.00
4,000.00	13.75	349.51	3,904.22	808.19	-149.57	248.48	0.00	0.00	0.00
4,100.00	13.75	349.51	4,001.35	831.56	-153.90	255.67	0.00	0.00	0.00
4,200.00	13.75	349.51	4,098.49	854.93	-158.22	262.85	0.00	0.00	0.00
4,300.00	13.75	349.51	4,195.62	878.30	-162.55	270.04	0.00	0.00	0.00
4,400.00	13.75	349.51	4,292.76	901.67	-166.87	277.22	0.00	0.00	0.00
4,500.00	13.75	349.51	4,389.89	925.05	-171.20	284.41	0.00	0.00	0.00
4,600.00	13.75	349.51	4,487.02	948.42	-175.53	291.59	0.00	0.00	0.00
4,664.83	13.75	349.51	4,550.00	963.57	-178.33	296.25	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well AD FED J EVANS 20W-25-02
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Site:</b>	Sec 21-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	AD FED J EVANS 20W-25-02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
<b>SUSSEX</b>									
4,700.00	13.75	349.51	4,584.16	971.79	-179.85	298.78	0.00	0.00	0.00
4,800.00	13.75	349.51	4,681.29	995.16	-184.18	305.97	0.00	0.00	0.00
4,900.00	13.75	349.51	4,778.43	1,018.54	-188.50	313.15	0.00	0.00	0.00
5,000.00	13.75	349.51	4,875.56	1,041.91	-192.83	320.34	0.00	0.00	0.00
5,100.00	13.75	349.51	4,972.69	1,065.28	-197.15	327.52	0.00	0.00	0.00
5,189.88	13.75	349.51	5,060.00	1,086.29	-201.04	333.98	0.00	0.00	0.00
<b>SHANNON</b>									
5,200.00	13.75	349.51	5,069.83	1,088.65	-201.48	334.71	0.00	0.00	0.00
5,300.00	13.75	349.51	5,166.96	1,112.02	-205.80	341.90	0.00	0.00	0.00
5,400.00	13.75	349.51	5,264.10	1,135.40	-210.13	349.08	0.00	0.00	0.00
5,500.00	13.75	349.51	5,361.23	1,158.77	-214.46	356.27	0.00	0.00	0.00
5,600.00	13.75	349.51	5,458.36	1,182.14	-218.78	363.45	0.00	0.00	0.00
5,700.00	13.75	349.51	5,555.50	1,205.51	-223.11	370.64	0.00	0.00	0.00
5,800.00	13.75	349.51	5,652.63	1,228.88	-227.43	377.82	0.00	0.00	0.00
5,900.00	13.75	349.51	5,749.77	1,252.26	-231.76	385.01	0.00	0.00	0.00
6,000.00	13.75	349.51	5,846.90	1,275.63	-236.08	392.20	0.00	0.00	0.00
6,100.00	13.75	349.51	5,944.03	1,299.00	-240.41	399.38	0.00	0.00	0.00
6,200.00	13.75	349.51	6,041.17	1,322.37	-244.73	406.57	0.00	0.00	0.00
6,300.00	13.75	349.51	6,138.30	1,345.75	-249.06	413.75	0.00	0.00	0.00
6,400.00	13.75	349.51	6,235.44	1,369.12	-253.39	420.94	0.00	0.00	0.00
6,500.00	13.75	349.51	6,332.57	1,392.49	-257.71	428.13	0.00	0.00	0.00
6,600.00	13.75	349.51	6,429.71	1,415.86	-262.04	435.31	0.00	0.00	0.00
6,649.60	13.75	349.51	6,477.88	1,427.45	-264.18	438.88	0.00	0.00	0.00
<b>Start DLS 10.00 TFO -79.43</b>									
6,700.00	15.47	330.63	6,526.68	1,439.21	-268.57	444.69	10.00	3.42	-37.47
6,750.00	18.40	316.63	6,574.53	1,450.77	-277.27	454.75	10.00	5.86	-27.99
6,800.00	22.07	306.75	6,621.45	1,462.13	-290.22	469.01	10.00	7.33	-19.78
6,850.00	26.16	299.68	6,667.08	1,473.21	-307.33	487.36	10.00	8.18	-14.13
6,900.00	30.50	294.46	6,711.09	1,483.93	-328.47	509.66	10.00	8.69	-10.44
6,950.00	35.01	290.45	6,753.13	1,494.21	-353.48	535.75	10.00	9.01	-8.02
7,000.00	39.62	287.26	6,792.89	1,503.96	-382.16	565.42	10.00	9.22	-6.38
7,050.00	44.31	284.64	6,830.06	1,513.11	-414.30	598.44	10.00	9.37	-5.24
7,100.00	49.04	282.43	6,864.36	1,521.59	-449.66	634.58	10.00	9.47	-4.42
7,100.98	49.13	282.39	6,865.00	1,521.75	-450.38	635.31	10.00	9.51	-4.09
<b>SHARON SPRINGS</b>									
7,140.73	52.93	280.85	6,890.00	1,527.96	-480.65	666.12	10.00	9.54	-3.87
<b>NIOBRARA</b>									
7,150.00	53.81	280.51	6,895.53	1,529.34	-487.96	673.54	10.00	9.57	-3.63
7,200.00	58.61	278.82	6,923.33	1,536.30	-528.91	715.04	10.00	9.60	-3.39
7,250.00	63.43	277.29	6,947.55	1,542.41	-572.21	758.76	10.00	9.64	-3.06
7,300.00	68.26	275.89	6,968.00	1,547.64	-617.51	804.37	10.00	9.67	-2.81
7,350.00	73.11	274.57	6,984.54	1,551.93	-664.49	851.51	10.00	9.69	-2.63
7,400.00	77.96	273.33	6,997.03	1,555.26	-712.77	899.84	10.00	9.70	-2.49
7,450.00	82.82	272.12	7,005.37	1,557.60	-762.00	948.97	10.00	9.71	-2.41
7,500.00	87.68	270.95	7,009.52	1,558.93	-811.79	998.55	10.00	9.72	-2.35
7,523.90	90.00	270.39	7,010.00	1,559.21	-835.68	1,022.29	10.00	9.72	-2.34
<b>Start 12332.13 hold at 7523.90 MD</b>									
7,600.00	90.00	270.39	7,010.00	1,559.72	-911.78	1,097.87	0.00	0.00	0.00
7,700.00	90.00	270.39	7,010.00	1,560.40	-1,011.78	1,197.18	0.00	0.00	0.00
7,800.00	90.00	270.39	7,010.00	1,561.08	-1,111.78	1,296.49	0.00	0.00	0.00
7,900.00	90.00	270.39	7,010.00	1,561.76	-1,211.77	1,395.81	0.00	0.00	0.00
8,000.00	90.00	270.39	7,010.00	1,562.44	-1,311.77	1,495.12	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well AD FED J EVANS 20W-25-02
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Site:</b>	Sec 21-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	AD FED J EVANS 20W-25-02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)	
8,100.00	90.00	270.39	7,010.00	1,563.12	-1,411.77	1,594.43	0.00	0.00	0.00	
8,200.00	90.00	270.39	7,010.00	1,563.80	-1,511.77	1,693.74	0.00	0.00	0.00	
8,300.00	90.00	270.39	7,010.00	1,564.47	-1,611.77	1,793.06	0.00	0.00	0.00	
8,400.00	90.00	270.39	7,010.00	1,565.15	-1,711.76	1,892.37	0.00	0.00	0.00	
8,500.00	90.00	270.39	7,010.00	1,565.83	-1,811.76	1,991.68	0.00	0.00	0.00	
8,600.00	90.00	270.39	7,010.00	1,566.51	-1,911.76	2,090.99	0.00	0.00	0.00	
8,700.00	90.00	270.39	7,010.00	1,567.19	-2,011.76	2,190.31	0.00	0.00	0.00	
8,800.00	90.00	270.39	7,010.00	1,567.87	-2,111.75	2,289.62	0.00	0.00	0.00	
8,900.00	90.00	270.39	7,010.00	1,568.55	-2,211.75	2,388.93	0.00	0.00	0.00	
9,000.00	90.00	270.39	7,010.00	1,569.22	-2,311.75	2,488.24	0.00	0.00	0.00	
9,100.00	90.00	270.39	7,010.00	1,569.90	-2,411.75	2,587.55	0.00	0.00	0.00	
9,200.00	90.00	270.39	7,010.00	1,570.58	-2,511.74	2,686.87	0.00	0.00	0.00	
9,300.00	90.00	270.39	7,010.00	1,571.26	-2,611.74	2,786.18	0.00	0.00	0.00	
9,400.00	90.00	270.39	7,010.00	1,571.94	-2,711.74	2,885.49	0.00	0.00	0.00	
9,500.00	90.00	270.39	7,010.00	1,572.62	-2,811.74	2,984.80	0.00	0.00	0.00	
9,600.00	90.00	270.39	7,010.00	1,573.30	-2,911.74	3,084.12	0.00	0.00	0.00	
9,700.00	90.00	270.39	7,010.00	1,573.97	-3,011.73	3,183.43	0.00	0.00	0.00	
9,800.00	90.00	270.39	7,010.00	1,574.65	-3,111.73	3,282.74	0.00	0.00	0.00	
9,900.00	90.00	270.39	7,010.00	1,575.33	-3,211.73	3,382.05	0.00	0.00	0.00	
10,000.00	90.00	270.39	7,010.00	1,576.01	-3,311.73	3,481.37	0.00	0.00	0.00	
10,100.00	90.00	270.39	7,010.00	1,576.69	-3,411.72	3,580.68	0.00	0.00	0.00	
10,200.00	90.00	270.39	7,010.00	1,577.37	-3,511.72	3,679.99	0.00	0.00	0.00	
10,300.00	90.00	270.39	7,010.00	1,578.05	-3,611.72	3,779.30	0.00	0.00	0.00	
10,400.00	90.00	270.39	7,010.00	1,578.72	-3,711.72	3,878.62	0.00	0.00	0.00	
10,500.00	90.00	270.39	7,010.00	1,579.40	-3,811.72	3,977.93	0.00	0.00	0.00	
10,600.00	90.00	270.39	7,010.00	1,580.08	-3,911.71	4,077.24	0.00	0.00	0.00	
10,700.00	90.00	270.39	7,010.00	1,580.76	-4,011.71	4,176.55	0.00	0.00	0.00	
10,800.00	90.00	270.39	7,010.00	1,581.44	-4,111.71	4,275.87	0.00	0.00	0.00	
10,900.00	90.00	270.39	7,010.00	1,582.12	-4,211.71	4,375.18	0.00	0.00	0.00	
11,000.00	90.00	270.39	7,010.00	1,582.80	-4,311.70	4,474.49	0.00	0.00	0.00	
11,100.00	90.00	270.39	7,010.00	1,583.47	-4,411.70	4,573.80	0.00	0.00	0.00	
11,200.00	90.00	270.39	7,010.00	1,584.15	-4,511.70	4,673.11	0.00	0.00	0.00	
11,300.00	90.00	270.39	7,010.00	1,584.83	-4,611.70	4,772.43	0.00	0.00	0.00	
11,400.00	90.00	270.39	7,010.00	1,585.51	-4,711.69	4,871.74	0.00	0.00	0.00	
11,500.00	90.00	270.39	7,010.00	1,586.19	-4,811.69	4,971.05	0.00	0.00	0.00	
11,600.00	90.00	270.39	7,010.00	1,586.87	-4,911.69	5,070.36	0.00	0.00	0.00	
11,700.00	90.00	270.39	7,010.00	1,587.55	-5,011.69	5,169.68	0.00	0.00	0.00	
11,800.00	90.00	270.39	7,010.00	1,588.22	-5,111.69	5,268.99	0.00	0.00	0.00	
11,900.00	90.00	270.39	7,010.00	1,588.90	-5,211.68	5,368.30	0.00	0.00	0.00	
12,000.00	90.00	270.39	7,010.00	1,589.58	-5,311.68	5,467.61	0.00	0.00	0.00	
12,100.00	90.00	270.39	7,010.00	1,590.26	-5,411.68	5,566.93	0.00	0.00	0.00	
12,200.00	90.00	270.39	7,010.00	1,590.94	-5,511.68	5,666.24	0.00	0.00	0.00	
12,300.00	90.00	270.39	7,010.00	1,591.62	-5,611.67	5,765.55	0.00	0.00	0.00	
12,400.00	90.00	270.39	7,010.00	1,592.30	-5,711.67	5,864.86	0.00	0.00	0.00	
12,500.00	90.00	270.39	7,010.00	1,592.97	-5,811.67	5,964.18	0.00	0.00	0.00	
12,600.00	90.00	270.39	7,010.00	1,593.65	-5,911.67	6,063.49	0.00	0.00	0.00	
12,700.00	90.00	270.39	7,010.00	1,594.33	-6,011.66	6,162.80	0.00	0.00	0.00	
12,800.00	90.00	270.39	7,010.00	1,595.01	-6,111.66	6,262.11	0.00	0.00	0.00	
12,900.00	90.00	270.39	7,010.00	1,595.69	-6,211.66	6,361.43	0.00	0.00	0.00	
13,000.00	90.00	270.39	7,010.00	1,596.37	-6,311.66	6,460.74	0.00	0.00	0.00	
13,100.00	90.00	270.39	7,010.00	1,597.05	-6,411.66	6,560.05	0.00	0.00	0.00	
13,200.00	90.00	270.39	7,010.00	1,597.72	-6,511.65	6,659.36	0.00	0.00	0.00	
13,300.00	90.00	270.39	7,010.00	1,598.40	-6,611.65	6,758.67	0.00	0.00	0.00	
13,400.00	90.00	270.39	7,010.00	1,599.08	-6,711.65	6,857.99	0.00	0.00	0.00	

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well AD FED J EVANS 20W-25-02
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Site:</b>	Sec 21-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	AD FED J EVANS 20W-25-02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)	
13,500.00	90.00	270.39	7,010.00	1,599.76	-6,811.65	6,957.30	0.00	0.00	0.00	
13,600.00	90.00	270.39	7,010.00	1,600.44	-6,911.64	7,056.61	0.00	0.00	0.00	
13,700.00	90.00	270.39	7,010.00	1,601.12	-7,011.64	7,155.92	0.00	0.00	0.00	
13,800.00	90.00	270.39	7,010.00	1,601.80	-7,111.64	7,255.24	0.00	0.00	0.00	
13,900.00	90.00	270.39	7,010.00	1,602.47	-7,211.64	7,354.55	0.00	0.00	0.00	
14,000.00	90.00	270.39	7,010.00	1,603.15	-7,311.63	7,453.86	0.00	0.00	0.00	
14,100.00	90.00	270.39	7,010.00	1,603.83	-7,411.63	7,553.17	0.00	0.00	0.00	
14,200.00	90.00	270.39	7,010.00	1,604.51	-7,511.63	7,652.49	0.00	0.00	0.00	
14,300.00	90.00	270.39	7,010.00	1,605.19	-7,611.63	7,751.80	0.00	0.00	0.00	
14,400.00	90.00	270.39	7,010.00	1,605.87	-7,711.63	7,851.11	0.00	0.00	0.00	
14,500.00	90.00	270.39	7,010.00	1,606.55	-7,811.62	7,950.42	0.00	0.00	0.00	
14,600.00	90.00	270.39	7,010.00	1,607.22	-7,911.62	8,049.74	0.00	0.00	0.00	
14,700.00	90.00	270.39	7,010.00	1,607.90	-8,011.62	8,149.05	0.00	0.00	0.00	
14,800.00	90.00	270.39	7,010.00	1,608.58	-8,111.62	8,248.36	0.00	0.00	0.00	
14,900.00	90.00	270.39	7,010.00	1,609.26	-8,211.61	8,347.67	0.00	0.00	0.00	
15,000.00	90.00	270.39	7,010.00	1,609.94	-8,311.61	8,446.99	0.00	0.00	0.00	
15,100.00	90.00	270.39	7,010.00	1,610.62	-8,411.61	8,546.30	0.00	0.00	0.00	
15,200.00	90.00	270.39	7,010.00	1,611.30	-8,511.61	8,645.61	0.00	0.00	0.00	
15,300.00	90.00	270.39	7,010.00	1,611.97	-8,611.60	8,744.92	0.00	0.00	0.00	
15,400.00	90.00	270.39	7,010.00	1,612.65	-8,711.60	8,844.23	0.00	0.00	0.00	
15,500.00	90.00	270.39	7,010.00	1,613.33	-8,811.60	8,943.55	0.00	0.00	0.00	
15,600.00	90.00	270.39	7,010.00	1,614.01	-8,911.60	9,042.86	0.00	0.00	0.00	
15,700.00	90.00	270.39	7,010.00	1,614.69	-9,011.60	9,142.17	0.00	0.00	0.00	
15,800.00	90.00	270.39	7,010.00	1,615.37	-9,111.59	9,241.48	0.00	0.00	0.00	
15,900.00	90.00	270.39	7,010.00	1,616.05	-9,211.59	9,340.80	0.00	0.00	0.00	
16,000.00	90.00	270.39	7,010.00	1,616.72	-9,311.59	9,440.11	0.00	0.00	0.00	
16,100.00	90.00	270.39	7,010.00	1,617.40	-9,411.59	9,539.42	0.00	0.00	0.00	
16,200.00	90.00	270.39	7,010.00	1,618.08	-9,511.58	9,638.73	0.00	0.00	0.00	
16,300.00	90.00	270.39	7,010.00	1,618.76	-9,611.58	9,738.05	0.00	0.00	0.00	
16,400.00	90.00	270.39	7,010.00	1,619.44	-9,711.58	9,837.36	0.00	0.00	0.00	
16,500.00	90.00	270.39	7,010.00	1,620.12	-9,811.58	9,936.67	0.00	0.00	0.00	
16,600.00	90.00	270.39	7,010.00	1,620.79	-9,911.57	10,035.98	0.00	0.00	0.00	
16,700.00	90.00	270.39	7,010.00	1,621.47	-10,011.57	10,135.30	0.00	0.00	0.00	
16,800.00	90.00	270.39	7,010.00	1,622.15	-10,111.57	10,234.61	0.00	0.00	0.00	
16,900.00	90.00	270.39	7,010.00	1,622.83	-10,211.57	10,333.92	0.00	0.00	0.00	
17,000.00	90.00	270.39	7,010.00	1,623.51	-10,311.57	10,433.23	0.00	0.00	0.00	
17,100.00	90.00	270.39	7,010.00	1,624.19	-10,411.56	10,532.55	0.00	0.00	0.00	
17,200.00	90.00	270.39	7,010.00	1,624.87	-10,511.56	10,631.86	0.00	0.00	0.00	
17,300.00	90.00	270.39	7,010.00	1,625.54	-10,611.56	10,731.17	0.00	0.00	0.00	
17,400.00	90.00	270.39	7,010.00	1,626.22	-10,711.56	10,830.48	0.00	0.00	0.00	
17,500.00	90.00	270.39	7,010.00	1,626.90	-10,811.55	10,929.79	0.00	0.00	0.00	
17,600.00	90.00	270.39	7,010.00	1,627.58	-10,911.55	11,029.11	0.00	0.00	0.00	
17,700.00	90.00	270.39	7,010.00	1,628.26	-11,011.55	11,128.42	0.00	0.00	0.00	
17,800.00	90.00	270.39	7,010.00	1,628.94	-11,111.55	11,227.73	0.00	0.00	0.00	
17,900.00	90.00	270.39	7,010.00	1,629.62	-11,211.54	11,327.04	0.00	0.00	0.00	
18,000.00	90.00	270.39	7,010.00	1,630.29	-11,311.54	11,426.36	0.00	0.00	0.00	
18,100.00	90.00	270.39	7,010.00	1,630.97	-11,411.54	11,525.67	0.00	0.00	0.00	
18,200.00	90.00	270.39	7,010.00	1,631.65	-11,511.54	11,624.98	0.00	0.00	0.00	
18,300.00	90.00	270.39	7,010.00	1,632.33	-11,611.54	11,724.29	0.00	0.00	0.00	
18,400.00	90.00	270.39	7,010.00	1,633.01	-11,711.53	11,823.61	0.00	0.00	0.00	
18,500.00	90.00	270.39	7,010.00	1,633.69	-11,811.53	11,922.92	0.00	0.00	0.00	
18,600.00	90.00	270.39	7,010.00	1,634.37	-11,911.53	12,022.23	0.00	0.00	0.00	
18,700.00	90.00	270.39	7,010.00	1,635.04	-12,011.53	12,121.54	0.00	0.00	0.00	
18,800.00	90.00	270.39	7,010.00	1,635.72	-12,111.52	12,220.86	0.00	0.00	0.00	

## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well AD FED J EVANS 20W-25-02
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB-EST @ 4654.00usft (Original Well Elev)
<b>Site:</b>	Sec 21-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	AD FED J EVANS 20W-25-02	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)	
18,900.00	90.00	270.39	7,010.00	1,636.40	-12,211.52	12,320.17	0.00	0.00	0.00	
19,000.00	90.00	270.39	7,010.00	1,637.08	-12,311.52	12,419.48	0.00	0.00	0.00	
19,100.00	90.00	270.39	7,010.00	1,637.76	-12,411.52	12,518.79	0.00	0.00	0.00	
19,200.00	90.00	270.39	7,010.00	1,638.44	-12,511.51	12,618.11	0.00	0.00	0.00	
19,300.00	90.00	270.39	7,010.00	1,639.12	-12,611.51	12,717.42	0.00	0.00	0.00	
19,400.00	90.00	270.39	7,010.00	1,639.79	-12,711.51	12,816.73	0.00	0.00	0.00	
19,500.00	90.00	270.39	7,010.00	1,640.47	-12,811.51	12,916.04	0.00	0.00	0.00	
19,600.00	90.00	270.39	7,010.00	1,641.15	-12,911.51	13,015.35	0.00	0.00	0.00	
19,700.00	90.00	270.39	7,010.00	1,641.83	-13,011.50	13,114.67	0.00	0.00	0.00	
19,800.00	90.00	270.39	7,010.00	1,642.51	-13,111.50	13,213.98	0.00	0.00	0.00	
19,856.02	90.00	270.39	7,010.00	1,642.89	-13,167.52	13,269.62	0.00	0.00	0.00	
TD at 19856.02										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
HZ LANDING PNT - AD-	0.00	0.00	7,010.00	1,559.21	-835.68	1,385,147.96	3,228,564.20	40.387730°N	104.679470°W	
- plan hits target center										
- Point										
BHL - AD-J EVANS C3-2	0.00	0.00	7,010.00	1,642.85	-13,167.52	1,385,117.08	3,216,232.12	40.387950°N	104.723740°W	
- plan misses target center by 0.04usft at 19856.02usft MD (7010.00 TVD, 1642.89 N, -13167.52 E)										
- Point										

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,892.71	3,800.00	PARKMAN				
4,664.83	4,550.00	SUSSEX				
5,189.88	5,060.00	SHANNON				
7,100.98	6,865.00	SHARON SPRINGS				
7,140.73	6,890.00	NIOBRARA				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
200.00	200.00	0.00	0.00	Start Build 2.00	
887.51	880.93	80.73	-14.94	Start 5762.09 hold at 887.51 MD	
6,649.60	6,477.88	1,427.45	-264.18	Start DLS 10.00 TFO -79.43	
7,523.90	7,010.00	1,559.21	-835.68	Start 12332.13 hold at 7523.90 MD	
19,856.02	7,010.00	1,642.89	-13,167.52	TD at 19856.02	