

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

OIL CONS. DIV DIST. 3

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35801		*Pool Code 98157	*Pool Name LYBROOK MANCOS W
*Property Code 315250	*Property Name W LYBROOK UNIT		*Well Number 735H
*GRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC		*Elevation 6696'

¹⁰ Surface Location

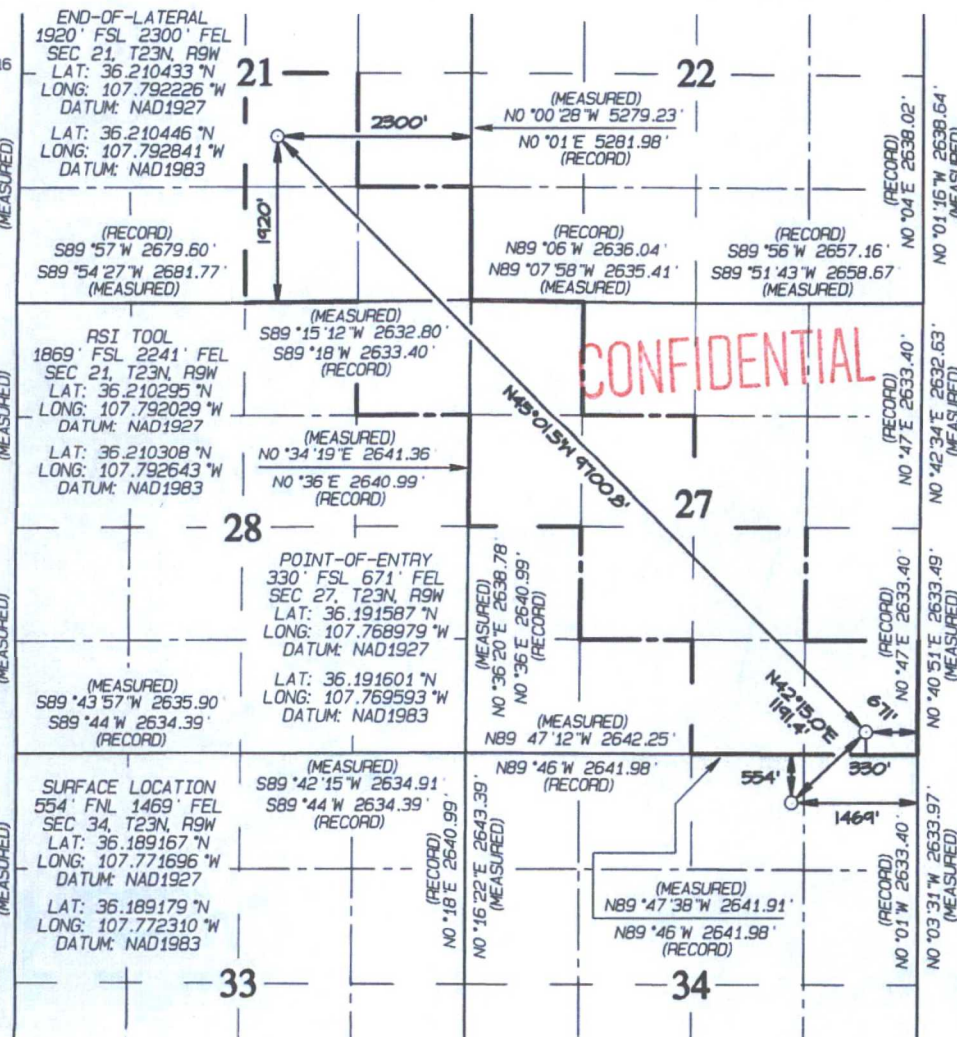
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	34	23N	9W		554	NORTH	1469	EAST	SAN JUAN

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	21	23N	9W		1920	SOUTH	2300	EAST	SAN JUAN

¹² Dedicated Acres 440.00 NE/4 NE/4 - Section 28 W/2 SE/4, SE/4 SE/4 - Section 21 W/2 NW/4, SE/4 NW/4, NE/4 SW/4 W/2 SE/4, SE/4 SE/4 - Section 27		¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-14051 - 12,807.24 Acres
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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



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 <i>[Signature]</i>	Date 6/21/17
Lacey Granillo Printed Name lacey.granillo@wpxenergy.com E-mail Address	
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: MAY 31, 2017 Date of Survey: JUNE 5, 2015	
Signature and Seal of Professional Surveyor	
Jason C. Edwards Certificate Number 15269	



EOW Summary

WPX Energy W
Lybrook
2309-34B
#735H





W Lybrook UT #735H
T23N R9W
Northing: 1888103.62
Easting: 518188.44
Actual

KB @ 6717.00usft (Cyclone 32)
GL @ 6696.00



WELL DETAILS W Lybrook UT #735H

	Ground Level:	6696.00		
+N/-S	+E/-W	Northing	Easting	Latitude
0.00	0.00	1888103.62	518188.44	36° 11' 21.00 N
				107° 46' 18.104 W

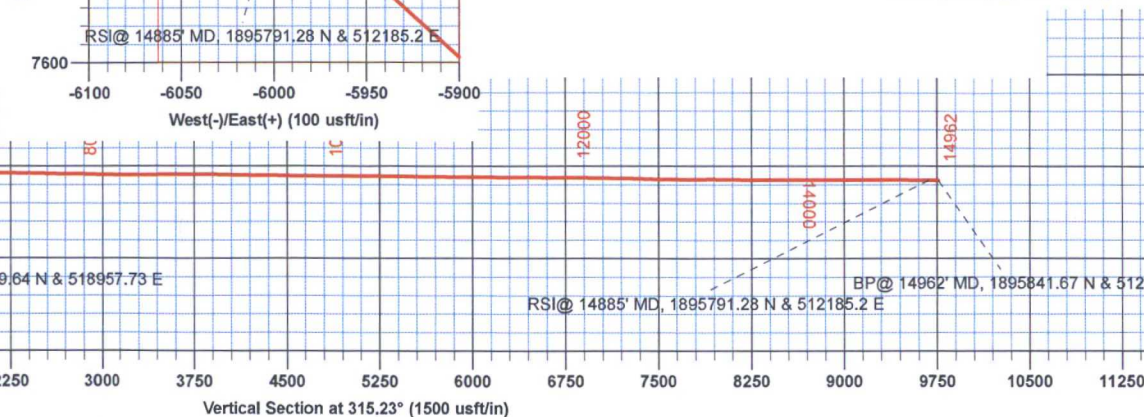
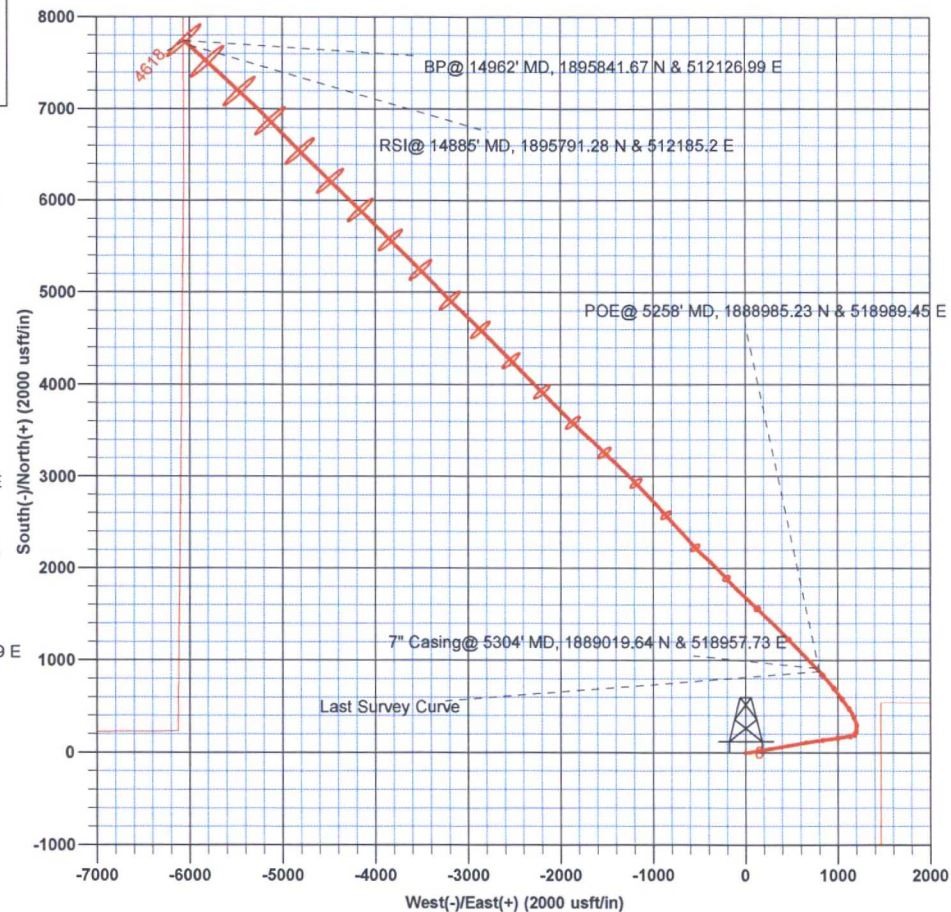
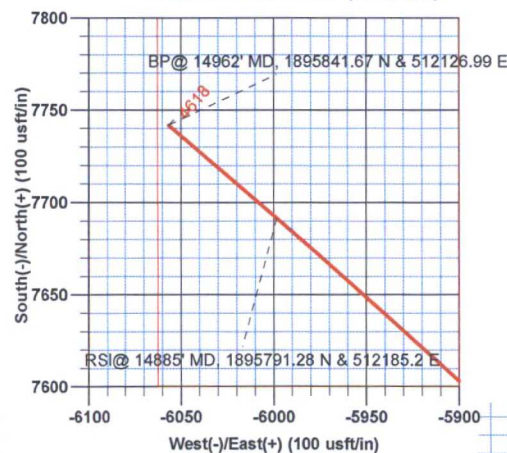
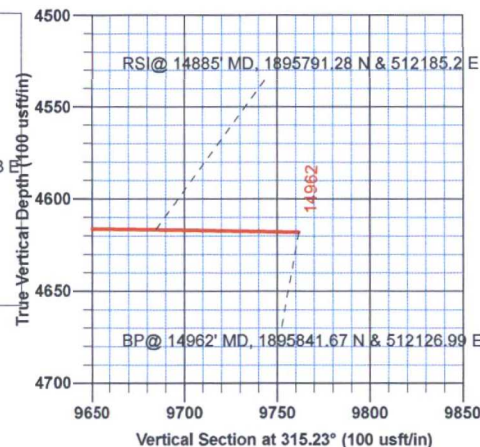
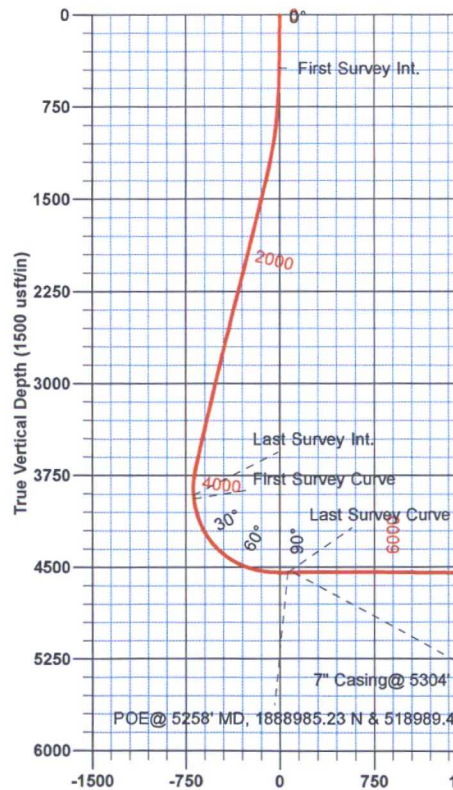


Azimuths to True North
Magnetic North: 9.10°

Magnetic Field
Strength: 49638.9nT
Dip Angle: 62.82°
Date: 4/12/2017
Model: HDGM

ANNOTATIONS

TVD	MD	Annotation
437.98	438.00	First Survey Int.
3912.20	4140.00	Last Survey Int.
3941.92	4171.00	First Survey Curve
4542.84	5258.00	Last Survey Curve
4542.84	5258.00	POE@ 5258' MD, 1888985.23 N & 518989.45 E
4542.46	5304.00	7" Casing@ 5304' MD, 1889019.64 N & 518957.73 E
4616.60	14885.00	RSI@ 14885' MD, 1895791.28 N & 512185.2 E
4618.06	14962.00	BP@ 14962' MD, 1895841.67 N & 512126.99 E



Bailey Fellows
12:56, May 30 2017
Scientific Drilling
325 S. Faudree Rd.
Odessa, TX 79765

WPX Energy

T23N R9W

2309-34B WLU

W Lybrook UT #735H - Slot A1

API: 30-045-35801

Wellbore #1

Design: Actual

Standard Survey Report

30 May, 2017



www.scientificdrilling.com

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #735H - Slot A1
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cyclone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cyclone 32)
Well:	W Lybrook UT #735H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Grand Junction District

Project	T23N R9W		
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	2309-34B WLU		
Site Position:		Northing:	1,888,108.09 usft
From:	Lat/Long	Easting:	518,148.80 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	36° 11' 21.044 N
		Longitude:	107° 46' 18.588 W
		Grid Convergence:	0.04 °

Well	W Lybrook UT #735H - Slot A1		
Well Position	+N/-S	0.00 usft	Northing: 1,888,103.62 usft
	+E/-W	0.00 usft	Easting: 518,188.44 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	36° 11' 21.000 N
		Longitude:	107° 46' 18.104 W
		Ground Level:	6,696.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	4/12/2017	9.10
			Dip Angle (°) 62.82
			Field Strength (nT) 49,639

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)
	0.00	0.00	0.00
			Direction (°) 315.23

Survey Program	Date 5/30/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
21.00	321.00	Gyro (Wellbore #1)	NS-GYRO-MS
438.00	4,140.00	SDI MWD Intermediate (Wellbore #1)	MWD+HDGM
4,171.00	5,258.00	SDI MWD Curve (Wellbore #1)	MWD+HDGM
5,453.00	14,962.00	SDI MWD Lateral (Wellbore #1)	MWD+HDGM
			Description
			North sensing gyrocompassing m/s
			OWSG MWD + HDGM
			OWSG 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	0.35	167.30	51.00	-0.09	0.02	-0.08	1.17	1.17	0.00
81.00	0.33	147.67	81.00	-0.25	0.09	-0.24	0.39	-0.07	-65.43
111.00	0.39	143.62	111.00	-0.41	0.19	-0.43	0.22	0.20	-13.50
141.00	0.63	146.59	141.00	-0.63	0.34	-0.69	0.80	0.80	9.90
171.00	0.82	154.15	171.00	-0.96	0.53	-1.05	0.71	0.63	25.20
201.00	0.76	160.97	200.99	-1.34	0.69	-1.43	0.37	-0.20	22.73

Scientific Drilling Int.
Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #735H - Slot A1
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cyclone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cyclone 32)
Well:	W Lybrook UT #735H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	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	0.72	167.52	230.99	-1.71	0.79	-1.77	0.31	-0.13	21.83
261.00	0.72	157.29	260.99	-2.07	0.91	-2.11	0.43	0.00	-34.10
291.00	0.62	149.35	290.99	-2.38	1.06	-2.44	0.45	-0.33	-26.47
321.00	0.50	160.46	320.98	-2.65	1.19	-2.72	0.54	-0.40	37.03
438.00	0.34	127.40	437.98	-3.34	1.64	-3.52	0.24	-0.14	-28.26
First Survey Int.									
532.00	2.11	94.15	531.96	-3.63	3.58	-5.10	1.95	1.88	-35.37
626.00	4.60	82.32	625.79	-3.25	9.05	-8.68	2.74	2.65	-12.59
720.00	6.77	83.19	719.32	-2.09	18.28	-14.36	2.31	2.31	0.93
814.00	8.93	78.79	812.44	-0.02	30.94	-21.80	2.38	2.30	-4.68
908.00	11.46	76.82	904.94	3.53	47.19	-30.73	2.72	2.69	-2.10
1,002.00	13.54	79.93	996.71	7.58	67.12	-41.89	2.32	2.21	3.31
1,095.00	16.74	80.21	1,086.47	11.77	91.05	-55.77	3.44	3.44	0.30
1,189.00	19.15	81.25	1,175.89	16.41	119.63	-72.60	2.59	2.56	1.11
1,283.00	20.34	81.62	1,264.36	21.14	151.03	-91.36	1.27	1.27	0.39
1,376.00	21.12	81.64	1,351.34	25.93	183.60	-110.89	0.84	0.84	0.02
1,470.00	22.70	82.32	1,438.55	30.82	218.33	-131.88	1.70	1.68	0.72
1,564.00	23.71	80.89	1,524.95	36.24	254.97	-153.84	1.23	1.07	-1.52
1,658.00	23.30	79.93	1,611.15	42.48	291.93	-175.44	0.60	-0.44	-1.02
1,752.00	22.77	79.57	1,697.65	49.02	328.13	-196.29	0.58	-0.56	-0.38
1,846.00	22.94	78.81	1,784.27	55.87	363.99	-216.68	0.36	0.18	-0.81
1,940.00	24.49	79.71	1,870.33	62.91	401.13	-237.84	1.69	1.65	0.96
2,033.00	22.55	79.62	1,955.60	69.56	437.64	-258.83	2.09	-2.09	-0.10
2,127.00	22.61	79.40	2,042.40	76.13	473.13	-279.16	0.11	0.06	-0.23
2,221.00	23.51	79.26	2,128.88	82.95	509.31	-299.80	0.96	0.96	-0.15
2,315.00	24.66	79.39	2,214.70	90.06	547.01	-321.30	1.22	1.22	0.14
2,409.00	24.64	78.97	2,300.13	97.42	585.52	-343.20	0.19	-0.02	-0.45
2,503.00	23.38	79.23	2,386.00	104.65	623.08	-364.51	1.35	-1.34	0.28
2,597.00	24.05	78.95	2,472.06	111.81	660.20	-385.58	0.72	0.71	-0.30
2,691.00	23.15	82.84	2,558.20	117.78	697.33	-407.49	1.91	-0.96	4.14
2,785.00	23.66	80.67	2,644.47	123.14	734.28	-429.70	1.07	0.54	-2.31
2,878.00	22.06	83.50	2,730.16	128.15	770.05	-451.34	2.09	-1.72	3.04
2,972.00	20.93	82.51	2,817.63	132.33	804.23	-472.44	1.26	-1.20	-1.05
3,066.00	20.52	82.99	2,905.54	136.53	837.23	-492.70	0.47	-0.44	0.51
3,160.00	21.11	82.58	2,993.41	140.73	870.37	-513.06	0.65	0.63	-0.44
3,254.00	20.27	83.24	3,081.34	144.83	903.33	-533.36	0.93	-0.89	0.70
3,348.00	20.79	82.67	3,169.37	148.88	936.04	-553.53	0.59	0.55	-0.61
3,442.00	20.33	79.84	3,257.39	153.89	968.66	-572.94	1.16	-0.49	-3.01
3,536.00	22.07	80.79	3,345.02	159.59	1,002.17	-592.49	1.89	1.85	1.01
3,630.00	22.55	80.56	3,431.99	165.38	1,037.38	-613.18	0.52	0.51	-0.24
3,724.00	20.46	80.78	3,519.44	170.97	1,071.38	-633.16	2.23	-2.22	0.23
3,818.00	20.52	82.86	3,607.49	175.65	1,103.95	-652.77	0.78	0.06	2.21
3,889.00	19.54	83.03	3,674.20	178.63	1,128.08	-667.65	1.38	-1.38	0.24

Scientific Drilling Int.
Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #735H - Slot A1
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cyclone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cyclone 32)
Well:	W Lybrook UT #735H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	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)
3,920.00	20.47	83.41	3,703.33	179.88	1,138.61	-674.18	3.03	3.00	1.23
3,952.00	19.46	77.97	3,733.41	181.64	1,149.39	-680.52	6.60	-3.16	-17.00
3,983.00	19.08	69.97	3,762.67	184.45	1,159.20	-685.43	8.60	-1.23	-25.81
4,014.00	18.29	61.17	3,792.05	188.53	1,168.22	-688.89	9.43	-2.55	-28.39
4,045.00	17.77	53.07	3,821.53	193.72	1,176.27	-690.87	8.25	-1.68	-26.13
4,077.00	17.64	45.60	3,852.02	200.05	1,183.64	-691.57	7.11	-0.41	-23.34
4,108.00	17.31	36.76	3,881.59	207.03	1,189.75	-690.92	8.62	-1.06	-28.52
4,140.00	16.65	26.77	3,912.20	214.94	1,194.67	-688.77	9.34	-2.06	-31.22
Last Survey Int.									
4,171.00	16.44	17.98	3,941.92	223.08	1,198.02	-685.35	8.10	-0.68	-28.35
First Survey Curve									
4,202.00	18.06	14.21	3,971.53	231.91	1,200.56	-680.86	6.35	5.23	-12.16
4,234.00	19.74	12.50	4,001.80	241.99	1,202.94	-675.39	5.53	5.25	-5.34
4,265.00	21.20	10.27	4,030.85	252.62	1,205.08	-669.34	5.34	4.71	-7.19
4,296.00	22.73	7.94	4,059.59	264.07	1,206.90	-662.50	5.68	4.94	-7.52
4,328.00	24.36	2.06	4,088.93	276.79	1,207.99	-654.24	8.93	5.09	-18.38
4,359.00	25.39	354.95	4,117.06	289.80	1,207.64	-644.75	10.20	3.32	-22.94
4,390.00	27.53	349.24	4,144.82	303.47	1,205.72	-633.70	10.72	6.90	-18.42
4,422.00	29.19	345.28	4,172.98	318.28	1,202.35	-620.81	7.84	5.19	-12.38
4,453.00	30.80	343.03	4,199.83	333.18	1,198.11	-607.25	6.33	5.19	-7.26
4,484.00	33.09	340.57	4,226.13	348.76	1,192.98	-592.57	8.50	7.39	-7.94
4,515.00	35.11	337.25	4,251.80	364.96	1,186.72	-576.66	8.86	6.52	-10.71
4,547.00	38.21	335.41	4,277.47	382.45	1,179.04	-558.83	10.28	9.69	-5.75
4,578.00	40.57	334.37	4,301.43	400.26	1,170.69	-540.31	7.90	7.61	-3.35
4,610.00	42.49	332.92	4,325.38	419.27	1,161.27	-520.18	6.71	6.00	-4.53
4,641.00	44.81	330.75	4,347.81	438.13	1,151.16	-499.67	8.91	7.48	-7.00
4,672.00	47.73	328.17	4,369.24	457.41	1,139.77	-477.96	11.17	9.42	-8.32
4,703.00	50.91	325.72	4,389.45	477.10	1,126.94	-454.95	11.88	10.26	-7.90
4,735.00	53.68	324.36	4,409.02	497.84	1,112.43	-430.00	9.29	8.66	-4.25
4,766.00	55.74	323.98	4,426.93	518.36	1,097.62	-405.01	6.72	6.65	-1.23
4,797.00	58.45	323.55	4,443.77	539.35	1,082.23	-379.27	8.82	8.74	-1.39
4,829.00	61.26	322.71	4,459.83	561.48	1,065.63	-351.87	9.07	8.78	-2.63
4,860.00	64.60	323.07	4,473.94	583.49	1,048.98	-324.51	10.82	10.77	1.16
4,891.00	67.40	323.77	4,486.55	606.23	1,032.11	-296.48	9.26	9.03	2.26
4,922.00	69.88	323.66	4,497.84	629.50	1,015.02	-267.93	8.01	8.00	-0.35
4,954.00	72.25	322.39	4,508.22	653.68	996.82	-237.95	8.30	7.41	-3.97
4,985.00	75.39	321.82	4,516.86	677.17	978.53	-208.39	10.28	10.13	-1.84
5,016.00	78.02	320.90	4,523.99	700.73	959.69	-178.40	8.96	8.48	-2.97
5,048.00	79.59	319.97	4,530.20	724.93	939.70	-147.14	5.67	4.91	-2.91
5,079.00	82.11	319.81	4,535.13	748.34	919.98	-116.64	8.14	8.13	-0.52
5,109.00	85.26	319.53	4,538.43	771.06	900.69	-86.91	10.54	10.50	-0.93
5,140.00	88.29	318.61	4,540.17	794.44	880.41	-56.03	10.21	9.77	-2.97
5,203.00	88.15	317.31	4,542.13	841.21	838.24	6.86	2.07	-0.22	-2.06
5,257.20	90.34	317.50	4,542.84	881.10	801.57	61.02	4.05	4.04	0.35

Scientific Drilling Int.
Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #735H - Slot A1
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cyclone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cyclone 32)
Well:	W Lybrook UT #735H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	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)	
POE #735H 3										
5,258.00	90.37	317.50	4,542.84	881.69	801.03	61.82	4.05	4.04	0.35	
Last Survey Curve - POE@ 5258' MD, 1888985.23 N & 518989.45 E										
5,304.00	90.58	317.22	4,542.46	915.53	769.87	107.78	0.75	0.45	-0.60	
7" Casing@ 5304' MD, 1889019.64 N & 518957.73 E										
5,453.00	91.24	316.33	4,540.10	1,024.09	667.84	256.71	0.75	0.45	-0.60	
5,548.00	89.29	316.99	4,539.66	1,093.18	602.64	351.67	2.17	-2.05	0.69	
5,643.00	89.06	315.71	4,541.03	1,161.91	537.08	446.64	1.37	-0.24	-1.35	
5,737.00	90.03	315.47	4,541.77	1,229.06	471.30	540.64	1.06	1.03	-0.26	
5,832.00	90.84	314.95	4,541.05	1,296.47	404.38	635.63	1.01	0.85	-0.55	
5,926.00	89.33	315.69	4,540.91	1,363.31	338.28	729.63	1.79	-1.61	0.79	
6,021.00	89.70	314.79	4,541.72	1,430.76	271.39	824.62	1.02	0.39	-0.95	
6,116.00	89.73	313.81	4,542.19	1,497.11	203.40	919.61	1.03	0.03	-1.03	
6,211.00	89.80	313.07	4,542.58	1,562.43	134.43	1,014.56	0.78	0.07	-0.78	
6,305.00	89.60	312.44	4,543.07	1,626.24	65.41	1,108.47	0.70	-0.21	-0.67	
6,400.00	88.52	314.18	4,544.63	1,691.40	-3.71	1,203.40	2.16	-1.14	1.83	
6,495.00	88.55	313.19	4,547.06	1,756.99	-72.38	1,298.33	1.04	0.03	-1.04	
6,590.00	89.03	316.65	4,549.07	1,824.04	-139.63	1,393.30	3.68	0.51	3.64	
6,685.00	89.56	316.01	4,550.24	1,892.76	-205.22	1,488.27	0.87	0.56	-0.67	
6,779.00	90.34	315.78	4,550.32	1,960.25	-270.64	1,582.26	0.87	0.83	-0.24	
6,874.00	90.00	315.02	4,550.04	2,027.89	-337.34	1,677.26	0.88	-0.36	-0.80	
6,969.00	89.13	313.32	4,550.76	2,094.08	-405.48	1,772.24	2.01	-0.92	-1.79	
7,064.00	88.52	313.01	4,552.70	2,159.06	-474.76	1,867.16	0.72	-0.64	-0.33	
7,159.00	89.06	315.96	4,554.71	2,225.61	-542.51	1,962.12	3.16	0.57	3.11	
7,254.00	89.19	318.01	4,556.16	2,295.06	-607.31	2,057.05	2.16	0.14	2.16	
7,349.00	89.16	318.36	4,557.53	2,365.85	-670.64	2,151.92	0.37	-0.03	0.37	
7,443.00	89.50	318.71	4,558.63	2,436.29	-732.88	2,245.76	0.52	0.36	0.37	
7,538.00	89.53	318.82	4,559.43	2,507.73	-795.50	2,340.57	0.12	0.03	0.12	
7,633.00	89.40	318.04	4,560.32	2,578.80	-858.53	2,435.42	0.83	-0.14	-0.82	
7,728.00	89.90	318.26	4,560.90	2,649.56	-921.91	2,530.29	0.58	0.53	0.23	
7,822.00	89.13	317.57	4,561.70	2,719.32	-984.91	2,624.19	1.10	-0.82	-0.73	
7,917.00	89.53	316.80	4,562.81	2,789.00	-1,049.47	2,719.12	0.91	0.42	-0.81	
8,012.00	88.09	315.87	4,564.78	2,857.71	-1,115.04	2,814.08	1.80	-1.52	-0.98	
8,107.00	88.99	315.87	4,567.20	2,925.87	-1,181.17	2,909.04	0.95	0.95	0.00	
8,202.00	88.73	314.37	4,569.09	2,993.17	-1,248.19	3,004.02	1.60	-0.27	-1.58	
8,297.00	89.03	314.48	4,570.95	3,059.65	-1,316.02	3,098.99	0.34	0.32	0.12	
8,392.00	89.70	314.12	4,572.00	3,126.00	-1,384.01	3,193.97	0.80	0.71	-0.38	
8,487.00	89.87	312.98	4,572.36	3,191.45	-1,452.86	3,288.93	1.21	0.18	-1.20	
8,582.00	89.93	314.39	4,572.52	3,257.07	-1,521.55	3,383.89	1.49	0.06	1.48	
8,676.00	91.11	314.10	4,571.67	3,322.65	-1,588.89	3,477.87	1.29	1.26	-0.31	
8,771.00	91.31	313.67	4,569.66	3,388.49	-1,657.34	3,572.83	0.50	0.21	-0.45	
8,866.00	91.11	313.24	4,567.66	3,453.81	-1,726.29	3,667.76	0.50	-0.21	-0.45	
8,961.00	90.37	313.51	4,566.43	3,519.05	-1,795.34	3,762.70	0.83	-0.78	0.28	
9,056.00	88.39	314.37	4,567.46	3,584.96	-1,863.73	3,857.67	2.27	-2.08	0.91	

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #735H - Slot A1
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cyclone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cyclone 32)
Well:	W Lybrook UT #735H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	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)	
9,150.00	87.21	314.30	4,571.07	3,650.61	-1,930.92	3,951.58	1.26	-1.26	-0.07	
9,245.00	88.15	315.98	4,574.91	3,717.89	-1,997.87	4,046.50	2.03	0.99	1.77	
9,339.00	90.13	315.96	4,576.32	3,785.46	-2,063.19	4,140.48	2.11	2.11	-0.02	
9,434.00	90.54	315.19	4,575.77	3,853.30	-2,129.69	4,235.47	0.92	0.43	-0.81	
9,529.00	88.02	315.27	4,576.96	3,920.74	-2,196.58	4,330.46	2.65	-2.65	0.08	
9,624.00	89.19	316.49	4,579.27	3,988.91	-2,262.70	4,425.42	1.78	1.23	1.28	
9,719.00	89.46	315.10	4,580.39	4,057.01	-2,328.93	4,520.41	1.49	0.28	-1.46	
9,814.00	90.13	315.19	4,580.73	4,124.35	-2,395.93	4,615.41	0.71	0.71	0.09	
9,908.00	90.47	314.81	4,580.24	4,190.82	-2,462.40	4,709.40	0.54	0.36	-0.40	
10,003.00	89.76	315.69	4,580.05	4,258.29	-2,529.28	4,804.40	1.19	-0.75	0.93	
10,098.00	89.43	315.53	4,580.72	4,326.17	-2,595.73	4,899.40	0.39	-0.35	-0.17	
10,193.00	89.73	315.33	4,581.42	4,393.85	-2,662.40	4,994.39	0.38	0.32	-0.21	
10,287.00	89.97	315.19	4,581.67	4,460.61	-2,728.57	5,088.39	0.30	0.26	-0.15	
10,382.00	89.50	314.85	4,582.10	4,527.81	-2,795.72	5,183.39	0.61	-0.49	-0.36	
10,474.00	89.87	314.95	4,582.61	4,592.75	-2,860.88	5,275.39	0.42	0.40	0.11	
10,566.00	88.99	314.17	4,583.53	4,657.30	-2,926.43	5,367.38	1.28	-0.96	-0.85	
10,658.00	89.13	313.63	4,585.03	4,721.08	-2,992.71	5,459.34	0.61	0.15	-0.59	
10,750.00	89.93	314.36	4,585.79	4,784.98	-3,058.89	5,551.31	1.18	0.87	0.79	
10,841.00	89.33	313.81	4,586.38	4,848.29	-3,124.26	5,642.29	0.89	-0.66	-0.60	
10,933.00	88.59	313.06	4,588.05	4,911.53	-3,191.05	5,734.23	1.15	-0.80	-0.82	
11,025.00	89.87	317.11	4,589.28	4,976.66	-3,255.99	5,826.20	4.62	1.39	4.40	
11,117.00	89.83	317.06	4,589.52	5,044.04	-3,318.63	5,918.15	0.07	-0.04	-0.05	
11,209.00	89.90	316.47	4,589.74	5,111.07	-3,381.65	6,010.12	0.65	0.08	-0.64	
11,301.00	89.33	315.47	4,590.36	5,177.21	-3,445.59	6,102.11	1.25	-0.62	-1.09	
11,393.00	88.49	313.47	4,592.11	5,241.64	-3,511.23	6,194.08	2.36	-0.91	-2.17	
11,485.00	89.03	315.44	4,594.10	5,306.06	-3,576.88	6,286.04	2.22	0.59	2.14	
11,577.00	89.26	315.85	4,595.47	5,371.83	-3,641.19	6,378.03	0.51	0.25	0.45	
11,668.00	90.47	316.17	4,595.69	5,437.30	-3,704.39	6,469.02	1.38	1.33	0.35	
11,760.00	90.44	315.39	4,594.96	5,503.23	-3,768.55	6,561.01	0.85	-0.03	-0.85	
11,852.00	90.37	315.46	4,594.31	5,568.77	-3,833.12	6,653.01	0.11	-0.08	0.08	
11,944.00	89.97	315.43	4,594.03	5,634.32	-3,897.66	6,745.01	0.44	-0.43	-0.03	
12,036.00	89.43	315.07	4,594.52	5,699.66	-3,962.43	6,837.01	0.71	-0.59	-0.39	
12,128.00	89.36	315.39	4,595.49	5,764.97	-4,027.22	6,929.00	0.36	-0.08	0.35	
12,220.00	89.03	315.75	4,596.78	5,830.66	-4,091.62	7,020.99	0.53	-0.36	0.39	
12,312.00	89.36	315.48	4,598.07	5,896.40	-4,155.96	7,112.98	0.46	0.36	-0.29	
12,403.00	89.06	314.76	4,599.33	5,960.88	-4,220.17	7,203.97	0.86	-0.33	-0.79	
12,496.00	88.15	314.47	4,601.59	6,026.17	-4,286.35	7,296.93	1.03	-0.98	-0.31	
12,587.00	87.38	314.11	4,605.14	6,089.67	-4,351.44	7,387.85	0.93	-0.85	-0.40	
12,679.00	89.16	314.17	4,607.92	6,153.71	-4,417.43	7,479.79	1.94	1.93	0.07	
12,770.00	89.19	313.78	4,609.23	6,216.89	-4,482.91	7,570.76	0.43	0.03	-0.43	
12,862.00	90.13	314.62	4,609.77	6,281.02	-4,548.86	7,662.74	1.37	1.02	0.91	
12,954.00	90.50	314.62	4,609.27	6,345.64	-4,614.34	7,754.73	0.40	0.40	0.00	
13,046.00	89.97	316.10	4,608.89	6,411.10	-4,678.98	7,846.73	1.71	-0.58	1.61	

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #735H - Slot A1
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cyclone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cyclone 32)
Well:	W Lybrook UT #735H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	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)	
13,137.00	89.30	315.37	4,609.47	6,476.27	-4,742.50	7,937.72	1.09	-0.74	-0.80	
13,229.00	89.50	314.99	4,610.43	6,541.52	-4,807.34	8,029.72	0.47	0.22	-0.41	
13,321.00	90.17	314.91	4,610.70	6,606.52	-4,872.45	8,121.72	0.73	0.73	-0.09	
13,413.00	88.89	315.69	4,611.45	6,671.91	-4,937.16	8,213.71	1.63	-1.39	0.85	
13,505.00	90.37	316.15	4,612.05	6,737.99	-5,001.16	8,305.70	1.68	1.61	0.50	
13,596.00	90.07	315.79	4,611.70	6,803.42	-5,064.41	8,396.69	0.51	-0.33	-0.40	
13,688.00	90.07	315.32	4,611.59	6,869.10	-5,128.83	8,488.69	0.51	0.00	-0.51	
13,780.00	89.93	314.50	4,611.59	6,934.05	-5,193.98	8,580.69	0.90	-0.15	-0.89	
13,872.00	89.53	314.25	4,612.02	6,998.39	-5,259.74	8,672.67	0.51	-0.43	-0.27	
13,964.00	89.97	314.18	4,612.42	7,062.55	-5,325.68	8,764.66	0.48	0.48	-0.08	
14,055.00	90.10	313.73	4,612.37	7,125.71	-5,391.19	8,855.64	0.51	0.14	-0.49	
14,150.00	90.67	313.21	4,611.73	7,191.06	-5,460.13	8,950.59	0.81	0.60	-0.55	
14,245.00	90.57	313.44	4,610.70	7,256.24	-5,529.24	9,045.53	0.26	-0.11	0.24	
14,340.00	89.30	312.46	4,610.81	7,320.97	-5,598.77	9,140.45	1.69	-1.34	-1.03	
14,435.00	89.97	312.89	4,611.41	7,385.36	-5,668.61	9,235.35	0.84	0.71	0.45	
14,530.00	89.30	314.05	4,612.02	7,450.72	-5,737.56	9,330.31	1.41	-0.71	1.22	
14,624.00	89.30	313.36	4,613.17	7,515.66	-5,805.50	9,424.26	0.73	0.00	-0.73	
14,719.00	89.13	312.53	4,614.47	7,580.38	-5,875.04	9,519.18	0.89	-0.18	-0.87	
14,813.00	89.46	312.12	4,615.62	7,643.67	-5,944.53	9,613.05	0.56	0.35	-0.44	
14,885.00	88.99	311.10	4,616.60	7,691.47	-5,998.36	9,684.90	1.56	-0.65	-1.42	
RSI@ 14885' MD, 1895791.28 N & 512185.2 E										
14,899.00	88.90	310.90	4,616.85	7,700.66	-6,008.92	9,698.86	1.56	-0.65	-1.42	
14,932.78	88.90	310.90	4,617.50	7,722.77	-6,034.45	9,732.54	0.00	0.00	0.00	
BHL #735H										
14,962.00	88.90	310.90	4,618.06	7,741.90	-6,056.53	9,761.67	0.00	0.00	0.00	
BP@ 14962' MD, 1895841.67 N & 512126.99 E										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
POE #735H 3	0.00	0.00	4,544.77	880.19	800.61	1,888,984.32	518,988.49	36° 11' 29.705 N	107° 46' 8.337 W
- hit/miss target									
- Shape									
- actual wellpath misses target center by 2.34usft at 5257.20usft MD (4542.84 TVD, 881.10 N, 801.57 E)									
- Point									
BHL #735H	0.00	0.00	4,619.00	7,747.99	-6,012.57	1,895,847.79	512,170.95	36° 12' 37.620 N	107° 47' 31.476 W
- actual wellpath misses target center by 33.42usft at 14932.78usft MD (4617.50 TVD, 7722.77 N, -6034.45 E)									
- Point									

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #735H - Slot A1
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cyclone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cyclone 32)
Well:	W Lybrook UT #735H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Grand Junction District

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
438.00	437.98	-3.34	1.64	First Survey Int.
4,140.00	3,912.20	214.94	1,194.67	Last Survey Int.
4,171.00	3,941.92	223.08	1,198.02	First Survey Curve
5,258.00	4,542.84	881.69	801.03	Last Survey Curve
5,258.00	4,542.84	881.69	801.03	POE@ 5258' MD, 1888985.23 N & 518989.45 E
5,304.00	4,542.46	915.53	769.87	7" Casing@ 5304' MD, 1889019.64 N & 518957.73 E
14,885.00	4,616.60	7,691.47	-5,998.36	RSI@ 14885' MD, 1895791.28 N & 512185.2 E
14,962.00	4,618.06	7,741.90	-6,056.53	BP@ 14962' MD, 1895841.67 N & 512126.99 E

Checked By: _____ Approved By: _____ Date: _____