

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

OIL CONS. DIV DIST. 3

AS DRILLED

MAY 23 2017

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35776	*Pool Code 98157	*Pool Name LYBROOK MANCOS W
*Property Code 315250	*Property Name W LYBROOK UNIT	*Well Number 712H
*GRID 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		1999	NORTH	2478	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
G	11	23N	9W		2432	NORTH	2287	EAST	SAN JUAN

¹² Dedicated Acres 320.0	SW/4 NE/4, N/2 SE/4 SE/4 SE/4 - Section 11 SW/4 SW/4 - Section 12 N/2 NW/4, SE/4 NW/4 - Section 13	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-14051 - 12,807.24 Acres
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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: Lacey Granillo Date: 5/22/17
Printed Name: Lacey Granillo
E-mail Address: lacey.granillo@wpxenergy.com

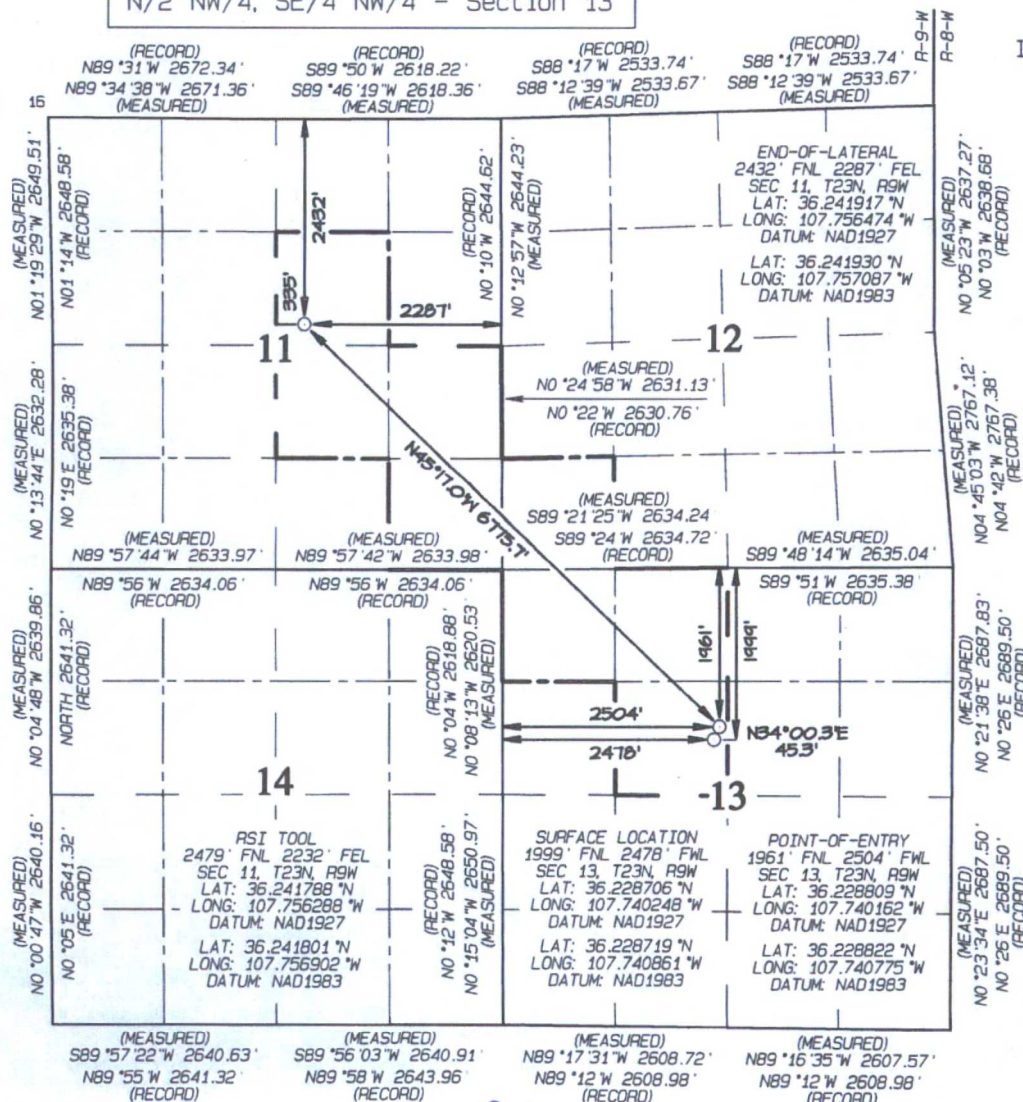
¹⁸ SURVEYOR CERTIFICATION

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



JASON C. EDWARDS
Certificate Number 15269



OIL CONS. DIV DIST. 3

MAY 23 2017

WPX Energy

T23N R9W

2309-13F WLU

W Lybrook UT #712H - Slot A4

Wellbore #1

Design: Actual

Standard Survey Report

10 May, 2017

CONFIDENTIAL



www.scientificdrilling.com





W Lybrook UT #712H
T23N R9W
Northing: 1902503.79
Easting: 527454.41
Actual

KB @ 6721.00usft (Cyclone 32)
GL @ 6700.00



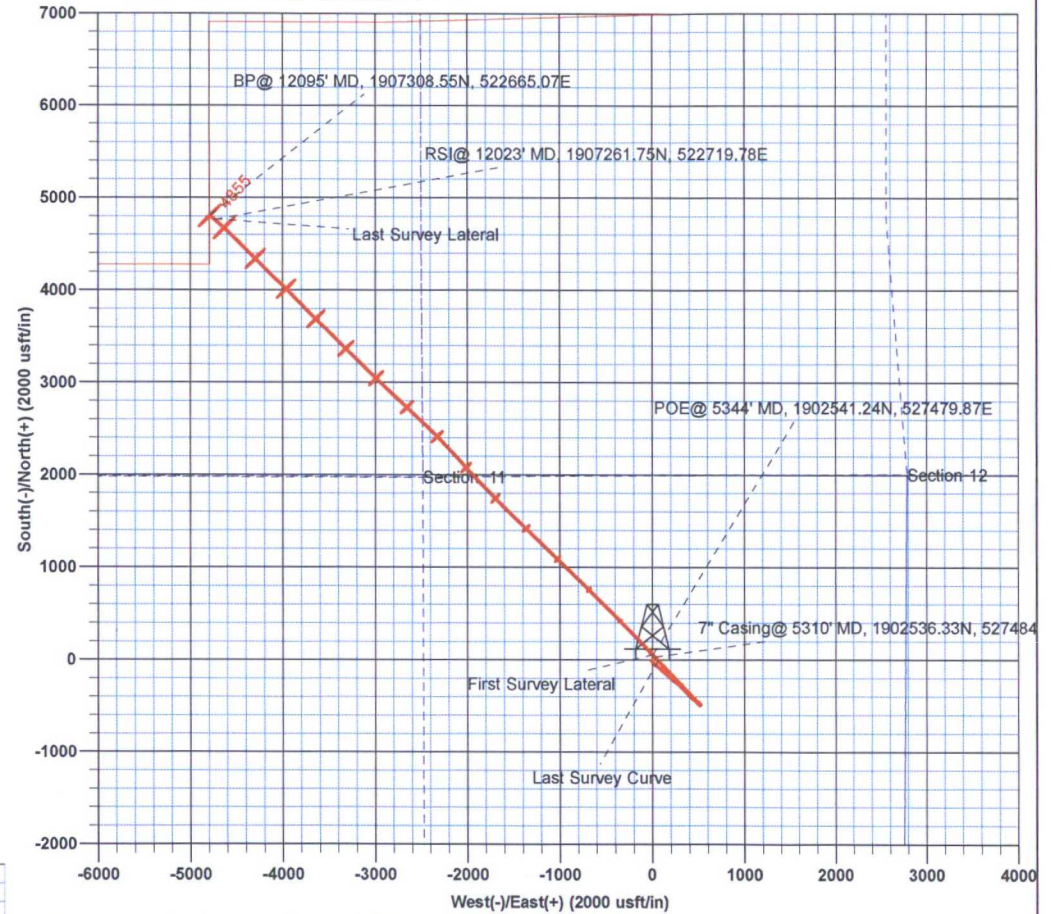
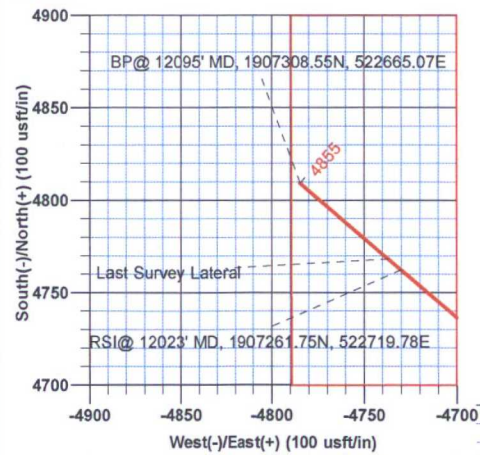
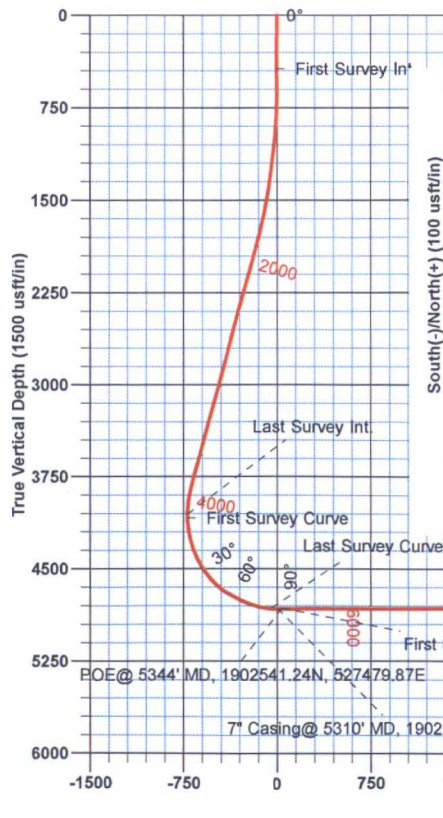
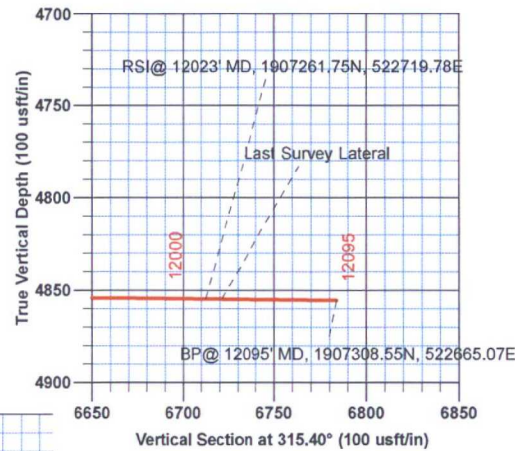
Azimuths to True North
Magnetic North: 9.05°
Magnetic Field
Strength: 49691.2snT
Dip Angle: 62.87°
Date: 3/20/2017
Model: HDGM

WELL DETAILS

W Lybrook UT #712H
Ground Level: 6700.00
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 1902503.79 527454.41 36° 13' 43.342 N 107° 44' 24.893 W

ANNOTATIONS

TVD	MD	Annotation
433.90	434.00	First Survey Int.
4056.64	4142.00	Last Survey Int.
4087.63	4173.00	First Survey Curve
4820.34	5262.00	Last Survey Curve
4821.73	5310.00	Casing@ 5310' MD, 1902536.33N, 527484.44E
4821.90	5344.00	First Survey Lateral
4821.90	5344.00	POE@ 5344' MD, 1902541.24N, 527479.87E
4854.75	12023.00	RSI@ 12023' MD, 1907261.75N, 522719.78E
4854.84	12032.00	SDI MWL
4854.84	12032.00	Last Survey Lateral
4855.47	12095.00	BP@ 12095' MD, 1907308.55N, 522665.07E



Bailey Fellows
6:53, May 10 2017

Scientific Drilling
325 S. Faudree Rd.
Odessa, TX 79765

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #712H - Slot A4
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 #712H	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 "
		Latitude:	36° 13' 43.896 N
		Longitude:	107° 44' 25.156 W
		Grid Convergence:	0.05 °

Well	W Lybrook UT #712H - Slot A4		
Well Position	+N/-S	0.00 usft	Northing: 1,902,503.79 usft
	+E/-W	0.00 usft	Easting: 527,454.41 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	36° 13' 43.342 N
		Longitude:	107° 44' 24.893 W
		Ground Level:	6,700.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	3/20/2017	9.05
			Dip Angle (°) 62.87
			Field Strength (nT) 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)
	0.00	0.00	0.00
			Direction (°) 315.40

Survey Program	Date 5/10/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
51.00	321.00	Gyros (Wellbore #1)	NS-GYRO-MS
434.00	4,142.00	SDI MWD Int. (Wellbore #1)	MWD
4,173.00	5,262.00	SDI MWD Curve (Wellbore #1)	MWD
5,344.00	12,095.00	SDI MWD Lateral (Wellbore #1)	MWD
			Description
			North sensing gyrocompassing m/s
			MWD - Standard
			MWD - Standard
			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	0.48	154.21	51.00	-0.19	0.09	-0.20	0.94	0.94	0.00	
81.00	0.67	166.98	81.00	-0.48	0.19	-0.47	0.76	0.63	42.57	
111.00	0.75	170.82	111.00	-0.84	0.26	-0.78	0.31	0.27	12.80	
141.00	0.80	194.78	140.99	-1.24	0.24	-1.05	1.08	0.17	79.87	
171.00	1.18	207.06	170.99	-1.72	0.04	-1.25	1.44	1.27	40.93	
201.00	1.46	216.33	200.98	-2.30	-0.33	-1.41	1.17	0.93	30.90	
231.00	1.53	217.71	230.97	-2.92	-0.80	-1.52	0.26	0.23	4.60	

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #712H - Slot A4
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 #712H	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	1.44	219.62	260.96	-3.53	-1.28	-1.61	0.34	-0.30	6.37
291.00	1.34	226.13	290.95	-4.06	-1.78	-1.65	0.62	-0.33	21.70
321.00	1.45	232.14	320.94	-4.54	-2.33	-1.60	0.61	0.37	20.03
434.00	1.79	251.08	433.90	-5.99	-5.13	-0.67	0.56	0.30	16.76
First Survey Int.									
526.00	0.93	243.50	525.87	-6.79	-7.15	0.19	0.95	-0.93	-8.24
618.00	0.66	144.30	617.87	-7.55	-7.51	-0.10	1.33	-0.29	-107.83
710.00	0.59	143.80	709.86	-8.36	-6.92	-1.09	0.08	-0.08	-0.54
803.00	2.39	130.00	802.83	-10.00	-5.16	-3.50	1.96	1.94	-14.84
895.00	4.44	134.80	894.66	-13.74	-1.16	-8.97	2.25	2.23	5.22
987.00	4.30	135.17	986.39	-18.70	3.80	-15.98	0.16	-0.15	0.40
1,079.00	6.79	131.25	1,077.95	-24.73	10.32	-24.85	2.74	2.71	-4.26
1,172.00	6.58	130.89	1,170.32	-31.84	18.48	-35.65	0.23	-0.23	-0.39
1,265.00	8.44	134.13	1,262.52	-40.08	27.41	-47.79	2.05	2.00	3.48
1,359.00	7.61	132.04	1,355.60	-49.05	36.99	-60.90	0.94	-0.88	-2.22
1,453.00	9.14	135.93	1,448.59	-58.59	46.80	-74.58	1.73	1.63	4.14
1,546.00	11.16	131.51	1,540.13	-69.86	58.68	-90.94	2.33	2.17	-4.75
1,641.00	11.60	130.57	1,633.27	-82.16	72.82	-109.63	0.50	0.46	-0.99
1,735.00	13.28	130.54	1,725.06	-95.33	88.20	-129.81	1.79	1.79	-0.03
1,828.00	12.72	129.80	1,815.67	-108.83	104.19	-150.64	0.63	-0.60	-0.80
1,922.00	15.14	131.72	1,906.90	-123.62	121.30	-173.20	2.62	2.57	2.04
2,016.00	15.79	130.62	1,997.50	-140.12	140.17	-198.19	0.76	0.69	-1.17
2,110.00	16.80	129.79	2,087.72	-157.14	160.32	-224.46	1.10	1.07	-0.88
2,204.00	15.64	131.06	2,177.98	-174.16	180.31	-250.61	1.29	-1.23	1.35
2,298.00	15.36	131.75	2,268.56	-190.77	199.16	-275.67	0.36	-0.30	0.73
2,392.00	14.92	130.55	2,359.30	-206.93	217.64	-300.15	0.57	-0.47	-1.28
2,486.00	15.28	129.08	2,450.05	-222.60	236.45	-324.52	0.56	0.38	-1.56
2,580.00	14.12	127.16	2,540.97	-237.34	255.20	-348.18	1.34	-1.23	-2.04
2,674.00	13.96	128.17	2,632.17	-251.27	273.25	-370.78	0.31	-0.17	1.07
2,768.00	15.23	134.36	2,723.14	-266.91	291.00	-394.37	2.14	1.35	6.59
2,862.00	14.02	134.61	2,814.09	-283.54	307.93	-418.10	1.29	-1.29	0.27
2,956.00	14.39	135.62	2,905.21	-299.88	324.21	-441.17	0.47	0.39	1.07
3,050.00	14.36	137.10	2,996.27	-316.77	340.31	-464.50	0.39	-0.03	1.57
3,144.00	15.67	134.07	3,087.06	-334.14	357.37	-488.84	1.62	1.39	-3.22
3,238.00	15.83	133.58	3,177.53	-351.81	375.78	-514.35	0.22	0.17	-0.52
3,332.00	13.86	134.06	3,268.39	-368.48	393.16	-538.42	2.10	-2.10	0.51
3,426.00	14.52	135.39	3,359.52	-384.70	409.52	-561.46	0.78	0.70	1.41
3,520.00	14.82	132.59	3,450.46	-401.22	426.65	-585.25	0.82	0.32	-2.98
3,614.00	14.83	132.00	3,541.33	-417.41	444.44	-609.27	0.16	0.01	-0.63
3,708.00	15.75	131.63	3,632.00	-433.93	462.92	-634.01	0.98	0.98	-0.39
3,802.00	15.23	131.93	3,722.59	-450.66	481.64	-659.06	0.56	-0.55	0.32
3,864.00	14.11	132.06	3,782.56	-461.16	493.31	-674.74	1.81	-1.81	0.21
3,891.00	13.32	132.18	3,808.79	-465.45	498.06	-681.13	2.93	-2.93	0.44

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #712H - Slot A4
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 #712H	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)
3,923.00	12.78	131.73	3,839.97	-470.29	503.43	-688.34	1.72	-1.69	-1.41
3,954.00	12.35	131.15	3,870.23	-474.75	508.48	-695.07	1.45	-1.39	-1.87
3,986.00	10.83	127.83	3,901.57	-478.85	513.44	-701.46	5.19	-4.75	-10.38
4,017.00	8.63	125.53	3,932.12	-481.98	517.63	-706.64	7.21	-7.10	-7.42
4,048.00	6.42	123.18	3,962.86	-484.28	520.97	-710.63	7.20	-7.13	-7.58
4,080.00	4.55	119.68	3,994.71	-485.89	523.57	-713.60	5.93	-5.84	-10.94
4,111.00	2.44	115.13	4,025.65	-486.78	525.24	-715.40	6.86	-6.81	-14.68
4,142.00	0.48	65.11	4,056.64	-487.01	525.95	-716.06	6.98	-6.32	-161.35
Last Survey Int.									
4,173.00	1.82	319.32	4,087.63	-486.58	525.75	-715.61	6.47	4.32	-341.26
First Survey Curve									
4,205.00	3.88	315.15	4,119.59	-485.43	524.66	-714.02	6.47	6.44	-13.03
4,236.00	5.91	315.81	4,150.48	-483.54	522.80	-711.38	6.55	6.55	2.13
4,267.00	8.39	317.19	4,181.23	-480.73	520.15	-707.52	8.02	8.00	4.45
4,299.00	10.93	317.82	4,212.78	-476.77	516.53	-702.16	7.94	7.94	1.97
4,330.00	13.37	317.28	4,243.08	-471.96	512.12	-695.64	7.88	7.87	-1.74
4,361.00	14.57	315.74	4,273.16	-466.53	506.97	-688.16	4.05	3.87	-4.97
4,393.00	16.62	315.00	4,303.98	-460.42	500.93	-679.55	6.44	6.41	-2.31
4,424.00	18.29	316.05	4,333.55	-453.78	494.41	-670.26	5.48	5.39	3.39
4,455.00	21.14	317.29	4,362.73	-446.17	487.24	-659.80	9.29	9.19	4.00
4,486.00	23.75	316.59	4,391.38	-437.52	479.16	-647.97	8.46	8.42	-2.26
4,518.00	26.38	316.40	4,420.37	-427.69	469.83	-634.42	8.22	8.22	-0.59
4,549.00	28.46	315.52	4,447.88	-417.43	459.90	-620.15	6.84	6.71	-2.84
4,580.00	30.69	315.17	4,474.84	-406.55	449.15	-604.85	7.22	7.19	-1.13
4,611.00	33.33	314.73	4,501.13	-394.94	437.52	-588.42	8.55	8.52	-1.42
4,643.00	35.39	314.00	4,527.54	-382.32	424.61	-570.36	6.56	6.44	-2.28
4,674.00	38.25	315.08	4,552.36	-369.29	411.37	-551.79	9.46	9.23	3.48
4,705.00	40.19	316.93	4,576.37	-355.18	397.76	-532.19	7.31	6.26	5.97
4,737.00	42.93	317.72	4,600.31	-339.57	383.38	-510.97	8.72	8.56	2.47
4,768.00	46.08	317.72	4,622.42	-323.50	368.76	-489.26	10.16	10.16	0.00
4,799.00	49.15	317.11	4,643.32	-306.64	353.27	-466.38	10.01	9.90	-1.97
4,831.00	52.45	314.73	4,663.54	-288.84	336.01	-441.59	11.81	10.31	-7.44
4,862.00	56.45	313.59	4,681.56	-271.28	317.92	-416.38	13.25	12.90	-3.68
4,883.02	58.77	314.98	4,692.82	-258.88	305.21	-398.64	12.37	11.05	6.59
Start 60 tan #712H									
4,893.00	59.88	315.61	4,697.91	-252.78	299.17	-390.05	12.37	11.10	6.35
4,925.00	61.77	316.44	4,713.51	-232.68	279.78	-362.12	6.33	5.91	2.59
4,956.00	61.37	315.57	4,728.27	-213.07	260.84	-334.86	2.78	-1.29	-2.81
4,983.33	61.74	315.46	4,741.29	-195.92	244.00	-310.83	1.40	1.35	-0.42
End 60 tan #712H									
4,987.00	61.79	315.44	4,743.02	-193.62	241.73	-307.59	1.40	1.36	-0.42
5,019.00	64.81	315.96	4,757.40	-173.16	221.77	-279.01	9.55	9.44	1.63
5,050.00	67.62	316.49	4,769.90	-152.68	202.15	-250.65	9.20	9.06	1.71
5,082.00	69.38	315.35	4,781.63	-131.29	181.44	-220.88	6.42	5.50	-3.56

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #712H - Slot A4
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 #712H	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)
5,113.00	72.01	316.20	4,791.88	-110.33	161.03	-191.63	8.87	8.48	2.74
5,144.00	74.74	317.81	4,800.74	-88.60	140.78	-161.94	10.11	8.81	5.19
5,176.00	77.53	318.29	4,808.41	-65.50	120.02	-130.91	8.84	8.72	1.50
5,207.00	80.35	317.25	4,814.36	-42.97	99.57	-100.51	9.67	9.10	-3.35
5,238.00	84.01	316.96	4,818.58	-20.48	78.67	-69.82	11.84	11.81	-0.94
5,262.00	87.55	317.82	4,820.34	-2.87	62.47	-45.90	15.18	14.75	3.58
Last Survey Curve									
5,310.00	89.14	317.19	4,821.73	32.51	30.06	2.04	3.57	3.32	-1.32
7" Casing@ 5310' MD, 1902536.33N, 527484.44E - 7"									
5,316.71	89.36	317.10	4,821.81	37.43	25.49	8.75	3.57	3.32	-1.32
POE #712H									
5,344.00	90.27	316.74	4,821.90	57.36	6.85	36.03	3.57	3.32	-1.32
First Survey Lateral - POE@ 5344' MD, 1902541.24N, 527479.87E									
5,375.00	90.40	316.57	4,821.72	79.90	-14.42	67.02	0.69	0.42	-0.55
5,470.00	91.82	315.76	4,819.88	148.42	-80.21	161.99	1.72	1.49	-0.85
5,565.00	90.50	316.59	4,817.96	216.94	-145.97	256.96	1.64	-1.39	0.87
5,660.00	89.97	316.65	4,817.57	285.99	-211.22	351.94	0.56	-0.56	0.06
5,755.00	90.27	314.90	4,817.37	354.06	-277.48	446.93	1.87	0.32	-1.84
5,849.00	89.29	315.86	4,817.73	420.97	-343.50	540.93	1.46	-1.04	1.02
5,944.00	89.87	315.50	4,818.43	488.93	-409.87	635.93	0.72	0.61	-0.38
6,039.00	90.13	315.21	4,818.43	556.52	-476.63	730.93	0.41	0.27	-0.31
6,134.00	88.76	314.52	4,819.35	623.53	-543.96	825.91	1.61	-1.44	-0.73
6,229.00	89.13	313.45	4,821.10	689.49	-612.30	920.87	1.19	0.39	-1.13
6,323.00	90.77	313.87	4,821.18	754.39	-680.30	1,014.82	1.80	1.74	0.45
6,418.00	89.69	315.17	4,820.80	820.99	-748.04	1,109.81	1.78	-1.14	1.37
6,513.00	90.23	315.08	4,820.86	888.32	-815.06	1,204.80	0.58	0.57	-0.09
6,608.00	90.00	314.04	4,820.67	954.97	-882.75	1,299.79	1.12	-0.24	-1.09
6,703.00	90.27	313.75	4,820.45	1,020.84	-951.21	1,394.76	0.42	0.28	-0.31
6,798.00	90.23	313.73	4,820.03	1,086.52	-1,019.84	1,489.72	0.05	-0.04	-0.02
6,892.00	90.67	313.39	4,819.29	1,151.29	-1,087.96	1,583.67	0.59	0.47	-0.36
6,987.00	90.44	315.05	4,818.37	1,217.54	-1,156.04	1,678.64	1.76	-0.24	1.75
7,082.00	89.19	315.50	4,818.68	1,285.04	-1,222.89	1,773.64	1.40	-1.32	0.47
7,177.00	88.89	313.89	4,820.27	1,351.84	-1,290.41	1,868.61	1.72	-0.32	-1.69
7,272.00	88.76	313.61	4,822.22	1,417.52	-1,359.02	1,963.55	0.32	-0.14	-0.29
7,367.00	89.26	313.88	4,823.86	1,483.20	-1,427.64	2,058.50	0.60	0.53	0.28
7,462.00	90.75	313.50	4,823.85	1,548.82	-1,496.33	2,153.45	1.62	1.57	-0.40
7,553.00	89.34	314.73	4,823.78	1,612.16	-1,561.66	2,244.43	2.06	-1.55	1.35
7,645.00	90.37	315.07	4,824.02	1,677.10	-1,626.82	2,336.42	1.18	1.12	0.37
7,738.00	89.46	315.98	4,824.15	1,743.46	-1,691.98	2,429.42	1.38	-0.98	0.98
7,829.00	90.57	315.87	4,824.13	1,808.84	-1,755.28	2,520.41	1.23	1.22	-0.12
7,921.00	89.26	316.43	4,824.27	1,875.18	-1,819.01	2,612.40	1.55	-1.42	0.61
8,013.00	89.66	316.53	4,825.13	1,941.89	-1,882.36	2,704.38	0.45	0.43	0.11
8,105.00	90.91	317.10	4,824.68	2,008.97	-1,945.32	2,796.35	1.49	1.36	0.62
8,197.00	89.19	317.24	4,824.60	2,076.44	-2,007.86	2,888.30	1.88	-1.87	0.15

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #712H - Slot A4
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 #712H	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)
8,289.00	90.30	317.74	4,825.00	2,144.26	-2,070.02	2,980.24	1.32	1.21	0.54
8,381.00	88.86	318.42	4,825.68	2,212.71	-2,131.49	3,072.13	1.73	-1.57	0.74
8,473.00	88.56	315.54	4,827.75	2,279.94	-2,194.23	3,164.07	3.15	-0.33	-3.13
8,565.00	90.17	317.04	4,828.77	2,346.44	-2,257.79	3,256.04	2.39	1.75	1.63
8,657.00	89.56	314.71	4,828.99	2,412.47	-2,321.84	3,348.03	2.62	-0.66	-2.53
8,749.00	90.03	314.73	4,829.32	2,477.21	-2,387.21	3,440.03	0.51	0.51	0.02
8,840.00	89.87	313.99	4,829.40	2,540.83	-2,452.27	3,531.01	0.83	-0.18	-0.81
8,932.00	89.87	313.85	4,829.60	2,604.65	-2,518.54	3,622.98	0.15	0.00	-0.15
9,024.00	90.20	313.71	4,829.55	2,668.30	-2,584.97	3,714.94	0.39	0.36	-0.15
9,115.00	89.87	312.71	4,829.49	2,730.61	-2,651.29	3,805.87	1.16	-0.36	-1.10
9,207.00	90.00	312.37	4,829.60	2,792.81	-2,719.08	3,897.76	0.40	0.14	-0.37
9,298.00	89.87	311.95	4,829.70	2,853.89	-2,786.53	3,988.61	0.48	-0.14	-0.46
9,390.00	90.50	313.85	4,829.40	2,916.51	-2,853.92	4,080.52	2.18	0.68	2.07
9,482.00	89.83	314.18	4,829.14	2,980.43	-2,920.08	4,172.49	0.81	-0.73	0.36
9,574.00	89.56	314.00	4,829.63	3,044.45	-2,986.16	4,264.47	0.35	-0.29	-0.20
9,665.00	90.37	314.67	4,829.68	3,108.04	-3,051.25	4,355.45	1.16	0.89	0.74
9,757.00	90.57	314.28	4,828.93	3,172.49	-3,116.89	4,447.44	0.48	0.22	-0.42
9,848.00	87.61	314.93	4,830.37	3,236.38	-3,181.67	4,538.40	3.33	-3.25	0.71
9,940.00	87.81	314.44	4,834.05	3,301.02	-3,247.03	4,630.32	0.57	0.22	-0.53
10,032.00	90.13	315.18	4,835.70	3,365.84	-3,312.28	4,722.30	2.65	2.52	0.80
10,123.00	90.54	315.04	4,835.17	3,430.31	-3,376.50	4,813.29	0.48	0.45	-0.15
10,215.00	90.54	314.69	4,834.30	3,495.21	-3,441.71	4,905.29	0.38	0.00	-0.38
10,306.00	88.12	313.42	4,835.37	3,558.48	-3,507.09	4,996.25	3.00	-2.66	-1.40
10,398.00	88.79	315.15	4,837.85	3,622.69	-3,572.93	5,088.19	2.02	0.73	1.88
10,489.00	90.07	314.65	4,838.75	3,686.92	-3,637.38	5,179.18	1.51	1.41	-0.55
10,581.00	90.13	314.46	4,838.59	3,751.46	-3,702.94	5,271.17	0.22	0.07	-0.21
10,673.00	91.45	316.95	4,837.33	3,817.30	-3,767.17	5,363.15	3.06	1.43	2.71
10,765.00	90.67	315.65	4,835.62	3,883.80	-3,830.72	5,455.12	1.65	-0.85	-1.41
10,856.00	89.97	315.51	4,835.12	3,948.79	-3,894.41	5,546.12	0.78	-0.77	-0.15
10,948.00	90.24	315.64	4,834.95	4,014.50	-3,958.81	5,638.12	0.33	0.29	0.14
11,040.00	89.33	314.45	4,835.29	4,079.60	-4,023.81	5,730.11	1.63	-0.99	-1.29
11,131.00	87.82	313.15	4,837.56	4,142.56	-4,089.47	5,821.04	2.19	-1.66	-1.43
11,226.00	87.81	313.64	4,841.18	4,207.78	-4,158.45	5,915.92	0.52	-0.01	0.52
11,321.00	88.42	314.84	4,844.30	4,274.02	-4,226.47	6,010.84	1.42	0.64	1.26
11,416.00	87.78	315.32	4,847.45	4,341.25	-4,293.51	6,105.79	0.84	-0.67	0.51
11,511.00	88.79	315.20	4,850.29	4,408.70	-4,360.35	6,200.75	1.07	1.06	-0.13
11,606.00	89.83	316.26	4,851.44	4,476.72	-4,426.66	6,295.73	1.56	1.09	1.12
11,700.00	89.56	315.02	4,851.94	4,543.93	-4,492.38	6,389.73	1.35	-0.29	-1.32
11,795.00	89.56	313.44	4,852.67	4,610.19	-4,560.45	6,484.70	1.66	0.00	-1.66
11,890.00	89.50	312.23	4,853.45	4,674.77	-4,630.11	6,579.60	1.28	-0.06	-1.27
11,985.00	89.40	310.77	4,854.36	4,737.72	-4,701.25	6,674.38	1.54	-0.11	-1.54
12,023.00	89.42	310.63	4,854.75	4,762.50	-4,730.06	6,712.25	0.37	0.06	-0.36
RSI@ 12023' MD, 1907261.75N, 522719.78E									
12,032.00	89.43	310.60	4,854.84	4,768.36	-4,736.89	6,721.22	0.37	0.06	-0.36

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #712H - Slot A4
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 #712H	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)
SDI MWD - Last Survey Lateral									
12,095.00	89.43	310.60	4,855.47	4,809.35	-4,784.72	6,783.99	0.00	0.00	0.00
BP@ 12095' MD, 1907308.55N, 522665.07E - BHL #712H									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Start 60 tan #712H - actual wellpath misses target center by 10.17usft at 4883.09usft MD (4692.86 TVD, -258.84 N, 305.17 E) - Point	0.00	0.00	4,686.70	-261.33	297.46	1,902,242.75	527,752.12	36° 13' 40.757 N	107° 44' 21.262 W
End 60 tan #712H - actual wellpath misses target center by 9.73usft at 4983.36usft MD (4741.30 TVD, -195.91 N, 243.99 E) - Point	0.00	0.00	4,736.70	-199.91	236.40	1,902,304.11	527,691.00	36° 13' 41.365 N	107° 44' 22.007 W
BHL #712H - actual wellpath misses target center by 58.31usft at 12095.00usft MD (4855.47 TVD, 4809.35 N, -4784.72 E) - Point	0.00	0.00	4,820.99	4,856.15	-4,789.33	1,907,355.34	522,660.42	36° 14' 31.364 N	107° 45' 23.361 W
POE #712H - actual wellpath misses target center by 17.74usft at 5316.66usft MD (4821.81 TVD, 37.39 N, 25.53 E) - Point	0.00	0.00	4,821.99	25.32	12.52	1,902,529.12	527,466.91	36° 13' 43.592 N	107° 44' 24.740 W

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
5,310.00	4,821.73	7"	7	8-3/4

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
434.00	433.90	-5.99	-5.13	First Survey Int.
4,142.00	4,056.64	-487.01	525.95	Last Survey Int.
4,173.00	4,087.63	-486.58	525.75	First Survey Curve
5,262.00	4,820.34	-2.87	62.47	Last Survey Curve
5,310.00	4,821.73	32.51	30.06	7" Casing@ 5310' MD, 1902536.33N, 527484.44E
5,344.00	4,821.90	57.36	6.85	First Survey Lateral
5,344.00	4,821.90	57.36	6.85	POE@ 5344' MD, 1902541.24N, 527479.87E
12,023.00	4,854.75	4,762.50	-4,730.06	RSI@ 12023' MD, 1907261.75N, 522719.78E
12,032.00	4,854.84	4,768.36	-4,736.89	SDI MWD
12,032.00	4,854.84	4,768.36	-4,736.89	Last Survey Lateral
12,095.00	4,855.47	4,809.35	-4,784.72	BP@ 12095' MD, 1907308.55N, 522665.07E

Checked By: _____ Approved By: _____ Date: _____