

Form C-102
Revised August 1, 2011

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

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

Submit one copy to
Appropriate District Office

☐ AMENDED REPORT

AS DRILLED
CONS. DIV DIST. 3

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35797	*Pool Code 98157	*Pool Name LYBROOK MANCOS W
*Property Code 315250	*Property Name W LYBROOK UNIT	*Well Number 767H
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 6696

¹⁰ Surface Location

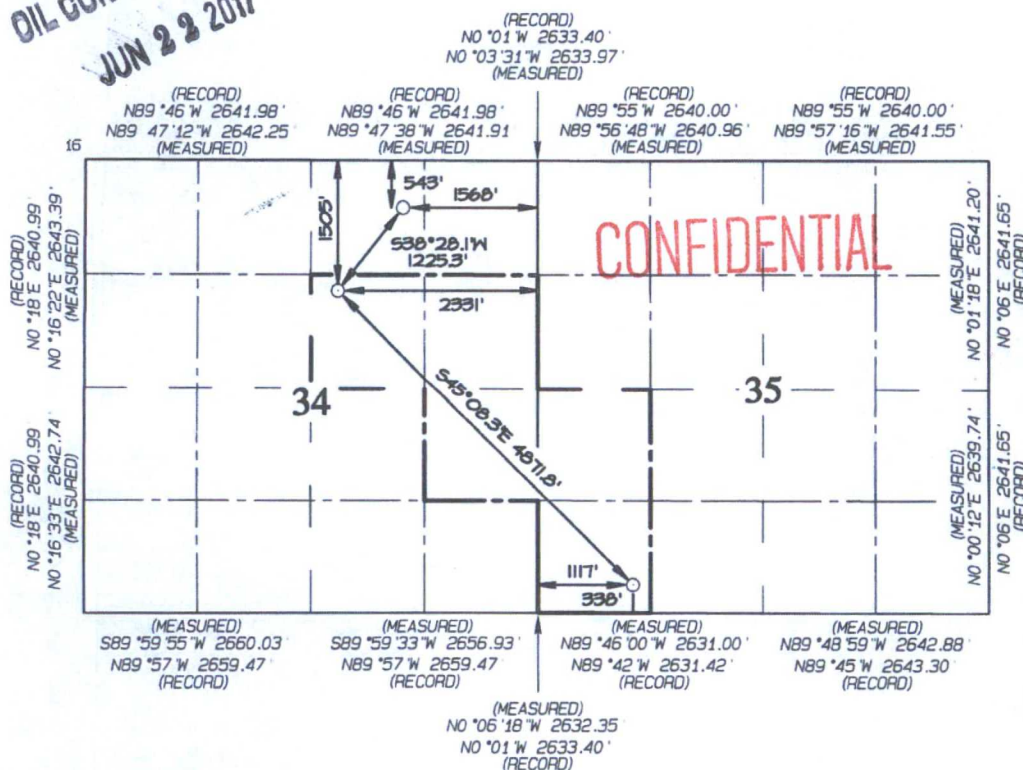
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	34	23N	9W		543	NORTH	1568	EAST	SAN JUAN

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
M	35	23N	9W		338	SOUTH	1117	WEST	SAN JUAN

¹² Dedicated Acres 200.0 W/2 SW/4 - Section 35 S/2 NE/4, NE/4 SE/4 - Section 34	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-14051 - 12,807.24 Acres
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ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



POINT-OF-ENTRY
1505' FNL 2331' FEL
SEC 34, T23N, R9W
LAT: 36.186565°N
LONG: 107.774617°W
DATUM: NAD1927

LAT: 36.186578°N
LONG: 107.775231°W
DATUM: NAD1983

SURFACE LOCATION
543' FNL 1568' FEL
SEC 34, T23N, R9W
LAT: 36.189198°N
LONG: 107.772033°W
DATUM: NAD1927

LAT: 36.189213°N
LONG: 107.772646°W
DATUM: NAD1983

RSI TOOL
386' FSL 1063' FWL
SEC 35, T23N, R9W
LAT: 36.177251°N
LONG: 107.763104°W
DATUM: NAD1927

LAT: 36.177265°N
LONG: 107.763718°W
DATUM: NAD1983

END-OF-LATERAL
338' FSL 1117' FWL
SEC 35, T23N, R9W
LAT: 36.177118°N
LONG: 107.762924°W
DATUM: NAD1927

LAT: 36.177132°N
LONG: 107.763537°W
DATUM: NAD1983

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 the mineral or working interest or a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature  Date 4/29/17

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

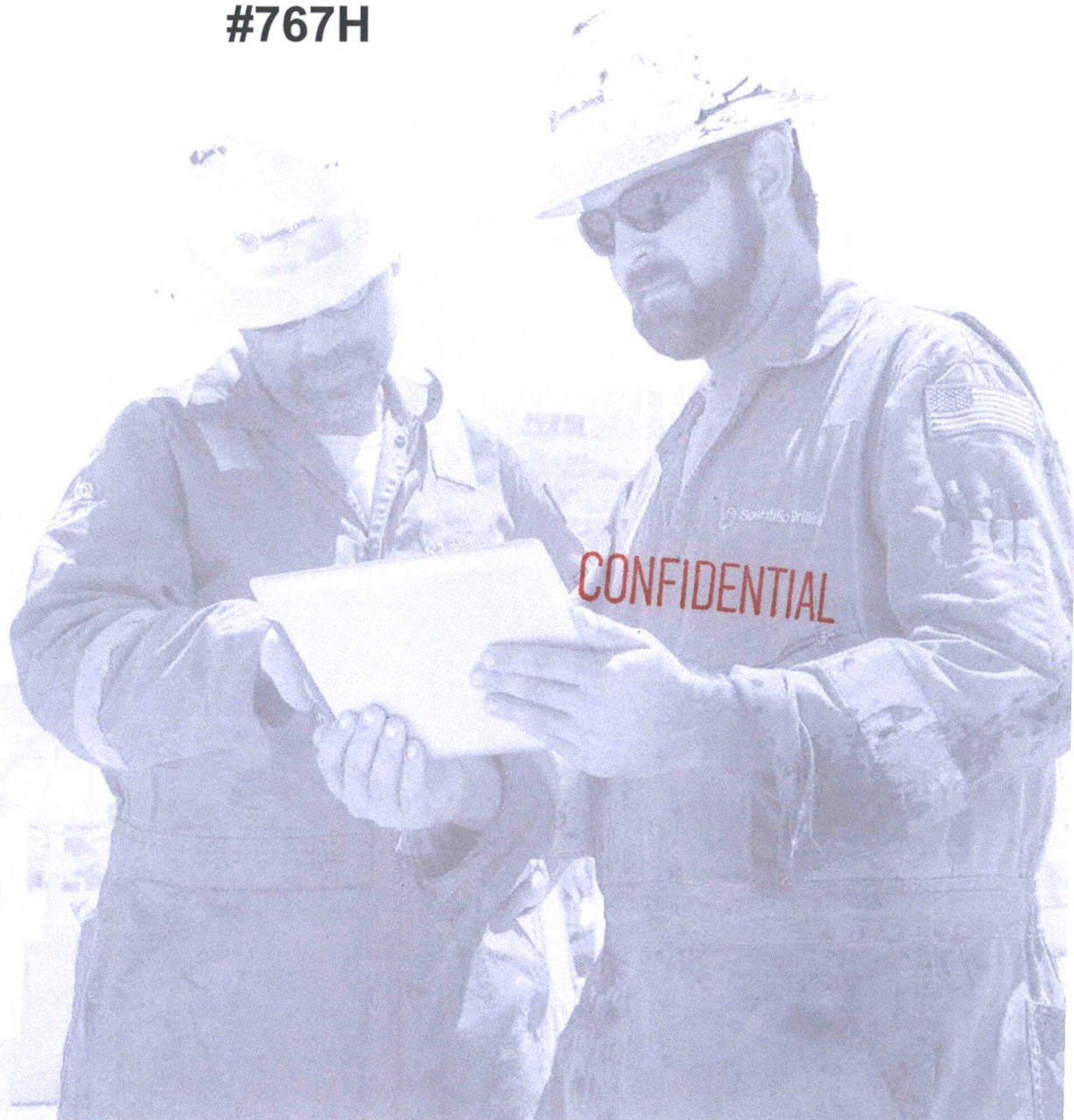


JASON C. EDWARDS
Certificate Number 15269



EOW Summary

**WPX Energy W
Lybrook
2309-34B
#767H**





W Lybrook UT #767H
T23N R9W
Northing: 1888115.09
Easting: 518089.09
Actual

KB @ 6717.00usft (Cylcone 32)
GL @ 6696.00



WELL DETAILS W Lybrook UT #767H

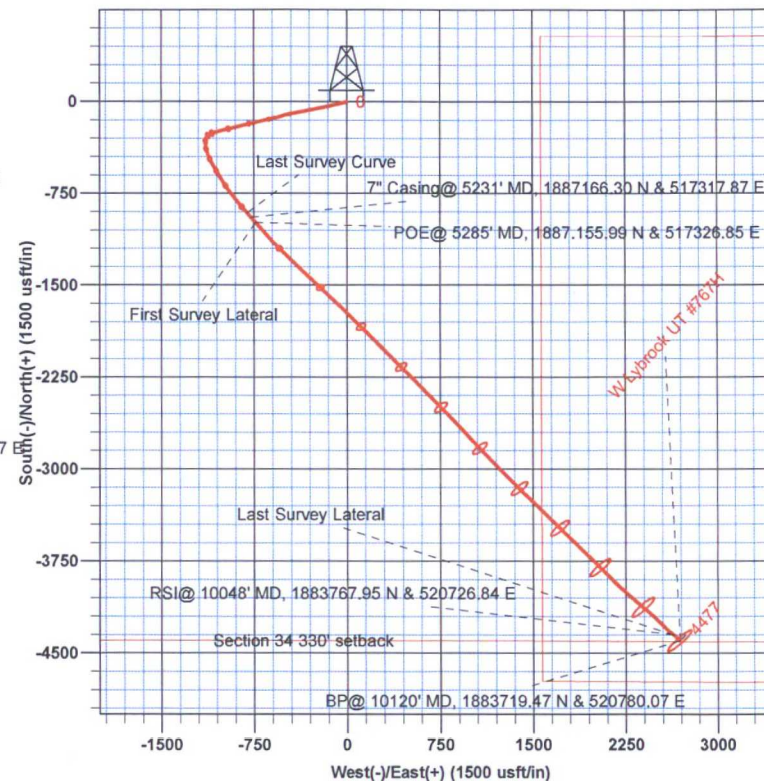
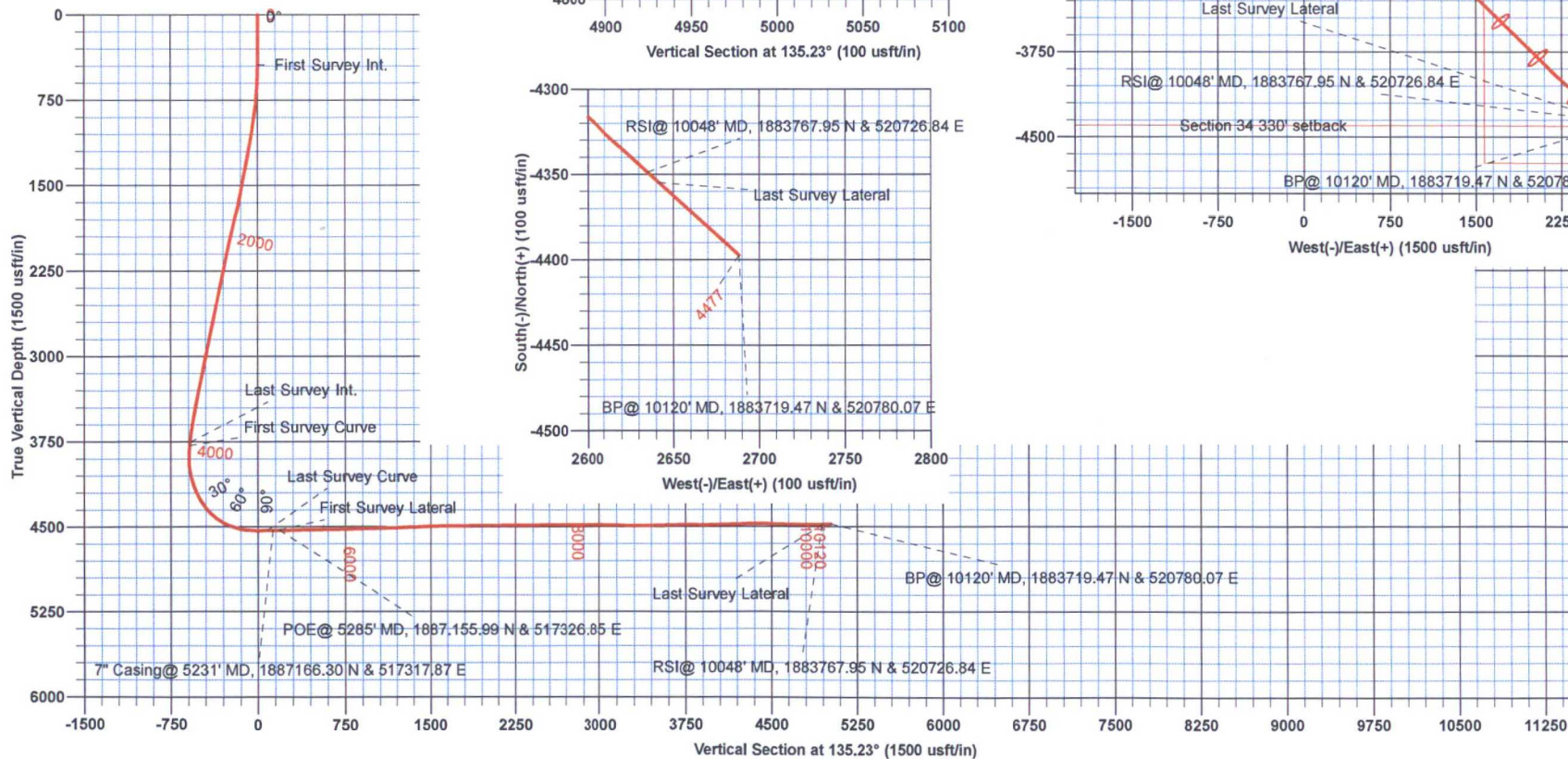
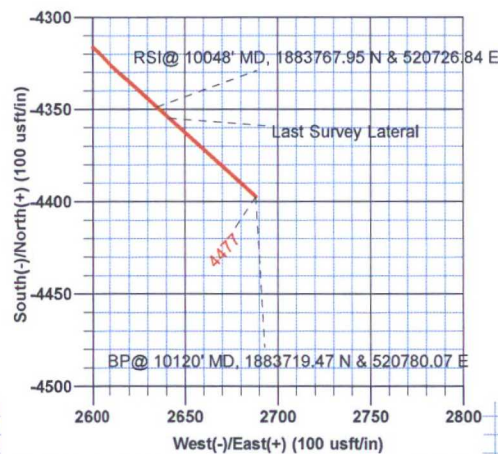
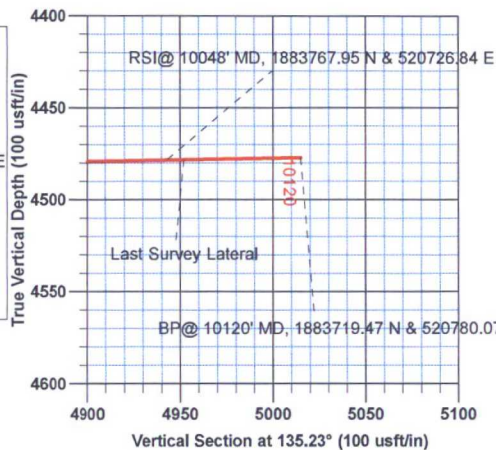
		Ground Level: 6696.00			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1888115.09	518089.09	36° 11' 21.114 N	107° 46' 19.316 W



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
439.99	440.00	First Survey Int.
3754.99	3952.00	Last Survey Int.
3785.94	3984.00	First Survey Curve
4531.29	5183.00	Last Survey Curve
4530.41	5231.00	Casing@ 5231' MD, 1887166.30 N & 517317.87 E
4529.39	5285.00	First Survey Lateral
4529.39	5285.00	POE@ 5285' MD, 1887.155.99 N & 517326.85 E
4478.28	10048.00	RSI@ 10048' MD, 1883767.95 N & 520726.84 E
4478.14	10057.00	Last Survey Lateral
4477.18	10120.00	BP@ 10120' MD, 1883719.47 N & 520780.07 E



Bailey Fellows
11:32, May 30 2017
Scientific Drilling
325 S. Faudree Rd.
Odessa, TX 79765

WPX Energy

T23N R9W

2309-34B WLU

W Lybrook UT #767H - Slot A5

API: 30-045-35797

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 #767H - Slot A5
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cylcone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cylcone 32)
Well:	W Lybrook UT #767H	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	Latitude:	36° 11' 21.044 N
From:	Lat/Long	Easting:	518,148.80 usft	Longitude:	107° 46' 18.588 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.04 °

Well	W Lybrook UT #767H - Slot A5					
Well Position	+N/-S	0.00 usft	Northing:	1,888,115.09 usft	Latitude:	36° 11' 21.114 N
	+E/-W	0.00 usft	Easting:	518,089.09 usft	Longitude:	107° 46' 19.316 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,696.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/12/2017	9.10	62.82	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)	Direction (°)	
	0.00	0.00	0.00	135.23	

Survey Program	Date	5/30/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
21.00	317.00	Gyro (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s	
440.00	3,952.00	SDI MWD Intermediate (Wellbore #1)	MWD+HDGM	OWSG MWD + HDGM	
3,984.00	5,183.00	SDI MWD Curve (Wellbore #1)	MWD+HDGM	OWSG MWD + HDGM	
5,285.00	10,120.00	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	0.21	28.08	51.00	0.05	0.03	-0.02	0.70	0.70	0.00	
81.00	0.22	37.39	81.00	0.14	0.09	-0.04	0.12	0.03	31.03	
111.00	0.36	62.85	111.00	0.23	0.21	-0.02	0.62	0.47	84.87	
141.00	0.35	118.08	141.00	0.23	0.37	0.10	1.10	-0.03	184.10	
171.00	0.28	88.41	171.00	0.19	0.52	0.23	0.58	-0.23	-98.90	
201.00	0.33	63.98	201.00	0.23	0.68	0.31	0.46	0.17	-81.43	

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #767H - Slot A5
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cylcone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cylcone 32)
Well:	W Lybrook UT #767H	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	0.33	56.43	231.00	0.32	0.82	0.36	0.14	0.00	-25.17
261.00	0.17	70.44	261.00	0.38	0.94	0.39	0.57	-0.53	46.70
291.00	0.13	154.97	291.00	0.36	1.00	0.44	0.68	-0.13	281.77
317.00	0.12	197.43	317.00	0.31	1.00	0.48	0.35	-0.04	163.31
440.00	1.17	241.13	439.99	-0.42	-0.14	0.20	0.88	0.85	35.53
First Survey Int.									
532.00	3.16	256.30	531.92	-1.47	-3.43	-1.37	2.23	2.16	16.49
624.00	5.96	260.60	623.62	-2.85	-10.60	-5.44	3.06	3.04	4.67
718.00	8.50	254.92	716.86	-5.46	-22.13	-11.71	2.80	2.70	-6.04
810.00	11.70	257.41	807.43	-9.26	-37.80	-20.05	3.51	3.48	2.71
902.00	14.52	256.35	897.02	-14.02	-58.12	-30.98	3.08	3.07	-1.15
994.00	17.84	256.55	985.36	-20.02	-83.04	-44.27	3.61	3.61	0.22
1,087.00	18.40	256.46	1,073.75	-26.77	-111.16	-59.28	0.60	0.60	-0.10
1,179.00	17.29	255.89	1,161.32	-33.50	-138.54	-73.78	1.22	-1.21	-0.62
1,272.00	18.95	258.88	1,249.71	-39.78	-166.76	-89.20	2.05	1.78	3.22
1,366.00	18.93	258.53	1,338.62	-45.76	-196.68	-106.03	0.12	-0.02	-0.37
1,459.00	19.99	257.12	1,426.31	-52.30	-226.96	-122.71	1.25	1.14	-1.52
1,553.00	18.77	257.79	1,514.98	-59.08	-257.41	-139.34	1.32	-1.30	0.71
1,647.00	19.07	257.98	1,603.90	-65.48	-287.21	-155.78	0.33	0.32	0.20
1,741.00	20.92	259.92	1,692.23	-71.62	-318.75	-173.64	2.09	1.97	2.06
1,835.00	22.94	259.92	1,779.43	-77.76	-353.31	-193.62	2.15	2.15	0.00
1,928.00	24.09	260.36	1,864.70	-84.11	-389.87	-214.86	1.25	1.24	0.47
2,022.00	22.39	256.10	1,951.08	-91.63	-426.17	-235.09	2.54	-1.81	-4.53
2,116.00	21.97	256.34	2,038.12	-100.08	-460.63	-253.36	0.46	-0.45	0.26
2,210.00	22.15	256.47	2,125.24	-108.38	-494.95	-271.63	0.20	0.19	0.14
2,304.00	22.72	255.41	2,212.13	-117.10	-529.75	-289.95	0.74	0.61	-1.13
2,397.00	21.63	256.09	2,298.25	-125.74	-563.76	-307.77	1.20	-1.17	0.73
2,491.00	19.78	254.96	2,386.17	-134.03	-595.94	-324.55	2.01	-1.97	-1.20
2,585.00	21.34	256.71	2,474.18	-142.09	-627.95	-341.37	1.78	1.66	1.86
2,679.00	22.06	258.10	2,561.52	-149.66	-661.87	-359.88	0.94	0.77	1.48
2,773.00	21.48	257.52	2,648.82	-157.02	-695.95	-378.65	0.66	-0.62	-0.62
2,867.00	20.52	258.15	2,736.57	-164.13	-728.88	-396.80	1.05	-1.02	0.67
2,960.00	19.36	256.64	2,824.00	-171.04	-759.83	-413.69	1.36	-1.25	-1.62
3,054.00	20.89	256.51	2,912.25	-178.55	-791.29	-430.52	1.63	1.63	-0.14
3,148.00	20.71	256.03	3,000.13	-186.47	-823.71	-447.73	0.26	-0.19	-0.51
3,242.00	22.10	255.56	3,087.64	-194.89	-856.97	-465.17	1.49	1.48	-0.50
3,336.00	20.96	255.41	3,175.08	-203.53	-890.36	-482.55	1.21	-1.21	-0.16
3,430.00	21.67	255.57	3,262.65	-212.09	-923.44	-499.77	0.76	0.76	0.17
3,524.00	22.29	255.91	3,349.82	-220.76	-957.54	-517.63	0.67	0.66	0.36
3,618.00	21.49	255.92	3,437.04	-229.29	-991.53	-535.52	0.85	-0.85	0.01
3,712.00	19.49	254.26	3,525.09	-237.73	-1,023.33	-551.92	2.22	-2.13	-1.77
3,806.00	17.13	254.96	3,614.32	-245.58	-1,051.80	-566.39	2.52	-2.51	0.74
3,900.00	14.76	255.40	3,704.70	-252.19	-1,076.76	-579.28	2.52	-2.52	0.47

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #767H - Slot A5
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cylcone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cylcone 32)
Well:	W Lybrook UT #767H	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)
3,952.00	14.71	249.64	3,754.99	-256.16	-1,089.36	-585.34	2.82	-0.10	-11.08
Last Survey Int.									
3,984.00	14.76	247.85	3,785.94	-259.11	-1,096.94	-588.58	1.43	0.16	-5.59
First Survey Curve									
4,015.00	14.72	243.39	3,815.92	-262.36	-1,104.12	-591.33	3.66	-0.13	-14.39
4,046.00	14.99	236.21	3,845.89	-266.36	-1,110.97	-593.32	6.00	0.87	-23.16
4,077.00	15.36	228.70	3,875.81	-271.30	-1,117.39	-594.33	6.45	1.19	-24.23
4,109.00	16.14	220.92	3,906.61	-277.45	-1,123.49	-594.26	7.03	2.44	-24.31
4,140.00	17.09	212.90	3,936.32	-284.54	-1,128.79	-592.96	8.00	3.06	-25.87
4,172.00	17.87	205.81	3,966.85	-292.90	-1,133.48	-590.32	7.08	2.44	-22.16
4,203.00	18.43	197.19	3,996.31	-301.87	-1,137.00	-586.44	8.84	1.81	-27.81
4,234.00	19.39	191.31	4,025.64	-311.60	-1,139.46	-581.26	6.88	3.10	-18.97
4,266.00	20.17	185.11	4,055.75	-322.30	-1,140.99	-574.74	6.99	2.44	-19.38
4,297.00	21.35	178.74	4,084.74	-333.27	-1,141.34	-567.20	8.21	3.81	-20.55
4,328.00	22.71	174.83	4,113.48	-344.87	-1,140.68	-558.50	6.45	4.39	-12.61
4,360.00	23.81	173.99	4,142.88	-357.45	-1,139.44	-548.70	3.59	3.44	-2.63
4,391.00	25.85	171.33	4,171.01	-370.35	-1,137.77	-538.36	7.50	6.58	-8.58
4,422.00	27.67	168.08	4,198.69	-384.08	-1,135.26	-526.85	7.53	5.87	-10.48
4,454.00	29.86	166.12	4,226.74	-399.09	-1,131.82	-513.77	7.45	6.84	-6.13
4,485.00	31.48	163.51	4,253.41	-414.34	-1,127.67	-500.02	6.76	5.23	-8.42
4,516.00	34.29	159.91	4,279.44	-430.31	-1,122.37	-484.95	11.04	9.06	-11.61
4,547.00	36.76	157.00	4,304.67	-447.05	-1,115.74	-468.40	9.65	7.97	-9.39
4,579.00	39.48	154.81	4,329.84	-465.07	-1,107.67	-449.92	9.49	8.50	-6.84
4,610.00	41.59	152.96	4,353.40	-483.16	-1,098.80	-430.83	7.83	6.81	-5.97
4,642.00	44.93	152.00	4,376.71	-502.60	-1,088.66	-409.89	10.64	10.44	-3.00
4,673.00	48.01	150.50	4,398.05	-522.30	-1,077.85	-388.29	10.54	9.94	-4.84
4,704.00	51.35	150.76	4,418.11	-542.90	-1,066.26	-365.50	10.79	10.77	0.84
4,735.00	56.01	150.10	4,436.47	-564.61	-1,053.93	-341.40	15.13	15.03	-2.13
4,767.00	60.73	150.06	4,453.24	-588.22	-1,040.34	-315.08	14.75	14.75	-0.13
4,798.00	63.53	149.01	4,467.73	-611.84	-1,026.45	-288.52	9.52	9.03	-3.39
4,829.00	65.58	148.81	4,481.05	-635.81	-1,011.99	-261.33	6.64	6.61	-0.65
4,861.00	68.76	146.90	4,493.47	-660.77	-996.30	-232.55	11.36	9.94	-5.97
4,892.00	71.69	146.55	4,503.95	-685.16	-980.30	-203.97	9.51	9.45	-1.13
4,923.00	75.38	145.57	4,512.74	-709.81	-963.70	-174.77	12.28	11.90	-3.16
4,955.00	78.36	145.16	4,520.01	-735.45	-945.99	-144.10	9.40	9.31	-1.28
4,986.00	81.40	143.57	4,525.45	-760.25	-928.21	-113.97	11.03	9.81	-5.13
5,017.00	84.66	141.45	4,529.22	-784.66	-909.48	-83.45	12.52	10.52	-6.84
5,111.00	91.14	139.89	4,532.66	-857.28	-849.98	10.01	7.09	6.89	-1.66
5,183.00	91.04	139.17	4,531.29	-912.04	-803.26	81.79	1.01	-0.14	-1.00
Last Survey Curve									
5,231.00	91.07	139.00	4,530.41	-948.31	-771.83	129.67	0.36	0.06	-0.35
7" Casing@ 5231' MD, 1887166.30 N & 517317.87 E									
5,244.67	91.08	138.95	4,530.15	-958.62	-762.85	143.32	0.36	0.06	-0.35
POE #767H 3									
5,285.00	91.10	138.81	4,529.39	-989.00	-736.34	183.55	0.36	0.06	-0.35

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #767H - Slot A5
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cylcone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cylcone 32)
Well:	W Lybrook UT #767H	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)
First Survey Lateral - POE@ 5285' MD, 1887.155.99 N & 517326.85 E									
5,380.00	91.14	138.62	4,527.53	-1,060.37	-673.67	278.36	0.20	0.04	-0.20
5,475.00	90.81	136.88	4,525.91	-1,130.68	-609.80	373.25	1.86	-0.35	-1.83
5,570.00	91.51	135.81	4,523.99	-1,199.39	-544.24	468.21	1.35	0.74	-1.13
5,661.00	90.27	134.37	4,522.57	-1,263.83	-480.00	559.19	2.09	-1.36	-1.58
5,753.00	90.23	134.08	4,522.17	-1,328.00	-414.08	651.18	0.32	-0.04	-0.32
5,845.00	91.54	134.27	4,520.75	-1,392.10	-348.10	743.15	1.44	1.42	0.21
5,937.00	91.28	133.57	4,518.49	-1,455.90	-281.86	835.10	0.81	-0.28	-0.76
6,029.00	91.81	132.95	4,516.01	-1,518.92	-214.88	927.01	0.89	0.58	-0.67
6,121.00	92.15	132.65	4,512.83	-1,581.39	-147.42	1,018.87	0.49	0.37	-0.33
6,212.00	91.91	133.76	4,509.61	-1,643.65	-81.13	1,109.76	1.25	-0.26	1.22
6,304.00	91.78	135.35	4,506.64	-1,708.16	-15.61	1,201.70	1.73	-0.14	1.73
6,397.00	92.15	134.62	4,503.45	-1,773.87	50.13	1,294.64	0.88	0.40	-0.78
6,489.00	92.95	134.43	4,499.36	-1,838.32	115.65	1,386.54	0.89	0.87	-0.21
6,581.00	92.28	135.56	4,495.16	-1,903.30	180.64	1,478.45	1.43	-0.73	1.23
6,673.00	91.54	135.39	4,492.10	-1,968.85	245.12	1,570.39	0.83	-0.80	-0.18
6,764.00	90.57	135.12	4,490.42	-2,033.47	309.17	1,661.38	1.11	-1.07	-0.30
6,856.00	89.93	136.00	4,490.02	-2,099.15	373.58	1,753.37	1.18	-0.70	0.96
6,948.00	90.77	136.00	4,489.46	-2,165.33	437.49	1,845.36	0.91	0.91	0.00
7,040.00	89.96	136.17	4,488.87	-2,231.60	501.30	1,937.35	0.90	-0.88	0.18
7,132.00	90.94	136.91	4,488.15	-2,298.38	564.58	2,029.32	1.33	1.07	0.80
7,223.00	90.27	135.73	4,487.19	-2,364.19	627.42	2,120.30	1.49	-0.74	-1.30
7,315.00	90.60	135.44	4,486.49	-2,429.90	691.80	2,212.29	0.48	0.36	-0.32
7,407.00	90.37	136.31	4,485.71	-2,495.94	755.85	2,304.28	0.98	-0.25	0.95
7,499.00	90.94	136.18	4,484.66	-2,562.38	819.47	2,396.26	0.64	0.62	-0.14
7,591.00	90.07	136.92	4,483.85	-2,629.17	882.74	2,488.23	1.24	-0.95	0.80
7,683.00	91.88	137.93	4,482.28	-2,696.90	944.97	2,580.15	2.25	1.97	1.10
7,775.00	89.93	137.15	4,480.83	-2,764.76	1,007.07	2,672.05	2.28	-2.12	-0.85
7,866.00	89.06	135.54	4,481.63	-2,830.60	1,069.88	2,763.03	2.01	-0.96	-1.77
7,958.00	90.27	137.18	4,482.17	-2,897.17	1,133.37	2,855.01	2.22	1.32	1.78
8,049.00	90.37	136.65	4,481.66	-2,963.63	1,195.53	2,945.96	0.59	0.11	-0.58
8,141.00	88.49	135.18	4,482.58	-3,029.71	1,259.53	3,037.95	2.59	-2.04	-1.60
8,233.00	87.78	134.43	4,485.57	-3,094.51	1,324.76	3,129.89	1.12	-0.77	-0.82
8,325.00	87.08	133.98	4,489.70	-3,158.59	1,390.65	3,221.79	0.90	-0.76	-0.49
8,417.00	89.33	134.41	4,492.58	-3,222.68	1,456.57	3,313.72	2.49	2.45	0.47
8,508.00	92.18	135.60	4,491.38	-3,287.02	1,520.90	3,404.70	3.39	3.13	1.31
8,600.00	91.34	134.58	4,488.55	-3,352.15	1,585.82	3,496.65	1.44	-0.91	-1.11
8,692.00	91.91	134.76	4,485.95	-3,416.80	1,651.22	3,588.61	0.65	0.62	0.20
8,784.00	89.83	133.86	4,484.55	-3,481.05	1,717.04	3,680.58	2.46	-2.26	-0.98
8,875.00	89.70	133.88	4,484.92	-3,544.12	1,782.64	3,771.56	0.14	-0.14	0.02
8,967.00	90.50	133.97	4,484.76	-3,607.94	1,848.91	3,863.53	0.88	0.87	0.10
9,059.00	91.61	134.68	4,483.07	-3,672.21	1,914.71	3,955.50	1.43	1.21	0.77
9,151.00	90.84	134.77	4,481.10	-3,736.93	1,980.06	4,047.48	0.84	-0.84	0.10

Scientific Drilling Int.

Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well W Lybrook UT #767H - Slot A5
Project:	T23N R9W	TVD Reference:	KB @ 6717.00usft (Cylcone 32)
Site:	2309-34B WLU	MD Reference:	KB @ 6717.00usft (Cylcone 32)
Well:	W Lybrook UT #767H	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)	
9,243.00	90.66	135.12	4,479.90	-3,801.92	2,045.17	4,139.47	0.43	-0.20	0.38	
9,338.00	92.79	134.94	4,477.04	-3,869.10	2,112.28	4,234.42	2.25	2.24	-0.19	
9,433.00	93.19	135.23	4,472.08	-3,936.28	2,179.26	4,329.29	0.52	0.42	0.31	
9,528.00	87.62	130.93	4,471.41	-4,001.12	2,248.60	4,424.16	7.41	-5.86	-4.53	
9,622.00	88.39	130.69	4,474.68	-4,062.52	2,319.71	4,517.82	0.86	0.82	-0.26	
9,717.00	87.99	131.47	4,477.68	-4,124.91	2,391.28	4,612.53	0.92	-0.42	0.82	
9,811.00	89.63	132.73	4,479.63	-4,187.92	2,461.01	4,706.36	2.20	1.74	1.34	
9,906.00	90.00	132.57	4,479.94	-4,252.28	2,530.88	4,801.26	0.42	0.39	-0.17	
10,000.00	91.04	133.13	4,479.09	-4,316.20	2,599.79	4,895.18	1.26	1.11	0.60	
10,048.00	90.90	132.47	4,478.28	-4,348.81	2,635.00	4,943.13	1.40	-0.30	-1.37	
RSI@ 10048' MD, 1883767.95 N & 520726.84 E										
10,057.00	90.87	132.35	4,478.14	-4,354.88	2,641.65	4,952.12	1.40	-0.30	-1.37	
Last Survey Lateral										
10,120.00	90.87	132.35	4,477.18	-4,397.32	2,688.20	5,015.03	0.00	0.00	0.00	
BP@ 10120' MD, 1883719.47 N & 520780.07 E - BHL #767										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
BHL #767H	0.00	0.00	4,494.00	-4,405.27	2,682.90	1,883,711.52	520,774.77	36° 10' 37.545 N	107° 45' 46.591 W	
- actual wellpath misses target center by 19.34usft at 10120.00usft MD (4477.18 TVD, -4397.32 N, 2688.20 E)										
- Point										
POE #767H 3	0.00	0.00	4,518.60	-946.25	-749.00	1,887,168.37	517,340.69	36° 11' 11.756 N	107° 46' 28.454 W	
- actual wellpath misses target center by 21.87usft at 5244.65usft MD (4530.15 TVD, -958.60 N, -762.87 E)										
- Point										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
440.00	439.99	-0.42	-0.14	First Survey Int.
3,952.00	3,754.99	-256.16	-1,089.36	Last Survey Int.
3,984.00	3,785.94	-259.11	-1,096.94	First Survey Curve
5,183.00	4,531.29	-912.04	-803.26	Last Survey Curve
5,231.00	4,530.41	-948.31	-771.83	7" Casing@ 5231' MD, 1887166.30 N & 517317.87 E
5,285.00	4,529.39	-989.00	-736.34	First Survey Lateral
5,285.00	4,529.39	-989.00	-736.34	POE@ 5285' MD, 1887.155.99 N & 517326.85 E
10,048.00	4,478.28	-4,348.81	2,635.00	RSI@ 10048' MD, 1883767.95 N & 520726.84 E
10,057.00	4,478.14	-4,354.88	2,641.65	Last Survey Lateral
10,120.00	4,477.18	-4,397.32	2,688.20	BP@ 10120' MD, 1883719.47 N & 520780.07 E

Checked By: _____	Approved By: _____	Date: _____
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