

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

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.

5. Lease Serial No.
NOG14031948

6. If Indian, Allottee or Tribe Name

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)
505-333-1808

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SHL: 1867' FSL & 674' FEL Sec 14 T23N R9W Unit: I
BHL: 697' FNL & 330' FEL Sec 25 T23N R9W Unit: A

7. If Unit of CA/Agreement, Name and/or No.
NMNM 135216A

8. Well Name and No.
W Lybrook Unit 755H

9. API Well No.
30-045-35816

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	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other <u>Change in Plans</u>
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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 recompleteness 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 recompleteness 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.)

OIL CONS. DIV DIST. 3

AUG 14 2017

RECEIVED

WPX Energy request a change in plans to the Total Depth (TD) per attached OPS & Directional Drill Plans.

AUG 09 2017

**ADHERE TO PREVIOUS NMOCD
CONDITIONS OF APPROVAL**

Farmington Field Office
Bureau of Land Management

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
Marie E. Jaramillo

Title: Permit Tech

Signature

Date: 8/9/17

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

PE

Date

8/10/17

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

FTO

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)

NMOC

12



WPX Energy

Operations Plan

(Note: This procedure will be adjusted onsite based upon actual conditions)

Date: August 9, 2017
Well Name: W Lybrook Unit 755H
SH Location: NESE Sec 14 23N-09W
BH Location: NENE Sec 25 23N-09W

Field: Lybrook Mancos W
Surface: IA
Elevation: 6719' GR
Minerals: BLM

Measured Depth: 14901.71'

I. GEOLOGY

Surface formation - NACIMIENTO

A. FORMATION TOPS: (TD)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	404.00	404.00	POINT LOOKOUT	3,702.00	3,474.00
KIRTLAND	546.00	546.00	MANCOS	3,894.00	3,647.00
PICTURED CLIFFS	1,016.00	1,013.00	GALLUP	4,264.00	3,981.00
LEWIS	1,221.00	1,213.00	KICKOFF POINT	4,371.23	4,078.09
CHACRA	1,443.00	1,426.00	TOP TARGET	5,474.00	4,757.00
CLIFF HOUSE	2,677.00	2,548.00	LANDING POINT	5,479.16	4,757.00
MENEFEE	2,689.00	2,559.00	BASE TARGET	5,479.16	4,757.00
			TD	14,901.71	4,722.00

B. MUD LOGGING PROGRAM:

Mudlogger on location from surface csg to TD.

C. LOGGING PROGRAM:

LWD GR from surface casing to TD.

D. NATURAL GAUGES:

Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

A. MUD PROGRAM:

LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 3/4" Directional Vertical hole, and the curve portion of the wellbore. A LSND (WBM) or (OBM) will be used to drill the lateral portion of well. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.

B. BOP TESTING:

While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The BOPE will be tested to 2,000 psi (High) for 10 minutes and the annular tested to 1,500 psi for 10 minutes. Pressure test surface casing to 1,500 psi for 30 minutes and intermediate casing to 1,500 psi for 30 minutes. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. All tests and inspections will be recorded in the tour book as to time and results.

III. MATERIALS

A. CASING PROGRAM:

CASING TYPE	OH SIZE (IN)	DEPTH (MD)	CSG SIZE	WEIGHT	GRADE	CONN
SURFACE	12.25"	320.00'	9.625"	36 LBS	J-55 or equiv	STC
INTERMEDIATE	8.75"	5479.16'	7"	23 LBS	J-55 or equiv	LTC
PRODUCTION	6.125"	5329.16' - 14901.71'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK	6.125"	Surf. - 5329.16'	4.5"	11.6 LBS	P-110 or equiv	LTC

B. FLOAT EQUIPMENT:

1. SURFACE CASING:

9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.

2. INTERMEDIATE CASING:

7" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) centralizer at 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. If losses are encountered during the drilling of the intermediate section a DV tool will be utilized and a 2 stage cement job may be planned to ensure cement circ back to surface. The DV tool will be placed 100' above the top of the Chacra formation. If cement is circulated back to surface on the first stage, a cancelation device will be dropped to shift the dv tool closed and the 2nd stage cement job will be aborted at that time, if no cement is seen at surface on the 1st stage the stage tool will be opened and a 2nd stage cement job will be pumped.

3. PRODUCTION LINER:

Run 4-1/2" Liner with cement nose guide Float Shoe + 2jts. of 4-1/2" casing + Landing Collar + 4-1/2" pup joint + 1 RSI (Sliding Sleeve) positioned inside the 330ft Hard line. Centralizer program will be determined by Wellbore condition and when Lateral is evaluated by Geoscientists and Reservoir Engineers. Set seals on Liner Hanger. Test TOL to 1500 psi for 15 minutes.

C. CEMENT:

(Note: Volumes may be adjusted onsite due to actual conditions)

1. Surface:

5 bbl Fresh Water Spacer, 100 sx (160 cu.ft.) of 14.5 ppg Type I-II (Neat G) + 20% Fly Ash cement w/ 7.41 gal/sack mix water ratio @ 1.61 cu ft/sx yield. Calculated @ volume + 50% excess. WOC 12 hours. Test csg to 600psi. Total Volume: (160 cu-ft/100 sx/ Bbls).TOC at Surface.

2. Intermediate:

Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 102 bbls, 292 sks, (575 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 59 bbls, 254 sks, (331 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 216 bbl Drilling mud or water. Total Cement: 161 bbls, 546 sks, (906 cuft)

3. Prod Liner:

Spacer #1: 10 bbl (56 cu-ft) Water Spacer. Spacer #2: 40 bbl 9.5 ppg (224.6 cu-ft) Tuned Spacer III. Spacer #3: 10 bbl Water Spacer. Lead Cement: Extencem™ System. Yield 1.36 cuft/sk 13.3 ppg (938 sx /1276 cuft /227 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/-204bbl Fr Water. Total Cement (938 sx /1276bbls).

D. COMPLETION:

Run CCL for perforating

A. PRESSURE TEST:

1. Pressure test 4-1/2" casing to 4500 psi max, hold at 1500 psi for 30 minutes. Increase pressure to Open RSI sleeves.

B. STIMULATION:

1. Stimulate with approximately 2,805,000# 20/40 mesh sand and 340,000# 16/30 mesh sand in 619,113 gallons water with 42,696 mscf N2 for 17 stages.
2. Isolate stages with flow through frac plug.
3. Drill out frac plugs and flowback lateral.

C. RUNNING TUBING:

1. Production Tubing: Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing near Top of Liner.

If this horizontal well is drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 B(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 B(2) NMAC, 19.15.16.15 B(2) NMAC, and 19.15.16.15. B(4) NMAC.

NOTES:

A 4-1/2" 11.6# P-110 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# J-55 Intermediate casing with a Liner Hanger and pack-off assembly then cemented to top of liner hanger.

After cementing and TOL clean up operations are complete, the TOL will be tested to 1500 psi (per BLM).

WPX Energy

T23N R9W

W Lybrook UT 716 Pad

W Lybrook UT 755H

API: 30-045-35816

Wellbore #1

Plan: Plan #1

Standard Planning Report

27 July, 2017



Scientific Drilling

www.scientificdrilling.com



W Lybrook UT 755H
T23N R9W
Northing: 1901069.64
Easting: 524307.45
Plan #1



WELL DETAILS W Lybrook UT 755H

Ground Level: 6719.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1901069.64	524307.45	36.224774	-107.750922

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
307.00	1.32	227.15	306.96	-2.97	-1.58	0.00	0.00	1.00
373.00	0.00	0.00	372.96	-3.48	-2.13	2.00	180.00	0.97
500.04	0.00	0.00	500.00	-3.48	-2.13	0.00	0.00	0.97
1771.23	25.42	247.89	1729.88	-107.90	-259.16	2.00	247.89	-105.87
4371.23	25.42	247.89	4078.09	-528.03	-1293.29	0.00	0.00	-535.72
5479.16	90.22	135.24	4757.00	-1186.00	-1062.00	9.00	-110.56	94.34
14901.71	90.21	135.24	4722.00	-7876.68	5572.60	0.00	162.51	9516.82

SITE DETAILS: W Lybrook UT 716 Pad

Site Centre Northing: 1901036.92
Easting: 524357.92

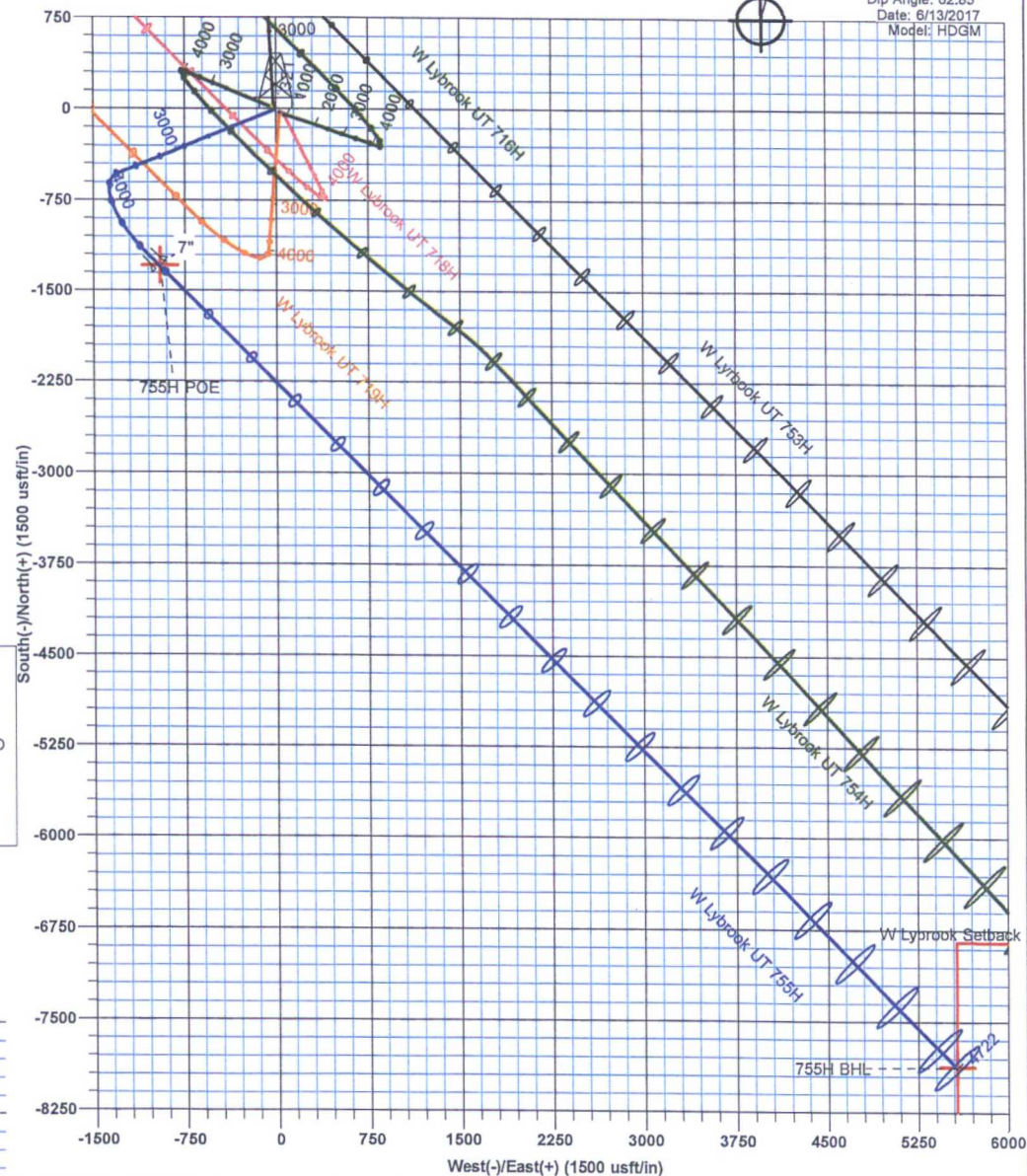
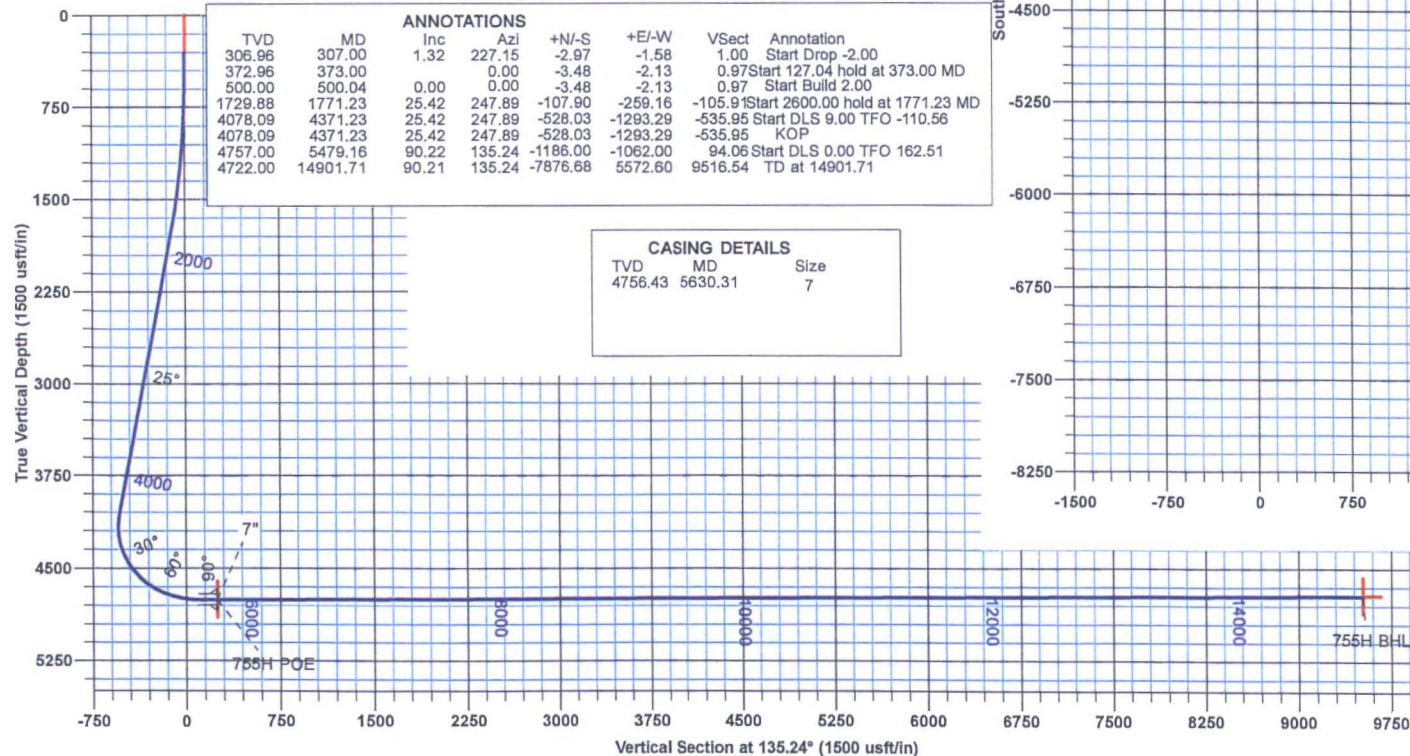
Positional Uncertainty: 0.00
Convergence: 0.05
Local North: True

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



GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)



Azimuths to True North
Magnetic North: 9.03°
Magnetic Field
Strength: 49661.0snT
Dip Angle: 62.85°
Date: 6/13/2017
Model: HDGM

Bailey Fellows
14:03, July 27 2017
Scientific Drilling
325 S Faudree Rd.
Odessa, TX 79765

Scientific Drilling Int.

Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT 755H
Company:	WPX Energy	TVD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Site:	W Lybrook UT 716 Pad	North Reference:	True
Well:	W Lybrook UT 755H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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		W Lybrook UT 716 Pad			
Site Position:		Northing:	1,901,036.93 usft	Latitude:	36.224684
From:	Lat/Long	Easting:	524,357.92 usft	Longitude:	-107.750751
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.05 °

Well	W Lybrook UT 755H					
Well Position	+N/-S	32.76 usft	Northing:	1,901,069.65 usft	Latitude:	36.224774
	+E/-W	-50.44 usft	Easting:	524,307.46 usft	Longitude:	-107.750922
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,719.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/13/2017	9.03	62.85	49,661

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	307.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	135.24

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
307.00	1.32	227.15	306.96	-2.97	-1.58	0.00	0.00	0.00	0.00	
373.00	0.00	0.00	372.96	-3.48	-2.13	2.00	-2.00	0.00	180.00	
500.04	0.00	0.00	500.00	-3.48	-2.13	0.00	0.00	0.00	0.00	
1,771.23	25.42	247.89	1,729.88	-107.90	-259.16	2.00	2.00	0.00	247.89	
4,371.23	25.42	247.89	4,078.09	-528.03	-1,293.29	0.00	0.00	0.00	0.00	
5,479.16	90.22	135.24	4,757.00	-1,186.00	-1,062.00	9.00	5.85	-10.17	-110.56	
14,901.71	90.21	135.24	4,722.00	-7,876.68	5,572.60	0.00	0.00	0.00	162.51	755H BHL

Scientific Drilling Int.

Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT 755H
Company:	WPX Energy	TVD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Site:	W Lybrook UT 716 Pad	North Reference:	True
Well:	W Lybrook UT 755H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
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	0.53	60.28	51.00	0.07	0.12	0.04	1.77	1.77	0.00
81.00	0.06	346.32	81.00	0.15	0.24	0.06	1.72	-1.57	-246.53
111.00	0.45	226.44	111.00	0.09	0.15	0.04	1.61	1.30	-399.60
141.00	0.82	195.04	141.00	-0.20	0.01	0.15	1.65	1.23	-104.67
171.00	1.04	193.03	170.99	-0.67	-0.11	0.40	0.74	0.73	-6.70
201.00	1.10	198.47	200.99	-1.21	-0.26	0.68	0.39	0.20	18.13
231.00	1.16	207.64	230.98	-1.75	-0.49	0.90	0.63	0.20	30.57
261.00	1.23	220.86	260.98	-2.27	-0.85	1.01	0.95	0.23	44.07
291.00	1.26	229.40	290.97	-2.73	-1.31	1.01	0.63	0.10	28.47
307.00	1.32	227.15	306.96	-2.97	-1.58	1.00	0.49	0.38	-14.06
Start Drop -2.00									
373.00	0.00	0.00	372.96	-3.48	-2.13	0.97	2.00	-2.00	0.00
Start 127.04 hold at 373.00 MD									
400.00	0.00	0.00	399.96	-3.48	-2.13	0.97	0.00	0.00	0.00
500.04	0.00	0.00	500.00	-3.48	-2.13	0.97	0.00	0.00	0.00
Start Build 2.00									
600.00	2.00	247.89	599.94	-4.14	-3.75	0.30	2.00	2.00	0.00
700.00	4.00	247.89	699.80	-6.11	-8.60	-1.72	2.00	2.00	0.00
800.00	6.00	247.89	799.41	-9.39	-16.67	-5.07	2.00	2.00	0.00
900.00	8.00	247.89	898.66	-13.97	-27.96	-9.76	2.00	2.00	0.00
1,000.00	10.00	247.89	997.42	-19.86	-42.45	-15.79	2.00	2.00	0.00
1,100.00	12.00	247.89	1,095.58	-27.04	-60.12	-23.13	2.00	2.00	0.00
1,200.00	14.00	247.89	1,193.02	-35.51	-80.96	-31.80	2.00	2.00	0.00
1,300.00	16.00	247.89	1,289.60	-45.25	-104.94	-41.76	2.00	2.00	0.00
1,400.00	18.00	247.89	1,385.23	-56.25	-132.02	-53.02	2.00	2.00	0.00
1,500.00	20.00	247.89	1,479.78	-68.50	-162.18	-65.56	2.00	2.00	0.00
1,600.00	22.00	247.89	1,573.13	-81.99	-195.38	-79.36	2.00	2.00	0.00
1,700.00	24.00	247.89	1,665.18	-96.70	-231.58	-94.40	2.00	2.00	0.00
1,771.23	25.42	247.89	1,729.88	-107.90	-259.16	-105.87	2.00	2.00	0.00
Start 2600.00 hold at 1771.23 MD									
1,800.00	25.42	247.89	1,755.87	-112.55	-270.61	-110.63	0.00	0.00	0.00
1,900.00	25.42	247.89	1,846.18	-128.71	-310.38	-127.16	0.00	0.00	0.00
2,000.00	25.42	247.89	1,936.50	-144.87	-350.16	-143.69	0.00	0.00	0.00
2,100.00	25.42	247.89	2,026.81	-161.03	-389.93	-160.22	0.00	0.00	0.00
2,200.00	25.42	247.89	2,117.13	-177.19	-429.70	-176.76	0.00	0.00	0.00
2,300.00	25.42	247.89	2,207.44	-193.35	-469.48	-193.29	0.00	0.00	0.00
2,400.00	25.42	247.89	2,297.76	-209.50	-509.25	-209.82	0.00	0.00	0.00
2,500.00	25.42	247.89	2,388.08	-225.66	-549.03	-226.36	0.00	0.00	0.00
2,600.00	25.42	247.89	2,478.39	-241.82	-588.80	-242.89	0.00	0.00	0.00
2,700.00	25.42	247.89	2,568.71	-257.98	-628.57	-259.42	0.00	0.00	0.00
2,800.00	25.42	247.89	2,659.02	-274.14	-668.35	-275.95	0.00	0.00	0.00
2,900.00	25.42	247.89	2,749.34	-290.30	-708.12	-292.49	0.00	0.00	0.00
3,000.00	25.42	247.89	2,839.66	-306.46	-747.90	-309.02	0.00	0.00	0.00
3,100.00	25.42	247.89	2,929.97	-322.62	-787.67	-325.55	0.00	0.00	0.00
3,200.00	25.42	247.89	3,020.29	-338.77	-827.44	-342.08	0.00	0.00	0.00
3,300.00	25.42	247.89	3,110.60	-354.93	-867.22	-358.62	0.00	0.00	0.00
3,400.00	25.42	247.89	3,200.92	-371.09	-906.99	-375.15	0.00	0.00	0.00
3,500.00	25.42	247.89	3,291.23	-387.25	-946.77	-391.68	0.00	0.00	0.00
3,600.00	25.42	247.89	3,381.55	-403.41	-986.54	-408.22	0.00	0.00	0.00
3,700.00	25.42	247.89	3,471.87	-419.57	-1,026.31	-424.75	0.00	0.00	0.00

Scientific Drilling Int.

Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT 755H
Company:	WPX Energy	TVD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Site:	W Lybrook UT 716 Pad	North Reference:	True
Well:	W Lybrook UT 755H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
3,800.00	25.42	247.89	3,562.18	-435.73	-1,066.09	-441.28	0.00	0.00	0.00
3,900.00	25.42	247.89	3,652.50	-451.88	-1,105.86	-457.81	0.00	0.00	0.00
4,000.00	25.42	247.89	3,742.81	-468.04	-1,145.63	-474.35	0.00	0.00	0.00
4,100.00	25.42	247.89	3,833.13	-484.20	-1,185.41	-490.88	0.00	0.00	0.00
4,200.00	25.42	247.89	3,923.44	-500.36	-1,225.18	-507.41	0.00	0.00	0.00
4,300.00	25.42	247.89	4,013.76	-516.52	-1,264.96	-523.94	0.00	0.00	0.00
4,371.23	25.42	247.89	4,078.09	-528.03	-1,293.29	-535.72	0.00	0.00	0.00
Start DLS 9.00 TFO -110.56 - KOP									
4,400.00	24.63	242.06	4,104.16	-533.16	-1,304.31	-539.83	9.00	-2.77	-20.25
4,450.00	23.81	231.26	4,149.79	-544.36	-1,321.39	-543.91	9.00	-1.62	-21.61
4,500.00	23.79	220.09	4,195.56	-558.40	-1,335.77	-544.06	9.00	-0.05	-22.33
4,550.00	24.55	209.25	4,241.20	-575.19	-1,347.34	-540.30	9.00	1.53	-21.69
4,600.00	26.04	199.29	4,286.42	-594.62	-1,356.05	-532.63	9.00	2.97	-19.91
4,650.00	28.13	190.53	4,330.95	-616.58	-1,361.83	-521.11	9.00	4.18	-17.53
4,700.00	30.70	183.00	4,374.52	-640.93	-1,364.66	-505.81	9.00	5.15	-15.06
4,750.00	33.65	176.60	4,416.85	-667.52	-1,364.51	-486.82	9.00	5.89	-12.80
4,800.00	36.87	171.16	4,457.68	-696.18	-1,361.38	-464.27	9.00	6.45	-10.89
4,850.00	40.31	166.50	4,496.76	-726.75	-1,355.29	-438.28	9.00	6.88	-9.32
4,900.00	43.91	162.47	4,533.86	-759.02	-1,346.29	-409.02	9.00	7.20	-8.06
4,950.00	47.63	158.94	4,568.73	-792.81	-1,334.42	-376.68	9.00	7.45	-7.06
5,000.00	51.45	155.81	4,601.18	-827.90	-1,319.76	-341.44	9.00	7.64	-6.26
5,050.00	55.35	153.00	4,630.99	-864.07	-1,302.41	-303.53	9.00	7.79	-5.62
5,100.00	59.30	150.44	4,657.98	-901.12	-1,282.46	-263.18	9.00	7.91	-5.11
5,150.00	63.30	148.09	4,681.99	-938.79	-1,260.04	-220.64	9.00	8.00	-4.71
5,200.00	67.33	145.90	4,702.87	-976.87	-1,235.28	-176.17	9.00	8.07	-4.38
5,250.00	71.40	143.83	4,720.49	-1,015.12	-1,208.35	-130.05	9.00	8.13	-4.13
5,300.00	75.48	141.86	4,734.74	-1,053.31	-1,179.41	-82.55	9.00	8.17	-3.94
5,350.00	79.58	139.96	4,745.53	-1,091.19	-1,148.63	-33.98	9.00	8.20	-3.80
5,400.00	83.69	138.12	4,752.80	-1,128.53	-1,116.21	15.36	9.00	8.22	-3.70
5,450.00	87.81	136.30	4,756.50	-1,165.11	-1,082.34	65.18	9.00	8.24	-3.64
5,479.16	90.22	135.24	4,757.00	-1,186.00	-1,062.00	94.34	9.00	8.24	-3.62
Start DLS 0.00 TFO 162.51									
5,500.00	90.22	135.24	4,756.92	-1,200.80	-1,047.33	115.18	0.00	0.00	0.00
5,600.00	90.22	135.24	4,756.54	-1,271.80	-976.91	215.17	0.00	0.00	0.00
5,630.31	90.22	135.24	4,756.43	-1,293.32	-955.57	245.48	0.00	0.00	0.00
7"									
5,700.00	90.22	135.24	4,756.17	-1,342.81	-906.50	315.17	0.00	0.00	0.00
5,800.00	90.22	135.24	4,755.79	-1,413.81	-836.09	415.17	0.00	0.00	0.00
5,900.00	90.22	135.24	4,755.41	-1,484.82	-765.68	515.17	0.00	0.00	0.00
6,000.00	90.22	135.24	4,755.04	-1,555.82	-695.26	615.17	0.00	0.00	0.00
6,100.00	90.22	135.24	4,754.66	-1,626.83	-624.85	715.17	0.00	0.00	0.00
6,200.00	90.22	135.24	4,754.28	-1,697.84	-554.44	815.17	0.00	0.00	0.00
6,300.00	90.22	135.24	4,753.91	-1,768.84	-484.02	915.17	0.00	0.00	0.00
6,400.00	90.22	135.24	4,753.53	-1,839.85	-413.61	1,015.17	0.00	0.00	0.00
6,500.00	90.22	135.24	4,753.15	-1,910.85	-343.20	1,115.17	0.00	0.00	0.00
6,600.00	90.22	135.24	4,752.78	-1,981.86	-272.78	1,215.17	0.00	0.00	0.00
6,700.00	90.22	135.24	4,752.40	-2,052.87	-202.37	1,315.17	0.00	0.00	0.00
6,800.00	90.22	135.24	4,752.02	-2,123.87	-131.96	1,415.17	0.00	0.00	0.00
6,900.00	90.22	135.24	4,751.65	-2,194.88	-61.54	1,515.17	0.00	0.00	0.00
7,000.00	90.22	135.24	4,751.27	-2,265.88	8.87	1,615.16	0.00	0.00	0.00
7,100.00	90.22	135.24	4,750.90	-2,336.89	79.28	1,715.16	0.00	0.00	0.00

Scientific Drilling Int.

Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT 755H
Company:	WPX Energy	TVD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Site:	W Lybrook UT 716 Pad	North Reference:	True
Well:	W Lybrook UT 755H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
7,200.00	90.22	135.24	4,750.52	-2,407.90	149.69	1,815.16	0.00	0.00	0.00
7,300.00	90.21	135.24	4,750.15	-2,478.90	220.11	1,915.16	0.00	0.00	0.00
7,400.00	90.21	135.24	4,749.77	-2,549.91	290.52	2,015.16	0.00	0.00	0.00
7,500.00	90.21	135.24	4,749.40	-2,620.92	360.93	2,115.16	0.00	0.00	0.00
7,600.00	90.21	135.24	4,749.02	-2,691.92	431.35	2,215.16	0.00	0.00	0.00
7,700.00	90.21	135.24	4,748.65	-2,762.93	501.76	2,315.16	0.00	0.00	0.00
7,800.00	90.21	135.24	4,748.27	-2,833.94	572.17	2,415.16	0.00	0.00	0.00
7,900.00	90.21	135.24	4,747.90	-2,904.94	642.58	2,515.16	0.00	0.00	0.00
8,000.00	90.21	135.24	4,747.52	-2,975.95	713.00	2,615.16	0.00	0.00	0.00
8,100.00	90.21	135.24	4,747.15	-3,046.95	783.41	2,715.16	0.00	0.00	0.00
8,200.00	90.21	135.24	4,746.78	-3,117.96	853.82	2,815.16	0.00	0.00	0.00
8,300.00	90.21	135.24	4,746.40	-3,188.97	924.23	2,915.16	0.00	0.00	0.00
8,400.00	90.21	135.24	4,746.03	-3,259.97	994.65	3,015.15	0.00	0.00	0.00
8,500.00	90.21	135.24	4,745.65	-3,330.98	1,065.06	3,115.15	0.00	0.00	0.00
8,600.00	90.21	135.24	4,745.28	-3,401.99	1,135.47	3,215.15	0.00	0.00	0.00
8,700.00	90.21	135.24	4,744.91	-3,472.99	1,205.88	3,315.15	0.00	0.00	0.00
8,800.00	90.21	135.24	4,744.53	-3,544.00	1,276.30	3,415.15	0.00	0.00	0.00
8,900.00	90.21	135.24	4,744.16	-3,615.01	1,346.71	3,515.15	0.00	0.00	0.00
9,000.00	90.21	135.24	4,743.79	-3,686.01	1,417.12	3,615.15	0.00	0.00	0.00
9,100.00	90.21	135.24	4,743.42	-3,757.02	1,487.53	3,715.15	0.00	0.00	0.00
9,200.00	90.21	135.24	4,743.04	-3,828.03	1,557.95	3,815.15	0.00	0.00	0.00
9,300.00	90.21	135.24	4,742.67	-3,899.03	1,628.36	3,915.15	0.00	0.00	0.00
9,400.00	90.21	135.24	4,742.30	-3,970.04	1,698.77	4,015.15	0.00	0.00	0.00
9,500.00	90.21	135.24	4,741.92	-4,041.05	1,769.18	4,115.15	0.00	0.00	0.00
9,600.00	90.21	135.24	4,741.55	-4,112.06	1,839.60	4,215.15	0.00	0.00	0.00
9,700.00	90.21	135.24	4,741.18	-4,183.06	1,910.01	4,315.15	0.00	0.00	0.00
9,800.00	90.21	135.24	4,740.81	-4,254.07	1,980.42	4,415.15	0.00	0.00	0.00
9,900.00	90.21	135.24	4,740.44	-4,325.08	2,050.83	4,515.14	0.00	0.00	0.00
10,000.00	90.21	135.24	4,740.06	-4,396.08	2,121.24	4,615.14	0.00	0.00	0.00
10,100.00	90.21	135.24	4,739.69	-4,467.09	2,191.66	4,715.14	0.00	0.00	0.00
10,200.00	90.21	135.24	4,739.32	-4,538.10	2,262.07	4,815.14	0.00	0.00	0.00
10,300.00	90.21	135.24	4,738.95	-4,609.10	2,332.48	4,915.14	0.00	0.00	0.00
10,400.00	90.21	135.24	4,738.58	-4,680.11	2,402.89	5,015.14	0.00	0.00	0.00
10,500.00	90.21	135.24	4,738.21	-4,751.12	2,473.30	5,115.14	0.00	0.00	0.00
10,600.00	90.21	135.24	4,737.84	-4,822.13	2,543.72	5,215.14	0.00	0.00	0.00
10,700.00	90.21	135.24	4,737.47	-4,893.13	2,614.13	5,315.14	0.00	0.00	0.00
10,800.00	90.21	135.24	4,737.10	-4,964.14	2,684.54	5,415.14	0.00	0.00	0.00
10,900.00	90.21	135.24	4,736.72	-5,035.15	2,754.95	5,515.14	0.00	0.00	0.00
11,000.00	90.21	135.24	4,736.35	-5,106.16	2,825.36	5,615.14	0.00	0.00	0.00
11,100.00	90.21	135.24	4,735.98	-5,177.16	2,895.78	5,715.14	0.00	0.00	0.00
11,200.00	90.21	135.24	4,735.61	-5,248.17	2,966.19	5,815.14	0.00	0.00	0.00
11,300.00	90.21	135.24	4,735.24	-5,319.18	3,036.60	5,915.13	0.00	0.00	0.00
11,400.00	90.21	135.24	4,734.87	-5,390.18	3,107.01	6,015.13	0.00	0.00	0.00
11,500.00	90.21	135.24	4,734.50	-5,461.19	3,177.42	6,115.13	0.00	0.00	0.00
11,600.00	90.21	135.24	4,734.13	-5,532.20	3,247.83	6,215.13	0.00	0.00	0.00
11,700.00	90.21	135.24	4,733.76	-5,603.21	3,318.25	6,315.13	0.00	0.00	0.00
11,800.00	90.21	135.24	4,733.40	-5,674.21	3,388.66	6,415.13	0.00	0.00	0.00
11,900.00	90.21	135.24	4,733.03	-5,745.22	3,459.07	6,515.13	0.00	0.00	0.00
12,000.00	90.21	135.24	4,732.66	-5,816.23	3,529.48	6,615.13	0.00	0.00	0.00
12,100.00	90.21	135.24	4,732.29	-5,887.24	3,599.89	6,715.13	0.00	0.00	0.00
12,200.00	90.21	135.24	4,731.92	-5,958.25	3,670.30	6,815.13	0.00	0.00	0.00
12,300.00	90.21	135.24	4,731.55	-6,029.25	3,740.71	6,915.13	0.00	0.00	0.00

Scientific Drilling Int.

Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT 755H
Company:	WPX Energy	TVD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Site:	W Lybrook UT 716 Pad	North Reference:	True
Well:	W Lybrook UT 755H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)	
12,400.00	90.21	135.24	4,731.18	-6,100.26	3,811.13	7,015.13	0.00	0.00	0.00	
12,500.00	90.21	135.24	4,730.81	-6,171.27	3,881.54	7,115.13	0.00	0.00	0.00	
12,600.00	90.21	135.24	4,730.44	-6,242.28	3,951.95	7,215.13	0.00	0.00	0.00	
12,700.00	90.21	135.24	4,730.08	-6,313.28	4,022.36	7,315.13	0.00	0.00	0.00	
12,800.00	90.21	135.24	4,729.71	-6,384.29	4,092.77	7,415.12	0.00	0.00	0.00	
12,900.00	90.21	135.24	4,729.34	-6,455.30	4,163.18	7,515.12	0.00	0.00	0.00	
13,000.00	90.21	135.24	4,728.97	-6,526.31	4,233.59	7,615.12	0.00	0.00	0.00	
13,100.00	90.21	135.24	4,728.60	-6,597.32	4,304.00	7,715.12	0.00	0.00	0.00	
13,200.00	90.21	135.24	4,728.24	-6,668.32	4,374.42	7,815.12	0.00	0.00	0.00	
13,300.00	90.21	135.24	4,727.87	-6,739.33	4,444.83	7,915.12	0.00	0.00	0.00	
13,400.00	90.21	135.24	4,727.50	-6,810.34	4,515.24	8,015.12	0.00	0.00	0.00	
13,500.00	90.21	135.24	4,727.13	-6,881.35	4,585.65	8,115.12	0.00	0.00	0.00	
13,600.00	90.21	135.24	4,726.77	-6,952.36	4,656.06	8,215.12	0.00	0.00	0.00	
13,700.00	90.21	135.24	4,726.40	-7,023.36	4,726.47	8,315.12	0.00	0.00	0.00	
13,800.00	90.21	135.24	4,726.03	-7,094.37	4,796.88	8,415.12	0.00	0.00	0.00	
13,900.00	90.21	135.24	4,725.67	-7,165.38	4,867.29	8,515.12	0.00	0.00	0.00	
14,000.00	90.21	135.24	4,725.30	-7,236.39	4,937.70	8,615.12	0.00	0.00	0.00	
14,100.00	90.21	135.24	4,724.93	-7,307.40	5,008.12	8,715.12	0.00	0.00	0.00	
14,200.00	90.21	135.24	4,724.57	-7,378.40	5,078.53	8,815.12	0.00	0.00	0.00	
14,300.00	90.21	135.24	4,724.20	-7,449.41	5,148.94	8,915.11	0.00	0.00	0.00	
14,400.00	90.21	135.24	4,723.83	-7,520.42	5,219.35	9,015.11	0.00	0.00	0.00	
14,500.00	90.21	135.24	4,723.47	-7,591.43	5,289.76	9,115.11	0.00	0.00	0.00	
14,600.00	90.21	135.24	4,723.10	-7,662.44	5,360.17	9,215.11	0.00	0.00	0.00	
14,700.00	90.21	135.24	4,722.74	-7,733.45	5,430.58	9,315.11	0.00	0.00	0.00	
14,800.00	90.21	135.24	4,722.37	-7,804.46	5,500.99	9,415.11	0.00	0.00	0.00	
14,901.71	90.21	135.24	4,722.00	-7,876.68	5,572.60	9,516.82	0.00	0.00	0.00	
TD at 14901.71										

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									
755H BHL	0.00	0.00	4,722.00	-7,876.68	5,572.60	1,893,197.71	529,886.75	36.203134	-107.732034
- plan hits target center									
- Point									
755H POE	0.00	0.00	4,757.00	-1,293.32	-955.10	1,899,775.51	523,353.45	36.221221	-107.754160
- plan misses target center by 0.66usft at 5630.64usft MD (4756.43 TVD, -1293.56 N, -955.34 E)									
- Point									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
5,630.31	4,756.43	7"	7	8-3/4

Scientific Drilling Int.

Planning Report

Database:	Grand Junction District	Local Co-ordinate Reference:	Well W Lybrook UT 755H
Company:	WPX Energy	TVD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Project:	T23N R9W	MD Reference:	GL 6719 + KB 21 = @ 6740.00usft (Cyclone 32)
Site:	W Lybrook UT 716 Pad	North Reference:	True
Well:	W Lybrook UT 755H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
307.00	306.96	-2.97	-1.58	Start Drop -2.00
373.00	372.96	-3.48	-2.13	Start 127.04 hold at 373.00 MD
500.04	500.00	-3.48	-2.13	Start Build 2.00
1,771.23	1,729.88	-107.90	-259.16	Start 2600.00 hold at 1771.23 MD
4,371.23	4,078.09	-528.03	-1,293.29	Start DLS 9.00 TFO -110.56
4,371.23	4,078.09	-528.03	-1,293.29	KOP
5,479.16	4,757.00	-1,186.00	-1,062.00	Start DLS 0.00 TFO 162.51
14,901.71	4,722.00	-7,876.68	5,572.60	TD at 14901.71