

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, NM 87505

☐ AMENDED REPORT
AS DRILLED

NOV 30 2018
DISTRICT III

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-043-21295		2 Pool Code 98172		3 Pool Name ESCAVADA N; MANCOS	
4 Property Code 321250		5 Property Name N ESCAVADA UNIT			6 Well Number 317H
7 OGRID No. 372286		8 Operator Name ENDURING RESOURCES LLC			9 Elevation 6864'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	9	22N	7W		228	SOUTH	1547	EAST	SANDOVAL

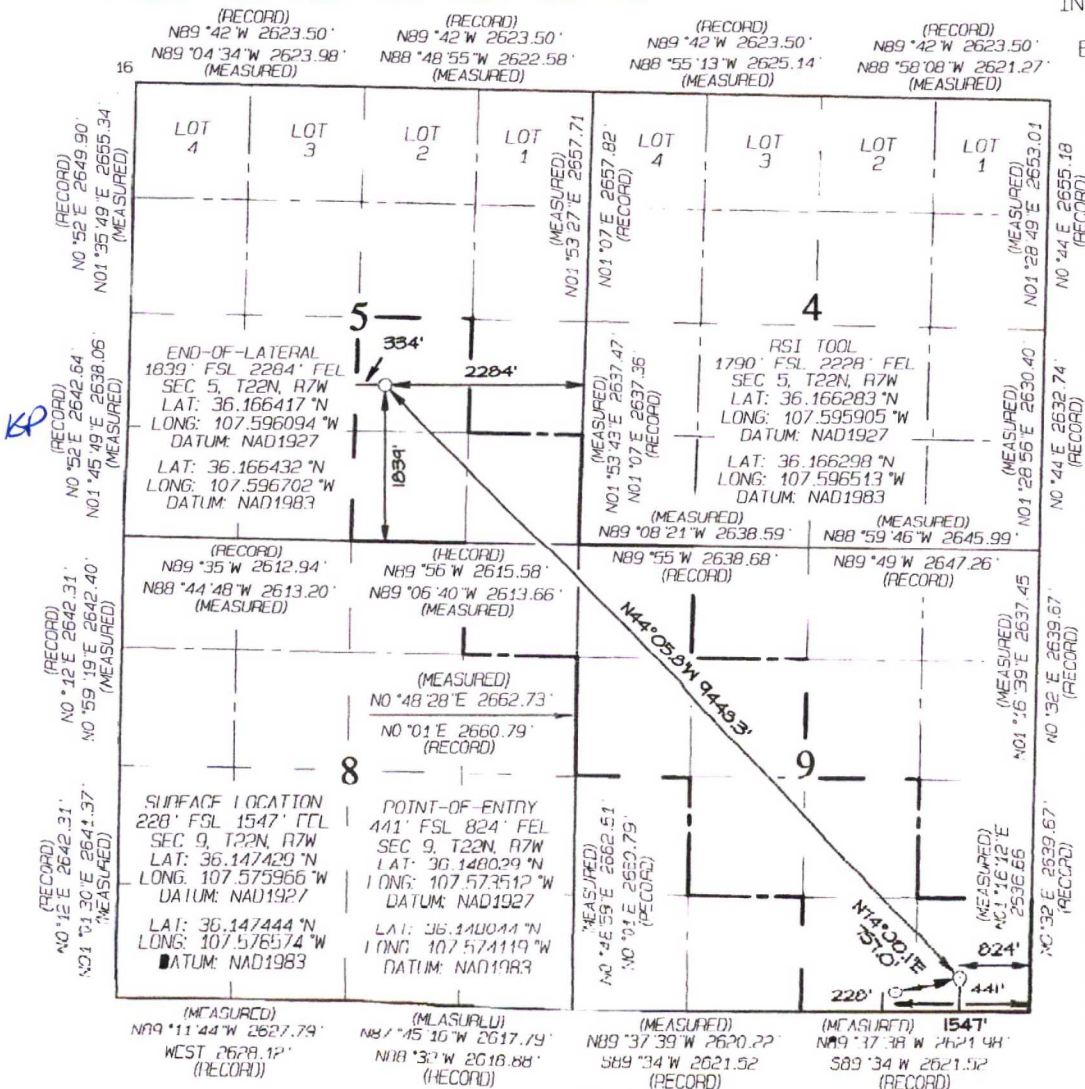
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	5	22N	7W		1839	SOUTH	2284	EAST	SANDOVAL

12 Dedicated Acres 440.0 NW/4 SE/4, S/2 SE/4 - Section 5 NE/4 NE/4 - Section 8 W/2 NW/4, SE/4 NW/4, NE/4 SW/4 W/2 SE/4, SE/4 SE/4 - Section 9		13 Joint or Infill		14 Consolidation Code		15 Order No. R-14080	
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NO ALLOWABLE WILL BE ASSIGNED
TO THIS COMPLETION UNTIL ALL
INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS
BEEN APPROVED BY THE DIVISION

CONFIDENTIAL



17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Lacey Granillo* Date: 12/31/18
Printed Name: Lacey Granillo
E-mail Address: lgranillo@enduringresources.com

18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: DECEMBER 7, 2017
Survey Date: FEBRUARY 1, 2016

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number: 15269



NMOCB
DEC 31 2018
DISTRICT III

EOW Summary

WPX Energy
N Escavada
UT 317H

CONFIDENTIAL

N Escavada UT 317H
Sandoval County, NM 3003 West
Northing: 1873005.63
Easting: 575985.96
Actual

GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
 GL @ 6864.00



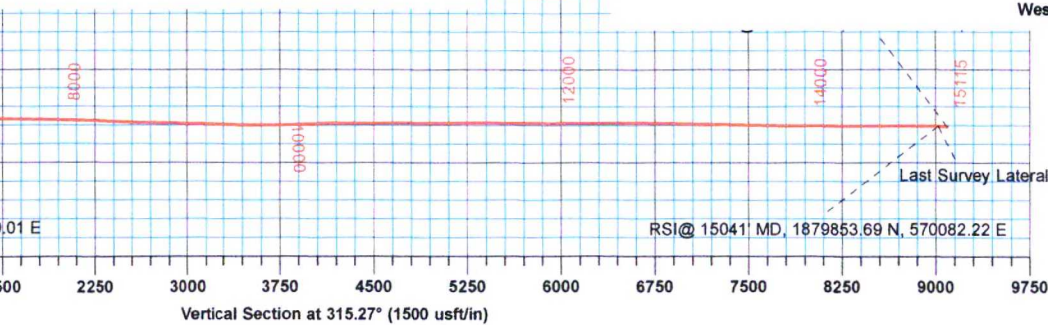
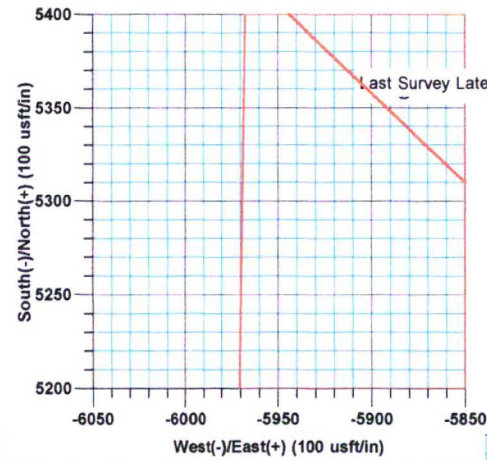
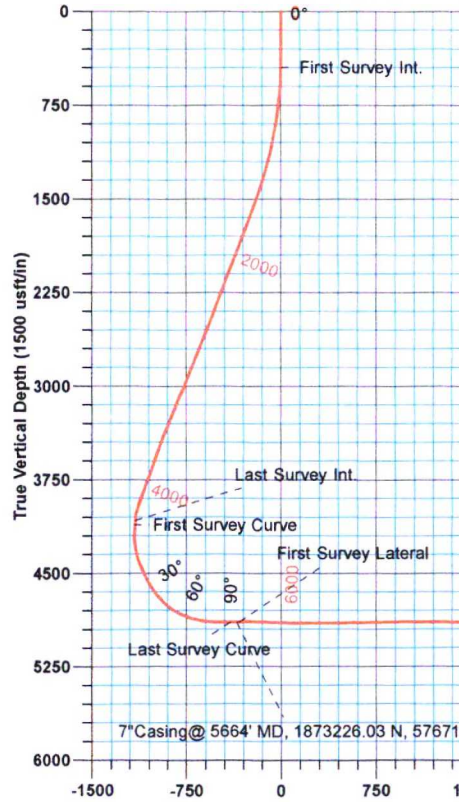
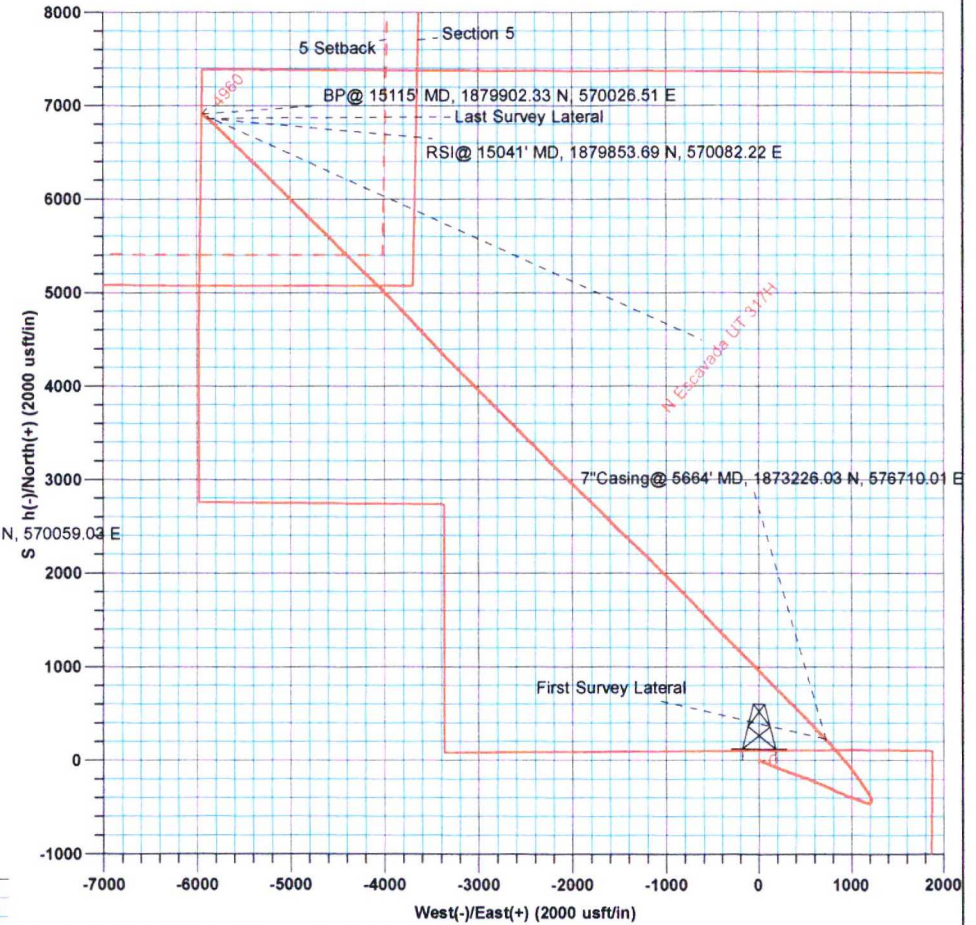
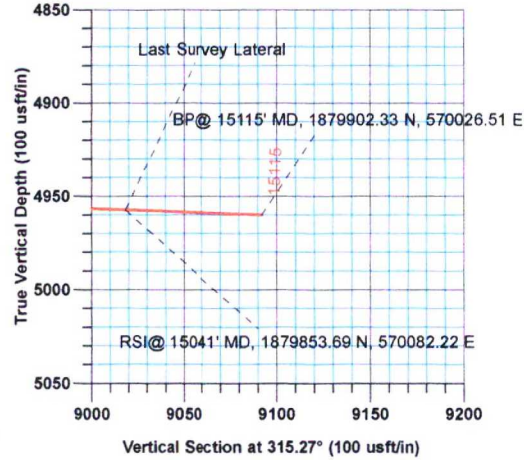
WELL DETAILS N Escavada UT 317H

		Ground Level:	6864.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1873005.63	575985.96	36.147429	-107.575966

TVD	MD	Annotation
446.99	447.00	First Survey Int.
4081.00	4319.00	Last Survey Int.
4112.54	4351.00	First Survey Curve
4893.79	5617.00	Last Survey Curve
4893.39	5664.00	7" Casing@ 5664' MD, 1873226.03 N, 576710.01 E
4893.19	5683.00	First Survey Lateral
4957.34	15041.00	Last Survey Lateral
4957.34	15041.00	RSI@ 15041' MD, 1879853.69 N, 570082.22 E
4960.04	15115.00	BP@ 15115' MD, 1879902.33 N, 570026.51 E



Azimuths to True North
 Magnetic North: 8.93°
 Magnetic Field
 Strength: 49524.6snT
 Dip Angle: 62.87°
 Date: 9/7/2017
 Model: HDGM



WPX Energy

Sandoval County, NM 3003 West
N Escavada UT 317-318 Pad
N Escavada UT 317H
API: 30-043-21295
Wellbore #1

Design: Actual

Standard Survey Report

06 December, 2017

NMOC
DEC 31 2018
DISTRICT III



www.scientificdrilling.com



Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well N Escavada UT 317H
Project:	Sandoval County, NM 3003 West	TVD Reference:	GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
Site:	N Escavada UT 317-318 Pad	MD Reference:	GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
Well:	N Escavada UT 317H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Grand Junction District

Project	Sandoval County, NM 3003 West		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site		N Escavada UT 317-318 Pad			
Site Position:		Northing:	1,873,005.64 usft	Latitude:	36.147429
From:	Lat/Long	Easting:	575,985.96 usft	Longitude:	-107.575966
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.15 °

Well	N Escavada UT 317H					
Well Position	+N/-S	0.00 usft	Northing:	1,873,005.64 usft	Latitude:	36.147429
	+E/-W	0.00 usft	Easting:	575,985.96 usft	Longitude:	-107.575966
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,864.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/7/2017	8.93	62.87	49,525

Design	Actual				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	315.27	

Survey Program	Date 12/6/2017				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
21.00	316.00	Gyros (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s	
447.00	4,319.00	SDI MWD Intermediate (Wellbore #1)	MWD+HDGM	OWSG MWD + HDGM	
4,351.00	5,617.00	SDI MWD Curve (Wellbore #1)	MWD+HDGM	OWSG MWD + HDGM	
5,683.00	15,115.00	SDI MWD Lateral (Wellbore #1)	MWD+HDGM	OWSG MWD + HDGM	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00
51.00	0.37	103.12	51.00	-0.02	0.09	-0.08	1.23	1.23	0.00
81.00	0.35	179.43	81.00	-0.14	0.19	-0.23	1.48	-0.07	254.37
111.00	0.42	196.66	111.00	-0.33	0.16	-0.35	0.45	0.23	57.43
141.00	0.32	179.28	141.00	-0.52	0.13	-0.46	0.50	-0.33	-57.93
171.00	0.80	172.44	171.00	-0.81	0.16	-0.69	1.61	1.60	-22.80
201.00	0.48	151.84	200.99	-1.13	0.24	-0.98	1.30	-1.07	-68.67

Scientific Drilling Int.

Survey Report

Company: WPX Energy
Project: Sandoval County, NM 3003 West
Site: N Escavada UT 317-318 Pad
Well: N Escavada UT 317H
Wellbore: Wellbore #1
Design: Actual

Local Co-ordinate Reference: Well N Escavada UT 317H
TVD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
MD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
231.00	0.40	128.42	230.99	-1.31	0.39	-1.20	0.65	-0.27	-78.07
261.00	0.38	230.11	260.99	-1.44	0.39	-1.30	2.02	-0.07	338.97
291.00	0.47	9.84	290.99	-1.38	0.34	-1.22	2.66	0.30	465.77
316.00	0.14	6.95	315.99	-1.25	0.36	-1.14	1.32	-1.32	-11.56
447.00	0.51	50.54	446.99	-0.72	0.83	-1.09	0.32	0.28	33.27
First Survey Int.									
540.00	2.70	95.59	539.95	-0.67	3.33	-2.82	2.55	2.35	48.44
634.00	4.81	108.07	633.74	-2.11	9.28	-8.03	2.39	2.24	13.28
727.00	7.03	110.25	726.24	-5.29	18.32	-16.65	2.40	2.39	2.34
820.00	8.68	113.80	818.37	-10.09	30.09	-28.34	1.85	1.77	3.82
914.00	10.17	116.73	911.10	-16.68	43.99	-42.81	1.66	1.59	3.12
1,007.00	11.73	114.76	1,002.40	-24.34	59.91	-59.45	1.72	1.68	-2.12
1,100.00	13.30	112.58	1,093.19	-32.40	78.37	-78.17	1.76	1.69	-2.34
1,194.00	14.81	112.27	1,184.37	-41.11	99.47	-99.21	1.61	1.61	-0.33
1,287.00	15.98	110.47	1,274.03	-50.09	122.47	-121.77	1.36	1.26	-1.94
1,381.00	18.98	113.47	1,363.69	-60.71	148.62	-147.72	3.33	3.19	3.19
1,474.00	20.75	110.08	1,451.15	-72.39	177.96	-176.67	2.27	1.90	-3.65
1,567.00	21.57	111.49	1,537.88	-84.31	209.35	-207.22	1.04	0.88	1.52
1,661.00	22.08	108.57	1,625.14	-96.26	242.17	-238.82	1.28	0.54	-3.11
1,754.00	23.60	109.49	1,710.85	-108.04	276.29	-271.20	1.68	1.63	0.99
1,847.00	23.14	106.91	1,796.22	-119.57	311.33	-304.05	1.21	-0.49	-2.77
1,941.00	22.83	111.51	1,882.77	-131.63	345.97	-336.99	1.94	-0.33	4.89
2,034.00	23.35	111.50	1,968.32	-145.00	379.90	-370.37	0.56	0.56	-0.01
2,128.00	22.64	109.96	2,054.85	-158.00	414.24	-403.78	0.99	-0.76	-1.64
2,221.00	22.58	109.21	2,140.70	-169.99	447.92	-436.00	0.32	-0.06	-0.81
2,314.00	22.13	108.38	2,226.71	-181.39	481.41	-467.66	0.59	-0.48	-0.89
2,408.00	22.69	107.88	2,313.61	-192.53	515.46	-499.55	0.63	0.60	-0.53
2,501.00	22.07	113.29	2,399.62	-204.95	548.59	-531.68	2.31	-0.67	5.82
2,594.00	22.51	113.35	2,485.67	-218.92	580.98	-564.40	0.47	0.47	0.06
2,688.00	22.54	113.62	2,572.49	-233.27	614.01	-597.84	0.11	0.03	0.29
2,781.00	22.18	112.27	2,658.50	-247.06	646.58	-630.56	0.67	-0.39	-1.45
2,874.00	23.30	113.13	2,744.27	-260.94	679.74	-663.76	1.26	1.20	0.92
2,969.00	23.85	115.30	2,831.35	-276.53	714.39	-699.22	1.08	0.58	2.28
3,064.00	22.39	113.54	2,918.71	-291.96	748.34	-734.08	1.70	-1.54	-1.85
3,159.00	24.55	114.83	3,005.85	-307.48	782.84	-769.38	2.34	2.27	1.36
3,254.00	23.75	113.51	3,092.54	-323.40	818.30	-805.64	1.02	-0.84	-1.39
3,349.00	22.98	113.43	3,179.74	-338.40	852.86	-840.62	0.81	-0.81	-0.08
3,444.00	24.71	113.62	3,266.63	-353.73	888.07	-876.30	1.82	1.82	0.20
3,539.00	24.17	113.56	3,353.12	-369.46	924.09	-912.82	0.57	-0.57	-0.06
3,634.00	22.60	110.05	3,440.32	-383.50	959.07	-947.41	2.21	-1.65	-3.69
3,729.00	21.26	109.36	3,528.44	-395.47	992.47	-979.42	1.44	-1.41	-0.73
3,824.00	20.26	108.87	3,617.27	-406.49	1,024.28	-1,009.64	1.07	-1.05	-0.52
3,919.00	22.13	108.89	3,705.84	-417.61	1,056.78	-1,040.41	1.97	1.97	0.02

Scientific Drilling Int.

Survey Report

Company: WPX Energy
Project: Sandoval County, NM 3003 West
Site: N Escavada UT 317-318 Pad
Well: N Escavada UT 317H
Wellbore: Wellbore #1
Design: Actual

Local Co-ordinate Reference: Well N Escavada UT 317H
TVD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
MD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,014.00	23.74	108.24	3,793.33	-429.39	1,091.87	-1,073.47	1.72	1.69	-0.68
4,109.00	21.60	107.28	3,880.98	-440.57	1,126.74	-1,105.95	2.29	-2.25	-1.01
4,129.00	21.08	107.84	3,899.61	-442.76	1,133.68	-1,112.40	2.79	-2.60	2.80
4,161.00	20.27	107.37	3,929.55	-446.18	1,144.44	-1,122.40	2.58	-2.53	-1.47
4,192.00	20.06	107.16	3,958.65	-449.35	1,154.65	-1,131.84	0.72	-0.68	-0.68
4,224.00	17.98	105.15	3,988.90	-452.26	1,164.66	-1,140.95	6.81	-6.50	-6.28
4,256.00	15.53	102.16	4,019.54	-454.46	1,173.62	-1,148.81	8.11	-7.66	-9.34
4,287.00	12.56	97.23	4,049.61	-455.76	1,181.02	-1,154.95	10.32	-9.58	-15.90
4,319.00	9.94	92.36	4,081.00	-456.31	1,187.23	-1,159.71	8.70	-8.19	-15.22
Last Survey Int.									
4,351.00	9.48	80.85	4,112.54	-456.00	1,192.59	-1,163.27	6.22	-1.44	-35.97
First Survey Curve									
4,382.00	10.31	66.59	4,143.09	-454.49	1,197.66	-1,165.76	8.32	2.68	-46.00
4,414.00	11.25	54.37	4,174.52	-451.54	1,202.83	-1,167.30	7.70	2.94	-38.19
4,445.00	11.84	41.58	4,204.90	-447.40	1,207.40	-1,167.57	8.46	1.90	-41.26
4,477.00	12.35	28.34	4,236.20	-441.93	1,211.20	-1,166.36	8.79	1.59	-41.38
4,509.00	12.67	12.85	4,267.45	-435.49	1,213.61	-1,163.48	10.50	1.00	-48.41
4,540.00	14.31	2.48	4,297.60	-428.35	1,214.53	-1,159.06	9.41	5.29	-33.45
4,572.00	16.10	355.31	4,328.48	-419.97	1,214.34	-1,152.97	8.10	5.59	-22.41
4,604.00	17.96	349.26	4,359.07	-410.70	1,213.05	-1,145.48	8.02	5.81	-18.91
4,635.00	19.45	342.72	4,388.44	-401.08	1,210.63	-1,136.94	8.29	4.81	-21.10
4,667.00	21.06	336.55	4,418.46	-390.71	1,206.76	-1,126.85	8.35	5.03	-19.28
4,699.00	22.56	331.10	4,448.17	-380.06	1,201.50	-1,115.59	7.87	4.69	-17.03
4,730.00	24.16	328.65	4,476.63	-369.44	1,195.33	-1,103.69	6.04	5.16	-7.90
4,762.00	25.89	327.90	4,505.63	-357.93	1,188.21	-1,090.50	5.50	5.41	-2.34
4,794.00	27.79	327.49	4,534.18	-345.72	1,180.49	-1,076.39	5.97	5.94	-1.28
4,825.00	29.75	327.32	4,561.35	-333.15	1,172.45	-1,061.81	6.33	6.32	-0.55
4,857.00	31.41	326.44	4,588.90	-319.52	1,163.55	-1,045.86	5.37	5.19	-2.75
4,889.00	33.28	326.50	4,615.93	-305.24	1,154.09	-1,029.07	5.84	5.84	0.19
4,920.00	35.37	325.76	4,641.53	-290.73	1,144.35	-1,011.90	6.87	6.74	-2.39
4,952.00	37.92	325.60	4,667.21	-274.96	1,133.58	-993.12	7.97	7.97	-0.50
4,984.00	40.69	325.53	4,691.97	-258.24	1,122.12	-973.18	8.66	8.66	-0.22
5,015.00	43.82	324.03	4,714.91	-241.22	1,110.09	-952.62	10.61	10.10	-4.84
5,047.00	46.81	322.75	4,737.41	-222.97	1,096.52	-930.10	9.77	9.34	-4.00
5,079.00	50.42	324.44	4,758.56	-203.64	1,082.29	-906.35	11.96	11.28	5.28
5,110.00	53.28	323.97	4,777.71	-183.87	1,068.03	-882.27	9.30	9.23	-1.52
5,142.00	56.60	323.51	4,796.09	-162.75	1,052.54	-856.37	10.44	10.38	-1.44
5,174.00	60.53	322.95	4,812.77	-140.89	1,036.19	-829.33	12.37	12.28	-1.75
5,205.00	63.67	322.20	4,827.28	-119.14	1,019.54	-802.16	10.35	10.13	-2.42
5,237.00	66.21	321.23	4,840.83	-96.39	1,001.58	-773.36	8.40	7.94	-3.03
5,269.00	69.07	321.29	4,853.00	-73.31	983.07	-743.93	8.94	8.94	0.19
5,300.00	72.15	320.67	4,863.30	-50.59	964.66	-714.83	10.11	9.94	-2.00
5,332.00	74.99	321.12	4,872.35	-26.78	945.30	-684.29	8.98	8.88	1.41
5,364.00	77.92	321.10	4,879.84	-2.56	925.77	-653.35	9.16	9.16	-0.06

Scientific Drilling Int.

Survey Report

Company: WPX Energy
Project: Sandoval County, NM 3003 West
Site: N Escavada UT 317-318 Pad
Well: N Escavada UT 317H
Wellbore: Wellbore #1
Design: Actual

Local Co-ordinate Reference: Well N Escavada UT 317H
TVD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
MD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,395.00	80.50	320.12	4,885.64	20.97	906.45	-623.03	8.88	8.32	-3.16
5,427.00	83.20	319.18	4,890.18	45.11	885.94	-591.45	8.92	8.44	-2.94
5,459.00	86.44	318.51	4,893.07	69.10	864.97	-559.65	10.34	10.13	-2.09
5,490.00	89.19	317.43	4,894.25	92.10	844.23	-528.71	9.53	8.87	-3.48
5,522.00	89.83	316.83	4,894.52	115.56	822.46	-496.72	2.74	2.00	-1.88
5,554.00	90.31	316.89	4,894.48	138.91	800.58	-464.74	1.51	1.50	0.19
5,585.00	90.91	316.57	4,894.15	161.48	779.33	-433.75	2.19	1.94	-1.03
5,617.00	90.40	316.21	4,893.79	184.64	757.26	-401.76	1.95	-1.59	-1.13
Last Survey Curve									
5,629.35	90.44	316.12	4,893.70	193.55	748.71	-389.41	0.84	0.36	-0.76
317H POE									
5,664.00	90.57	315.85	4,893.39	218.47	724.63	-354.76	0.84	0.36	-0.76
7"Casing@ 5664' MD, 1873226.03 N, 576710.01 E									
5,683.00	90.64	315.71	4,893.19	232.09	711.38	-335.77	0.84	0.36	-0.76
First Survey Lateral									
5,778.00	89.80	315.70	4,892.82	300.08	645.04	-240.77	0.88	-0.88	-0.01
5,873.00	88.49	317.05	4,894.24	368.84	579.51	-145.80	1.98	-1.38	1.42
5,968.00	88.66	316.77	4,896.60	438.19	514.63	-50.87	0.34	0.18	-0.29
6,063.00	87.92	316.13	4,899.44	507.02	449.20	44.07	1.03	-0.78	-0.67
6,158.00	88.45	314.44	4,902.45	574.49	382.40	139.01	1.86	0.56	-1.78
6,253.00	89.23	315.10	4,904.37	641.38	314.97	233.99	1.08	0.82	0.69
6,348.00	90.94	314.44	4,904.23	708.28	247.53	328.98	1.93	1.80	-0.69
6,443.00	89.90	313.99	4,903.53	774.53	179.44	423.96	1.19	-1.09	-0.47
6,538.00	91.78	315.77	4,902.14	841.55	112.14	518.94	2.73	1.98	1.87
6,633.00	91.65	315.44	4,899.30	909.40	45.71	613.90	0.37	-0.14	-0.35
6,728.00	91.41	315.02	4,896.76	976.82	-21.17	708.86	0.51	-0.25	-0.44
6,823.00	90.87	314.46	4,894.87	1,043.67	-88.64	803.84	0.82	-0.57	-0.59
6,918.00	90.81	313.99	4,893.48	1,109.93	-156.71	898.81	0.50	-0.06	-0.49
7,013.00	89.93	316.78	4,892.87	1,177.54	-223.42	993.80	3.08	-0.93	2.94
7,108.00	89.80	315.53	4,893.09	1,246.06	-289.23	1,088.79	1.32	-0.14	-1.32
7,203.00	89.00	311.67	4,894.08	1,311.55	-358.01	1,183.72	4.15	-0.84	-4.06
7,298.00	89.33	316.25	4,895.47	1,377.47	-426.36	1,278.66	4.83	0.35	4.82
7,393.00	89.19	316.47	4,896.70	1,446.22	-491.92	1,373.64	0.27	-0.15	0.23
7,488.00	89.36	315.53	4,897.90	1,514.55	-557.91	1,468.62	1.01	0.18	-0.99
7,584.00	88.63	315.64	4,899.58	1,583.11	-625.08	1,564.60	0.77	-0.76	0.11
7,679.00	89.53	316.53	4,901.11	1,651.54	-690.96	1,659.58	1.33	0.95	0.94
7,774.00	88.43	316.11	4,902.80	1,720.23	-756.56	1,754.55	1.24	-1.16	-0.44
7,869.00	88.33	315.57	4,905.48	1,788.35	-822.72	1,849.50	0.58	-0.11	-0.57
7,964.00	88.62	316.03	4,908.01	1,856.44	-888.93	1,944.47	0.57	0.31	0.48
8,059.00	89.12	316.45	4,909.89	1,925.04	-954.62	2,039.43	0.69	0.53	0.44
8,154.00	89.03	315.12	4,911.42	1,993.11	-1,020.86	2,134.42	1.40	-0.09	-1.40
8,249.00	88.43	314.80	4,913.53	2,060.23	-1,088.06	2,229.39	0.72	-0.63	-0.34
8,344.00	87.28	313.58	4,917.08	2,126.40	-1,156.13	2,324.30	1.76	-1.21	-1.28
8,439.00	87.12	313.05	4,921.72	2,191.49	-1,225.17	2,419.13	0.58	-0.17	-0.56

Scientific Drilling Int.

Survey Report

Company: WPX Energy
Project: Sandoval County, NM 3003 West
Site: N Escavada UT 317-318 Pad
Well: N Escavada UT 317H
Wellbore: Wellbore #1
Design: Actual

Local Co-ordinate Reference: Well N Escavada UT 317H
TVD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
MD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,534.00	87.88	314.23	4,925.87	2,256.99	-1,293.85	2,514.00	1.48	0.80	1.24
8,629.00	88.22	312.73	4,929.10	2,322.32	-1,362.74	2,608.90	1.62	0.36	-1.58
8,724.00	88.96	313.68	4,931.44	2,387.33	-1,431.97	2,703.81	1.27	0.78	1.00
8,819.00	89.16	314.34	4,933.00	2,453.33	-1,500.28	2,798.77	0.73	0.21	0.69
8,914.00	88.59	316.08	4,934.86	2,520.73	-1,567.20	2,893.75	1.93	-0.60	1.83
9,009.00	88.72	315.97	4,937.09	2,589.08	-1,633.14	2,988.71	0.18	0.14	-0.12
9,104.00	88.42	315.24	4,939.46	2,656.94	-1,699.58	3,083.68	0.83	-0.32	-0.77
9,199.00	88.89	314.64	4,941.69	2,724.03	-1,766.81	3,178.65	0.80	0.49	-0.63
9,294.00	88.39	314.45	4,943.95	2,790.65	-1,834.49	3,273.62	0.56	-0.53	-0.20
9,389.00	87.98	313.23	4,946.95	2,856.41	-1,902.98	3,368.54	1.35	-0.43	-1.28
9,484.00	89.33	313.71	4,949.18	2,921.75	-1,971.90	3,463.46	1.51	1.42	0.51
9,579.00	90.94	314.81	4,948.96	2,988.05	-2,039.94	3,558.44	2.05	1.69	1.16
9,674.00	89.06	312.92	4,948.96	3,053.88	-2,108.42	3,653.41	2.81	-1.98	-1.99
9,769.00	91.24	314.80	4,948.71	3,119.69	-2,176.91	3,748.37	3.03	2.29	1.98
9,864.00	92.49	315.06	4,945.62	3,186.75	-2,244.13	3,843.31	1.34	1.32	0.27
9,960.00	91.98	314.86	4,941.88	3,254.53	-2,312.01	3,939.24	0.57	-0.53	-0.21
10,055.00	93.43	316.68	4,937.39	3,322.52	-2,378.20	4,034.12	2.45	1.53	1.92
10,150.00	89.90	316.07	4,934.63	3,391.25	-2,443.71	4,129.05	3.77	-3.72	-0.64
10,243.00	88.89	315.07	4,935.62	3,457.66	-2,508.81	4,222.04	1.53	-1.09	-1.08
10,336.00	90.67	315.93	4,935.97	3,523.99	-2,573.99	4,315.04	2.13	1.91	0.92
10,429.00	89.50	314.99	4,935.83	3,590.27	-2,639.21	4,408.03	1.61	-1.26	-1.01
10,522.00	89.76	314.57	4,936.43	3,655.78	-2,705.23	4,501.03	0.53	0.28	-0.45
10,616.00	91.74	315.13	4,935.20	3,722.06	-2,771.86	4,595.01	2.19	2.11	0.60
10,709.00	91.41	315.72	4,932.65	3,788.28	-2,837.11	4,687.97	0.73	-0.35	0.63
10,802.00	89.60	316.97	4,931.83	3,855.56	-2,901.30	4,780.95	2.37	-1.95	1.34
10,896.00	89.06	316.29	4,932.93	3,923.89	-2,965.84	4,874.92	0.92	-0.57	-0.72
10,989.00	88.83	315.40	4,934.64	3,990.60	-3,030.62	4,967.89	0.99	-0.25	-0.96
11,082.00	91.34	315.26	4,934.50	4,056.73	-3,095.99	5,060.89	2.70	2.70	-0.15
11,176.00	90.98	315.09	4,932.60	4,123.39	-3,162.24	5,154.87	0.42	-0.38	-0.18
11,269.00	90.77	314.68	4,931.18	4,189.01	-3,228.13	5,247.85	0.50	-0.23	-0.44
11,362.00	89.70	315.79	4,930.80	4,255.04	-3,293.62	5,340.85	1.66	-1.15	1.19
11,456.00	89.23	315.59	4,931.68	4,322.30	-3,359.27	5,434.84	0.54	-0.50	-0.21
11,549.00	88.69	315.19	4,933.36	4,388.50	-3,424.58	5,527.83	0.72	-0.58	-0.43
11,643.00	89.19	316.54	4,935.10	4,455.95	-3,490.02	5,621.80	1.53	0.53	1.44
11,736.00	90.84	317.76	4,935.08	4,524.12	-3,553.26	5,714.75	2.21	1.77	1.31
11,829.00	90.54	317.89	4,933.96	4,593.04	-3,615.70	5,807.65	0.35	-0.32	0.14
11,923.00	89.97	317.31	4,933.54	4,662.46	-3,679.08	5,901.57	0.87	-0.61	-0.62
12,016.00	89.97	317.71	4,933.59	4,731.03	-3,741.90	5,994.50	0.43	0.00	0.43
12,109.00	90.07	317.61	4,933.56	4,799.77	-3,804.54	6,087.42	0.15	0.11	-0.11
12,203.00	91.21	315.45	4,932.51	4,867.98	-3,869.20	6,181.38	2.60	1.21	-2.30
12,296.00	89.26	315.62	4,932.12	4,934.35	-3,934.34	6,274.37	2.10	-2.10	0.18
12,389.00	88.62	315.05	4,933.84	5,000.49	-3,999.70	6,367.36	0.92	-0.69	-0.61
12,483.00	92.38	316.02	4,933.02	5,067.56	-4,065.53	6,461.34	4.13	4.00	1.03

Scientific Drilling Int.

Survey Report

Company: WPX Energy
Project: Sandoval County, NM 3003 West
Site: N Escavada UT 317-318 Pad
Well: N Escavada UT 317H
Wellbore: Wellbore #1
Design: Actual

Local Co-ordinate Reference: Well N Escavada UT 317H
TVD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
MD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,576.00	91.51	317.10	4,929.87	5,135.04	-4,129.44	6,554.26	1.49	-0.94	1.16
12,670.00	88.62	314.92	4,929.76	5,202.66	-4,194.72	6,648.23	3.85	-3.07	-2.32
12,763.00	87.95	313.42	4,932.55	5,267.43	-4,261.39	6,741.17	1.77	-0.72	-1.61
12,856.00	87.15	313.22	4,936.52	5,331.18	-4,328.99	6,834.03	0.89	-0.86	-0.22
12,950.00	87.53	313.39	4,940.88	5,395.58	-4,397.32	6,927.87	0.44	0.40	0.18
13,045.00	88.99	314.84	4,943.77	5,461.68	-4,465.49	7,022.81	2.17	1.54	1.53
13,140.00	89.47	315.51	4,945.04	5,529.05	-4,532.45	7,117.80	0.87	0.51	0.71
13,235.00	88.19	315.35	4,946.98	5,596.71	-4,599.10	7,212.77	1.36	-1.35	-0.17
13,330.00	90.13	315.58	4,948.38	5,664.42	-4,665.72	7,307.76	2.06	2.04	0.24
13,425.00	89.26	315.36	4,948.88	5,732.14	-4,732.34	7,402.76	0.94	-0.92	-0.23
13,520.00	89.43	315.61	4,949.97	5,799.88	-4,798.94	7,497.75	0.32	0.18	0.26
13,615.00	89.66	315.71	4,950.72	5,867.82	-4,865.34	7,592.74	0.26	0.24	0.11
13,710.00	89.36	314.88	4,951.54	5,935.34	-4,932.16	7,687.74	0.93	-0.32	-0.87
13,805.00	89.26	315.08	4,952.68	6,002.48	-4,999.36	7,782.73	0.24	-0.11	0.21
13,901.00	89.19	315.23	4,953.98	6,070.54	-5,067.05	7,878.72	0.17	-0.07	0.16
13,996.00	89.56	315.09	4,955.01	6,137.90	-5,134.03	7,973.72	0.42	0.39	-0.15
14,091.00	89.73	314.61	4,955.60	6,204.90	-5,201.38	8,068.71	0.54	0.18	-0.51
14,186.00	89.97	313.76	4,955.85	6,271.11	-5,269.50	8,163.69	0.93	0.25	-0.89
14,281.00	90.10	313.08	4,955.79	6,336.41	-5,338.50	8,258.64	0.73	0.14	-0.72
14,376.00	89.70	315.46	4,955.96	6,402.72	-5,406.53	8,353.62	2.54	-0.42	2.51
14,471.00	89.23	314.06	4,956.85	6,469.60	-5,473.98	8,448.61	1.55	-0.49	-1.47
14,566.00	88.85	313.74	4,958.44	6,535.47	-5,542.42	8,543.57	0.52	-0.40	-0.34
14,661.00	91.58	315.23	4,958.08	6,602.03	-5,610.19	8,638.55	3.27	2.87	1.57
14,756.00	90.91	314.71	4,956.02	6,669.15	-5,677.38	8,733.52	0.89	-0.71	-0.55
14,851.00	90.43	313.44	4,954.91	6,735.23	-5,745.62	8,828.50	1.43	-0.51	-1.34
14,946.00	89.36	312.73	4,955.08	6,800.12	-5,815.01	8,923.42	1.35	-1.13	-0.75
15,041.00	87.91	311.28	4,957.34	6,863.67	-5,885.57	9,018.24	2.16	-1.53	-1.53
Last Survey Lateral - RSI@ 15041' MD, 1879853.69 N, 570082.22 E									
15,115.00	87.91	311.28	4,960.04	6,912.46	-5,941.15	9,092.01	0.00	0.00	0.00
BP@ 15115' MD, 1879902.33 N, 570026.51 E - 317H BHL									

Scientific Drilling Int.

Survey Report

Company: WPX Energy
Project: Sandoval County, NM 3003 West
Site: N Escavada UT 317-318 Pad
Well: N Escavada UT 317H
Wellbore: Wellbore #1
Design: Actual

Local Co-ordinate Reference: Well N Escavada UT 317H
TVD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
MD Reference: GL 6864 + KB 21 = @ 6885.00usft (Cyclone 32)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
447.00	446.99	-0.72	0.83	First Survey Int.
4,319.00	4,081.00	-456.31	1,187.23	Last Survey Int.
4,351.00	4,112.54	-456.00	1,192.59	First Survey Curve
5,617.00	4,893.79	184.64	757.26	Last Survey Curve
5,664.00	4,893.39	218.47	724.63	7"Casing@ 5664' MD, 1873226.03 N, 576710.01 E
5,683.00	4,893.19	232.09	711.38	First Survey Lateral
15,041.00	4,957.34	6,863.67	-5,885.57	Last Survey Lateral
15,041.00	4,957.34	6,863.67	-5,885.57	RSI@ 15041' MD, 1879853.69 N, 570082.22 E
15,115.00	4,960.04	6,912.46	-5,941.15	BP@ 15115' MD, 1879902.33 N, 570026.51 E

Checked By: _____ Approved By: _____ Date: _____