

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 30-045-35803		*Pool Code 98157	*Pool Name LYBROOK MANCOS W	MAY 23 2017
*Property Code 315250	*Property Name W LYBROOK UNIT			*Well Number 710H
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC			*Elevation 6700'

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
F	13	23N	9W		1961	NORTH	2464	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

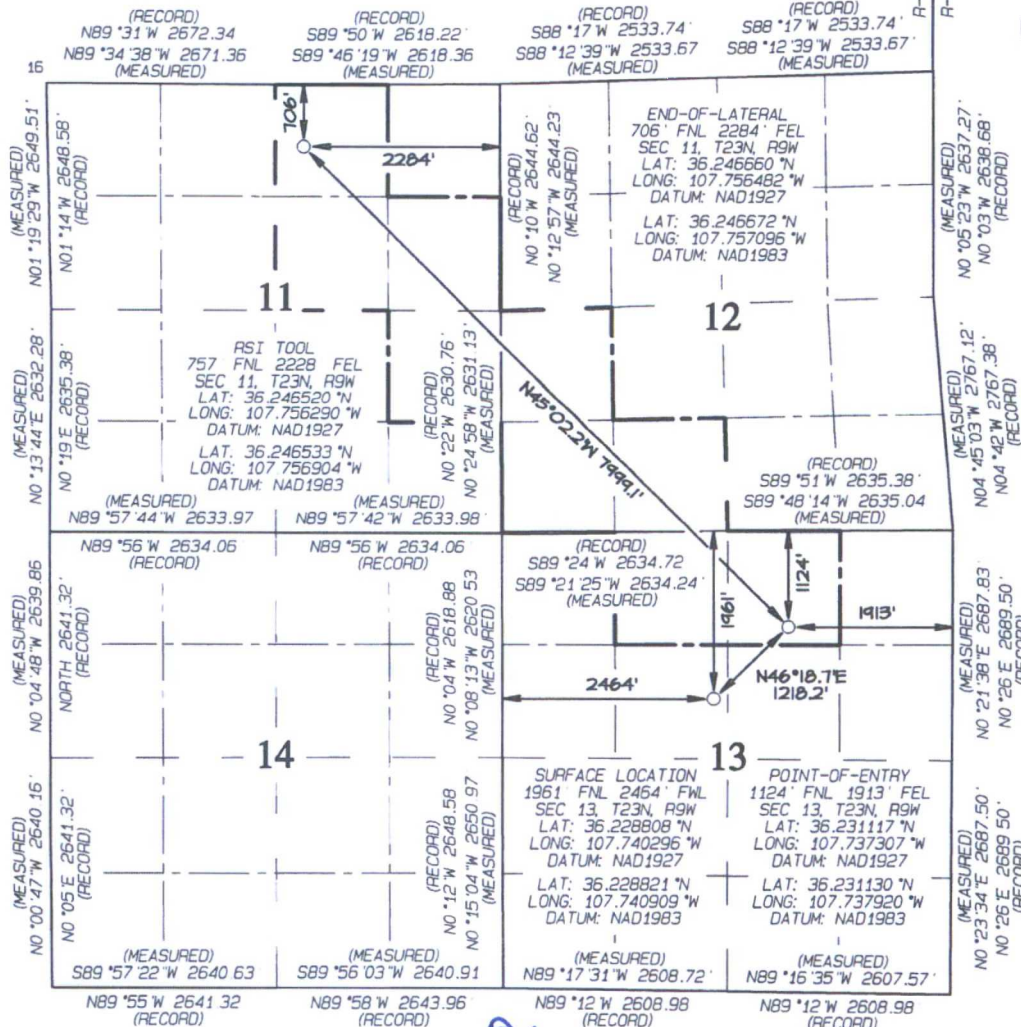
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	11	23N	9W		706	NORTH	2284	EAST	SAN JUAN

¹² Dedicated Acres
360.00
NW/4 NE/4, S/2 NE/4
NE/4 SE/4 - Section 11
NW/4 SW/4, S/2 SW/4 - Section 12
NE/4 NW/4, NW/4 NE/4 - Section 13

¹³ Joint or Infill
¹⁴ Consolidation Code
¹⁵ Order No.
R-14051 - 12,807.24 Acres

CONFIDENTIAL

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: *[Signature]* Date: 5/22/17

Printed Name: Lacey Granillo

E-mail Address: lacey.granillo@wpxenergy.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: MAY 10, 2017
Survey Date: OCTOBER 23, 2015

Signature and Seal of Professional Surveyor



Certificate Number 15269



OIL CONS. DIV DIST. 3

MAY 23 2017

EOW Summary

**WPX Energy W
Lybrook
2309-13F #710H**

CONFIDENTIAL





W Lybrook UT #710H
T23N R9W
Northing: 1902540.91
Easting: 527440.21
Actual

KB @ 6721.00usft (Cyclone 32)
GL @ 6700.00



Azimuths to True North
Magnetic North: 9.05°
Magnetic Field
Strength: 49691.0nT
Dip Angle: 62.87°
Date: 3/20/2017
Model: HDGM

WELL DETAILS W Lybrook UT #710H

Ground Level: 6700.00

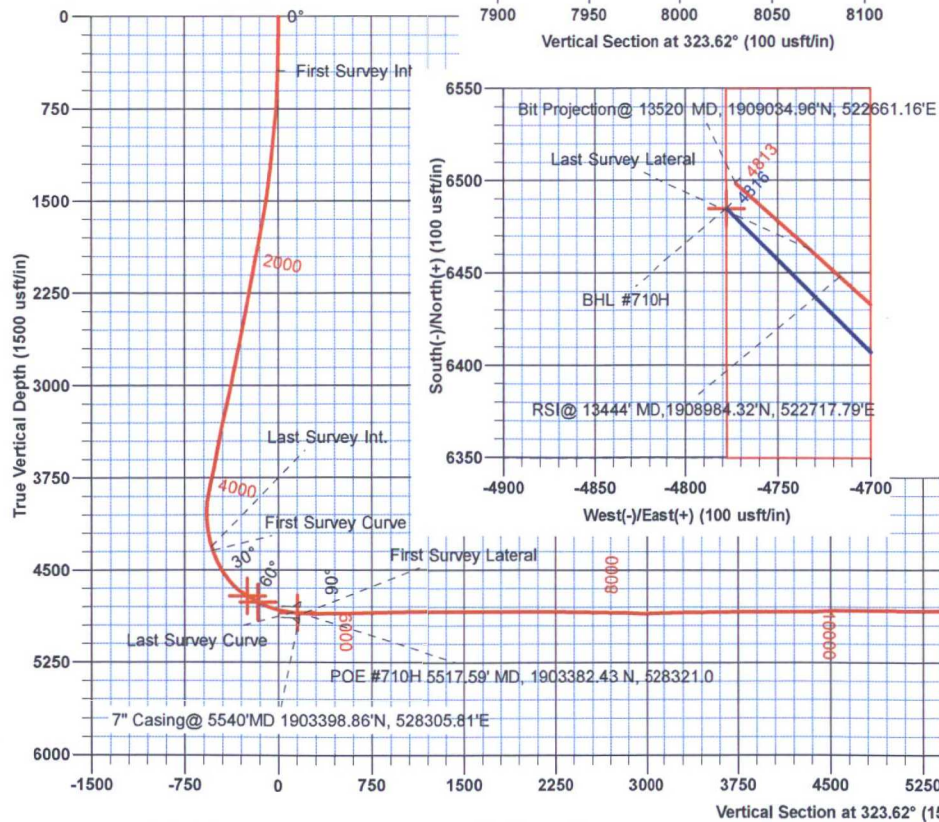
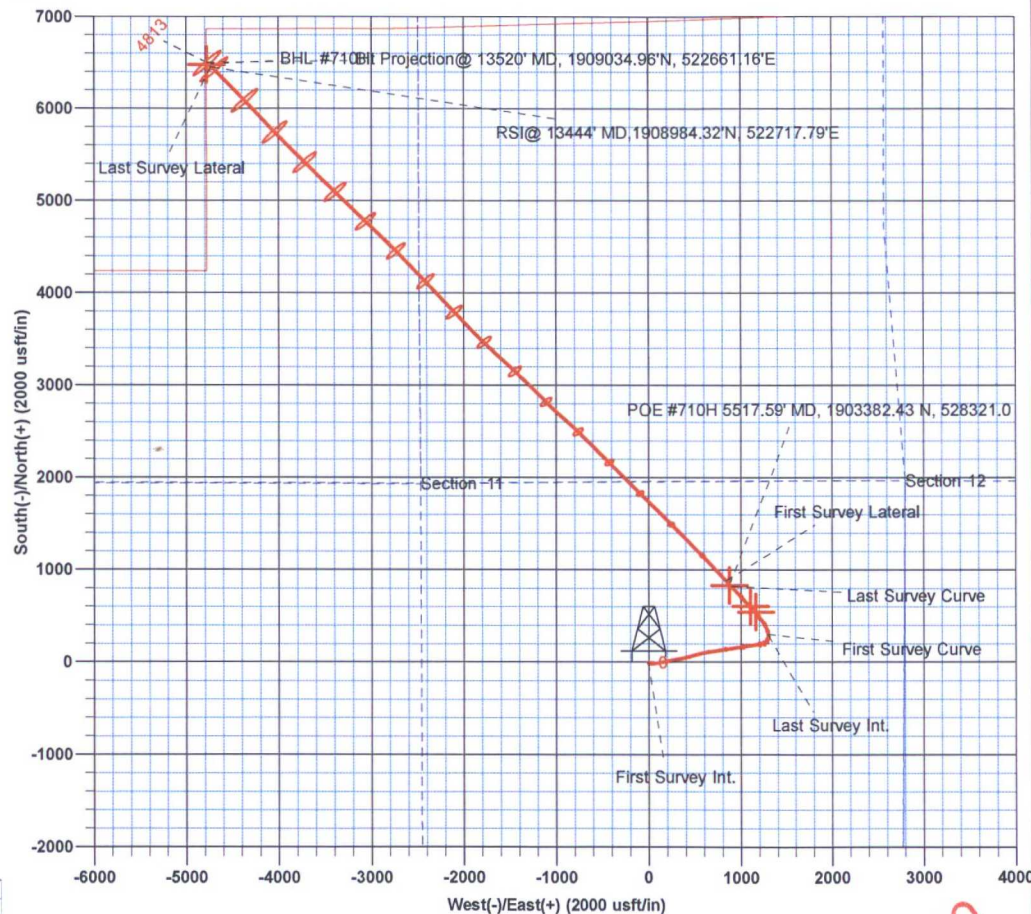
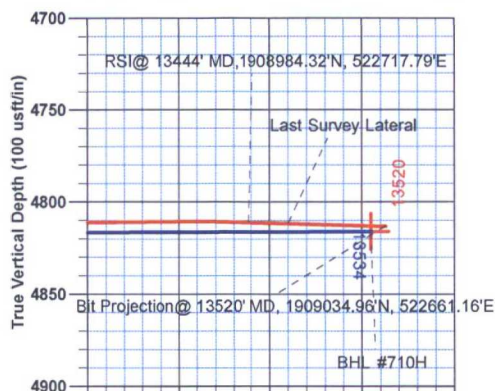
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1902540.91	527440.21	36° 13' 43.709 N	107° 44' 25.066 W

ANNOTATIONS

TVD	MD	Annotation
443.93	444.06	First Survey Int.
4311.95	4578.96	Last Survey Int.
4341.86	4611.06	First Survey Curve
4845.39	5489.06	Last Survey Curve
4850.26	5576.06	First Survey Lateral
4811.07	13444'	RSI@ 13444' MD, 1908984.32'N, 522717.79'E
4811.66	13466.06	Last Survey Lateral
4813.20	13520'	Bit Projection@ 13520' MD, 1909034.96'N, 522661.16'E

7" Casing@ 5540' MD 1903398.86'N, 528305.81'E

CASING DETAILS
TVD MD Name Size
4848.805540.00 7



CONFIDENTIAL

Bailey Fellows
12:36, May 09 2017
Scientific Drilling
325 S. Faudree Rd.
Odessa, TX 79765

WPX Energy

T23N R9W

2309-13F WLU

W Lybrook UT #710H - Slot A2

Wellbore #1

Design: Actual

Standard Survey Report

09 May, 2017



www.scientificdrilling.com

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #710H - Slot A2
Project:	T23N R9W	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Well:	W Lybrook UT #710H	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		2309-13F WLU			
Site Position:		Northing:		1,902,559.83 usft	
From:	Map	Easting:		527,432.82 usft	
Position Uncertainty:		0.00 usft		Slot Radius:	
		13-3/16 "		Grid Convergence:	
				36° 13' 43.896 N	
				107° 44' 25.156 W	
				0.05 °	

Well	W Lybrook UT #710H - Slot A2					
Well Position	+N/-S	0.00 usft	Northing:	1,902,540.91 usft	Latitude:	36° 13' 43.709 N
	+E/-W	0.00 usft	Easting:	527,440.21 usft	Longitude:	107° 44' 25.066 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,700.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/20/2017	9.05	62.87	49,691

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	323.62	

Survey Program	Date 5/9/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
51.00	321.00	Gyros (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s
444.00	4,578.99	SDI MWD Int. (Wellbore #1)	MWD	MWD - Standard
4,610.99	5,489.00	SDI MWD Curve (Wellbore #1)	MWD	MWD - Standard
5,576.00	13,520.00	SDI MWD Lateral (Wellbore #1)	MWD	MWD - Standard

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	
51.00	0.21	297.69	51.00	0.04	-0.08	0.08	0.41	0.41	0.00	
81.00	0.09	239.34	81.00	0.06	-0.15	0.14	0.60	-0.40	-194.50	
111.00	0.03	22.44	111.00	0.05	-0.17	0.14	0.38	-0.20	477.00	
141.00	0.22	214.54	141.00	0.01	-0.20	0.13	0.83	0.63	-559.67	
171.00	0.47	185.25	171.00	-0.16	-0.24	0.02	0.99	0.83	-97.63	
201.00	0.62	185.28	201.00	-0.44	-0.27	-0.20	0.50	0.50	0.10	
231.00	1.03	192.77	230.99	-0.87	-0.34	-0.49	1.41	1.37	24.97	

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #710H - Slot A2
Project:	T23N R9W	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Well:	W Lybrook UT #710H	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)
261.00	1.30	196.25	260.99	-1.46	-0.50	-0.88	0.93	0.90	11.60
291.00	1.39	200.25	290.98	-2.12	-0.72	-1.28	0.43	0.30	13.33
321.00	1.49	203.98	320.97	-2.82	-1.00	-1.68	0.46	0.33	12.43
444.00	1.49	216.56	443.93	-5.57	-2.61	-2.94	0.27	0.00	10.23
First Survey Int.									
538.00	1.49	109.77	537.91	-6.96	-2.18	-4.31	2.54	0.00	-113.61
632.00	4.17	93.18	631.79	-7.57	2.38	-7.50	2.95	2.85	-17.65
726.00	5.50	107.28	725.46	-9.09	10.09	-13.31	1.89	1.41	15.00
818.00	7.97	102.65	816.81	-11.80	20.53	-21.68	2.75	2.68	-5.03
909.00	9.19	84.16	906.81	-12.44	33.92	-30.14	3.30	1.34	-20.32
1,003.00	10.48	90.45	999.43	-11.75	49.93	-39.07	1.78	1.37	6.69
1,095.00	11.32	82.38	1,089.78	-10.61	67.25	-48.44	1.89	0.91	-8.77
1,187.00	13.42	80.11	1,179.64	-7.58	86.72	-57.54	2.34	2.28	-2.47
1,279.00	15.65	80.60	1,268.69	-3.72	109.48	-67.94	2.43	2.42	0.53
1,371.00	15.75	81.15	1,357.25	0.23	134.06	-79.34	0.19	0.11	0.60
1,464.00	16.66	78.67	1,446.56	4.79	159.61	-90.82	1.23	0.98	-2.67
1,556.00	18.73	82.88	1,534.20	9.21	187.20	-103.62	2.64	2.25	4.58
1,648.00	22.51	80.80	1,620.30	13.86	219.25	-118.89	4.18	4.11	-2.26
1,740.00	22.58	78.75	1,705.27	20.12	253.96	-134.44	0.86	0.08	-2.23
1,833.00	24.18	78.81	1,790.63	27.30	290.16	-150.13	1.72	1.72	0.06
1,926.00	24.31	78.82	1,875.43	34.71	327.62	-166.38	0.14	0.14	0.01
2,020.00	24.92	79.05	1,960.88	42.22	366.05	-183.13	0.66	0.65	0.24
2,114.00	25.61	76.93	2,045.89	50.58	405.28	-199.67	1.21	0.73	-2.26
2,208.00	25.90	75.73	2,130.55	60.23	444.97	-215.44	0.63	0.31	-1.28
2,311.00	27.29	73.95	2,222.66	72.30	489.46	-232.11	1.56	1.35	-1.73
2,405.00	27.41	73.24	2,306.15	84.50	530.89	-246.86	0.37	0.13	-0.76
2,499.00	26.74	74.40	2,389.85	96.43	571.98	-261.63	0.91	-0.71	1.23
2,592.00	24.90	78.11	2,473.56	106.09	611.29	-277.17	2.63	-1.98	3.99
2,687.00	24.06	77.65	2,560.02	114.35	649.78	-293.34	0.91	-0.88	-0.48
2,781.00	23.49	81.83	2,646.05	121.11	687.05	-310.00	1.89	-0.61	4.45
2,875.00	23.57	81.37	2,732.24	126.60	724.17	-327.61	0.21	0.09	-0.49
2,968.00	23.91	81.22	2,817.37	132.26	761.18	-345.00	0.37	0.37	-0.16
3,062.00	23.39	80.59	2,903.47	138.22	798.41	-362.29	0.62	-0.55	-0.67
3,156.00	22.91	80.57	2,989.90	144.27	834.87	-379.04	0.51	-0.51	-0.02
3,250.00	23.12	85.08	3,076.43	148.85	871.31	-396.97	1.89	0.22	4.80
3,344.00	25.07	82.49	3,162.24	153.04	909.44	-416.22	2.36	2.07	-2.76
3,438.00	25.44	81.20	3,247.25	158.73	949.14	-435.18	0.71	0.39	-1.37
3,532.00	25.53	79.63	3,332.11	165.46	989.02	-453.41	0.72	0.10	-1.67
3,626.00	22.57	81.99	3,417.94	171.62	1,026.82	-470.87	3.31	-3.15	2.51
3,720.00	20.67	81.11	3,505.32	176.70	1,061.07	-487.10	2.05	-2.02	-0.94
3,814.00	21.25	81.47	3,593.10	181.79	1,094.31	-502.72	0.63	0.62	0.38
3,908.00	23.83	82.53	3,679.91	186.79	1,129.99	-519.86	2.78	2.74	1.13
4,002.00	24.52	82.65	3,765.67	191.75	1,168.17	-538.50	0.74	0.73	0.13

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #710H - Slot A2
Project:	T23N R9W	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Well:	W Lybrook UT #710H	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)
4,096.00	23.04	80.15	3,851.69	197.40	1,205.64	-556.19	1.90	-1.57	-2.66
4,110.00	22.17	80.67	3,864.61	198.29	1,210.94	-558.61	6.38	-6.21	3.71
4,141.00	21.50	79.78	3,893.39	200.25	1,222.31	-563.78	2.41	-2.16	-2.87
4,173.00	19.72	77.19	3,923.34	202.49	1,233.34	-568.52	6.25	-5.56	-8.09
4,204.00	17.76	71.92	3,952.70	205.11	1,242.94	-572.10	8.35	-6.32	-17.00
4,235.00	16.08	65.18	3,982.36	208.38	1,251.33	-574.44	8.32	-5.42	-21.74
4,267.00	14.91	58.88	4,013.20	212.37	1,258.88	-575.71	6.40	-3.66	-19.69
4,298.00	14.73	52.83	4,043.17	216.82	1,265.43	-576.02	5.02	-0.58	-19.52
4,330.00	14.31	45.53	4,074.15	222.04	1,271.50	-575.41	5.86	-1.31	-22.81
4,361.00	14.79	37.83	4,104.16	227.85	1,276.66	-573.79	6.42	1.55	-24.84
4,392.00	15.98	32.61	4,134.05	234.57	1,281.39	-571.18	5.89	3.84	-16.84
4,423.00	16.36	26.90	4,163.82	242.06	1,285.66	-567.69	5.27	1.23	-18.42
4,454.00	16.84	21.93	4,193.53	250.12	1,289.31	-563.37	4.83	1.55	-16.03
4,486.00	17.64	15.52	4,224.10	259.09	1,292.34	-557.94	6.44	2.50	-20.03
4,517.00	18.55	9.29	4,253.56	268.49	1,294.40	-551.60	6.89	2.94	-20.10
4,548.00	19.79	3.29	4,282.85	278.59	1,295.49	-544.11	7.50	4.00	-19.35
4,578.99	20.44	358.35	4,311.95	289.24	1,295.64	-535.62	5.87	2.10	-15.94
Last Survey Int.									
4,579.00	20.44	358.35	4,311.96	289.25	1,295.64	-535.62	5.87	2.31	-15.43
4,611.00	21.32	353.30	4,341.86	300.61	1,294.80	-525.97	6.26	2.75	-15.78
First Survey Curve									
4,642.00	22.64	350.46	4,370.61	312.09	1,293.15	-515.75	5.47	4.26	-9.16
4,673.00	24.31	347.76	4,399.04	324.21	1,290.81	-504.60	6.41	5.39	-8.71
4,705.00	26.30	345.75	4,427.97	337.52	1,287.67	-492.03	6.77	6.22	-6.28
4,736.00	28.05	343.03	4,455.55	351.15	1,283.85	-478.79	6.92	5.65	-8.77
4,768.00	30.08	340.01	4,483.52	365.89	1,278.91	-464.00	7.83	6.34	-9.44
4,799.00	32.54	336.15	4,510.00	380.82	1,272.88	-448.40	10.24	7.94	-12.45
4,830.00	34.43	332.17	4,535.86	396.19	1,265.42	-431.59	9.34	6.10	-12.84
4,861.00	36.86	330.02	4,561.05	412.00	1,256.68	-413.68	8.82	7.84	-6.94
4,893.00	39.78	326.41	4,586.16	428.85	1,246.22	-393.91	11.49	9.13	-11.28
4,924.00	42.57	323.97	4,609.49	445.59	1,234.56	-373.52	10.38	9.00	-7.87
4,955.00	45.64	322.67	4,631.75	462.89	1,221.67	-351.94	10.32	9.90	-4.19
4,987.00	49.33	321.55	4,653.37	481.50	1,207.18	-328.37	11.82	11.53	-3.50
5,018.00	53.47	320.10	4,672.71	500.27	1,191.87	-304.18	13.85	13.35	-4.68
5,050.00	57.00	319.60	4,690.95	520.36	1,174.92	-277.95	11.11	11.03	-1.56
5,081.00	59.33	318.19	4,707.30	540.20	1,157.61	-251.71	8.45	7.52	-4.55
5,083.07	59.37	318.18	4,708.36	541.53	1,156.42	-249.93	2.18	2.13	-0.55
Start 60 Tan #710H									
5,112.00	59.99	318.02	4,722.96	560.11	1,139.74	-225.08	2.18	2.13	-0.55
5,144.00	60.30	317.77	4,738.89	580.70	1,121.13	-197.46	1.18	0.97	-0.78
5,175.00	60.15	317.56	4,754.29	600.59	1,103.01	-170.70	0.76	-0.48	-0.68
5,182.91	60.74	317.55	4,758.19	605.67	1,098.37	-163.86	7.49	7.48	-0.16
End 60 Tan #710H									
5,206.00	62.47	317.51	4,769.17	620.65	1,084.65	-143.66	7.49	7.48	-0.16

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #710H - Slot A2
Project:	T23N R9W	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Well:	W Lybrook UT #710H	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)
5,238.00	66.37	317.44	4,782.98	641.92	1,065.15	-114.97	12.19	12.19	-0.22
5,269.00	69.19	317.84	4,794.70	663.12	1,045.81	-86.43	9.17	9.10	1.29
5,300.00	71.20	317.96	4,805.21	684.76	1,026.26	-57.41	6.49	6.48	0.39
5,332.00	72.83	316.95	4,815.09	707.19	1,005.68	-27.15	5.91	5.09	-3.16
5,363.00	75.24	317.15	4,823.61	729.00	985.38	2.45	7.80	7.77	0.65
5,394.00	77.51	316.63	4,830.91	750.99	964.79	32.37	7.50	7.32	-1.68
5,426.00	79.87	316.47	4,837.19	773.77	943.21	63.51	7.39	7.38	-0.50
5,457.00	82.42	317.38	4,841.96	796.14	922.29	93.93	8.72	8.23	2.94
5,489.00	85.27	317.76	4,845.39	819.62	900.83	125.56	8.98	8.91	1.19
Last Survey Curve									
5,517.59	86.27	317.42	4,847.50	840.67	881.60	153.91	3.70	3.51	-1.20
POE #710H 5517.59' MD, 1903382.43 N, 528321.0									
5,540.00	87.06	317.15	4,848.80	857.11	866.42	176.15	3.70	3.51	-1.20
7" Casing@ 5540' MD 1903398.86' N, 528305.81' E									
5,576.00	88.32	316.72	4,850.26	883.39	841.86	211.88	3.70	3.51	-1.19
First Survey Lateral									
5,671.00	89.06	316.73	4,852.43	952.54	776.76	306.17	0.78	0.78	0.01
5,766.00	91.21	317.06	4,852.20	1,021.89	711.84	400.51	2.29	2.26	0.35
5,861.00	91.35	316.93	4,850.08	1,091.35	647.06	494.85	0.20	0.15	-0.14
5,955.00	90.91	316.17	4,848.23	1,159.58	582.43	588.11	0.93	-0.47	-0.81
6,050.00	90.94	315.57	4,846.69	1,227.76	516.29	682.23	0.63	0.03	-0.63
6,145.00	90.94	315.52	4,845.14	1,295.56	449.77	776.28	0.05	0.00	-0.05
6,240.00	91.35	314.97	4,843.24	1,363.01	382.90	870.25	0.72	0.43	-0.58
6,335.00	91.92	314.24	4,840.53	1,429.69	315.29	964.03	0.97	0.60	-0.77
6,430.00	91.55	315.10	4,837.65	1,496.44	247.76	1,057.83	0.99	-0.39	0.91
6,525.00	90.64	315.31	4,835.83	1,563.85	180.84	1,151.79	0.98	-0.96	0.22
6,619.00	89.70	314.37	4,835.56	1,630.13	114.18	1,244.69	1.41	-1.00	-1.00
6,714.00	91.08	315.05	4,834.91	1,696.96	46.67	1,338.54	1.62	1.45	0.72
6,809.00	90.30	314.85	4,833.77	1,764.07	-20.55	1,432.44	0.85	-0.82	-0.21
6,904.00	89.46	314.34	4,833.96	1,830.77	-88.20	1,526.27	1.03	-0.88	-0.54
6,999.00	91.21	316.04	4,833.41	1,898.16	-155.15	1,620.23	2.57	1.84	1.79
7,094.00	90.57	315.71	4,831.93	1,966.34	-221.28	1,714.35	0.76	-0.67	-0.35
7,188.00	88.89	314.93	4,832.38	2,033.18	-287.37	1,807.36	1.97	-1.79	-0.83
7,283.00	89.03	315.36	4,834.10	2,100.51	-354.37	1,901.31	0.48	0.15	0.45
7,378.00	88.79	313.92	4,835.91	2,167.25	-421.95	1,995.13	1.54	-0.25	-1.52
7,473.00	88.82	313.60	4,837.89	2,232.94	-490.55	2,088.70	0.34	0.03	-0.34
7,568.00	91.75	316.00	4,837.42	2,299.87	-557.94	2,182.56	3.99	3.08	2.53
7,662.00	89.63	314.30	4,836.28	2,366.50	-624.23	2,275.52	2.89	-2.26	-1.81
7,757.00	89.70	313.87	4,836.84	2,432.59	-692.46	2,369.21	0.46	0.07	-0.45
7,852.00	89.03	314.18	4,837.89	2,498.61	-760.77	2,462.87	0.78	-0.71	0.33
7,947.00	89.77	314.01	4,838.89	2,564.71	-828.99	2,556.55	0.80	0.78	-0.18
8,042.00	88.18	312.59	4,840.59	2,629.85	-898.11	2,650.00	2.24	-1.67	-1.49
8,137.00	88.35	311.75	4,843.46	2,693.59	-968.49	2,743.06	0.90	0.18	-0.88
8,232.00	88.25	313.51	4,846.28	2,757.90	-1,038.35	2,836.28	1.85	-0.11	1.85

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #710H - Slot A2
Project:	T23N R9W	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Well:	W Lybrook UT #710H	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)	
8,326.00	89.43	314.40	4,848.18	2,823.13	-1,106.01	2,928.92	1.57	1.26	0.95	
8,421.00	90.47	315.56	4,848.27	2,890.28	-1,173.20	3,022.84	1.64	1.09	1.22	
8,516.00	91.11	315.02	4,846.96	2,957.79	-1,240.03	3,116.83	0.88	0.67	-0.57	
8,611.00	90.94	314.92	4,845.26	3,024.92	-1,307.23	3,210.73	0.21	-0.18	-0.11	
8,706.00	91.38	314.32	4,843.34	3,091.63	-1,374.83	3,304.54	0.78	0.46	-0.63	
8,798.00	91.08	313.51	4,841.36	3,155.43	-1,441.09	3,395.20	0.94	-0.33	-0.88	
8,890.00	91.48	312.57	4,839.31	3,218.20	-1,508.32	3,485.62	1.11	0.43	-1.02	
8,982.00	91.28	311.84	4,837.09	3,279.99	-1,576.44	3,575.77	0.82	-0.22	-0.79	
9,074.00	90.00	312.73	4,836.06	3,341.88	-1,644.50	3,665.97	1.69	-1.39	0.97	
9,166.00	89.66	314.37	4,836.33	3,405.27	-1,711.18	3,756.55	1.82	-0.37	1.78	
9,258.00	90.75	314.19	4,836.01	3,469.50	-1,777.04	3,847.32	1.20	1.18	-0.20	
9,350.00	90.48	313.93	4,835.02	3,533.47	-1,843.15	3,938.04	0.41	-0.29	-0.28	
9,442.00	89.60	314.84	4,834.95	3,597.82	-1,908.90	4,028.85	1.38	-0.96	0.99	
9,534.00	89.56	315.69	4,835.63	3,663.17	-1,973.65	4,119.87	0.92	-0.04	0.92	
9,626.00	90.40	316.97	4,835.66	3,729.72	-2,037.17	4,211.12	1.66	0.91	1.39	
9,718.00	90.84	316.43	4,834.67	3,796.67	-2,100.26	4,302.44	0.76	0.48	-0.59	
9,810.00	91.95	316.65	4,832.43	3,863.42	-2,163.52	4,393.71	1.23	1.21	0.24	
9,901.00	91.28	316.84	4,829.86	3,929.67	-2,225.86	4,484.02	0.77	-0.74	0.21	
9,993.00	90.07	316.87	4,828.78	3,996.79	-2,288.77	4,575.38	1.32	-1.32	0.03	
10,085.00	91.19	317.62	4,827.77	4,064.34	-2,351.22	4,666.80	1.47	1.22	0.82	
10,176.00	89.36	316.60	4,827.33	4,131.01	-2,413.15	4,757.21	2.30	-2.01	-1.12	
10,268.00	90.17	316.67	4,827.71	4,197.89	-2,476.32	4,848.52	0.88	0.88	0.08	
10,360.00	90.37	315.85	4,827.27	4,264.36	-2,539.92	4,939.76	0.92	0.22	-0.89	
10,451.00	88.90	316.04	4,827.85	4,329.75	-2,603.20	5,029.94	1.63	-1.62	0.21	
10,543.00	89.50	315.62	4,829.14	4,395.74	-2,667.29	5,121.08	0.80	0.65	-0.46	
10,634.00	89.40	315.09	4,830.01	4,460.48	-2,731.24	5,211.13	0.59	-0.11	-0.58	
10,726.00	89.60	314.80	4,830.81	4,525.47	-2,796.35	5,302.08	0.38	0.22	-0.32	
10,818.00	89.63	314.13	4,831.43	4,589.91	-2,862.01	5,392.90	0.73	0.03	-0.73	
10,909.00	89.93	313.51	4,831.78	4,652.91	-2,927.66	5,482.57	0.76	0.33	-0.68	
11,001.00	90.37	312.46	4,831.54	4,715.64	-2,994.96	5,572.99	1.24	0.48	-1.14	
11,093.00	89.26	314.20	4,831.84	4,778.77	-3,061.88	5,663.51	2.24	-1.21	1.89	
11,185.00	90.71	314.24	4,831.86	4,842.93	-3,127.81	5,754.27	1.58	1.58	0.04	
11,276.00	91.95	313.64	4,829.75	4,906.05	-3,193.32	5,843.95	1.51	1.36	-0.66	
11,368.00	90.07	314.45	4,828.13	4,970.00	-3,259.44	5,934.65	2.23	-2.04	0.88	
11,459.00	89.83	314.38	4,828.21	5,033.69	-3,324.44	6,024.48	0.27	-0.26	-0.08	
11,551.00	90.37	314.39	4,828.05	5,098.04	-3,390.18	6,115.28	0.59	0.59	0.01	
11,642.00	90.57	314.18	4,827.30	5,161.58	-3,455.33	6,205.07	0.32	0.22	-0.23	
11,734.00	91.35	314.19	4,825.76	5,225.69	-3,521.29	6,295.82	0.85	0.85	0.01	
11,825.00	90.37	314.79	4,824.39	5,289.45	-3,586.20	6,385.65	1.26	-1.08	0.66	
11,917.00	89.73	315.01	4,824.31	5,354.39	-3,651.36	6,476.59	0.74	-0.70	0.24	
12,009.00	89.46	313.79	4,824.96	5,418.76	-3,717.09	6,567.39	1.36	-0.29	-1.33	
12,101.00	89.90	315.38	4,825.48	5,483.33	-3,782.61	6,658.25	1.79	0.48	1.73	
12,192.00	88.99	314.15	4,826.36	5,547.41	-3,847.22	6,748.16	1.68	-1.00	-1.35	
12,284.00	90.13	315.29	4,827.06	5,612.14	-3,912.59	6,839.04	1.75	1.24	1.24	

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #710H - Slot A2
Project:	T23N R9W	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Well:	W Lybrook UT #710H	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)
12,376.00	90.54	317.35	4,826.53	5,678.67	-3,976.12	6,930.29	2.28	0.45	2.24
12,471.00	90.67	317.14	4,825.52	5,748.42	-4,040.61	7,024.70	0.26	0.14	-0.22
12,565.00	90.57	316.83	4,824.51	5,817.15	-4,104.73	7,118.06	0.35	-0.11	-0.33
12,660.00	90.22	316.39	4,823.85	5,886.18	-4,169.99	7,212.35	0.59	-0.37	-0.46
12,755.00	89.83	316.67	4,823.81	5,955.13	-4,235.35	7,306.62	0.51	-0.41	0.29
12,850.00	88.64	316.39	4,825.08	6,024.07	-4,300.70	7,400.89	1.29	-1.25	-0.29
12,945.00	91.48	316.10	4,824.98	6,092.68	-4,366.39	7,495.09	3.01	2.99	-0.31
13,040.00	91.78	316.61	4,822.28	6,161.40	-4,431.93	7,589.29	0.62	0.32	0.54
13,134.00	91.51	315.98	4,819.58	6,229.32	-4,496.85	7,682.48	0.73	-0.29	-0.67
13,229.00	92.99	315.92	4,815.85	6,297.55	-4,562.85	7,776.56	1.56	1.56	-0.06
13,324.00	92.39	315.29	4,811.39	6,365.35	-4,629.24	7,870.53	0.92	-0.63	-0.66
13,419.00	88.72	312.40	4,810.47	6,431.14	-4,697.73	7,964.12	4.92	-3.86	-3.04
13,444.00	88.53	312.09	4,811.07	6,447.94	-4,716.23	7,988.62	1.44	-0.74	-1.23
RSI@ 13444' MD, 1908984.32°N, 522717.79°E									
13,466.00	88.37	311.82	4,811.66	6,462.64	-4,732.59	8,010.16	1.44	-0.74	-1.23
Last Survey Lateral									
13,514.72	88.37	311.82	4,813.05	6,495.11	-4,768.88	8,057.83	0.00	0.00	0.00
BHL #710H									
13,520.00	88.37	311.82	4,813.20	6,498.63	-4,772.82	8,062.99	0.00	0.00	0.00
Bit Projection@ 13520' MD, 1909034.96°N, 522661.16°E									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Start 60 Tan #710H	0.00	0.00	4,708.71	547.83	1,163.75	1,903,089.86	528,603.44	36° 13' 49.127 N	107° 44' 10.861 W
- hit/miss target									
- Shape									
- actual wellpath misses target center by 9.68usft at 5083.07usft MD (4708.36 TVD, 541.53 N, 1156.42 E)									
- Point									
End 60 Tan #710H	0.00	0.00	4,758.71	609.09	1,102.53	1,903,151.06	528,542.16	36° 13' 49.732 N	107° 44' 11.608 W
- actual wellpath misses target center by 5.41usft at 5182.91usft MD (4758.19 TVD, 605.67 N, 1098.37 E)									
- Point									
BHL #710H	0.00	0.00	4,815.99	6,484.99	-4,777.83	1,909,021.31	522,656.16	36° 14' 47.840 N	107° 45' 23.397 W
- actual wellpath misses target center by 13.83usft at 13514.72usft MD (4813.05 TVD, 6495.11 N, -4768.88 E)									
- Point									
POE #710H 5517.59' MI	0.00	0.00	4,843.99	835.66	875.79	1,903,377.41	528,315.20	36° 13' 51.973 N	107° 44' 14.375 W
- actual wellpath misses target center by 8.44usft at 5517.64usft MD (4847.50 TVD, 840.71 N, 881.57 E)									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
5,540.00	4,848.80	7" Casing@ 5540'MD 1903398.86°N, 528305.81°E	7	8-3/4

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #710H - Slot A2
Project:	T23N R9W	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Well:	W Lybrook UT #710H	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)	
444.00	443.93	-5.57	-2.61	First Survey Int.
4,578.99	4,311.95	289.24	1,295.64	Last Survey Int.
4,611.00	4,341.86	300.61	1,294.80	First Survey Curve
5,489.00	4,845.39	819.62	900.83	Last Survey Curve
5,576.00	4,850.26	883.39	841.86	First Survey Lateral
13,444.00	4,811.07	6,447.94	-4,716.23	RSI@ 13444' MD, 1908984.32'N, 522717.79'E
13,466.00	4,811.66	6,462.64	-4,732.59	Last Survey Lateral
13,520.00	4,813.20	6,498.63	-4,772.82	Bit Projection@ 13520' MD, 1909034.96'N, 522661.16'E

Checked By: _____ Approved By: _____ Date: _____