RECEIVED

APR 20 2016

Farmington Field Office
Bureau of Land Management

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM 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.*

5. Lease Serial No.
NMNM 057164

6. If Indian, Allottee or Tribe Name

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

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Lybrook 2309 34B #765

2. Name of Operator
WPX Energy Production, LLC

9. API Well No.
30-045-35731

3a. Address
PO Box 640 Aztec, NM 87410

3b. Phone No. *(include area code)*
505-333-1808

10. Field and Pool or Exploratory Area
Basin Mancos

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
SHL: 550' FNL & 1508' FEL SEC 34 23N 9W
BHL: 399' FNL & 1516' FEL SEC 34 23N 9W

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 **Amended Change in Plans**
	☒ 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 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.)

WPX request a change in plans from 7" to 5 ½" Production String and TD depth from 6816' to 5316' per attached OPS & Directional Drill Plans. This will no longer be an injection well, at this time.

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations

OIL CONS. DIV DIST. 3
APR 26 2016

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

Title Permit Tech III

Signature

4/19/16

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by
Abdelgadir Elmadani

Title PE

Date 4/25/16

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 FFO

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)

NMOCD

WPXENERGY

WPX Energy

Operations Plan

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

Date:	April 19, 2016	**Field:**	Basin Mancos
Well Name:	Lybrook 2309-34B #765	**Surface:**	Federal
SH Location:	NWNE Sec 34 23N-09W	**Elevation:**	6696' GR
BH Location:	NWNE Sec 34 23N-09W	**Minerals:**	Federal

Measured Depth: 5,316.28'

I. **GEOLOGY:** SURFACE FORMATION - NACIMIENTO

A. FORMATION TOPS (KB)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	317	317	POINT LOOKOUT	3,292	3,286
KIRTLAND	466	466	MANCOS	3,433	3,427
PICTURED CLIFFS	947	946	GALLUP	3,610	3,604
LEWIS	1,049	1,048	GREENHORN	5,208	5,202
CHACRA	1,300	1,298	DAKOTA	5,300	5,294
CLIFF HOUSE	2,227	2,221	ENTRADA	6,515	6,509
MENEFEE	2,297	2,291	TD	5,316.28	5,310.00

B. MUD LOGGING PROGRAM: Mudlogger on location from surface csg to TD.

C. LOGGING PROGRAM: OH Wireline logs from surface casing to TD. LWD GR from surface casing to TD. Primary target is Macos Gallup. ~~We are planning to evaluate Dacota and Entrada with mud and wireline logs.~~

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

E. CORE: Acquire approximately 575' of whole core at approximately 3975'-4550'

II. DRILLING

A. **MUD PROGRAM:** LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 ¾" Directional Vertical hole. 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 anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Pressure test surface casing to **600 psi for 30 minutes** and intermediate casing to **1500 psi for 30 minutes.** Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **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
PRODUCTION	8.75"	0' - 5,316.28'	5-1/2"	17 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. PRODUCTION: Run 5-1/2" Production casing with cement nose guide Float Shoe + 1 jt. of 5-1/2" casing + Float collar.
Centralizer program: Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to surface.

C. **CEMENTING:**

(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. Production: STAGE 1: Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 49 bbls, 141 sks, (278 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 214 bbls, 923 sks, (1199 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 124 bbl Drilling mud or water.
Total Cement: 263 bbls, 1064 sks, (1477 cuft)

I. COMPLETION

A. **CBL**

Run CCL for perforating

A. **PRESSURE TEST**

1. Pressure test 5-1/2" casing to 5,000 psi max, for 30 minutes.

B. **STIMULATION**

1. Perform one or more DFITs in the Gallup/Mancos interval
2. Isolate each DFIT interval with a bridge plug.
3. Stimulate with approximately 235,000 lbs 20/40 sand, 1500 bbls water, 1.8 MMscf Nitrogen.
4. Isolate stages with flow through frac plug.
5. Drill out frac plugs and flowback for test only for a 3-6 month period.
6. Retrieve remaining bridge plugs once production test is complete.

C. **RUNNING TUBING**

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

NOTE:

Proposed Operations:

WPX Energy

T23N R9W
2309-34B WLU
Lybrook 2309-34B #765 - Slot A3

Wellbore #1

Plan: Design #2 5Jan16 sam

Standard Planning Report

20 January, 2016

WPX
Planning Report

Database:	COMPASS	**Local Co-ordinate Reference:**	Well Lybrook 2309-34B #765 (A3) - Slot A3
Company:	WPX Energy	**TVD Reference:**	GL @ 6696.00usft (Original Well Elev)
Project:	T23N R9W	**MD Reference:**	GL @ 6696.00usft (Original Well Elev)
Site:	2309-34B WLU	**North Reference:**	True
Well:	Lybrook 2309-34B #765	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 5Jan16 sam		

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:**	36.189179
From:	Lat/Long	**Easting:**	518,148.80 usft	**Longitude:**	-107.771830
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.04 °

Well	Lybrook 2309-34B #765H - Slot A3					
Well Position	**+N/-S**	0.00 usft	**Northing:**	1,888,108.09 usft	**Latitude:**	36.189179
	+E/-W	0.00 usft	**Easting:**	518,148.80 usft	**Longitude:**	-107.771830
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)**
	IGRF2015	1/8/2016	9.35	62.88	49,872

Design	Design #2 5Jan16 sam				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (bearing)**	
	0.00	0.00	0.00	0.00	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
751.95	5.04	357.23	751.62	11.06	-0.53	2.00	2.00	0.00	357.23	
2,180.35	5.04	357.23	2,174.50	136.37	-6.59	0.00	0.00	0.00	0.00	
2,516.28	0.00	0.00	2,510.00	151.12	-7.30	1.50	-1.50	0.00	180.00	
5,316.28	0.00	0.00	5,310.00	151.12	-7.30	0.00	0.00	0.00	0.00	BHL #765

WPX

Planning Report

Database:	COMPASS	**Local Co-ordinate Reference:**	Well Lybrook 2309-34B #765 (A3) - Slot A3
Company:	WPX Energy	**TVD Reference:**	GL @ 6696.00usft (Original Well Elev)
Project:	T23N R9W	**MD Reference:**	GL @ 6696.00usft (Original Well Elev)
Site:	2309-34B WLU	**North Reference:**	True
Well:	Lybrook 2309-34B #765	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 5Jan16 sam		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	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
320.00	0.00	0.00	320.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
751.95	5.04	357.23	751.62	11.06	-0.53	11.06	2.00	2.00	0.00
Hold 5.04 Inclination									
1,000.00	5.04	357.23	998.72	32.82	-1.59	32.82	0.00	0.00	0.00
1,500.00	5.04	357.23	1,496.78	76.69	-3.70	76.69	0.00	0.00	0.00
2,000.00	5.04	357.23	1,994.85	120.55	-5.82	120.55	0.00	0.00	0.00
2,180.35	5.04	357.23	2,174.50	136.37	-6.59	136.37	0.00	0.00	0.00
Start Drop -1.50									
2,500.00	0.24	357.23	2,493.72	151.08	-7.30	151.08	1.50	-1.50	0.00
2,516.28	0.00	0.00	2,510.00	151.12	-7.30	151.12	1.50	-1.50	16.99
Vertical									
3,000.00	0.00	0.00	2,993.72	151.12	-7.30	151.12	0.00	0.00	0.00
3,500.00	0.00	0.00	3,493.72	151.12	-7.30	151.12	0.00	0.00	0.00
4,000.00	0.00	0.00	3,993.72	151.12	-7.30	151.12	0.00	0.00	0.00
4,276.28	0.00	0.00	4,270.00	151.12	-7.30	151.12	0.00	0.00	0.00
Mancos Lower									
4,381.28	0.00	0.00	4,375.00	151.12	-7.30	151.12	0.00	0.00	0.00
El Vado									
4,420.28	0.00	0.00	4,414.00	151.12	-7.30	151.12	0.00	0.00	0.00
Mancos Unc									
4,454.28	0.00	0.00	4,448.00	151.12	-7.30	151.12	0.00	0.00	0.00
PS3									
4,487.28	0.00	0.00	4,481.00	151.12	-7.30	151.12	0.00	0.00	0.00
PS2									
4,500.00	0.00	0.00	4,493.72	151.12	-7.30	151.12	0.00	0.00	0.00
4,508.28	0.00	0.00	4,502.00	151.12	-7.30	151.12	0.00	0.00	0.00
PS1									
4,967.28	0.00	0.00	4,961.00	151.12	-7.30	151.12	0.00	0.00	0.00
Sanastee									
5,000.00	0.00	0.00	4,993.72	151.12	-7.30	151.12	0.00	0.00	0.00
5,196.28	0.00	0.00	5,190.00	151.12	-7.30	151.12	0.00	0.00	0.00
Greenhorn									
5,281.28	0.00	0.00	5,275.00	151.12	-7.30	151.12	0.00	0.00	0.00
Dakota									
5,316.28	0.00	0.00	5,310.00	151.12	-7.30	151.12	0.00	0.00	0.00
TD at 5316.28									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL #765 - plan hits target center - Circle (radius 25.00)	0.00	0.00	5,310.00	151.12	-7.30	1,888,259.20	518,141.40	36.189594	-107.771855

WPX
Planning Report

Database:	COMPASS	**Local Co-ordinate Reference:**	Well Lybrook 2309-34B #765 (A3) - Slot A3
Company:	WPX Energy	**TVD Reference:**	GL @ 6696.00usft (Original Well Elev)
Project:	T23N R9W	**MD Reference:**	GL @ 6696.00usft (Original Well Elev)
Site:	2309-34B WLU	**North Reference:**	True
Well:	Lybrook 2309-34B #765	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 5Jan16 sam		

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
320.00	320.00	9 5/8"	9.620	12.250

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)
4,276.28	4,270.00	Mancos Lower		0.00	
4,381.28	4,375.00	El Vado		0.00	
4,420.28	4,414.00	Mancos Unc		0.00	
4,454.28	4,448.00	PS3		0.00	
4,487.28	4,481.00	PS2		0.00	
4,508.28	4,502.00	PS1		0.00	
4,967.28	4,961.00	Sanastee		0.00	
5,196.28	5,190.00	Greenhorn		0.00	
5,281.28	5,275.00	Dakota		0.00	

Plan Annotations

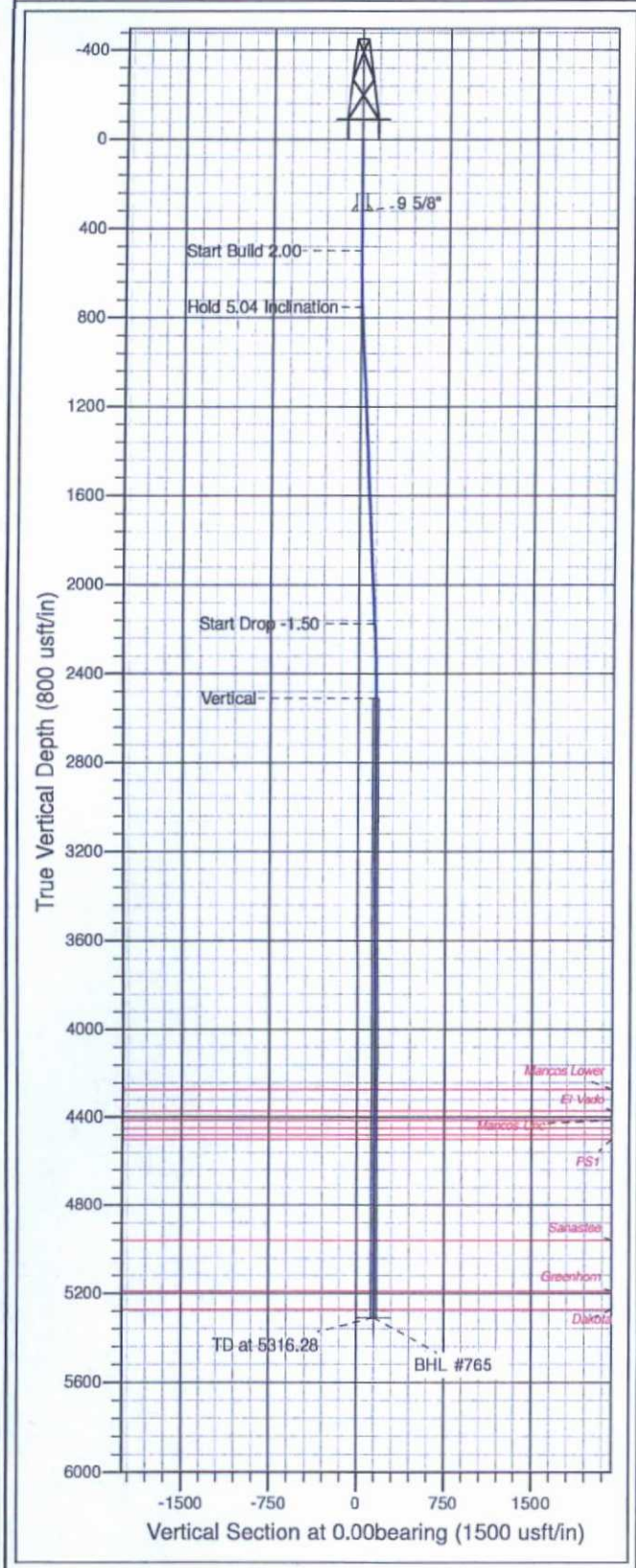
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
500.00	500.00	0.00	0.00	Start Build 2.00
751.95	751.62	11.06	-0.53	Hold 5.04 Inclination
2,180.35	2,174.50	136.37	-6.59	Start Drop -1.50
2,516.28	2,510.00	151.12	-7.30	Vertical
5,316.28	5,310.00	151.12	-7.30	TD at 5316.28

WPXENERGY

Well Name: Lybrook 2309-34B #765
Surface Location: 2309-34B WLU
NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003
Ground Elevation: 6696.00

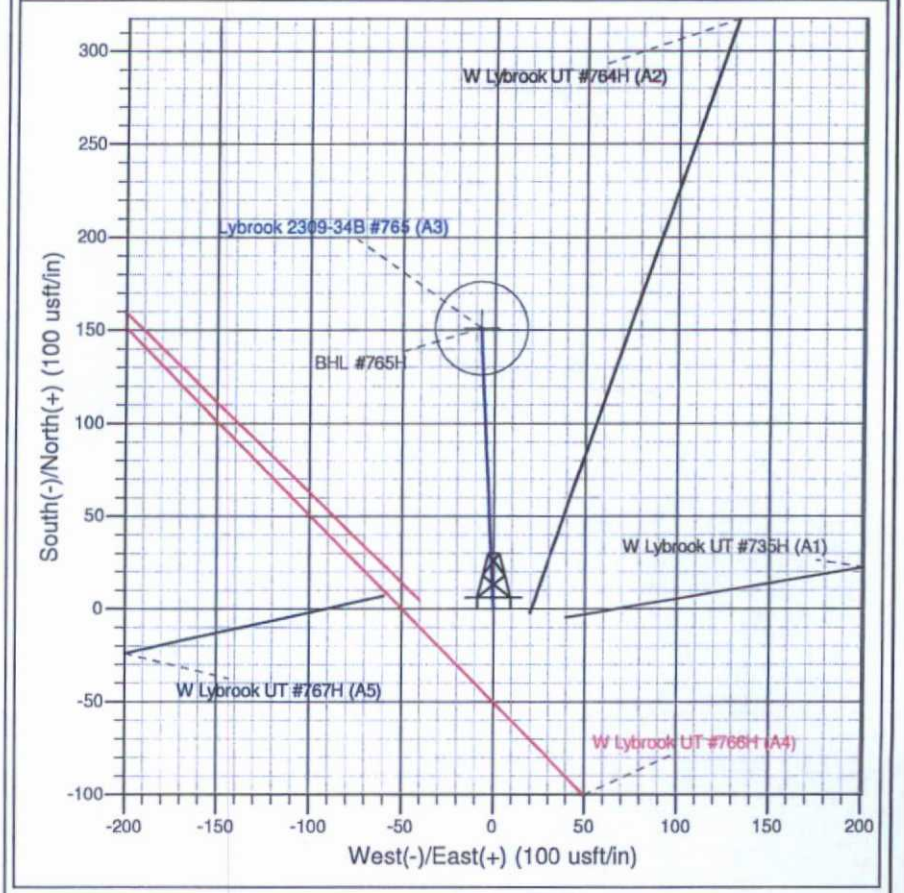
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1888108.09	518148.80	36.189179	-107.771830	A3

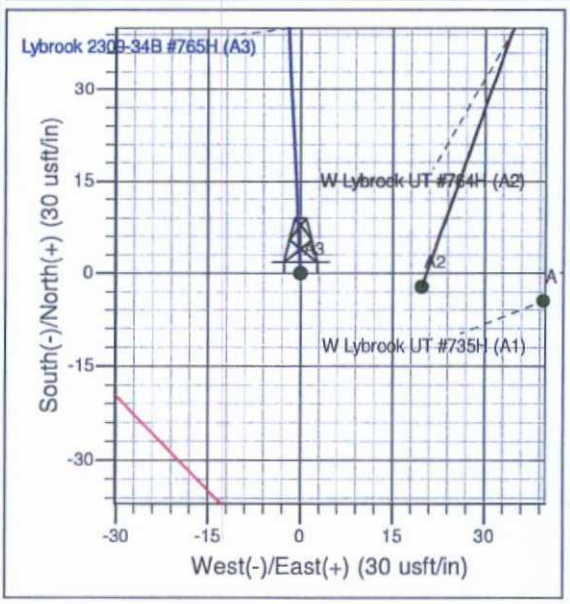
GL @ 6696.00usft (Original Well Elev)



ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
500.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
751.62	751.95	5.04	357.23	11.06	-0.53	11.06	11.07	Hold 5.04 Inclination
2174.50	2180.35	5.04	357.23	136.37	-6.59	136.37	136.53	Start Drop -1.50
2510.00	2516.28	0.00	0.00	151.12	-7.30	151.12	151.29	Vertical
5310.00	5316.28	0.00	0.00	151.12	-7.30	151.12	151.29	TD at 5316.28





Azimuths to True North
Magnetic North: 9.35°

Magnetic Field
Strength: 49871.9snT
Dip Angle: 62.88°
Date: 1/8/2016
Model: IGRF2015

Project: T23N R9W
Site: 2309-34B WLU
Well: Lybrook 2309-34B #765H
Design #2 5Jan16 sam

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL #765	5310.00	151.12	-7.30	1888259.20	518141.40	36.189594	-107.771855	Circle (Radius: 25.00)
	- plan hits target center							

RECEIVED

APR 07 2016

Farmington Field Office
Bureau of Land Management

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

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NMNM 057164

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☒ Oil Well ☐ Gas Well ☐ Other

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Lybrook 2309 34B #765

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30-045-35731

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PO Box 640 Aztec, NM 87410

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505-333-1808

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Basin Mancos

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SHL: 550' FNL & 1508' FEL SEC 34 23N 9W
BHL: 399' FNL & 1516' FEL SEC 34 23N 9W

11. Country or Parish, State
San Juan, NM

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☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other **Change in Plans**
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WPX request a change in plans to 5 ½" Production String and TD depth per attached OPS & Directional Drill Plans.

OIL CONS. DIV DIST. 3

APR 13 2016

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)* Marie E. Jaramillo Title Permit Tech III

Signature Marie E. Jaramillo 4/6/16

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by William Tambekou Title Petroleum Engineer Date 04/08/2016

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 FFO

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)

NMOCD

WPX Energy

T23N R9W
2309-34B WLU
Lybrook 2309-34B #765H - Slot A3

Wellbore #1

Plan: Design #2 5Jan16 sam

Standard Planning Report

20 January, 2016

WPX
Planning Report

Database:	COMPASS	**Local Co-ordinate Reference:**	Well Lybrook 2309-34B #765H (A3) - Slot A3
Company:	WPX Energy	**TVD Reference:**	GL @ 6696.00usft (Original Well Elev)
Project:	T23N R9W	**MD Reference:**	GL @ 6696.00usft (Original Well Elev)
Site:	2309-34B WLU	**North Reference:**	True
Well:	Lybrook 2309-34B #765H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 5Jan16 sam		

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:**	36.189179
From:	Lat/Long	**Easting:**	518,148.80 usft	**Longitude:**	-107.771830
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.04 °

Well	Lybrook 2309-34B #765H - Slot A3					
Well Position	**+N/-S**	0.00 usft	**Northing:**	1,888,108.09 usft	**Latitude:**	36.189179
	+E/-W	0.00 usft	**Easting:**	518,148.80 usft	**Longitude:**	-107.771830
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)**
	IGRF2015	1/8/2016	9.35	62.88	49,872

Design	Design #2 5Jan16 sam			
Audit Notes:				
Version:	**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (bearing)**
	0.00	0.00	0.00	0.00

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
751.95	5.04	357.23	751.62	11.06	-0.53	2.00	2.00	0.00	357.23	
2,180.35	5.04	357.23	2,174.50	136.37	-6.59	0.00	0.00	0.00	0.00	
2,516.28	0.00	0.00	2,510.00	151.12	-7.30	1.50	-1.50	0.00	180.00	
5,316.28	0.00	0.00	5,310.00	151.12	-7.30	0.00	0.00	0.00	0.00	BHL #765H

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Project:	T23N R9W	**MD Reference:**	GL @ 6696.00usft (Original Well Elev)
Site:	2309-34B WLU	**North Reference:**	True
Well:	Lybrook 2309-34B #765H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 5Jan16 sam		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	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
320.00	0.00	0.00	320.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
751.95	5.04	357.23	751.62	11.06	-0.53	11.06	2.00	2.00	0.00
Hold 5.04 Inclination									
1,000.00	5.04	357.23	998.72	32.82	-1.59	32.82	0.00	0.00	0.00
1,500.00	5.04	357.23	1,496.78	76.69	-3.70	76.69	0.00	0.00	0.00
2,000.00	5.04	357.23	1,994.85	120.55	-5.82	120.55	0.00	0.00	0.00
2,180.35	5.04	357.23	2,174.50	136.37	-6.59	136.37	0.00	0.00	0.00
Start Drop -1.50									
2,500.00	0.24	357.23	2,493.72	151.08	-7.30	151.08	1.50	-1.50	0.00
2,516.28	0.00	0.00	2,510.00	151.12	-7.30	151.12	1.50	-1.50	16.99
Vertical									
3,000.00	0.00	0.00	2,993.72	151.12	-7.30	151.12	0.00	0.00	0.00
3,500.00	0.00	0.00	3,493.72	151.12	-7.30	151.12	0.00	0.00	0.00
4,000.00	0.00	0.00	3,993.72	151.12	-7.30	151.12	0.00	0.00	0.00
4,276.28	0.00	0.00	4,270.00	151.12	-7.30	151.12	0.00	0.00	0.00
Mancos Lower									
4,381.28	0.00	0.00	4,375.00	151.12	-7.30	151.12	0.00	0.00	0.00
El Vado									
4,420.28	0.00	0.00	4,414.00	151.12	-7.30	151.12	0.00	0.00	0.00
Mancos Unc									
4,454.28	0.00	0.00	4,448.00	151.12	-7.30	151.12	0.00	0.00	0.00
PS3									
4,487.28	0.00	0.00	4,481.00	151.12	-7.30	151.12	0.00	0.00	0.00
PS2									
4,500.00	0.00	0.00	4,493.72	151.12	-7.30	151.12	0.00	0.00	0.00
4,508.28	0.00	0.00	4,502.00	151.12	-7.30	151.12	0.00	0.00	0.00
PS1									
4,967.28	0.00	0.00	4,961.00	151.12	-7.30	151.12	0.00	0.00	0.00
Sanastee									
5,000.00	0.00	0.00	4,993.72	151.12	-7.30	151.12	0.00	0.00	0.00
5,196.28	0.00	0.00	5,190.00	151.12	-7.30	151.12	0.00	0.00	0.00
Greenhorn									
5,281.28	0.00	0.00	5,275.00	151.12	-7.30	151.12	0.00	0.00	0.00
Dakota									
5,316.28	0.00	0.00	5,310.00	151.12	-7.30	151.12	0.00	0.00	0.00
TD at 5316.28									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL #765H - plan hits target center - Circle (radius 25.00)	0.00	0.00	5,310.00	151.12	-7.30	1,888,259.20	518,141.40	36.189594	-107.771855

WPX
Planning Report

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Project:	T23N R9W	**MD Reference:**	GL @ 6696.00usft (Original Well Elev)
Site:	2309-34B WLU	**North Reference:**	True
Well:	Lybrook 2309-34B #765H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 5Jan16 sam		

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
320.00	320.00	9 5/8"	9.620	12.250

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)
4,276.28	4,270.00	Mancos Lower		0.00	
4,381.28	4,375.00	El Vado		0.00	
4,420.28	4,414.00	Mancos Unc		0.00	
4,454.28	4,448.00	PS3		0.00	
4,487.28	4,481.00	PS2		0.00	
4,508.28	4,502.00	PS1		0.00	
4,967.28	4,961.00	Sanastee		0.00	
5,196.28	5,190.00	Greenhorn		0.00	
5,281.28	5,275.00	Dakota		0.00	

Plan Annotations

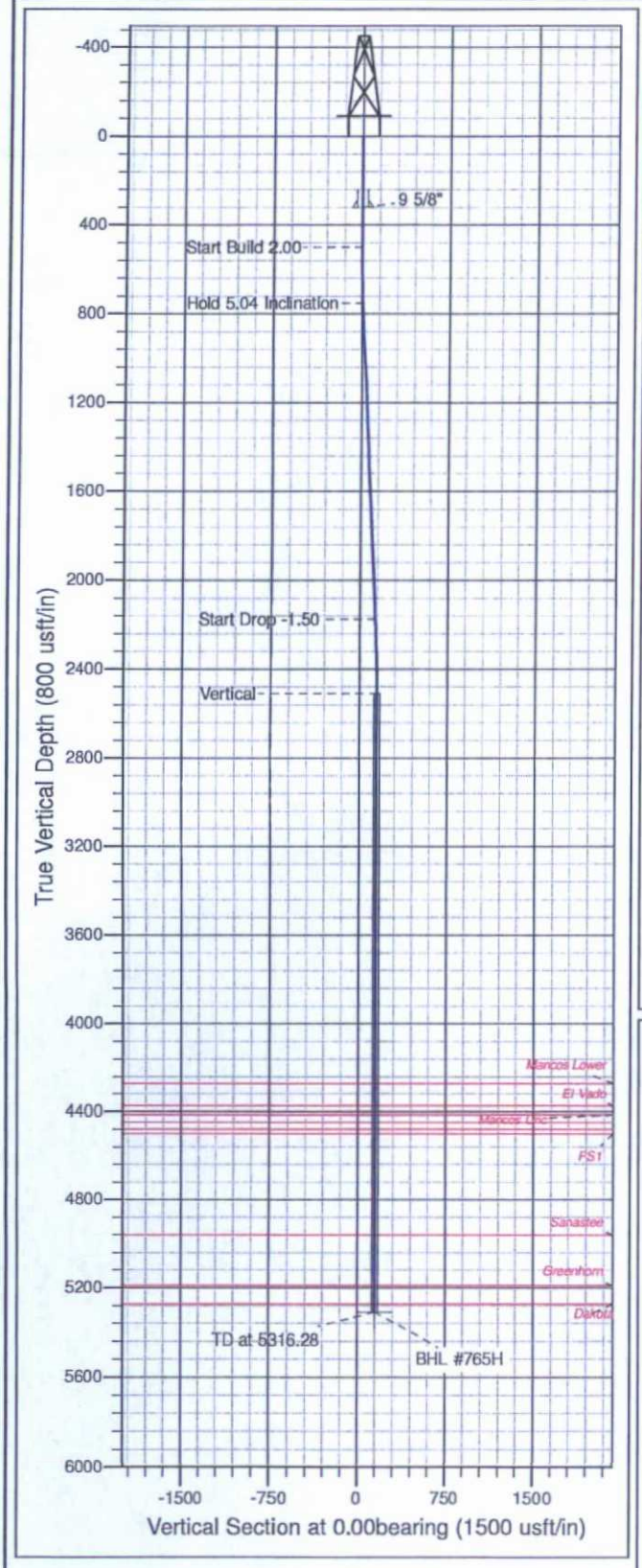
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
500.00	500.00	0.00	0.00	Start Build 2.00
751.95	751.62	11.06	-0.53	Hold 5.04 Inclination
2,180.35	2,174.50	136.37	-6.59	Start Drop -1.50
2,516.28	2,510.00	151.12	-7.30	Vertical
5,316.28	5,310.00	151.12	-7.30	TD at 5316.28

WPXENERGY

Well Name: Lybrook 2309-34B #765H
Surface Location: 2309-34B WLU
NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003
Ground Elevation: 6696.00

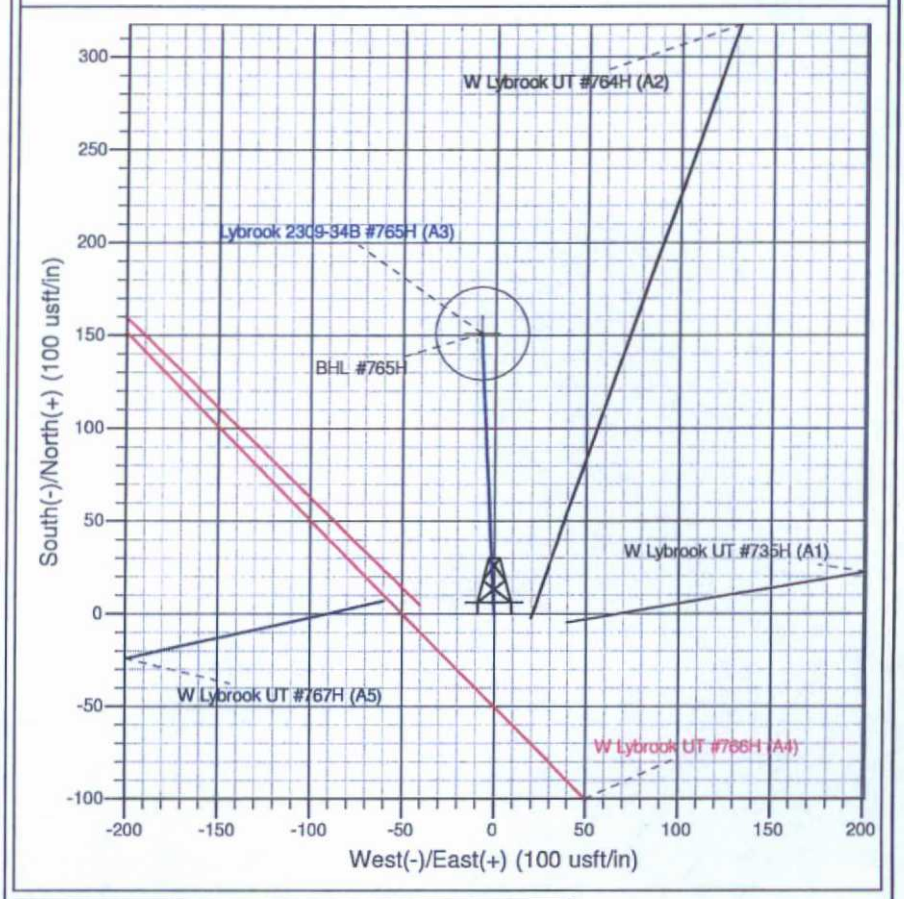
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1888108.09	518148.80	36.189179	-107.771830	A3

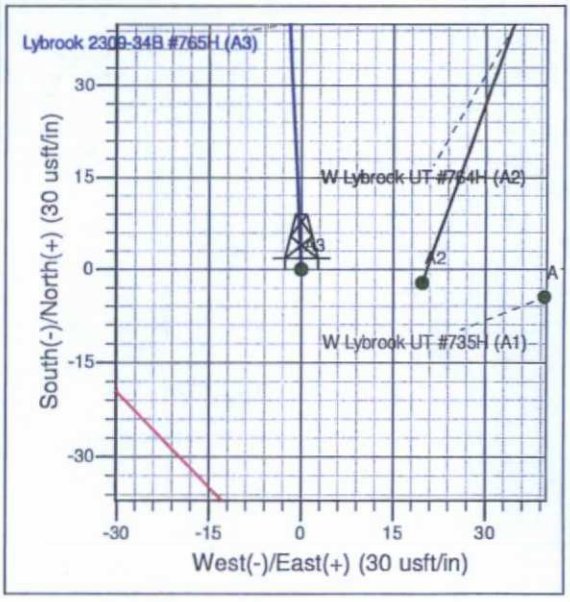
GL @ 6696.00usft (Original Well Elev)

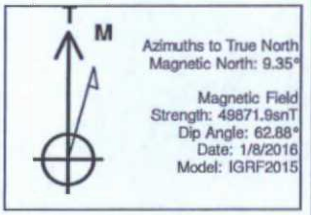


ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
500.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
751.62	751.95	5.04	357.23	11.06	-0.53	11.06	11.07	Hold 5.04 Inclination
2174.50	2180.35	5.04	357.23	136.37	-6.59	136.37	136.53	Start Drop -1.50
2510.00	2516.28	0.00	0.00	151.12	-7.30	151.12	151.29	Vertical
5310.00	5316.28	0.00	0.00	151.12	-7.30	151.12	151.29	TD at 5316.28







Azimuths to True North
Magnetic North: 9.35°

Magnetic Field
Strength: 49871.9snT
Dip Angle: 62.88°
Date: 1/8/2016
Model: IGRF2015

Project: T23N R9W
Site: 2309-34B WLU
Well: Lybrook 2309-34B #765H
Design #2 5Jan16 sam

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL #765H	5310.00	151.12	-7.30	1888259.20	518141.40	36.189594	-107.771855	Circle (Radius: 25.00)
	- plan hits target center							

WPX Energy

Operations Plan

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

Date:	**April 6, 2016**	**Field:**	**Basin Mancos**
Well Name:	**Lybrook 2309-34B #765**	**Surface:**	**Federal**
SH Location:	**NWNE Sec 34 23N-09W**	**Elevation:**	**6696' GR**
BH Location:	**NWNE Sec 34 23N-09W**	**Minerals:**	**Federal**

Measured Depth: **5,316.28'**

I. **GEOLOGY:** SURFACE FORMATION - NACIMIENTO

A. FORMATION TOPS (KB)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	317	317	POINT LOOKOUT	3,292	3,286
KIRTLAND	466	466	MANCOS	3,433	3,427
PICTURED CLIFFS	947	946	GALLUP	3,610	3,604
LEWIS	1,049	1,048	GREENHORN	5,208	5,202
CHACRA	1,300	1,298	DAKOTA	5,300	5,294
CLIFF HOUSE	2,227	2,221	ENTRADA	6,515	6,509
MENEFEE	2,297	2,291	TD	5,316.28	5,310.00

B. MUD LOGGING PROGRAM: Mudlogger on location from surface csg to TD.

C. LOGGING PROGRAM: OH Wireline logs from surface casing to TD. LWD GR from surface casing to TD. Primary target is Macos Gallup. We are planning to evaluate Dacota and Entrada with mud and wireline logs.

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

E. CORE: Acquire approximately 575' of whole core at approximately 3975'-4550'

II. DRILLING

A. **MUD PROGRAM:** LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 ¾" Directional Vertical hole. 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 anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Pressure test surface casing to **600 psi for 30 minutes** and intermediate casing to **1500 psi for 30 minutes.** Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **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
PRODUCTION	8.75"	320' - 5,316.28'	5-1/2"	17 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. PRODUCTION: Run 5-1/2" Production casing with cement nose guide Float Shoe + 1 jt. of 5-1/2" casing + Float collar.
Centralizer program: Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to surface.

C. **CEMENTING:**

(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. Production: STAGE 1: Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 49 bbls, 141 sks, (278 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 214 bbls, 923 sks, (1199 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 124 bbl Drilling mud or water.
Total Cement: 263 bbls, 1064 sks, (1477 cuft)

I. **COMPLETION**

A. **CBL**

Run CCL for perforating

A. **PRESSURE TEST**

1. Pressure test 5-1/2" casing to 5,000 psi max, for 30 minutes.

B. **STIMULATION**

1. Perform one or more DFITs in the Gallup/Mancos interval
2. Isolate each DFIT interval with a bridge plug.
3. Stimulate with approximately 235,000 lbs 20/40 sand, 1500 bbls water, 1.8 MMscf Nitrogen.
4. Isolate stages with flow through frac plug.
5. Drill out frac plugs and flowback for test only for a 3-6 month period.
6. Retrieve remaining bridge plugs once production test is complete.

C. **RUNNING TUBING**

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

NOTE:

Proposed Operations: