

RECEIVED

APR 10 2017

Form 3160-5
(February 2005)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Farmington Field Office
Bureau of Land ManagementFORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

WPX Energy Production, LLC

3a. Address

PO Box 640 Aztec, NM 87410

3b. Phone No. (include area code)

505-333-1816

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 1980' FNL & 2471' FWL, Sec 13, T23N, R9W

BHL: 759' FSL & 330' FEL, Sec 19 T23N, R8W

Lease Serial No.

N0-G-1312-1856

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

NMNM 135216A

8. Well Name and No.

W Lybrook Unit 751H

9. API Well No.

30-045-35806

10. Field and Pool or Exploratory Area

Lybrook Mancos W

11. Country or Parish, State

San Juan, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	<u>Sidetrack</u>
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

4/3/17- WPX received verbal from BLM (William) & NMOCD (Brandon) to proceed with sidetrack. Attached is the sidetrack procedure, wellbore and plans.

OIL CONS. DIV DIST

APR 17 2017

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Lacey Granillo		Title Permit Tech III
Signature		Date 4/10/17
THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by <u>William Tambeken</u>		Title <u>Petroleum Engineer</u> Date <u>4/14/2017</u>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office <u>FFD</u>

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

SIDETRACK PROCEDURE

Well: W Lybrook Unit 751H

Location: San Juan County, NM

Date: April 6, 2017

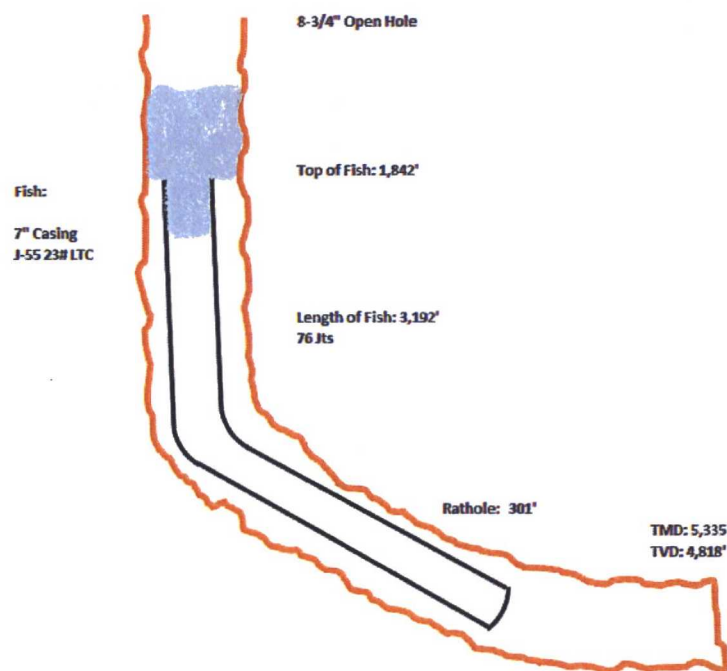
Objective: Sidetrack New Wellbore

EH&S Notes:

- ✓ Personnel Safety is the number one priority, no exceptions.
- ✓ Please follow appropriate WPX Energy contractor protocols for this job plan. (Please see your WPX Energy Business Representative if you have any questions; Contractor protocols can be found in the WPX Energy Contractor Guide.
- ✓ A Safety meeting shall be held each morning before work and subsequent "tailgate" safety meetings are to be held during the day when operation objectives shift in nature and intent. Please ensure these are documented per the WPX Contractor Guide.

Current Wellbore Status:

- 8-3/4" Hole drilled to 5,335' TMD (4,818 TVD)
- 3,192' 7" 23# J-55 LTC Casing (Fish) in hole
- 301' of Rathole
- WPX owns 100% Minerals (Surface to Basement) in F Sec 13 23N 8W
- Cement Plug set from 1,342'-1,942'



Procedure:

- Run in hole with 8-3/4" Bit and Directional Tools (1.95 deg motor)
- Tag and dress cement plug
- Commence slide drilling to kick off plug, track cuttings return to verify successful kickoff
- Drill ahead in vertical per attached directional plan
- Trip out of hole at KOP for curve assembly
- Drill and land curve
- Run and cement 7" casing to surface per previously purposed cement procedure

Directional Drilling Plan attached.

30' minimum will be maintained from previous plugged wellbore to ensure no anti-collision issues.

WPX Energy

T23N R9W

2309-13F WLU

W Lybrook UT #751H - Slot A3

Wellbore #2 ST

Plan: ST Plan #4

Standard Planning Report

06 April, 2017



www.scientificdrilling.com



Scientific Drilling Int.
Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT #751H - Slot A3
Company:	WPX Energy	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	North Reference:	True
Well:	W Lybrook UT #751H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 ST		
Design:	ST Plan #4		

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	Latitude:	36° 13' 43.896 N
From:	Map	Easting:	527,432.82 usft	Longitude:	107° 44' 25.156 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.05 °

Well	W Lybrook UT #751H - Slot A3					
Well Position	+N/-S	-37.49 usft	Northing:	1,902,522.35 usft	Latitude:	36° 13' 43.525 N
	+E/-W	14.45 usft	Easting:	527,447.31 usft	Longitude:	107° 44' 24.979 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,700.00 usft

Wellbore	Wellbore #2 ST				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/6/2017	9.05	62.87	49,686

Design	ST Plan #4			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	1,363.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	135.49

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
1,363.00	8.06	306.87	1,360.68	30.48	-50.23	0.00	0.00	0.00	0.00	
1,727.59	15.65	333.00	1,717.47	89.75	-93.09	2.50	2.08	7.17	48.59	
1,955.53	15.59	311.73	1,937.17	137.57	-129.94	2.50	-0.03	-9.33	-100.83	
3,647.00	15.59	311.73	3,566.39	440.16	-469.26	0.00	0.00	0.00	0.00	
4,270.67	0.00	0.00	4,182.39	496.29	-532.20	2.50	-2.50	0.00	180.00	
5,274.33	90.33	138.70	4,819.00	15.27	-109.61	9.00	9.00	0.00	138.70	
5,294.33	90.33	138.70	4,818.88	0.24	-96.41	0.00	0.00	0.00	0.00	
5,594.33	90.32	135.70	4,817.18	-219.85	107.39	1.00	0.00	-1.00	-90.18	
16,358.55	90.33	134.45	4,756.00	-7,841.26	7,708.33	0.01	0.00	-0.01	-89.48	BHL #751H

Scientific Drilling Int.
Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT #751H - Slot A3
Company:	WPX Energy	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	North Reference:	True
Well:	W Lybrook UT #751H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 ST		
Design:	ST Plan #4		

Planned 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)
1,363.00	8.06	306.87	1,360.68	30.48	-50.23	-56.94	0.00	0.00	0.00
1,400.00	8.70	311.46	1,397.29	33.88	-54.40	-62.30	2.50	1.73	12.41
1,500.00	10.64	320.92	1,495.87	46.06	-65.89	-79.04	2.50	1.94	9.45
1,600.00	12.77	327.37	1,593.79	62.53	-77.67	-99.04	2.50	2.13	6.45
1,700.00	15.02	331.96	1,690.86	83.28	-89.72	-122.29	2.50	2.25	4.59
1,727.59	15.65	333.00	1,717.47	89.75	-93.09	-129.26	2.50	2.29	3.76
1,800.00	15.41	326.29	1,787.24	106.46	-102.86	-148.03	2.50	-0.33	-9.26
1,900.00	15.42	316.88	1,883.66	127.22	-119.33	-174.37	2.50	0.01	-9.42
1,955.53	15.59	311.73	1,937.17	137.57	-129.94	-189.20	2.50	0.31	-9.28
2,000.00	15.59	311.73	1,980.00	145.53	-138.86	-201.13	0.00	0.00	0.00
2,100.00	15.59	311.73	2,076.32	163.42	-158.92	-227.95	0.00	0.00	0.00
2,200.00	15.59	311.73	2,172.64	181.31	-178.98	-254.77	0.00	0.00	0.00
2,300.00	15.59	311.73	2,268.96	199.20	-199.04	-281.59	0.00	0.00	0.00
2,400.00	15.59	311.73	2,365.28	217.08	-219.10	-308.41	0.00	0.00	0.00
2,500.00	15.59	311.73	2,461.60	234.97	-239.16	-335.23	0.00	0.00	0.00
2,600.00	15.59	311.73	2,557.92	252.86	-259.22	-362.05	0.00	0.00	0.00
2,700.00	15.59	311.73	2,654.24	270.75	-279.29	-388.87	0.00	0.00	0.00
2,800.00	15.59	311.73	2,750.56	288.64	-299.35	-415.69	0.00	0.00	0.00
2,900.00	15.59	311.73	2,846.88	306.53	-319.41	-442.51	0.00	0.00	0.00
3,000.00	15.59	311.73	2,943.20	324.42	-339.47	-469.33	0.00	0.00	0.00
3,100.00	15.59	311.73	3,039.52	342.31	-359.53	-496.15	0.00	0.00	0.00
3,200.00	15.59	311.73	3,135.84	360.20	-379.59	-522.97	0.00	0.00	0.00
3,300.00	15.59	311.73	3,232.16	378.09	-399.65	-549.79	0.00	0.00	0.00
3,400.00	15.59	311.73	3,328.48	395.97	-419.71	-576.61	0.00	0.00	0.00
3,500.00	15.59	311.73	3,424.80	413.86	-439.77	-603.43	0.00	0.00	0.00
3,600.00	15.59	311.73	3,521.12	431.75	-459.83	-630.25	0.00	0.00	0.00
3,647.00	15.59	311.73	3,566.39	440.16	-469.26	-642.85	0.00	0.00	0.00
3,700.00	14.27	311.73	3,617.60	449.25	-479.45	-656.48	2.50	-2.50	0.00
3,800.00	11.77	311.73	3,715.03	464.24	-496.26	-678.95	2.50	-2.50	0.00
3,900.00	9.27	311.73	3,813.34	476.38	-509.88	-697.16	2.50	-2.50	0.00
4,000.00	6.77	311.73	3,912.35	485.66	-520.29	-711.08	2.50	-2.50	0.00
4,100.00	4.27	311.73	4,011.88	492.06	-527.46	-720.67	2.50	-2.50	0.00
4,200.00	1.77	311.73	4,111.74	495.56	-531.39	-725.92	2.50	-2.50	0.00
4,270.67	0.00	0.00	4,182.39	496.29	-532.20	-727.01	2.50	-2.50	0.00
4,300.00	2.64	138.70	4,211.71	495.78	-531.75	-726.33	9.00	9.00	0.00
4,350.00	7.14	138.70	4,261.52	492.58	-528.94	-722.08	9.00	9.00	0.00
4,400.00	11.64	138.70	4,310.84	486.45	-523.56	-713.94	9.00	9.00	0.00
4,450.00	16.14	138.70	4,359.36	477.44	-515.64	-701.96	9.00	9.00	0.00
4,500.00	20.64	138.70	4,406.80	465.59	-505.23	-686.21	9.00	9.00	0.00
4,550.00	25.14	138.70	4,452.85	450.98	-492.40	-666.80	9.00	9.00	0.00
4,600.00	29.64	138.70	4,497.23	433.71	-477.22	-643.84	9.00	9.00	0.00
4,650.00	34.14	138.70	4,539.67	413.87	-459.79	-617.47	9.00	9.00	0.00
4,700.00	38.64	138.70	4,579.91	391.59	-440.22	-587.86	9.00	9.00	0.00
4,750.00	43.14	138.70	4,617.70	367.01	-418.62	-555.19	9.00	9.00	0.00
4,800.00	47.64	138.70	4,652.81	340.27	-395.13	-519.66	9.00	9.00	0.00
4,850.00	52.14	138.70	4,685.01	311.55	-369.90	-481.49	9.00	9.00	0.00
4,900.00	56.64	138.70	4,714.12	281.02	-343.08	-440.91	9.00	9.00	0.00
4,950.00	61.14	138.70	4,739.94	248.87	-314.83	-398.18	9.00	9.00	0.00
5,000.00	65.64	138.70	4,762.33	215.29	-285.34	-353.56	9.00	9.00	0.00
5,050.00	70.14	138.70	4,781.15	180.50	-254.77	-307.32	9.00	9.00	0.00
5,100.00	74.64	138.70	4,796.27	144.71	-223.33	-259.75	9.00	9.00	0.00
5,150.00	79.14	138.70	4,807.61	108.13	-191.19	-211.14	9.00	9.00	0.00
5,200.00	83.64	138.70	4,815.09	71.00	-158.57	-161.80	9.00	9.00	0.00
5,250.00	88.14	138.70	4,818.67	33.54	-125.67	-112.02	9.00	9.00	0.00

Scientific Drilling Int.

Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT #751H - Slot A3
Company:	WPX Energy	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	North Reference:	True
Well:	W Lybrook UT #751H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 ST		
Design:	ST Plan #4		

Planned 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)
5,274.33	90.33	138.70	4,819.00	15.27	-109.61	-87.73	9.00	9.00	0.00
5,294.33	90.33	138.70	4,818.88	0.24	-96.41	-67.76	0.00	0.00	0.00
5,300.00	90.33	138.64	4,818.85	-4.01	-92.67	-62.10	1.00	0.00	-1.00
5,400.00	90.33	137.64	4,818.28	-78.49	-25.94	37.79	1.00	0.00	-1.00
5,500.00	90.32	136.64	4,817.71	-151.80	42.07	137.75	1.00	0.00	-1.00
5,594.33	90.32	135.70	4,817.18	-219.85	107.39	232.07	1.00	0.00	-1.00
5,600.00	90.32	135.70	4,817.15	-223.91	111.35	237.74	0.01	0.00	-0.01
5,700.00	90.32	135.69	4,816.59	-295.47	181.20	337.73	0.01	0.00	-0.01
5,800.00	90.32	135.68	4,816.03	-367.01	251.07	437.73	0.01	0.00	-0.01
5,900.00	90.32	135.66	4,815.47	-438.54	320.94	537.73	0.01	0.00	-0.01
6,000.00	90.32	135.65	4,814.91	-510.06	390.83	637.73	0.01	0.00	-0.01
6,100.00	90.32	135.64	4,814.36	-581.57	460.74	737.73	0.01	0.00	-0.01
6,200.00	90.32	135.63	4,813.80	-653.06	530.66	837.72	0.01	0.00	-0.01
6,300.00	90.32	135.62	4,813.24	-724.53	600.60	937.72	0.01	0.00	-0.01
6,400.00	90.32	135.61	4,812.68	-795.99	670.55	1,037.72	0.01	0.00	-0.01
6,500.00	90.32	135.60	4,812.12	-867.44	740.51	1,137.72	0.01	0.00	-0.01
6,600.00	90.32	135.58	4,811.56	-938.87	810.49	1,237.72	0.01	0.00	-0.01
6,700.00	90.32	135.57	4,811.00	-1,010.29	880.48	1,337.72	0.01	0.00	-0.01
6,800.00	90.32	135.56	4,810.43	-1,081.70	950.49	1,437.71	0.01	0.00	-0.01
6,900.00	90.32	135.55	4,809.87	-1,153.09	1,020.51	1,537.71	0.01	0.00	-0.01
7,000.00	90.32	135.54	4,809.31	-1,224.46	1,090.55	1,637.71	0.01	0.00	-0.01
7,100.00	90.32	135.53	4,808.75	-1,295.83	1,160.60	1,737.71	0.01	0.00	-0.01
7,200.00	90.32	135.51	4,808.19	-1,367.18	1,230.66	1,837.71	0.01	0.00	-0.01
7,300.00	90.32	135.50	4,807.63	-1,438.51	1,300.74	1,937.71	0.01	0.00	-0.01
7,400.00	90.32	135.49	4,807.07	-1,509.83	1,370.84	2,037.70	0.01	0.00	-0.01
7,500.00	90.32	135.48	4,806.51	-1,581.14	1,440.94	2,137.70	0.01	0.00	-0.01
7,600.00	90.32	135.47	4,805.94	-1,652.43	1,511.07	2,237.70	0.01	0.00	-0.01
7,700.00	90.32	135.46	4,805.38	-1,723.70	1,581.20	2,337.70	0.01	0.00	-0.01
7,800.00	90.32	135.44	4,804.82	-1,794.97	1,651.35	2,437.70	0.01	0.00	-0.01
7,900.00	90.32	135.43	4,804.26	-1,866.22	1,721.52	2,537.70	0.01	0.00	-0.01
8,000.00	90.32	135.42	4,803.69	-1,937.45	1,791.70	2,637.69	0.01	0.00	-0.01
8,100.00	90.32	135.41	4,803.13	-2,008.67	1,861.90	2,737.69	0.01	0.00	-0.01
8,200.00	90.32	135.40	4,802.57	-2,079.88	1,932.10	2,837.69	0.01	0.00	-0.01
8,300.00	90.32	135.39	4,802.00	-2,151.07	2,002.33	2,937.69	0.01	0.00	-0.01
8,400.00	90.32	135.38	4,801.44	-2,222.25	2,072.57	3,037.69	0.01	0.00	-0.01
8,500.00	90.32	135.36	4,800.88	-2,293.41	2,142.82	3,137.69	0.01	0.00	-0.01
8,600.00	90.32	135.35	4,800.31	-2,364.56	2,213.08	3,237.68	0.01	0.00	-0.01
8,700.00	90.32	135.34	4,799.75	-2,435.70	2,283.36	3,337.68	0.01	0.00	-0.01
8,800.00	90.32	135.33	4,799.18	-2,506.82	2,353.66	3,437.68	0.01	0.00	-0.01
8,900.00	90.32	135.32	4,798.62	-2,577.93	2,423.97	3,537.68	0.01	0.00	-0.01
9,000.00	90.32	135.31	4,798.05	-2,649.02	2,494.29	3,637.68	0.01	0.00	-0.01
9,100.00	90.32	135.29	4,797.49	-2,720.10	2,564.63	3,737.67	0.01	0.00	-0.01
9,200.00	90.32	135.28	4,796.92	-2,791.17	2,634.98	3,837.67	0.01	0.00	-0.01
9,300.00	90.32	135.27	4,796.36	-2,862.22	2,705.35	3,937.67	0.01	0.00	-0.01
9,400.00	90.32	135.26	4,795.79	-2,933.25	2,775.73	4,037.67	0.01	0.00	-0.01
9,500.00	90.32	135.25	4,795.23	-3,004.27	2,846.13	4,137.66	0.01	0.00	-0.01
9,600.00	90.32	135.24	4,794.66	-3,075.28	2,916.54	4,237.66	0.01	0.00	-0.01
9,700.00	90.32	135.22	4,794.10	-3,146.28	2,986.96	4,337.66	0.01	0.00	-0.01
9,800.00	90.32	135.21	4,793.53	-3,217.25	3,057.40	4,437.66	0.01	0.00	-0.01
9,900.00	90.32	135.20	4,792.96	-3,288.22	3,127.85	4,537.65	0.01	0.00	-0.01
10,000.00	90.32	135.19	4,792.40	-3,359.17	3,198.32	4,637.65	0.01	0.00	-0.01
10,100.00	90.32	135.18	4,791.83	-3,430.11	3,268.80	4,737.65	0.01	0.00	-0.01
10,200.00	90.32	135.17	4,791.26	-3,501.03	3,339.30	4,837.64	0.01	0.00	-0.01
10,300.00	90.32	135.16	4,790.70	-3,571.94	3,409.81	4,937.64	0.01	0.00	-0.01

Scientific Drilling Int.

Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT #751H - Slot A3
Company:	WPX Energy	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	North Reference:	True
Well:	W Lybrook UT #751H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 ST		
Design:	ST Plan #4		

Planned 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)
10,400.00	90.33	135.14	4,790.13	-3,642.83	3,480.33	5,037.64	0.01	0.00	-0.01
10,500.00	90.33	135.13	4,789.56	-3,713.71	3,550.87	5,137.63	0.01	0.00	-0.01
10,600.00	90.33	135.12	4,788.99	-3,784.58	3,621.43	5,237.63	0.01	0.00	-0.01
10,700.00	90.33	135.11	4,788.43	-3,855.43	3,691.99	5,337.63	0.01	0.00	-0.01
10,800.00	90.33	135.10	4,787.86	-3,926.27	3,762.58	5,437.62	0.01	0.00	-0.01
10,900.00	90.33	135.09	4,787.29	-3,997.09	3,833.17	5,537.62	0.01	0.00	-0.01
11,000.00	90.33	135.07	4,786.72	-4,067.90	3,903.78	5,637.61	0.01	0.00	-0.01
11,100.00	90.33	135.06	4,786.15	-4,138.69	3,974.41	5,737.61	0.01	0.00	-0.01
11,200.00	90.33	135.05	4,785.59	-4,209.47	4,045.05	5,837.61	0.01	0.00	-0.01
11,300.00	90.33	135.04	4,785.02	-4,280.24	4,115.70	5,937.60	0.01	0.00	-0.01
11,400.00	90.33	135.03	4,784.45	-4,350.99	4,186.37	6,037.60	0.01	0.00	-0.01
11,500.00	90.33	135.02	4,783.88	-4,421.72	4,257.05	6,137.59	0.01	0.00	-0.01
11,600.00	90.33	135.00	4,783.31	-4,492.45	4,327.75	6,237.59	0.01	0.00	-0.01
11,700.00	90.33	134.99	4,782.74	-4,563.16	4,398.46	6,337.58	0.01	0.00	-0.01
11,800.00	90.33	134.98	4,782.17	-4,633.85	4,469.18	6,437.58	0.01	0.00	-0.01
11,900.00	90.33	134.97	4,781.60	-4,704.53	4,539.92	6,537.57	0.01	0.00	-0.01
12,000.00	90.33	134.96	4,781.03	-4,775.20	4,610.67	6,637.56	0.01	0.00	-0.01
12,100.00	90.33	134.95	4,780.46	-4,845.85	4,681.44	6,737.56	0.01	0.00	-0.01
12,200.00	90.33	134.94	4,779.89	-4,916.48	4,752.22	6,837.55	0.01	0.00	-0.01
12,300.00	90.33	134.92	4,779.32	-4,987.11	4,823.02	6,937.55	0.01	0.00	-0.01
12,400.00	90.33	134.91	4,778.75	-5,057.71	4,893.83	7,037.54	0.01	0.00	-0.01
12,500.00	90.33	134.90	4,778.18	-5,128.31	4,964.66	7,137.53	0.01	0.00	-0.01
12,600.00	90.33	134.89	4,777.60	-5,198.89	5,035.49	7,237.53	0.01	0.00	-0.01
12,700.00	90.33	134.88	4,777.03	-5,269.45	5,106.35	7,337.52	0.01	0.00	-0.01
12,800.00	90.33	134.87	4,776.46	-5,340.01	5,177.22	7,437.51	0.01	0.00	-0.01
12,900.00	90.33	134.85	4,775.89	-5,410.54	5,248.10	7,537.50	0.01	0.00	-0.01
13,000.00	90.33	134.84	4,775.32	-5,481.06	5,318.99	7,637.50	0.01	0.00	-0.01
13,100.00	90.33	134.83	4,774.74	-5,551.57	5,389.90	7,737.49	0.01	0.00	-0.01
13,200.00	90.33	134.82	4,774.17	-5,622.07	5,460.83	7,837.48	0.01	0.00	-0.01
13,300.00	90.33	134.81	4,773.60	-5,692.55	5,531.77	7,937.47	0.01	0.00	-0.01
13,400.00	90.33	134.80	4,773.03	-5,763.01	5,602.72	8,037.46	0.01	0.00	-0.01
13,500.00	90.33	134.79	4,772.45	-5,833.46	5,673.69	8,137.45	0.01	0.00	-0.01
13,600.00	90.33	134.77	4,771.88	-5,903.90	5,744.67	8,237.44	0.01	0.00	-0.01
13,700.00	90.33	134.76	4,771.31	-5,974.32	5,815.66	8,337.43	0.01	0.00	-0.01
13,800.00	90.33	134.75	4,770.73	-6,044.73	5,886.67	8,437.42	0.01	0.00	-0.01
13,900.00	90.33	134.74	4,770.16	-6,115.12	5,957.70	8,537.41	0.01	0.00	-0.01
14,000.00	90.33	134.73	4,769.59	-6,185.50	6,028.74	8,637.40	0.01	0.00	-0.01
14,100.00	90.33	134.72	4,769.01	-6,255.87	6,099.79	8,737.39	0.01	0.00	-0.01
14,200.00	90.33	134.70	4,768.44	-6,326.22	6,170.86	8,837.38	0.01	0.00	-0.01
14,300.00	90.33	134.69	4,767.86	-6,396.55	6,241.94	8,937.37	0.01	0.00	-0.01
14,400.00	90.33	134.68	4,767.29	-6,466.88	6,313.03	9,037.36	0.01	0.00	-0.01
14,500.00	90.33	134.67	4,766.72	-6,537.18	6,384.14	9,137.35	0.01	0.00	-0.01
14,600.00	90.33	134.66	4,766.14	-6,607.48	6,455.26	9,237.33	0.01	0.00	-0.01
14,700.00	90.33	134.65	4,765.57	-6,677.75	6,526.40	9,337.32	0.01	0.00	-0.01
14,800.00	90.33	134.63	4,764.99	-6,748.02	6,597.55	9,437.31	0.01	0.00	-0.01
14,900.00	90.33	134.62	4,764.41	-6,818.27	6,668.72	9,537.30	0.01	0.00	-0.01
15,000.00	90.33	134.61	4,763.84	-6,888.50	6,739.90	9,637.28	0.01	0.00	-0.01
15,100.00	90.33	134.60	4,763.26	-6,958.73	6,811.10	9,737.27	0.01	0.00	-0.01
15,200.00	90.33	134.59	4,762.69	-7,028.93	6,882.30	9,837.26	0.01	0.00	-0.01
15,300.00	90.33	134.58	4,762.11	-7,099.12	6,953.53	9,937.24	0.01	0.00	-0.01
15,400.00	90.33	134.57	4,761.53	-7,169.30	7,024.76	10,037.23	0.01	0.00	-0.01
15,500.00	90.33	134.55	4,760.96	-7,239.47	7,096.02	10,137.21	0.01	0.00	-0.01
15,600.00	90.33	134.54	4,760.38	-7,309.62	7,167.28	10,237.20	0.01	0.00	-0.01
15,700.00	90.33	134.53	4,759.80	-7,379.75	7,238.56	10,337.18	0.01	0.00	-0.01

Scientific Drilling Int.

Planning Report

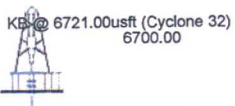
Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT #751H - Slot A3
Company:	WPX Energy	TVD Reference:	KB @ 6721.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	KB @ 6721.00usft (Cyclone 32)
Site:	2309-13F WLU	North Reference:	True
Well:	W Lybrook UT #751H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2 ST		
Design:	ST Plan #4		

Planned 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)
15,800.00	90.33	134.52	4,759.23	-7,449.87	7,309.85	10,437.17	0.01	0.00	-0.01
15,900.00	90.33	134.51	4,758.65	-7,519.98	7,381.16	10,537.15	0.01	0.00	-0.01
16,000.00	90.33	134.50	4,758.07	-7,590.07	7,452.48	10,637.13	0.01	0.00	-0.01
16,100.00	90.33	134.48	4,757.49	-7,660.15	7,523.82	10,737.12	0.01	0.00	-0.01
16,200.00	90.33	134.47	4,756.92	-7,730.21	7,595.17	10,837.10	0.01	0.00	-0.01
16,300.00	90.33	134.46	4,756.34	-7,800.26	7,666.53	10,937.08	0.01	0.00	-0.01
16,358.55	90.33	134.45	4,756.00	-7,841.26	7,708.33	10,995.62	0.01	0.00	-0.01

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 #751H	0.00	0.00	4,756.00	-7,841.26	7,708.33	1,894,688.49	535,163.16	36° 12' 25.967 N	107° 42' 50.918 W
- plan hits target center									
- Point									



W Lybrook UT #751H
T23N R9W
Northing: 1902522.35
Easting: 527447.31
ST Plan BF



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 #751H						
Ground Level: 6700.00						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1902522.35	527447.31	36° 13' 43.525 N	107° 44' 24.979 W	

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
1363.00	8.06	306.87	1360.68	30.48	-50.23	0.00	0.00	-56.94	
1727.59	15.65	333.00	1717.47	89.75	-93.09	2.50	48.59	-129.26	
1955.53	15.59	311.73	1937.17	137.57	-129.94	2.50	100.83	-189.20	
3647.00	15.59	311.73	3566.39	440.16	-469.26	0.00	0.00	-642.85	
4270.67	0.00	0.00	4182.39	496.29	-532.20	2.50	180.00	-727.01	
5274.33	90.33	138.70	4819.00	15.27	-109.61	9.00	138.70	-87.73	
5294.33	90.33	138.70	4818.88	0.24	-96.41	0.00	0.00	-67.76	
5594.33	90.32	135.70	4817.18	-219.85	107.39	1.00	-90.18	232.07	
16358.55	90.33	134.45	4756.00	-7841.26	7708.33	0.01	-89.48	0995.62	BHL #751H

SITE DETAILS: 2309-13F WLU
Site Centre Northing: 1902559.83
Easting: 527432.82
Positional Uncertainty: 0.00
Convergence: 0.05
Local North: True

PROJECT DETAILS: T23N R9W
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level

DESIGN TARGET DETAILS			
Name	TVD	+N/-S	+E/-W
BHL #751H	4756.00	-7841.26	7708.33
POE #751H	4819.00	-64.03	-51.31

