

EXTRACTION OIL & GAS

WELD COUNTY

Sec 30-T6N-R67W

RAINDANCE 29E-10-3N

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

03 July, 2018



Project: WELD COUNTY
Site: Sec 30-T6N-R67W
Well: RAINDANCE 29E-10-3N
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL 1



Azimuths to True North
Magnetic North: 8.23°

Magnetic Field
Strength: 52322.8nT
Dip Angle: 66.85°
Date: 2/20/2018
Model: IGRF2015

WELL DETAILS: RAINDANCE 29E-10-3N

+N/-S	+E/-W	Northing	Easting	4977.00	Latitude	Longitude	Slot
0.00	0.00	1407751.79	3159132.62	40° 27' 4.579 N	104° 55' 41.495 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	400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	
3	625.66	4.51	50.28	625.43	5.68	6.83	2.00	50.28	7.15	
4	6317.45	4.51	50.28	6299.57	291.87	351.35	0.00	0.00	367.47	
5	6543.12	0.00	0.00	6525.00	297.55	358.18	2.00	180.00	374.61	
6	6573.12	0.00	0.00	6555.00	297.55	358.18	0.00	0.00	374.61	
7	7473.18	90.00	89.99	7128.00	297.66	931.18	10.00	89.99	946.68	
8	9223.18	90.00	89.99	7128.00	297.99	2681.18	0.00	0.00	2693.84	
9	9872.63	90.00	77.00	7128.00	371.42	3325.07	2.00	-90.00	3340.87	
10	10923.36	90.00	98.01	7128.00	416.86	4368.93	2.00	90.00	4385.62	
11	11771.87	90.00	98.01	7128.00	298.56	5209.15	0.00	0.00	5217.70	

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	Start Build 2.00
625.66	4.51	50.28	625.43	5.68	6.83	7.15	8.88	Start 5691.79 hold at 625.66 MD
6317.45	4.51	50.28	6299.57	291.87	351.35	367.47	456.77	Start Drop -2.00
6543.12	0.00	0.00	6525.00	297.55	358.18	374.61	465.65	Start 30.00 hold at 6543.12 MD
6573.12	0.00	0.00	6555.00	297.55	358.18	374.61	465.65	Start DLS 10.00 TFO 89.99
7473.18	90.00	89.99	7128.00	297.66	931.18	946.68	1038.65	Start 1750.00 hold at 7473.18 MD
9223.18	90.00	89.99	7128.00	297.99	2681.18	2693.84	2788.65	Start DLS 2.00 TFO -90.00
9872.63	90.00	77.00	7128.00	371.42	3325.07	3340.87	3438.10	Start Turn 2.00
10923.36	90.00	98.01	7128.00	416.86	4368.93	4385.62	4488.83	Start 848.51 hold at 10923.36 MD
11771.87	90.00	98.01	7128.00	298.56	5209.15	5217.70	5337.34	TD at 11771.87

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
RAINDANCE 29E-10-3N - LP	7128.00	297.66	931.18	1408055.45	3160061.87	40° 27' 7.520 N	104° 55' 29.449 W	Point
RAINDANCE 29E-10-3N - plan hits target center								
RAINDANCE 29E-10-3N - PBHL	7128.00	298.56	5209.15	1408083.93	3164339.74	40° 27' 7.524 N	104° 54' 34.110 W	Point
RAINDANCE 29E-10-3N - plan hits target center								

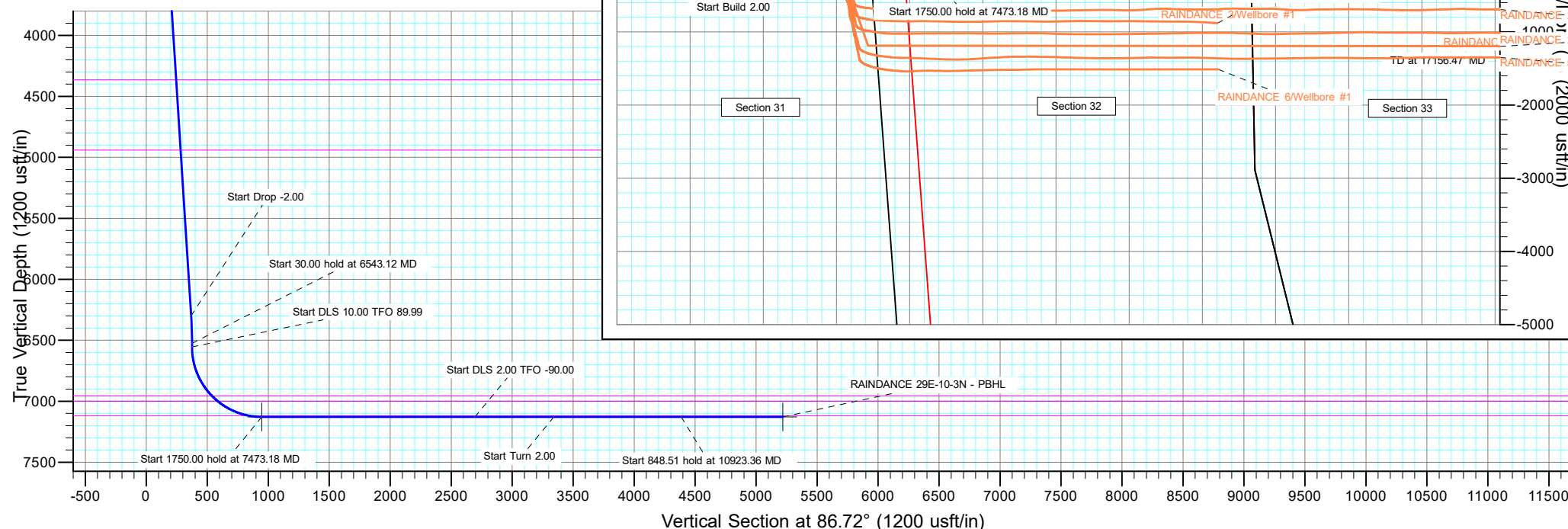
FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3620.00	3629.55	PARKMAN
4365.00	4376.87	SUSSEX
4940.00	4953.65	SHANNON
6956.00	7017.28	SHARON SPRINGS
6998.00	7079.51	NIOBRARA
7118.00	7365.97	NIO B

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:
210' FSL, 471' FEL
Sec 30-T6N-R67W
LP:
495' FSL, 460' FWL
Sec 29-T6N-R67W
BHL:
495' FSL, 460' FEL
Sec 29-T6N-R67W



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well RAINDANCE 29E-10-3N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5002.00usft
Project:	WELD COUNTY	MD Reference:	KB 25' @ 5002.00usft
Site:	Sec 30-T6N-R67W	North Reference:	True
Well:	RAINDANCE 29E-10-3N	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 30-T6N-R67W			
Site Position:		Northing:	1,407,747.87 usft	Latitude:	40° 27' 4.536 N
From:	Lat/Long	Easting:	3,159,200.28 usft	Longitude:	104° 55' 40.620 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.37 °

Well	RAINDANCE 29E-10-3N					
Well Position	+N/-S	4.36 usft	Northing:	1,407,751.80 usft	Latitude:	40° 27' 4.579 N
	+E/-W	-67.63 usft	Easting:	3,159,132.62 usft	Longitude:	104° 55' 41.495 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,977.00 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/20/2018	8.23	66.85	52,322.84737886

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	86.72

Plan Survey Tool Program	Date	7/3/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	11,771.41	PROPOSAL 1 (ORIGINAL WELL	MWD OWSG
			OWSG MWD - Standard	

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Project:	WELD COUNTY	MD Reference:	KB 25' @ 5002.00usft
Site:	Sec 30-T6N-R67W	North Reference:	True
Well:	RAINDANCE 29E-10-3N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

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	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
625.66	4.51	50.28	625.43	5.68	6.83	2.00	2.00	0.00	50.28	
6,317.46	4.51	50.28	6,299.57	291.87	351.35	0.00	0.00	0.00	0.00	
6,543.12	0.00	0.00	6,525.00	297.55	358.18	2.00	-2.00	0.00	180.00	
6,573.12	0.00	0.00	6,555.00	297.55	358.18	0.00	0.00	0.00	0.00	
7,473.18	90.00	89.99	7,128.00	297.66	931.18	10.00	10.00	10.00	89.99	RAINDANCE 29E-10-
9,223.18	90.00	89.99	7,128.00	297.99	2,681.18	0.00	0.00	0.00	0.00	
9,872.63	90.00	77.00	7,128.00	371.42	3,325.07	2.00	0.00	-2.00	-90.00	
10,923.36	90.00	98.01	7,128.00	416.86	4,368.93	2.00	0.00	2.00	90.00	RAINDANCE 29E-10-
11,771.87	90.00	98.01	7,128.00	298.56	5,209.15	0.00	0.00	0.00	0.00	RAINDANCE 29E-10-

Planning Report

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Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5002.00usft
Project:	WELD COUNTY	MD Reference:	KB 25' @ 5002.00usft
Site:	Sec 30-T6N-R67W	North Reference:	True
Well:	RAINDANCE 29E-10-3N	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)
0.00	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
Start Build 2.00									
500.00	2.00	50.28	499.98	1.12	1.34	1.40	2.00	2.00	0.00
600.00	4.00	50.28	599.84	4.46	5.37	5.61	2.00	2.00	0.00
625.66	4.51	50.28	625.43	5.68	6.83	7.15	2.00	2.00	0.00
Start 5691.79 hold at 625.66 MD									
700.00	4.51	50.28	699.54	9.41	11.33	11.85	0.00	0.00	0.00
800.00	4.51	50.28	799.23	14.44	17.39	18.18	0.00	0.00	0.00
900.00	4.51	50.28	898.92	19.47	23.44	24.51	0.00	0.00	0.00
1,000.00	4.51	50.28	998.61	24.50	29.49	30.84	0.00	0.00	0.00
1,100.00	4.51	50.28	1,098.30	29.53	35.54	37.17	0.00	0.00	0.00
1,200.00	4.51	50.28	1,197.99	34.56	41.60	43.51	0.00	0.00	0.00
1,300.00	4.51	50.28	1,297.68	39.58	47.65	49.84	0.00	0.00	0.00
1,400.00	4.51	50.28	1,397.37	44.61	53.70	56.17	0.00	0.00	0.00
1,500.00	4.51	50.28	1,497.06	49.64	59.76	62.50	0.00	0.00	0.00
1,600.00	4.51	50.28	1,596.75	54.67	65.81	68.83	0.00	0.00	0.00
1,700.00	4.51	50.28	1,696.44	59.70	71.86	75.16	0.00	0.00	0.00
1,800.00	4.51	50.28	1,796.13	64.72	77.91	81.49	0.00	0.00	0.00
1,900.00	4.51	50.28	1,895.82	69.75	83.97	87.82	0.00	0.00	0.00
2,000.00	4.51	50.28	1,995.51	74.78	90.02	94.15	0.00	0.00	0.00
2,100.00	4.51	50.28	2,095.20	79.81	96.07	100.48	0.00	0.00	0.00
2,200.00	4.51	50.28	2,194.89	84.84	102.12	106.81	0.00	0.00	0.00
2,300.00	4.51	50.28	2,294.57	89.87	108.18	113.14	0.00	0.00	0.00
2,400.00	4.51	50.28	2,394.26	94.89	114.23	119.47	0.00	0.00	0.00
2,500.00	4.51	50.28	2,493.95	99.92	120.28	125.80	0.00	0.00	0.00
2,600.00	4.51	50.28	2,593.64	104.95	126.34	132.13	0.00	0.00	0.00
2,700.00	4.51	50.28	2,693.33	109.98	132.39	138.46	0.00	0.00	0.00
2,800.00	4.51	50.28	2,793.02	115.01	138.44	144.79	0.00	0.00	0.00
2,900.00	4.51	50.28	2,892.71	120.04	144.49	151.12	0.00	0.00	0.00
3,000.00	4.51	50.28	2,992.40	125.06	150.55	157.45	0.00	0.00	0.00
3,100.00	4.51	50.28	3,092.09	130.09	156.60	163.79	0.00	0.00	0.00
3,200.00	4.51	50.28	3,191.78	135.12	162.65	170.12	0.00	0.00	0.00
3,300.00	4.51	50.28	3,291.47	140.15	168.71	176.45	0.00	0.00	0.00
3,400.00	4.51	50.28	3,391.16	145.18	174.76	182.78	0.00	0.00	0.00
3,500.00	4.51	50.28	3,490.85	150.21	180.81	189.11	0.00	0.00	0.00
3,600.00	4.51	50.28	3,590.54	155.23	186.86	195.44	0.00	0.00	0.00
3,629.55	4.51	50.28	3,620.00	156.72	188.65	197.31	0.00	0.00	0.00
PARKMAN									
3,700.00	4.51	50.28	3,690.23	160.26	192.92	201.77	0.00	0.00	0.00
3,800.00	4.51	50.28	3,789.92	165.29	198.97	208.10	0.00	0.00	0.00
3,900.00	4.51	50.28	3,889.61	170.32	205.02	214.43	0.00	0.00	0.00
4,000.00	4.51	50.28	3,989.30	175.35	211.08	220.76	0.00	0.00	0.00
4,100.00	4.51	50.28	4,088.99	180.37	217.13	227.09	0.00	0.00	0.00
4,200.00	4.51	50.28	4,188.68	185.40	223.18	233.42	0.00	0.00	0.00
4,300.00	4.51	50.28	4,288.37	190.43	229.23	239.75	0.00	0.00	0.00
4,376.87	4.51	50.28	4,365.00	194.30	233.89	244.62	0.00	0.00	0.00
SUSSEX									
4,400.00	4.51	50.28	4,388.06	195.46	235.29	246.08	0.00	0.00	0.00
4,500.00	4.51	50.28	4,487.75	200.49	241.34	252.41	0.00	0.00	0.00
4,600.00	4.51	50.28	4,587.44	205.52	247.39	258.74	0.00	0.00	0.00

Planning Report

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Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5002.00usft
Project:	WELD COUNTY	MD Reference:	KB 25' @ 5002.00usft
Site:	Sec 30-T6N-R67W	North Reference:	True
Well:	RAINDANCE 29E-10-3N	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)
4,700.00	4.51	50.28	4,687.13	210.54	253.45	265.07	0.00	0.00	0.00
4,800.00	4.51	50.28	4,786.82	215.57	259.50	271.40	0.00	0.00	0.00
4,900.00	4.51	50.28	4,886.51	220.60	265.55	277.73	0.00	0.00	0.00
4,953.65	4.51	50.28	4,940.00	223.30	268.80	281.13	0.00	0.00	0.00
SHANNON									
5,000.00	4.51	50.28	4,986.20	225.63	271.60	284.07	0.00	0.00	0.00
5,100.00	4.51	50.28	5,085.89	230.66	277.66	290.40	0.00	0.00	0.00
5,200.00	4.51	50.28	5,185.58	235.69	283.71	296.73	0.00	0.00	0.00
5,300.00	4.51	50.28	5,285.27	240.71	289.76	303.06	0.00	0.00	0.00
5,400.00	4.51	50.28	5,384.96	245.74	295.82	309.39	0.00	0.00	0.00
5,500.00	4.51	50.28	5,484.65	250.77	301.87	315.72	0.00	0.00	0.00
5,600.00	4.51	50.28	5,584.34	255.80	307.92	322.05	0.00	0.00	0.00
5,700.00	4.51	50.28	5,684.03	260.83	313.97	328.38	0.00	0.00	0.00
5,800.00	4.51	50.28	5,783.72	265.85	320.03	334.71	0.00	0.00	0.00
5,900.00	4.51	50.28	5,883.41	270.88	326.08	341.04	0.00	0.00	0.00
6,000.00	4.51	50.28	5,983.10	275.91	332.13	347.37	0.00	0.00	0.00
6,100.00	4.51	50.28	6,082.79	280.94	338.18	353.70	0.00	0.00	0.00
6,200.00	4.51	50.28	6,182.48	285.97	344.24	360.03	0.00	0.00	0.00
6,300.00	4.51	50.28	6,282.17	291.00	350.29	366.36	0.00	0.00	0.00
6,317.46	4.51	50.28	6,299.57	291.87	351.35	367.47	0.00	0.00	0.00
Start Drop -2.00									
6,400.00	2.86	50.28	6,381.94	295.27	355.43	371.74	2.00	-2.00	0.00
6,500.00	0.86	50.28	6,481.89	297.34	357.93	374.35	2.00	-2.00	0.00
6,543.12	0.00	0.00	6,525.00	297.55	358.18	374.61	2.00	-2.00	0.00
Start 30.00 hold at 6543.12 MD									
6,573.12	0.00	0.00	6,555.00	297.55	358.18	374.61	0.00	0.00	0.00
Start DLS 10.00 TFO 89.99									
6,600.00	2.69	89.99	6,581.87	297.55	358.81	375.24	10.00	10.00	0.00
6,650.00	7.69	89.99	6,631.65	297.55	363.33	379.76	10.00	10.00	0.00
6,700.00	12.69	89.99	6,680.85	297.55	372.17	388.58	10.00	10.00	0.00
6,750.00	17.69	89.99	6,729.09	297.56	385.27	401.66	10.00	10.00	0.00
6,800.00	22.69	89.99	6,776.00	297.56	402.51	418.88	10.00	10.00	0.00
6,850.00	27.69	89.99	6,821.23	297.56	423.79	440.11	10.00	10.00	0.00
6,900.00	32.69	89.99	6,864.44	297.57	448.92	465.20	10.00	10.00	0.00
6,950.00	37.69	89.99	6,905.29	297.57	477.72	493.96	10.00	10.00	0.00
7,000.00	42.69	89.99	6,943.48	297.58	509.97	526.16	10.00	10.00	0.00
7,017.28	44.41	89.99	6,956.00	297.58	521.88	538.05	10.00	10.00	0.00
SHARON SPRINGS									
7,050.00	47.68	89.99	6,978.71	297.59	545.43	561.56	10.00	10.00	0.00
7,079.51	50.64	89.99	6,998.00	297.59	567.75	583.84	10.00	10.00	0.00
NIOBRARA									
7,100.00	52.68	89.99	7,010.71	297.59	583.83	599.89	10.00	10.00	0.00
7,150.00	57.68	89.99	7,039.25	297.60	624.86	640.86	10.00	10.00	0.00
7,200.00	62.68	89.99	7,064.10	297.61	668.23	684.16	10.00	10.00	0.00
7,250.00	67.68	89.99	7,085.08	297.62	713.60	729.45	10.00	10.00	0.00
7,300.00	72.68	89.99	7,102.03	297.63	760.62	776.40	10.00	10.00	0.00
7,350.00	77.68	89.99	7,114.81	297.64	808.94	824.65	10.00	10.00	0.00
7,365.97	79.28	89.99	7,118.00	297.64	824.60	840.27	10.00	10.00	0.00
NIO B									
7,400.00	82.68	89.99	7,123.33	297.65	858.20	873.82	10.00	10.00	0.00
7,450.00	87.68	89.99	7,127.53	297.66	908.00	923.54	10.00	10.00	0.00
7,473.18	90.00	89.99	7,128.00	297.66	931.18	946.68	10.00	10.00	0.00
Start 1750.00 hold at 7473.18 MD									

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well RAINDANCE 29E-10-3N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5002.00usft
Project:	WELD COUNTY	MD Reference:	KB 25' @ 5002.00usft
Site:	Sec 30-T6N-R67W	North Reference:	True
Well:	RAINDANCE 29E-10-3N	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)
7,500.00	90.00	89.99	7,128.00	297.66	958.00	973.46	0.00	0.00	0.00
7,600.00	90.00	89.99	7,128.00	297.68	1,058.00	1,073.29	0.00	0.00	0.00
7,700.00	90.00	89.99	7,128.00	297.70	1,158.00	1,173.13	0.00	0.00	0.00
7,800.00	90.00	89.99	7,128.00	297.72	1,258.00	1,272.97	0.00	0.00	0.00
7,900.00	90.00	89.99	7,128.00	297.74	1,358.00	1,372.81	0.00	0.00	0.00
8,000.00	90.00	89.99	7,128.00	297.76	1,458.00	1,472.64	0.00	0.00	0.00
8,100.00	90.00	89.99	7,128.00	297.78	1,558.00	1,572.48	0.00	0.00	0.00
8,200.00	90.00	89.99	7,128.00	297.80	1,658.00	1,672.32	0.00	0.00	0.00
8,300.00	90.00	89.99	7,128.00	297.82	1,758.00	1,772.15	0.00	0.00	0.00
8,400.00	90.00	89.99	7,128.00	297.84	1,858.00	1,871.99	0.00	0.00	0.00
8,500.00	90.00	89.99	7,128.00	297.86	1,958.00	1,971.83	0.00	0.00	0.00
8,600.00	90.00	89.99	7,128.00	297.88	2,058.00	2,071.67	0.00	0.00	0.00
8,700.00	90.00	89.99	7,128.00	297.89	2,158.00	2,171.50	0.00	0.00	0.00
8,800.00	90.00	89.99	7,128.00	297.91	2,258.00	2,271.34	0.00	0.00	0.00
8,900.00	90.00	89.99	7,128.00	297.93	2,358.00	2,371.18	0.00	0.00	0.00
9,000.00	90.00	89.99	7,128.00	297.95	2,458.00	2,471.02	0.00	0.00	0.00
9,100.00	90.00	89.99	7,128.00	297.97	2,558.00	2,570.85	0.00	0.00	0.00
9,200.00	90.00	89.99	7,128.00	297.99	2,658.00	2,670.69	0.00	0.00	0.00
9,223.18	90.00	89.99	7,128.00	297.99	2,681.18	2,693.84	0.00	0.00	0.00
Start DLS 2.00 TFO -90.00									
9,300.00	90.00	88.45	7,128.00	299.04	2,757.99	2,770.58	2.00	0.00	-2.00
9,400.00	90.00	86.45	7,128.00	303.48	2,857.88	2,870.56	2.00	0.00	-2.00
9,500.00	90.00	84.45	7,128.00	311.41	2,957.56	2,970.54	2.00	0.00	-2.00
9,600.00	90.00	82.45	7,128.00	322.81	3,056.91	3,070.37	2.00	0.00	-2.00
9,700.00	90.00	80.45	7,128.00	337.68	3,155.79	3,169.94	2.00	0.00	-2.00
9,800.00	90.00	78.45	7,128.00	355.98	3,254.10	3,269.13	2.00	0.00	-2.00
9,872.63	90.00	77.00	7,128.00	371.42	3,325.07	3,340.87	2.00	0.00	-2.00
Start Turn 2.00									
9,900.00	90.00	77.55	7,128.00	377.45	3,351.76	3,367.87	2.00	0.00	2.00
10,000.00	90.00	79.55	7,128.00	397.30	3,449.77	3,466.84	2.00	0.00	2.00
10,100.00	90.00	81.55	7,128.00	413.73	3,548.40	3,566.26	2.00	0.00	2.00
10,200.00	90.00	83.55	7,128.00	426.70	3,647.55	3,665.99	2.00	0.00	2.00
10,300.00	90.00	85.55	7,128.00	436.20	3,747.10	3,765.91	2.00	0.00	2.00
10,400.00	90.00	87.55	7,128.00	442.22	3,846.91	3,865.91	2.00	0.00	2.00
10,500.00	90.00	89.55	7,128.00	444.75	3,946.87	3,965.85	2.00	0.00	2.00
10,600.00	90.00	91.55	7,128.00	443.80	4,046.86	4,065.62	2.00	0.00	2.00
10,700.00	90.00	93.55	7,128.00	439.35	4,146.76	4,165.10	2.00	0.00	2.00
10,800.00	90.00	95.55	7,128.00	431.43	4,246.44	4,264.16	2.00	0.00	2.00
10,900.00	90.00	97.55	7,128.00	420.02	4,345.78	4,362.69	2.00	0.00	2.00
10,923.36	90.00	98.01	7,128.00	416.86	4,368.93	4,385.62	2.00	0.00	2.00
Start 848.51 hold at 10923.36 MD									
11,000.00	90.00	98.01	7,128.00	406.18	4,444.82	4,460.77	0.00	0.00	0.00
11,100.00	90.00	98.01	7,128.00	392.23	4,543.84	4,558.84	0.00	0.00	0.00
11,200.00	90.00	98.01	7,128.00	378.29	4,642.87	4,656.90	0.00	0.00	0.00
11,300.00	90.00	98.01	7,128.00	364.35	4,741.89	4,754.97	0.00	0.00	0.00
11,400.00	90.00	98.01	7,128.00	350.41	4,840.91	4,853.03	0.00	0.00	0.00
11,500.00	90.00	98.01	7,128.00	336.46	4,939.93	4,951.09	0.00	0.00	0.00
11,600.00	90.00	98.01	7,128.00	322.52	5,038.96	5,049.16	0.00	0.00	0.00
11,700.00	90.00	98.01	7,128.00	308.58	5,137.98	5,147.22	0.00	0.00	0.00
11,771.87	90.00	98.01	7,128.00	298.56	5,209.15	5,217.70	0.00	0.00	0.00
TD at 11771.87									

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well RAINDANCE 29E-10-3N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5002.00usft
Project:	WELD COUNTY	MD Reference:	KB 25' @ 5002.00usft
Site:	Sec 30-T6N-R67W	North Reference:	True
Well:	RAINDANCE 29E-10-3N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
RAINDANCE 29E-10-3N - plan hits target center - Point	0.00	0.00	7,128.00	298.56	5,209.15	1,408,083.94	3,164,339.74	40° 27' 7.524 N	104° 54' 34.110 W
RAINDANCE 29E-10-3N - plan hits target center - Point	0.00	0.00	7,128.00	297.66	931.18	1,408,055.45	3,160,061.87	40° 27' 7.520 N	104° 55' 29.449 W

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
3,629.55	3,620.00	PARKMAN				
4,376.87	4,365.00	SUSSEX				
4,953.65	4,940.00	SHANNON				
7,017.28	6,956.00	SHARON SPRINGS				
7,079.51	6,998.00	NIOBRARA				
7,365.97	7,118.00	NIO B				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
400.00	400.00	0.00	0.00	Start Build 2.00
625.66	625.43	5.68	6.83	Start 5691.79 hold at 625.66 MD
6,317.46	6,299.57	291.87	351.35	Start Drop -2.00
6,543.12	6,525.00	297.55	358.18	Start 30.00 hold at 6543.12 MD
6,573.12	6,555.00	297.55	358.18	Start DLS 10.00 TFO 89.99
7,473.18	7,128.00	297.66	931.18	Start 1750.00 hold at 7473.18 MD
9,223.18	7,128.00	297.99	2,681.18	Start DLS 2.00 TFO -90.00
9,872.63	7,128.00	371.42	3,325.07	Start Turn 2.00
10,923.36	7,128.00	416.86	4,368.93	Start 848.51 hold at 10923.36 MD
11,771.87	7,128.00	298.56	5,209.15	TD at 11771.87