

EXTRACTION OIL & GAS

Weld County

Sec 21-T5N-R65W

AD-DAIRY 3-20-24

ORIGINAL WELLBORE

Plan: PROPOSAL #1

Standard Planning Report

13 February, 2017



Project: Weld County
Site: Sec 21-T5N-R65W
Well: AD-DAIRY 3-20-24
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1



Azimuths to True North
Magnetic North: 8.28°
Magnetic Field
Strength: 52516.2nT
Dip Angle: 66.88°
Date: 5/22/2016
Model: IGRF2015

WELL DETAILS: AD-DAIRY 3-20-24

+N/-S	+E/-W	Northing	Ground Level:	4639.0	Latitude	Longitude	Slot
0.0	0.0	1383356.13	Easting	3229413.78	40° 22' 58.044 N	104° 40' 35.328 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2144.0	0.00	0.00	2144.0	0.0	0.0	0.00	0.00	0.0	
3	2619.9	9.52	201.76	2617.7	-36.6	-14.6	2.00	201.76	16.2	
4	6533.6	9.52	201.76	6477.6	-637.6	-254.5	0.00	0.00	281.6	
5	7399.6	90.00	270.69	7010.0	-714.0	-827.4	10.00	69.20	857.3	HZ LANDING PNT -
6	19719.6	90.00	270.69	7010.0	-564.8	-13146.5	0.00	0.00	13158.7	BHL - AD-DAIRY 3-

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
2144.0	0.00	0.00	2144.0	0.0	0.0	0.0	0.0	Build 2"/100'
2619.9	9.52	201.76	2617.7	-36.6	-14.6	-36.6	39.4	Hold 9.52" Inc
6533.6	9.52	201.76	6477.6	-637.6	-254.5	-637.6	686.5	KOP, Build 10"/100'
7399.6	90.00	270.69	7010.0	-714.0	-827.4	-714.0	1273.3	LP @ 90° Inc, 270.69° Azm Hold
19719.6	90.00	270.69	7010.0	-564.8	-13146.5	-564.8	13593.3	TD at 19719.6' MD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL - AD-DAIRY 3-20-24	7010.0	-564.8	-13146.5	1382669.27	3216273.05	40° 22' 52.428 N	104° 43' 25.212 W	Point
HZ LANDING PNT - AD-DAIRY 3-20-24	7010.0	-714.0	-827.4	1382634.48	3228593.03	40° 22' 50.988 N	104° 40' 46.020 W	Point

FORMATION TOP DETAILS

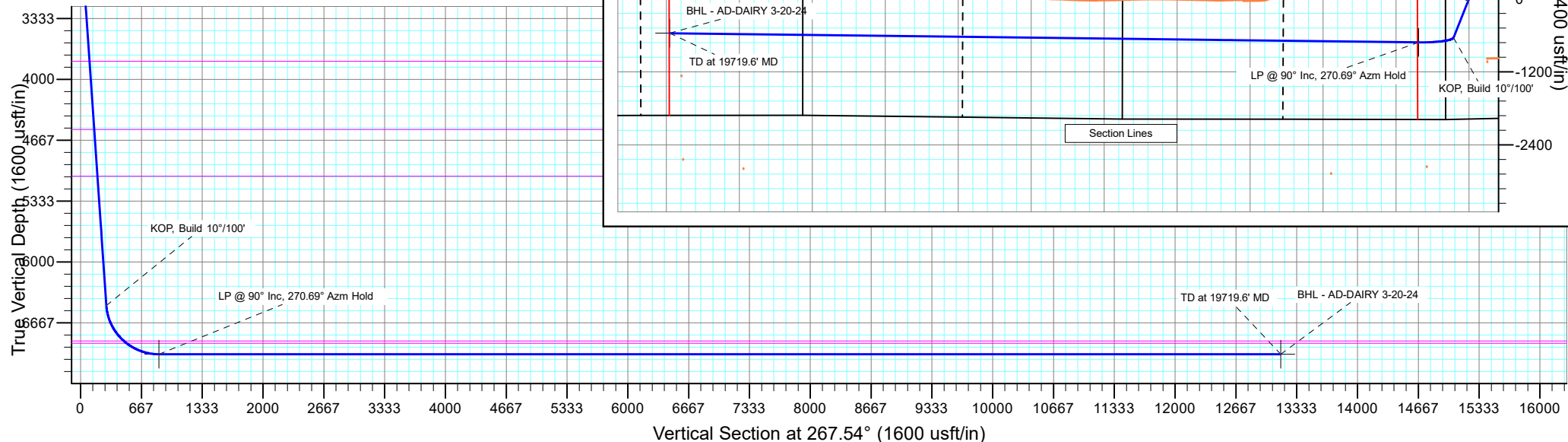
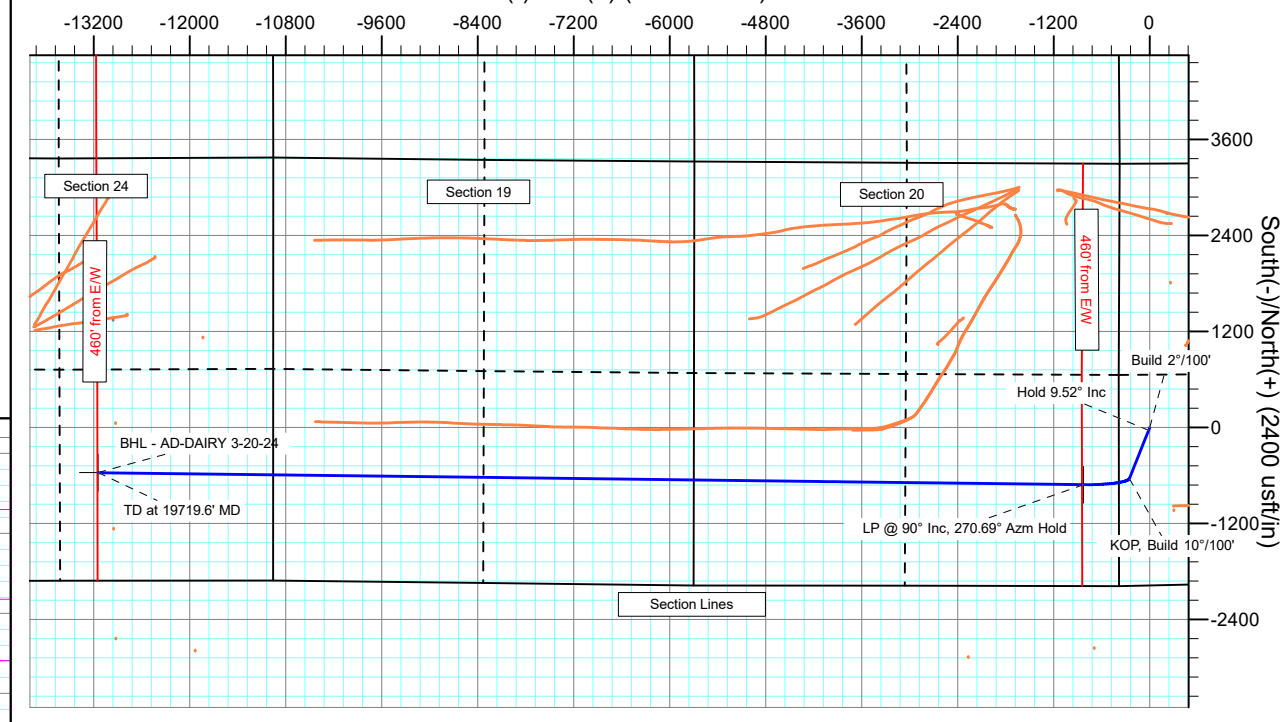
TVDPath	MDPath	Formation
3800.0	3818.7	PARKMAN
4550.0	4579.2	SUSSEX
5060.0	5096.3	SHANNON
6865.0	6980.2	SHARON SPRINGS
6890.0	7019.6	NIOBRARA

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:
368' FSL, 1972' FSL
Sec 21-T5N-R65W
LP:
1268' FSL, 460' FEL
Sec 20-T5N-R65W
BHL:
1348' FSL, 2208' FEL
Sec 24-T5N-R66W

West(-)/East(+) (2400 usft/in)



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well AD-DAIRY 3-20-24
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DAIRY 3-20-24	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 21-T5N-R65W			
Site Position:		Northing:	1,383,619.20 usft	Latitude:	40° 23' 0.636 N
From:	Lat/Long	Easting:	3,229,494.91 usft	Longitude:	104° 40' 34.248 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence:	0.53 °

Well	AD-DAIRY 3-20-24					
Well Position	+N/-S	-262.3 usft	Northing:	1,383,356.13 usft	Latitude:	40° 22' 58.044 N
	+E/-W	-83.6 usft	Easting:	3,229,413.78 usft	Longitude:	104° 40' 35.328 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	4,639.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/22/2016	8.28	66.88	52,516.24079385

Design	PROPOSAL #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	0.00

Plan Survey Tool Program			Date	2/13/2017	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	19,719.6	PROPOSAL #1 (ORIGINAL WEL	MWD OWSG Rev 2	
				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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,144.0	0.00	0.00	2,144.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,619.9	9.52	201.76	2,617.7	-36.6	-14.6	2.00	2.00	0.00	201.76	
6,533.6	9.52	201.76	6,477.6	-637.6	-254.5	0.00	0.00	0.00	0.00	
7,399.6	90.00	270.69	7,010.0	-714.0	-827.4	10.00	9.29	7.96	69.20	HZ LANDING PNT - /
19,719.6	90.00	270.69	7,010.0	-564.8	-13,146.5	0.00	0.00	0.00	0.00	BHL - AD-DAIRY 3-20-

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well AD-DAIRY 3-20-24
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DAIRY 3-20-24	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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,144.0	0.00	0.00	2,144.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 2°/100'									
2,200.0	1.12	201.76	2,200.0	-0.5	-0.2	-0.5	2.00	2.00	0.00
2,300.0	3.12	201.76	2,299.9	-3.9	-1.6	-3.9	2.00	2.00	0.00
2,400.0	5.12	201.76	2,399.7	-10.6	-4.2	-10.6	2.00	2.00	0.00
2,500.0	7.12	201.76	2,499.1	-20.5	-8.2	-20.5	2.00	2.00	0.00
2,600.0	9.12	201.76	2,598.1	-33.6	-13.4	-33.6	2.00	2.00	0.00
2,619.9	9.52	201.76	2,617.7	-36.6	-14.6	-36.6	2.00	2.00	0.00
Hold 9.52° Inc									
2,700.0	9.52	201.76	2,696.7	-48.9	-19.5	-48.9	0.00	0.00	0.00
2,800.0	9.52	201.76	2,795.3	-64.3	-25.7	-64.3	0.00	0.00	0.00
2,900.0	9.52	201.76	2,894.0	-79.6	-31.8	-79.6	0.00	0.00	0.00
3,000.0	9.52	201.76	2,992.6	-95.0	-37.9	-95.0	0.00	0.00	0.00
3,100.0	9.52	201.76	3,091.2	-110.4	-44.0	-110.4	0.00	0.00	0.00
3,200.0	9.52	201.76	3,189.8	-125.7	-50.2	-125.7	0.00	0.00	0.00
3,300.0	9.52	201.76	3,288.5	-141.1	-56.3	-141.1	0.00	0.00	0.00
3,400.0	9.52	201.76	3,387.1	-156.4	-62.4	-156.4	0.00	0.00	0.00
3,500.0	9.52	201.76	3,485.7	-171.8	-68.6	-171.8	0.00	0.00	0.00
3,600.0	9.52	201.76	3,584.3	-187.1	-74.7	-187.1	0.00	0.00	0.00
3,700.0	9.52	201.76	3,682.9	-202.5	-80.8	-202.5	0.00	0.00	0.00
3,800.0	9.52	201.76	3,781.6	-217.8	-86.9	-217.8	0.00	0.00	0.00
3,818.7	9.52	201.76	3,800.0	-220.7	-88.1	-220.7	0.00	0.00	0.00
PARKMAN									
3,900.0	9.52	201.76	3,880.2	-233.2	-93.1	-233.2	0.00	0.00	0.00
4,000.0	9.52	201.76	3,978.8	-248.6	-99.2	-248.6	0.00	0.00	0.00
4,100.0	9.52	201.76	4,077.4	-263.9	-105.3	-263.9	0.00	0.00	0.00
4,200.0	9.52	201.76	4,176.1	-279.3	-111.5	-279.3	0.00	0.00	0.00
4,300.0	9.52	201.76	4,274.7	-294.6	-117.6	-294.6	0.00	0.00	0.00
4,400.0	9.52	201.76	4,373.3	-310.0	-123.7	-310.0	0.00	0.00	0.00
4,500.0	9.52	201.76	4,471.9	-325.3	-129.9	-325.3	0.00	0.00	0.00
4,579.2	9.52	201.76	4,550.0	-337.5	-134.7	-337.5	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well AD-DAIRY 3-20-24
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DAIRY 3-20-24	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)
SUSSEX									
4,600.0	9.52	201.76	4,570.6	-340.7	-136.0	-340.7	0.00	0.00	0.00
4,700.0	9.52	201.76	4,669.2	-356.1	-142.1	-356.1	0.00	0.00	0.00
4,800.0	9.52	201.76	4,767.8	-371.4	-148.2	-371.4	0.00	0.00	0.00
4,900.0	9.52	201.76	4,866.4	-386.8	-154.4	-386.8	0.00	0.00	0.00
5,000.0	9.52	201.76	4,965.1	-402.1	-160.5	-402.1	0.00	0.00	0.00
5,096.3	9.52	201.76	5,060.0	-416.9	-166.4	-416.9	0.00	0.00	0.00
SHANNON									
5,100.0	9.52	201.76	5,063.7	-417.5	-166.6	-417.5	0.00	0.00	0.00
5,200.0	9.52	201.76	5,162.3	-432.8	-172.8	-432.8	0.00	0.00	0.00
5,300.0	9.52	201.76	5,260.9	-448.2	-178.9	-448.2	0.00	0.00	0.00
5,400.0	9.52	201.76	5,359.5	-463.6	-185.0	-463.6	0.00	0.00	0.00
5,500.0	9.52	201.76	5,458.2	-478.9	-191.1	-478.9	0.00	0.00	0.00
5,600.0	9.52	201.76	5,556.8	-494.3	-197.3	-494.3	0.00	0.00	0.00
5,700.0	9.52	201.76	5,655.4	-509.6	-203.4	-509.6	0.00	0.00	0.00
5,800.0	9.52	201.76	5,754.0	-525.0	-209.5	-525.0	0.00	0.00	0.00
5,900.0	9.52	201.76	5,852.7	-540.3	-215.7	-540.3	0.00	0.00	0.00
6,000.0	9.52	201.76	5,951.3	-555.7	-221.8	-555.7	0.00	0.00	0.00
6,100.0	9.52	201.76	6,049.9	-571.0	-227.9	-571.0	0.00	0.00	0.00
6,200.0	9.52	201.76	6,148.5	-586.4	-234.0	-586.4	0.00	0.00	0.00
6,300.0	9.52	201.76	6,247.2	-601.8	-240.2	-601.8	0.00	0.00	0.00
6,400.0	9.52	201.76	6,345.8	-617.1	-246.3	-617.1	0.00	0.00	0.00
6,500.0	9.52	201.76	6,444.4	-632.5	-252.4	-632.5	0.00	0.00	0.00
6,533.6	9.52	201.76	6,477.6	-637.6	-254.5	-637.6	0.00	0.00	0.00
KOP, Build 10°/100'									
6,550.0	10.21	210.43	6,493.7	-640.1	-255.7	-640.1	10.00	4.25	52.92
6,600.0	13.38	229.59	6,542.7	-647.7	-262.4	-647.7	10.00	6.34	38.32
6,650.0	17.42	240.79	6,590.9	-655.1	-273.3	-655.1	10.00	8.08	22.41
6,700.0	21.85	247.73	6,638.0	-662.3	-288.5	-662.3	10.00	8.86	13.88
6,750.0	26.48	252.39	6,683.6	-669.2	-307.7	-669.2	10.00	9.25	9.31
6,800.0	31.21	255.73	6,727.3	-675.8	-330.9	-675.8	10.00	9.47	6.68
6,850.0	36.01	258.27	6,769.0	-682.0	-357.9	-682.0	10.00	9.60	5.07
6,900.0	40.86	260.27	6,808.1	-687.7	-388.4	-687.7	10.00	9.68	4.01
6,950.0	45.73	261.92	6,844.5	-693.0	-422.3	-693.0	10.00	9.74	3.30
6,980.2	48.68	262.79	6,865.0	-696.0	-444.2	-696.0	10.00	9.78	2.87
SHARON SPRINGS									
7,000.0	50.62	263.32	6,877.8	-697.8	-459.2	-697.8	10.00	9.79	2.66
7,019.6	52.54	263.81	6,890.0	-699.5	-474.5	-699.5	10.00	9.80	2.52
NIORARA									
7,050.0	55.52	264.53	6,907.9	-702.0	-499.0	-702.0	10.00	9.82	2.36
7,100.0	60.44	265.60	6,934.4	-705.6	-541.2	-705.6	10.00	9.83	2.15
7,150.0	65.36	266.58	6,957.1	-708.7	-585.6	-708.7	10.00	9.85	1.95
7,200.0	70.29	267.48	6,976.0	-711.0	-631.8	-711.0	10.00	9.86	1.80
7,250.0	75.23	268.33	6,990.8	-712.8	-679.5	-712.8	10.00	9.87	1.70
7,300.0	80.17	269.14	7,001.5	-713.9	-728.3	-713.9	10.00	9.87	1.62
7,350.0	85.10	269.93	7,007.9	-714.3	-777.9	-714.3	10.00	9.88	1.57
7,399.6	90.00	270.69	7,010.0	-714.0	-827.4	-714.0	10.00	9.88	1.55
LP @ 90° Inc, 270.69° Azm Hold									
7,500.0	90.00	270.69	7,010.0	-712.8	-927.8	-712.8	0.00	0.00	0.00
7,600.0	90.00	270.69	7,010.0	-711.6	-1,027.8	-711.6	0.00	0.00	0.00
7,700.0	90.00	270.69	7,010.0	-710.4	-1,127.8	-710.4	0.00	0.00	0.00
7,800.0	90.00	270.69	7,010.0	-709.1	-1,227.8	-709.1	0.00	0.00	0.00
7,900.0	90.00	270.69	7,010.0	-707.9	-1,327.8	-707.9	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well AD-DAIRY 3-20-24
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DAIRY 3-20-24	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)	
8,000.0	90.00	270.69	7,010.0	-706.7	-1,427.8	-706.7	0.00	0.00	0.00	
8,100.0	90.00	270.69	7,010.0	-705.5	-1,527.8	-705.5	0.00	0.00	0.00	
8,200.0	90.00	270.69	7,010.0	-704.3	-1,627.8	-704.3	0.00	0.00	0.00	
8,300.0	90.00	270.69	7,010.0	-703.1	-1,727.8	-703.1	0.00	0.00	0.00	
8,400.0	90.00	270.69	7,010.0	-701.9	-1,827.8	-701.9	0.00	0.00	0.00	
8,500.0	90.00	270.69	7,010.0	-700.7	-1,927.8	-700.7	0.00	0.00	0.00	
8,600.0	90.00	270.69	7,010.0	-699.5	-2,027.8	-699.5	0.00	0.00	0.00	
8,700.0	90.00	270.69	7,010.0	-698.2	-2,127.8	-698.2	0.00	0.00	0.00	
8,800.0	90.00	270.69	7,010.0	-697.0	-2,227.8	-697.0	0.00	0.00	0.00	
8,900.0	90.00	270.69	7,010.0	-695.8	-2,327.7	-695.8	0.00	0.00	0.00	
9,000.0	90.00	270.69	7,010.0	-694.6	-2,427.7	-694.6	0.00	0.00	0.00	
9,100.0	90.00	270.69	7,010.0	-693.4	-2,527.7	-693.4	0.00	0.00	0.00	
9,200.0	90.00	270.69	7,010.0	-692.2	-2,627.7	-692.2	0.00	0.00	0.00	
9,300.0	90.00	270.69	7,010.0	-691.0	-2,727.7	-691.0	0.00	0.00	0.00	
9,400.0	90.00	270.69	7,010.0	-689.8	-2,827.7	-689.8	0.00	0.00	0.00	
9,500.0	90.00	270.69	7,010.0	-688.6	-2,927.7	-688.6	0.00	0.00	0.00	
9,600.0	90.00	270.69	7,010.0	-687.3	-3,027.7	-687.3	0.00	0.00	0.00	
9,700.0	90.00	270.69	7,010.0	-686.1	-3,127.7	-686.1	0.00	0.00	0.00	
9,800.0	90.00	270.69	7,010.0	-684.9	-3,227.7	-684.9	0.00	0.00	0.00	
9,900.0	90.00	270.69	7,010.0	-683.7	-3,327.7	-683.7	0.00	0.00	0.00	
10,000.0	90.00	270.69	7,010.0	-682.5	-3,427.7	-682.5	0.00	0.00	0.00	
10,100.0	90.00	270.69	7,010.0	-681.3	-3,527.7	-681.3	0.00	0.00	0.00	
10,200.0	90.00	270.69	7,010.0	-680.1	-3,627.7	-680.1	0.00	0.00	0.00	
10,300.0	90.00	270.69	7,010.0	-678.9	-3,727.6	-678.9	0.00	0.00	0.00	
10,400.0	90.00	270.69	7,010.0	-677.7	-3,827.6	-677.7	0.00	0.00	0.00	
10,500.0	90.00	270.69	7,010.0	-676.4	-3,927.6	-676.4	0.00	0.00	0.00	
10,600.0	90.00	270.69	7,010.0	-675.2	-4,027.6	-675.2	0.00	0.00	0.00	
10,700.0	90.00	270.69	7,010.0	-674.0	-4,127.6	-674.0	0.00	0.00	0.00	
10,800.0	90.00	270.69	7,010.0	-672.8	-4,227.6	-672.8	0.00	0.00	0.00	
10,900.0	90.00	270.69	7,010.0	-671.6	-4,327.6	-671.6	0.00	0.00	0.00	
11,000.0	90.00	270.69	7,010.0	-670.4	-4,427.6	-670.4	0.00	0.00	0.00	
11,100.0	90.00	270.69	7,010.0	-669.2	-4,527.6	-669.2	0.00	0.00	0.00	
11,200.0	90.00	270.69	7,010.0	-668.0	-4,627.6	-668.0	0.00	0.00	0.00	
11,300.0	90.00	270.69	7,010.0	-666.7	-4,727.6	-666.7	0.00	0.00	0.00	
11,400.0	90.00	270.69	7,010.0	-665.5	-4,827.6	-665.5	0.00	0.00	0.00	
11,500.0	90.00	270.69	7,010.0	-664.3	-4,927.6	-664.3	0.00	0.00	0.00	
11,600.0	90.00	270.69	7,010.0	-663.1	-5,027.5	-663.1	0.00	0.00	0.00	
11,700.0	90.00	270.69	7,010.0	-661.9	-5,127.5	-661.9	0.00	0.00	0.00	
11,800.0	90.00	270.69	7,010.0	-660.7	-5,227.5	-660.7	0.00	0.00	0.00	
11,900.0	90.00	270.69	7,010.0	-659.5	-5,327.5	-659.5	0.00	0.00	0.00	
12,000.0	90.00	270.69	7,010.0	-658.3	-5,427.5	-658.3	0.00	0.00	0.00	
12,100.0	90.00	270.69	7,010.0	-657.1	-5,527.5	-657.1	0.00	0.00	0.00	
12,200.0	90.00	270.69	7,010.0	-655.8	-5,627.5	-655.8	0.00	0.00	0.00	
12,300.0	90.00	270.69	7,010.0	-654.6	-5,727.5	-654.6	0.00	0.00	0.00	
12,400.0	90.00	270.69	7,010.0	-653.4	-5,827.5	-653.4	0.00	0.00	0.00	
12,500.0	90.00	270.69	7,010.0	-652.2	-5,927.5	-652.2	0.00	0.00	0.00	
12,600.0	90.00	270.69	7,010.0	-651.0	-6,027.5	-651.0	0.00	0.00	0.00	
12,700.0	90.00	270.69	7,010.0	-649.8	-6,127.5	-649.8	0.00	0.00	0.00	
19,719.6	90.00	270.69	7,010.0	-564.8	-13,146.5	-564.8	0.00	0.00	0.00	
TD at 19719.6' MD										

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well AD-DAIRY 3-20-24
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	KB-EST @ 4655.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DAIRY 3-20-24	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
BHL - AD-DAIRY 3-20-2	0.00	0.00	7,010.0	-564.8	-13,146.5	1,382,669.27	3,216,273.05	40° 22' 52.428 N	104° 43' 25.212 W
- plan hits target center									
- Point									
HZ LANDING PNT - AD-	0.00	0.00	7,010.0	-714.0	-827.4	1,382,634.48	3,228,593.04	40° 22' 50.988 N	104° 40' 46.020 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
3,818.7	3,800.0	PARKMAN				
4,579.2	4,550.0	SUSSEX				
5,096.3	5,060.0	SHANNON				
6,980.2	6,865.0	SHARON SPRINGS				
7,019.6	6,890.0	NIOBRARA				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
2,144.0	2,144.0	0.0	0.0	Build 2°/100'	
2,619.9	2,617.7	-36.6	-14.6	Hold 9.52° Inc	
6,533.6	6,477.6	-637.6	-254.5	KOP, Build 10°/100'	
7,399.6	7,010.0	-714.0	-827.4	LP @ 90° Inc, 270.69° Azm Hold	
19,719.6	7,010.0	-564.8	-13,146.5	TD at 19719.6' MD	