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: 3/7/16
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	Lybrook 2309 3	765	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
If cement fails to circulate, submit CBL. Subsequent remediation will need to be reviewed by agencies. Processing of this Change of Plans does not approve SWD. Must submit an SWD application, C-108, to Santa Fe.

Kathleen Allen

NMOCD Approved by Signature

3/15/16
Date

RECEIVED

MAR 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

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.*

OIL CONS. DIV DIST. 3

MAR 14 2016

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NMNM 057164
	6. If Indian, Allottee or Tribe Name
	7. If Unit of CA/Agreement, Name and/or No.
	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)* 505-333-1816	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
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change in Plans
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ 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 Energy would like to change the OPS plan with the additional deeper formation tops to the Entrada. WPX plans to drill the well into the Entrada for a potential injection well after the initial evaluation of production in the Mancos has been completed. Once the Evaluation is completed WPX will submit a secondary OPS plan to transition this well into a Disposal well.

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	3/7/16

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Abdelgadir Elmadani	Title PE	Date 3/8/16
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:	March 7, 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: 6,816.28'

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	6,816.28	6,810.00

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' - 6,816.28'	7"	23 lbs	L-80 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 7" Production casing with cement nose guide Float Shoe + 1 jt. of 7" 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: 29 bbls, 84 sks, (165 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 171 bbls, 740 sks, (962 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 124 bbl Drilling mud or water.
Total Cement: 201 bbls, 824 sks, (1127 cuft)

I. COMPLETION

A. **CBL**

Run CCL for perforating

A. **PRESSURE TEST**

1. Pressure test 7" 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: