Form 3160-5 (February 2005)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FEB 13 2015

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

DC	SIGNIO OF EMILD IVI	MINAGEMENT	<u> </u>										
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. No-G-1312-1797 المورية 6. If Indian, Allottee or Tribe Name 791-151								
								SUBMIT IN TRIPLICATE – Other instructions on page 2.					Agreement, Name and/or No.
								1. Type of Well			8 18	/ell Name and	I No
Oil Well Ga	s Well Other			S CHACO UT #343H									
Name of Operator     WPX Energy Production, LLC			1	PI Well No.	3-21246								
3a. Address PO Box 640 Aztec, NM 8	37410	3b. Phone No. (include area code) 505-333-1816		10. Field and Pool or Exploratory Area LYBROOK GL									
4. Location of Well (Footage, Sec., SHL: 1327' FNL & 200' FEL SEC BHL: 2332' FNL & 240' FEL SEC	T.,R.,M., or Survey Descript 2 22N 7W			11. Country or Parish, State SANDOVAL, NM									
12. CHECK T	HE APPROPRIATE BOX	(ES) TO INDICATE NATURE (	OF NOTICE, REPOR	T OR OTHER	R DATA								
TYPE OF SUBMISSION		ТҮРЕ	OF ACTION										
Notice of Intent	Acidize	Deepen	Production (Start/Resume)	□ v	Vater Shut-Off								
	Alter Casing	Fracture Treat	Reclamation	=	Vell Integrity								
Subsequent Report	Casing Repair	New Construction	Recomplete		other NGE OF OPS PLANS								
Subsequent Report	Change Plans	Plug and Abandon	Temporarily Abandon	Temporarily bandon									
Final Abandonment Notice  13. Describe Proposed or Complete	Convert to Injection	Plug Back	Water Dispo										
subsequent reports must be file recompletion in a new interval	ed within 30 days following, a Form 3160-4 must be fil nation, have been completed	hich the work will be performed completion of the involved oper ed once testing has been complet d and the operator has determined to ~320' Attached is an up	ations. If the operation ted. Final Abandonmonth that the site is ready	n results in a nent Notices mu for final inspe	multiple completion or ust be filed only after all ection.)								
, ,	•		BLM'S AP ACTION I	PROVAL OF OOES NOT F	R ACCEPTANCE OF THIS RELIEVE THE LESSEE AND								
CONDITIONS OF AP	PROVAL /	RECEIVED	OPERATO AUTHORI	R FROM O	BTAINING ANY OTHER QUIRED FOR OPERATION								
Adhere to previously issued		FEB 2 0 2015	ON FEDE	RAL AND IN	idian lands								
14. I hereby certify that the foregoing Name (Printed/Typed)  LACEY GRANILLQ	is true and correct.	NMOCD     DISTRICT   Itile	DEDMITTING T										
Signature		Date	2/11/15										
A managed by	THIS SPACE FO	OR FEDERAL OR STA		E	<u> </u>								
Approved by	Tambekou		Petroleum Title Engine	Date	2-17-2015								
Conditions of approval, if any, are atta the applicant holds legal or equitable t applicant to conduct operations thereo	iched. Approval of this notice itle to those rights in the subj		Office FFO	Date									
Title 18 U.S.C. Section 1001 and Title	e 43 U.S.C. Section 1212 ma	ke it a crime for any person knowing	ngly and willfully to m	ake to any dena	artment or agency of the								

(Instructions on page 2)

United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



# **WPX ENERGY**

## Operations Plan

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

DATE:

10/27/2014

FIELD:

LYBROOK GALLUP

WELL NAME:

S Chaco UT #343H

Sandoval CO., NM

SURFACE:

Indian Allotted

SH Location:

NENE Sec 2 -22N -07W

**ELEVATION:** 

7034' GR

BH Location:

SWNW Sec 2 -22N -07W

MINERALS:

Indian Allotted

**MEASURED DEPTH: 10,612** 

LEASE #:

NO-G-1312-1797

GEOLOGY:

Surface formation - Naciemiento

A FORMATION TOPS: (KB)

TORWATION TOTOL ( RB)							
Name	MD	TVD	Name	MD	TVD		
Ojo Alamo	1139	1135	Point Lookout	4204	4010		
Kirtland	1296	1287	Mancos	4379	4182		
Picture Cliffs	1645	1619	Kickoff Point	4820	4621		
Lewis	1739	1706	Top Target	5646	5240		
Chacra	1992	1941	Landing Point	5888	5288		
Cliff House	3252	3113	Base Target	5888	5288		
Menefee	3303	3160					
			TD	10612	5228		

- B. **MUD LOGGING PROGRAM:** Mudlogger on location from surface csg to TD.
- LOGGING PROGRAM: LWD GR from surface casing to TD. C.
- 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 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.

NOTE: Vertical portion of the well (8-3/4 in.) will be directionally drilled as per attached Directional Plan to +/- 4,820' (MD) / 4,621' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 5,888' (MD) / 5,288' (TVD). 7 in. csg will be set at this point. A 6-1/8" Lateral will be drilled as per the attached Directional Plan to +/- 10,612' (MD) / 5,228' (TVD). Will run 4-1/2 in. Production Liner from +/- 5,738 ft. to TD and cemented. Liner will be tied back to surface w / 4-1/2" Casing for stimulation / testing, then removed from the well.

# III. MATERIALS

### A. CASING PROGRAM:

CASING TYPE	OH SIZE (IN)	DEPTH (MD) (FT)	CASING SIZE (IN)	WEIGHT(LB)	GRADE
Surface	12.25"	320'	9.625"	36#	J-55
Intermediate	8.75"	5,888'	7"	23#	K-55
Prod. Liner	6.125"	5,738 - 10,612'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf 5,738'	4-1/2"	11.6#	N-80

#### B. **FLOAT EQUIPMENT:**

- 1. <u>SURFACE CASING:</u> 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
- 2. <u>INTERMEDIATE CASING:</u> 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 2,700 ft., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft.
- 3. <u>PRODUCTION LINER:</u> 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.
- 4. TIE-BACK CASING: None

# C. CEMENTING:

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

- 1. <u>SURFACE:</u> 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. <u>INTERMEDIATE:</u> 20 bbl (112 cu-ft) Mud Flush III spacer + Lead: +/- 700 sx Foamed 50/50 Poz Cement. 13.0 ppg + 0.1% Halad 766 + 0.2% Versaset + 1.5% Chem-Foamer 760 (Yield: 1.43 cu-ft/ sk. / Vol: 1216 cu-ft / 216.5 Bbls.) + TAIL: 100 sx 13.5 #/gal. + 0.2% Versaset + 0.15% HALAD-766 (Yield: 1.28 cu-ft / sk / Vol: 128 cu-ft / 22.8 Bbls.). + Fresh Water Displacement (1,362 cu-ft / +/- 242 Bbls) + 100 sx Top-Out Cement Premium: Yield: (1.17 cu-ft/ sk / (Vol: 117 cu-ft / 20.8 Bbls). Test Casing to 1500 PSI for 30 minutes. Total Cement Volume: (1050 sx / 1461 cu-ft / 260 bbls). Mix with +/- 84,000 SCF Nitrogen. TOC at surface.
- 3. PRODUCTION LINER: STAGE 1:10 bbl (56.cu-ft) Fr Water Spacer. STAGE 2:40 bbl 9.5 ppg (224.6 cu-ft) Tuned Spacer III + 0.5 gal/bbl Musol + 38.75 ppb Barite + 0.5 gal/bbl SEM-7. STAGE 3: 10 bbl Fr Water Spacer. STAGE 4: Lead Cement: 50 / 50 Poz Premium + 0.2% Versaset + 0.2% Halad -766, Yield 1.43 cu ft/sk, 13.0 ppg, (10 sx / 14.3 cu ft. / 2.5 bbls). STAGE 5: 200 sx. Foamed Lead Cement: 50 / 50 Poz Standard + 0.2% Versaset + 0.2% HALAD-766 + 1.5% Chem-Foamer 760. Yield 1.97 cu-ft/sk. 13.0 ppg (200 sx / 394 cu-ft. / 70.2 bbls.). STAGE 6: Tail Cement : 100 sx. 50/50 Poz Standard + 0.2% Versaset + 0.05% HALAD-766 + .05% SA-1015, Weight: 13.5 ppg ( 100 sx / Yield 1.28 cu ft/sk. / 128 cu ft. / 22.8 bbls) STAGE 7: Displace w/ +/- 137 bbl Fr Water. Total Cement ( 536.3 cu ft / 95.5 bbls). Mix Foamed Cement w/ +/- 75,000 SCF Nitrogen. Est. TOC +/- 5,644 ft.

#### IV. COMPLETION

# A. CBL

Run CCL for perforating.

# B. 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.

# C. 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.

#### D. RUNNING TUBING

- 1. <u>Production Tubing:</u> Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing near Top of Liner point of curve (~5,800' MD).
- Although this horizontal well will be 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.

# NOTE:

Installation of RSI sleeves at Toe of Lateral.

#### **Proposed Operations:**

A 4-1/2" 11.6# N-80 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# K-55 Intermediate casing (set at 6,094 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be +/- 5,944 ft. (MD) +/- 78 degree angle. TOC: +/- 5,644 ft. (MD).

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

A 4-1/2" 11.6# N-80 tie-back string with seal assembly will be run and stung into the PBR of the liner hanger, tested to 1500 PSI and hung off at the surface.

The Drilling Rig will be rigged down at this point and Completion operations will begin. After Stimulation and Testing operations are complete the 4-1/2" tie-back string will be removed from the well.

Note: Changes to formation tops, casing landing points, well TD and Directional Plan.