

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Tony Delfin
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-4 or 3160-5 form.

Operator Signature Date: 1/26/16

Well information:

API WELL #	Well Name	Well #	Operator Name	Type	Stat	County	Surf_Owner	UL	Sec	Twp	N/S	Rng	W/E
30-045-35731-00-00	W LYBROOK UNIT	765H	WPX ENERGY PRODUCTION, LLC	O	N	San Juan	F	B	34	23	N	9	W

Drilling/Casing Change

Conditions of Approval:

(See the below checked and additional conditions)

- ✓ Notify Aztec OCD 24hrs prior to casing & cement.
- ✓ Hold C-104 for directional survey & "As Drilled" Plat
- ✓ Hold C-104 for ✓ NSL, ☐ NSP, ☐ DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Ensure compliance with 19.15.17
- ☐ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ✓ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ✓ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
- ✓ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

Additional requirements

NMOCD Approved by Signature

2/23/16
Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JAN 26 2016

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

Farmington Field Office
Bureau of Land Management
5. Lease Serial No.
NMNM 057164

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 <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator WPX Energy Production, LLC		7. If Unit of CA/Agreement, Name and/or No.
3a. Address PO Box 640 Aztec, NM 87410	3b. Phone No. (include area code) 505-333-1816	8. Well Name and No. Lybrook 2309 34B #765
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		9. API Well No. 30-045- 35731
		10. Field and Pool or Exploratory Area Basin Mancos
		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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Change in Name & Plans</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompleat 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 recompleat 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 Energy request to change the well name from W. Lybrook UT #765H to **Lybrook 2309-34B #765**. WPX plans to change the well as a standalone vertical and not subject to the unit. A Directional Drill plan is attached based on a slight deviation to avoid the hardline. Also, attached is the updated C102 & OPS plan.

OIL CONS. DIV DIST. 3

FEB 18 2016

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Marie E. Jaramillo		Title Permit Tech III
Signature 		1/26/16
THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by 		Title PE
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.		Date 2/17/16
		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 AV

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35731		*Pool Code 97232	*Pool Name BASIN MANCOS
*Property Code 316010	*Property Name LYBROOK 2309-34B		*Well Number 765
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC		*Elevation 6696'

¹⁰ Surface Location

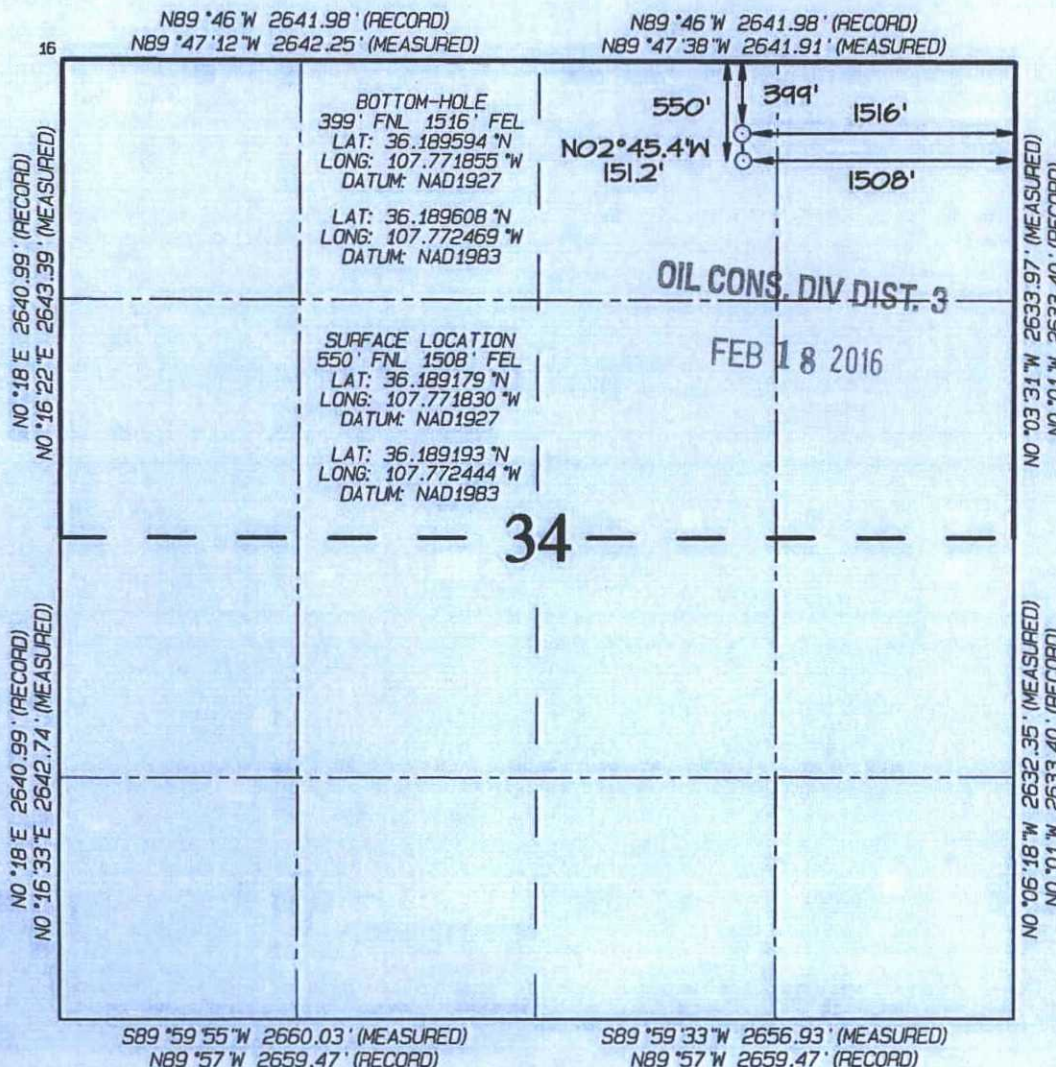
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	34	23N	9W		550	NORTH	1508	EAST	SAN JUAN

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
B	34	23N	9W		399	NORTH	1516	EAST	SAN JUAN

¹² Dedicated Acres 320.00	N/2 - Section 34	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Marie E. Jaramillo Date 1/26/16
Printed Name Marie E. Jaramillo
E-mail Address marie.jaramillo@wpxenenergy.com

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: JANUARY 20, 2016
Date of Survey: JUNE 5, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

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

FEB 18 2016

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
From:	Lat/Long	Easting:	518,148.80 usft
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

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		

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

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		

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)	+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	

+N/-S
0.00

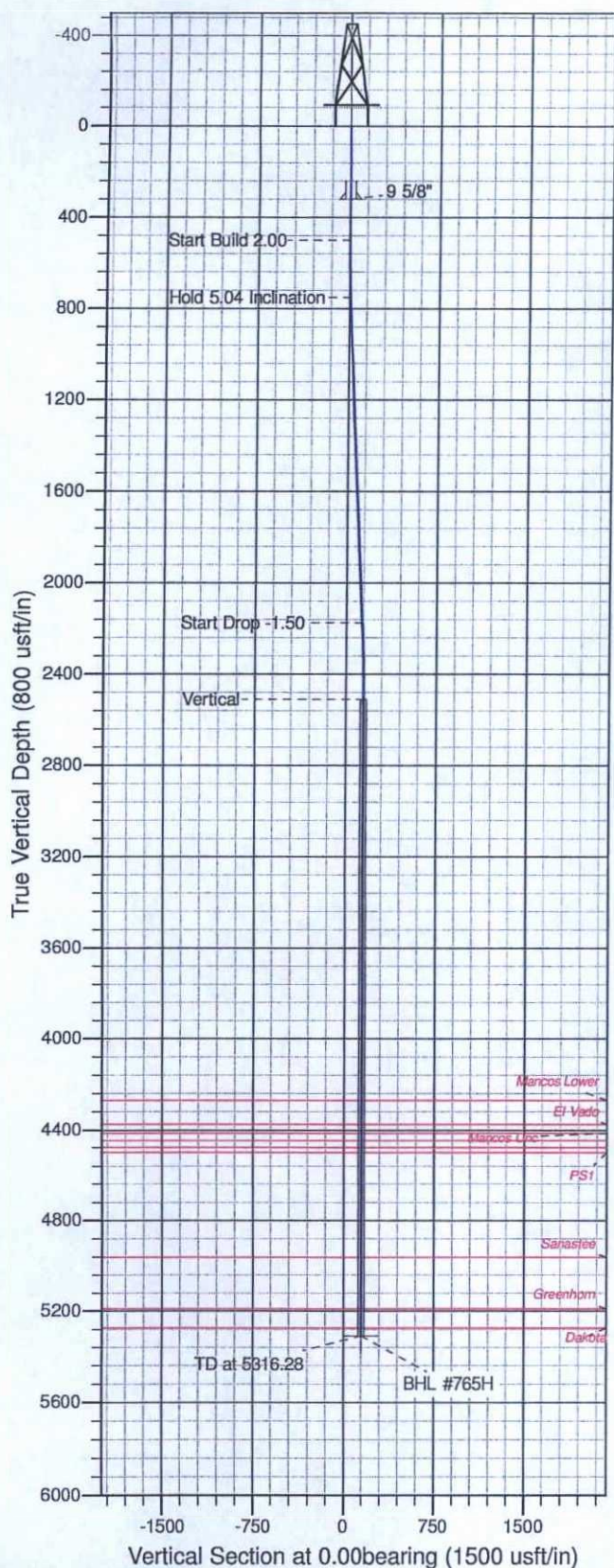
+E/-W
0.00

Northing
1888108.09

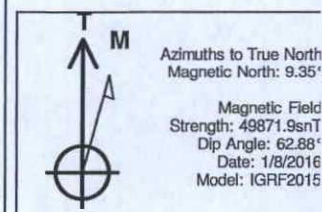
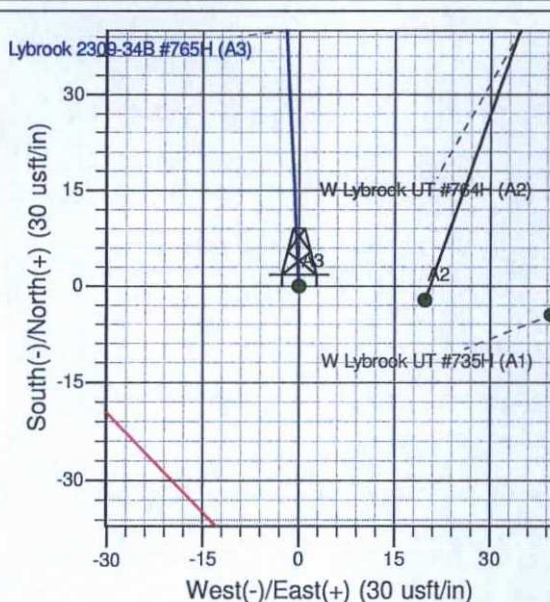
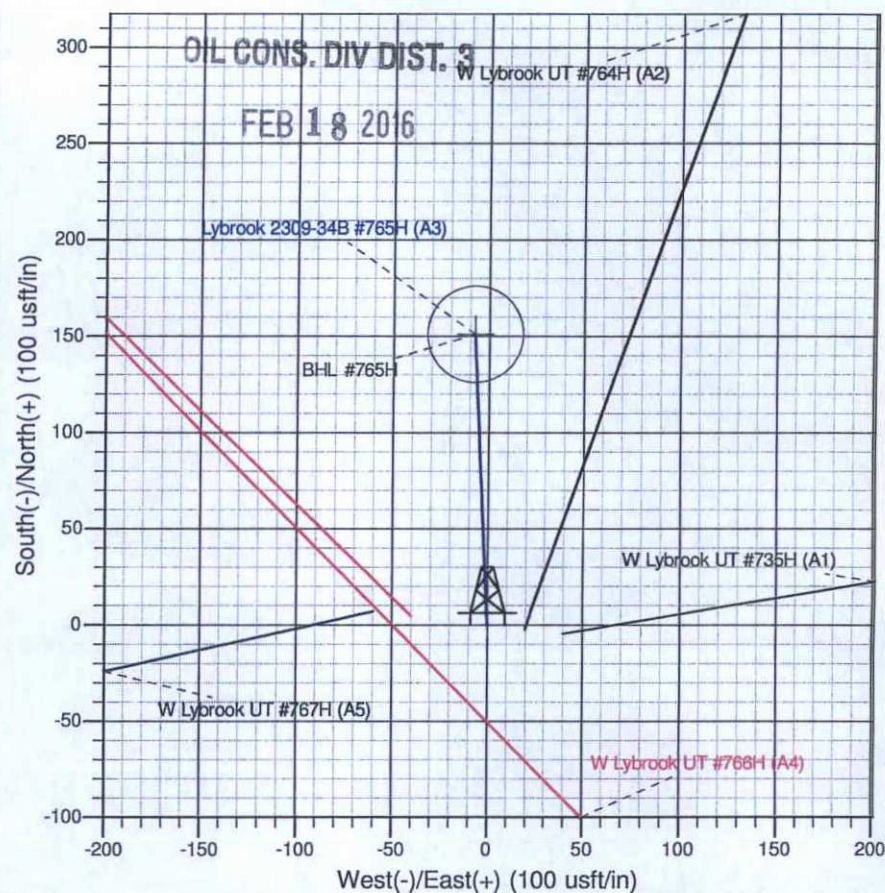
Easting
518148.80

Latitude
36.189179

Longitude
-107.771830

Slot
A3

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 Inclinat
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



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)

WPX ENERGY

WPX Energy

Operations Plan

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

Date: January 26, 2016

Field: Basin Mancos

Well Name: 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	3292	3286
KIRTLAND	466	466	MANCOS	3433	3427
PICTURED CLIFFS	947	946	GALLUP	3610	3604
LEWIS	1049	1048	TD	5,316.28	5,310.00
CHACRA	1300	1298			
CLIFF HOUSE	2227	2221			
MENEFEE	2297	2291			

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

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 3/4" 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'	5.5"	17LBS	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 4500 psi max, for 30 minutes.

B. STIMULATION

1. Perform one or more DFITs in the Gallup/Mancos interval
2. Isolate with bridge plug/s.
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.

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: