

EXTRACTION OIL & GAS

Weld County

Sec 21-T5N-R65W

AD-DOUBLE CLUTCH 2-20-24

ORIGINAL WELLBORE

Plan: PROPOSAL #1

Standard Planning Report

09 February, 2017



Project: Weld County
Site: Sec 21-T5N-R65W
Well: AD-DOUBLE CLUTCH 2-20-24
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1



Azimuths to True North
Magnetic North: 8.28°
Magnetic Field
Strength: 52516.4nT
Dip Angle: 66.88°
Date: 5/22/2016
Model: IGRF2015

WELL DETAILS: AD-DOUBLE CLUTCH 2-20-24

+N/-S	+E/-W	Northing	Ground Level:	4638.0	Easting	Latitude	Longitude	Slot
0.0	0.0	1383476.35	3229412.66	40° 22' 59.232 N	104° 40' 35.328 W			

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3459.6	9.19	330.51	3457.6	32.0	-18.1	2.00	330.51	19.6	
4	6529.1	9.19	330.51	6487.7	458.8	-259.4	0.00	0.00	280.4	
5	7383.5	90.00	270.34	7010.0	535.5	-830.1	10.00	-60.49	854.0	HZ LANDING PNT -
6	19710.6	90.00	270.34	7010.0	608.2	-13157.0	0.00	0.00	13171.0	BHL - AD-DOUBLE

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
3000.0	0.00	0.00	3000.0	0.0	0.0	0.0	0.0	Build 2°/100'
3459.6	9.19	330.51	3457.6	32.0	-18.1	19.6	36.8	Hold 9.19° Inc
6529.1	9.19	330.51	6487.7	458.8	-259.4	280.4	527.1	KOP, Build 10°/100'
7383.5	90.00	270.34	7010.0	535.5	-830.1	854.0	1109.5	LP @ 90° Inc, 270.34° Azm Hold
19710.6	90.00	270.34	7010.0	608.2	-13157.0	13171.0	13436.5	TD at 19710.6' MD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL - AD-DOUBLE CLUTCH 2-20-24	7010.0	608.2	-13157.0	1383962.37	3216250.58	40° 23' 5.208 N	104° 43' 25.356 W	Point
HZ LANDING PNT - AD-DOUBLE CLUTCH 2-20-24	7010.0	608.2	-830.1	1384004.15	3228577.57	40° 23' 4.524 N	104° 40' 46.056 W	Point

FORMATION TOP DETAILS

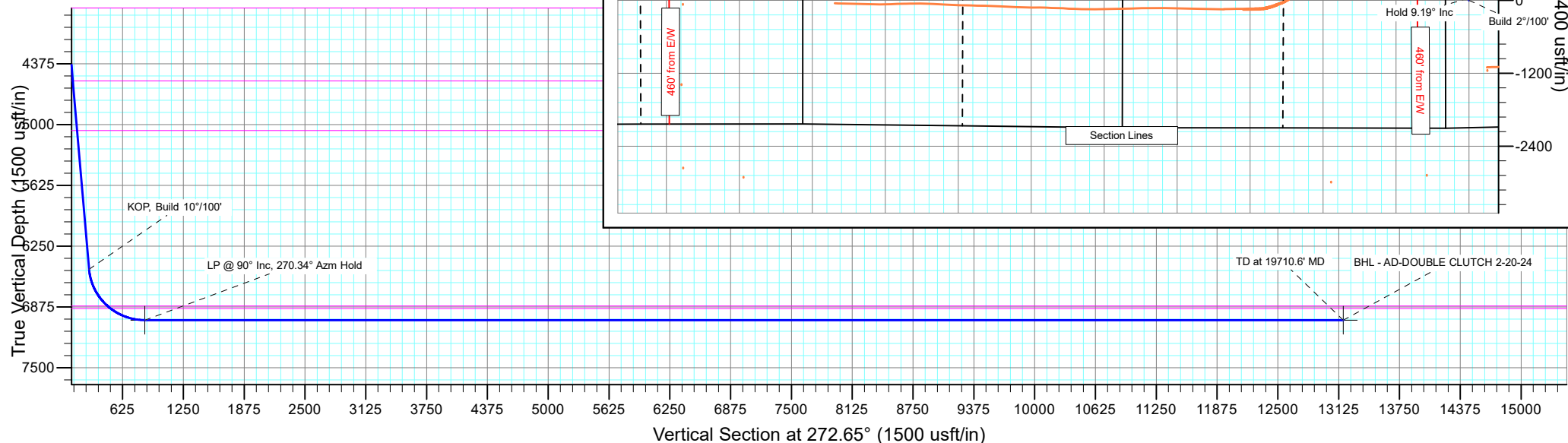
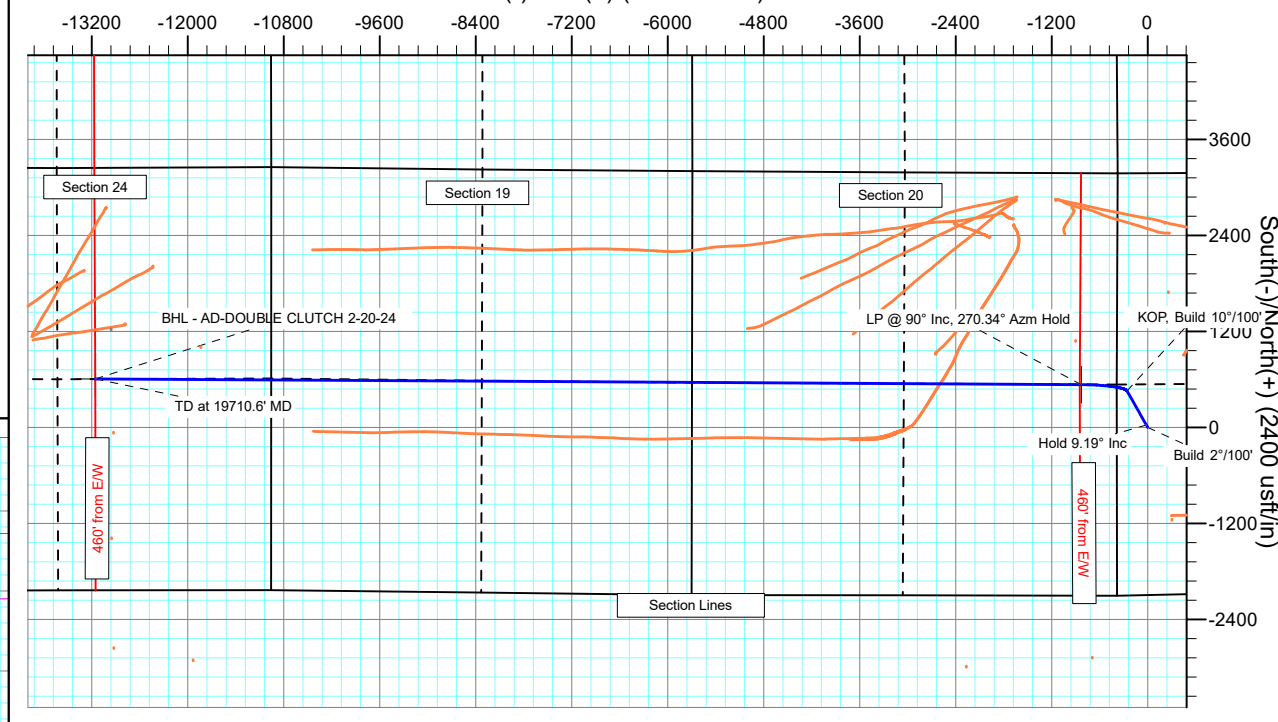
TVDPath	MDPath	Formation
3800.0	3806.4	PARKMAN
4550.0	4566.2	SUSSEX
5060.0	5082.8	SHANNON
6865.0	6964.6	SHARON SPRINGS
6890.0	7004.0	NIOBRARA

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:
369' FWL, 2092' FSL
Sec 21-T5N-R65W
LP:
2637' FSL, 460' FEL
Sec 20-T5N-R65W
BHL:
2637' FNL, 2215' FEL
Sec 24-T5N-R66W

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



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well AD-DOUBLE CLUTCH 2-20-24
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DOUBLE CLUTCH 2-20-24	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-DOUBLE CLUTCH 2-20-24			
Well Position	+N/-S	-142.1 usft	Northing:	1,383,476.35 usft
	+E/-W	-83.6 usft	Easting:	3,229,412.66 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level: 4,638.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/22/2016	8.28	66.88	52,516.42058060

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	2/9/2017		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	19,710.6	PROPOSAL #1 (ORIGINAL WEL	MWD
			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	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,459.6	9.19	330.51	3,457.6	32.0	-18.1	2.00	2.00	0.00	330.51	
6,529.1	9.19	330.51	6,487.7	458.8	-259.4	0.00	0.00	0.00	0.00	
7,383.5	90.00	270.34	7,010.0	535.5	-830.1	10.00	9.46	-7.04	-60.49	HZ LANDING PNT - /
19,710.6	90.00	270.34	7,010.0	608.2	-13,157.0	0.00	0.00	0.00	0.00	BHL - AD-DOUBLE C

Planning Report

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Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DOUBLE CLUTCH 2-20-24	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
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 2°/100'									
3,100.0	2.00	330.51	3,100.0	1.5	-0.9	1.5	2.00	2.00	0.00
3,200.0	4.00	330.51	3,199.8	6.1	-3.4	6.1	2.00	2.00	0.00
3,300.0	6.00	330.51	3,299.5	13.7	-7.7	13.7	2.00	2.00	0.00
3,400.0	8.00	330.51	3,398.7	24.3	-13.7	24.3	2.00	2.00	0.00
3,459.6	9.19	330.51	3,457.6	32.0	-18.1	32.0	2.00	2.00	0.00
Hold 9.19° Inc									
3,500.0	9.19	330.51	3,497.5	37.6	-21.3	37.6	0.00	0.00	0.00
3,600.0	9.19	330.51	3,596.2	51.5	-29.1	51.5	0.00	0.00	0.00
3,700.0	9.19	330.51	3,694.9	65.5	-37.0	65.5	0.00	0.00	0.00
3,800.0	9.19	330.51	3,793.7	79.4	-44.9	79.4	0.00	0.00	0.00
3,806.4	9.19	330.51	3,800.0	80.2	-45.4	80.2	0.00	0.00	0.00
PARKMAN									
3,900.0	9.19	330.51	3,892.4	93.3	-52.7	93.3	0.00	0.00	0.00
4,000.0	9.19	330.51	3,991.1	107.2	-60.6	107.2	0.00	0.00	0.00
4,100.0	9.19	330.51	4,089.8	121.1	-68.5	121.1	0.00	0.00	0.00
4,200.0	9.19	330.51	4,188.5	135.0	-76.3	135.0	0.00	0.00	0.00
4,300.0	9.19	330.51	4,287.2	148.9	-84.2	148.9	0.00	0.00	0.00
4,400.0	9.19	330.51	4,386.0	162.8	-92.0	162.8	0.00	0.00	0.00
4,500.0	9.19	330.51	4,484.7	176.7	-99.9	176.7	0.00	0.00	0.00
4,566.2	9.19	330.51	4,550.0	185.9	-105.1	185.9	0.00	0.00	0.00
SUSSEX									

Planning Report

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Project:	Weld County	MD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DOUBLE CLUTCH 2-20-24	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)
4,600.0	9.19	330.51	4,583.4	190.6	-107.8	190.6	0.00	0.00	0.00
4,700.0	9.19	330.51	4,682.1	204.5	-115.6	204.5	0.00	0.00	0.00
4,800.0	9.19	330.51	4,780.8	218.4	-123.5	218.4	0.00	0.00	0.00
4,900.0	9.19	330.51	4,879.5	232.3	-131.4	232.3	0.00	0.00	0.00
5,000.0	9.19	330.51	4,978.3	246.2	-139.2	246.2	0.00	0.00	0.00
5,082.8	9.19	330.51	5,060.0	257.7	-145.7	257.7	0.00	0.00	0.00
SHANNON									
5,100.0	9.19	330.51	5,077.0	260.1	-147.1	260.1	0.00	0.00	0.00
5,200.0	9.19	330.51	5,175.7	274.0	-154.9	274.0	0.00	0.00	0.00
5,300.0	9.19	330.51	5,274.4	287.9	-162.8	287.9	0.00	0.00	0.00
5,400.0	9.19	330.51	5,373.1	301.8	-170.7	301.8	0.00	0.00	0.00
5,500.0	9.19	330.51	5,471.8	315.7	-178.5	315.7	0.00	0.00	0.00
5,600.0	9.19	330.51	5,570.5	329.6	-186.4	329.6	0.00	0.00	0.00
5,700.0	9.19	330.51	5,669.3	343.6	-194.3	343.6	0.00	0.00	0.00
5,800.0	9.19	330.51	5,768.0	357.5	-202.1	357.5	0.00	0.00	0.00
5,900.0	9.19	330.51	5,866.7	371.4	-210.0	371.4	0.00	0.00	0.00
6,000.0	9.19	330.51	5,965.4	385.3	-217.8	385.3	0.00	0.00	0.00
6,100.0	9.19	330.51	6,064.1	399.2	-225.7	399.2	0.00	0.00	0.00
6,200.0	9.19	330.51	6,162.8	413.1	-233.6	413.1	0.00	0.00	0.00
6,300.0	9.19	330.51	6,261.6	427.0	-241.4	427.0	0.00	0.00	0.00
6,400.0	9.19	330.51	6,360.3	440.9	-249.3	440.9	0.00	0.00	0.00
6,500.0	9.19	330.51	6,459.0	454.8	-257.2	454.8	0.00	0.00	0.00
6,529.1	9.19	330.51	6,487.7	458.8	-259.4	458.8	0.00	0.00	0.00
KOP, Build 10°/100'									
6,550.0	10.38	320.35	6,508.3	461.7	-261.5	461.7	10.00	5.69	-48.53
6,600.0	14.10	304.33	6,557.2	468.7	-269.4	468.7	10.00	7.43	-32.05
6,650.0	18.42	295.27	6,605.2	475.5	-281.6	475.5	10.00	8.65	-18.12
6,700.0	23.01	289.64	6,651.9	482.1	-297.9	482.1	10.00	9.18	-11.26
6,750.0	27.74	285.82	6,697.1	488.6	-318.3	488.6	10.00	9.45	-7.64
6,800.0	32.54	283.05	6,740.3	494.8	-342.6	494.8	10.00	9.61	-5.55
6,850.0	37.39	280.92	6,781.3	500.7	-370.7	500.7	10.00	9.70	-4.25
6,900.0	42.27	279.22	6,819.7	506.3	-402.2	506.3	10.00	9.76	-3.40
6,950.0	47.17	277.81	6,855.2	511.5	-437.0	511.5	10.00	9.80	-2.81
6,964.6	48.61	277.45	6,865.0	512.9	-447.7	512.9	10.00	9.82	-2.53
SHARON SPRINGS									
7,000.0	52.09	276.61	6,887.6	516.2	-474.8	516.2	10.00	9.84	-2.35
7,004.0	52.48	276.53	6,890.0	516.6	-477.9	516.6	10.00	9.84	-2.22
NIOBRARA									
7,050.0	57.02	275.57	6,916.6	520.6	-515.2	520.6	10.00	9.85	-2.09
7,100.0	61.95	274.63	6,941.9	524.4	-558.1	524.4	10.00	9.87	-1.88
7,150.0	66.89	273.77	6,963.5	527.7	-603.1	527.7	10.00	9.88	-1.71
7,200.0	71.83	272.98	6,981.1	530.4	-649.8	530.4	10.00	9.89	-1.59
7,250.0	76.78	272.23	6,994.7	532.6	-697.9	532.6	10.00	9.90	-1.50
7,300.0	81.73	271.51	7,004.0	534.2	-747.0	534.2	10.00	9.90	-1.44
7,350.0	86.68	270.80	7,009.0	535.2	-796.7	535.2	10.00	9.90	-1.41
7,383.5	90.00	270.34	7,010.0	535.5	-830.1	535.5	10.00	9.90	-1.39
LP @ 90° Inc, 270.34° Azm Hold									
7,400.0	90.00	270.34	7,010.0	535.6	-846.6	535.6	0.00	0.00	0.00
7,500.0	90.00	270.34	7,010.0	536.2	-946.6	536.2	0.00	0.00	0.00
7,600.0	90.00	270.34	7,010.0	536.8	-1,046.6	536.8	0.00	0.00	0.00
7,700.0	90.00	270.34	7,010.0	537.4	-1,146.6	537.4	0.00	0.00	0.00
7,800.0	90.00	270.34	7,010.0	538.0	-1,246.6	538.0	0.00	0.00	0.00
7,900.0	90.00	270.34	7,010.0	538.6	-1,346.6	538.6	0.00	0.00	0.00

Planning Report

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Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DOUBLE CLUTCH 2-20-24	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	270.34	7,010.0	539.2	-1,446.6	539.2	0.00	0.00	0.00	
8,100.0	90.00	270.34	7,010.0	539.8	-1,546.6	539.8	0.00	0.00	0.00	
8,200.0	90.00	270.34	7,010.0	540.4	-1,646.6	540.4	0.00	0.00	0.00	
8,300.0	90.00	270.34	7,010.0	540.9	-1,746.6	540.9	0.00	0.00	0.00	
8,400.0	90.00	270.34	7,010.0	541.5	-1,846.6	541.5	0.00	0.00	0.00	
8,500.0	90.00	270.34	7,010.0	542.1	-1,946.6	542.1	0.00	0.00	0.00	
8,600.0	90.00	270.34	7,010.0	542.7	-2,046.6	542.7	0.00	0.00	0.00	
8,700.0	90.00	270.34	7,010.0	543.3	-2,146.6	543.3	0.00	0.00	0.00	
8,800.0	90.00	270.34	7,010.0	543.9	-2,246.6	543.9	0.00	0.00	0.00	
8,900.0	90.00	270.34	7,010.0	544.5	-2,346.6	544.5	0.00	0.00	0.00	
9,000.0	90.00	270.34	7,010.0	545.1	-2,446.6	545.1	0.00	0.00	0.00	
9,100.0	90.00	270.34	7,010.0	545.7	-2,546.6	545.7	0.00	0.00	0.00	
9,200.0	90.00	270.34	7,010.0	546.3	-2,646.6	546.3	0.00	0.00	0.00	
9,300.0	90.00	270.34	7,010.0	546.8	-2,746.6	546.8	0.00	0.00	0.00	
9,400.0	90.00	270.34	7,010.0	547.4	-2,846.6	547.4	0.00	0.00	0.00	
9,500.0	90.00	270.34	7,010.0	548.0	-2,946.6	548.0	0.00	0.00	0.00	
9,600.0	90.00	270.34	7,010.0	548.6	-3,046.6	548.6	0.00	0.00	0.00	
9,700.0	90.00	270.34	7,010.0	549.2	-3,146.6	549.2	0.00	0.00	0.00	
9,800.0	90.00	270.34	7,010.0	549.8	-3,246.6	549.8	0.00	0.00	0.00	
9,900.0	90.00	270.34	7,010.0	550.4	-3,346.6	550.4	0.00	0.00	0.00	
10,000.0	90.00	270.34	7,010.0	551.0	-3,446.6	551.0	0.00	0.00	0.00	
10,100.0	90.00	270.34	7,010.0	551.6	-3,546.6	551.6	0.00	0.00	0.00	
10,200.0	90.00	270.34	7,010.0	552.2	-3,646.6	552.2	0.00	0.00	0.00	
10,300.0	90.00	270.34	7,010.0	552.7	-3,746.6	552.7	0.00	0.00	0.00	
10,400.0	90.00	270.34	7,010.0	553.3	-3,846.6	553.3	0.00	0.00	0.00	
10,500.0	90.00	270.34	7,010.0	553.9	-3,946.6	553.9	0.00	0.00	0.00	
10,600.0	90.00	270.34	7,010.0	554.5	-4,046.6	554.5	0.00	0.00	0.00	
10,700.0	90.00	270.34	7,010.0	555.1	-4,146.6	555.1	0.00	0.00	0.00	
10,800.0	90.00	270.34	7,010.0	555.7	-4,246.6	555.7	0.00	0.00	0.00	
10,900.0	90.00	270.34	7,010.0	556.3	-4,346.6	556.3	0.00	0.00	0.00	
11,000.0	90.00	270.34	7,010.0	556.9	-4,446.6	556.9	0.00	0.00	0.00	
11,100.0	90.00	270.34	7,010.0	557.5	-4,546.6	557.5	0.00	0.00	0.00	
11,200.0	90.00	270.34	7,010.0	558.1	-4,646.6	558.1	0.00	0.00	0.00	
11,300.0	90.00	270.34	7,010.0	558.6	-4,746.6	558.6	0.00	0.00	0.00	
11,400.0	90.00	270.34	7,010.0	559.2	-4,846.6	559.2	0.00	0.00	0.00	
11,500.0	90.00	270.34	7,010.0	559.8	-4,946.6	559.8	0.00	0.00	0.00	
11,600.0	90.00	270.34	7,010.0	560.4	-5,046.6	560.4	0.00	0.00	0.00	
11,700.0	90.00	270.34	7,010.0	561.0	-5,146.6	561.0	0.00	0.00	0.00	
11,800.0	90.00	270.34	7,010.0	561.6	-5,246.6	561.6	0.00	0.00	0.00	
11,900.0	90.00	270.34	7,010.0	562.2	-5,346.6	562.2	0.00	0.00	0.00	
12,000.0	90.00	270.34	7,010.0	562.8	-5,446.6	562.8	0.00	0.00	0.00	
12,100.0	90.00	270.34	7,010.0	563.4	-5,546.6	563.4	0.00	0.00	0.00	
12,200.0	90.00	270.34	7,010.0	564.0	-5,646.6	564.0	0.00	0.00	0.00	
12,300.0	90.00	270.34	7,010.0	564.5	-5,746.6	564.5	0.00	0.00	0.00	
12,400.0	90.00	270.34	7,010.0	565.1	-5,846.6	565.1	0.00	0.00	0.00	
12,500.0	90.00	270.34	7,010.0	565.7	-5,946.6	565.7	0.00	0.00	0.00	
12,600.0	90.00	270.34	7,010.0	566.3	-6,046.6	566.3	0.00	0.00	0.00	
12,700.0	90.00	270.34	7,010.0	566.9	-6,146.6	566.9	0.00	0.00	0.00	
19,710.6	90.00	270.34	7,010.0	608.2	-13,157.0	608.2	0.00	0.00	0.00	
TD at 19710.6' MD										

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well AD-DOUBLE CLUTCH 2-20-24
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	KB-EST @ 4654.0usft (Original Well Elev)
Site:	Sec 21-T5N-R65W	North Reference:	True
Well:	AD-DOUBLE CLUTCH 2-20-24	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,806.4	3,800.0	PARKMAN			
4,566.2	4,550.0	SUSSEX			
5,082.8	5,060.0	SHANNON			
6,964.6	6,865.0	SHARON SPRINGS			
7,004.0	6,890.0	NIOBRARA			

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
3,000.0	3,000.0	0.0	0.0	Build 2°/100'	
3,459.6	3,457.6	32.0	-18.1	Hold 9.19° Inc	
6,529.1	6,487.7	458.8	-259.4	KOP, Build 10°/100'	
7,383.5	7,010.0	535.5	-830.1	LP @ 90° Inc, 270.34° Azm Hold	
19,710.6	7,010.0	608.2	-13,157.0	TD at 19710.6' MD	