Form 3160-5 (February 2005)

UNITED STATES DEPARTMENT OF THE INTERIOR

FEB 13 2015

FORM APPROVED OMB No. 1004-0137

BU	JREAU OF LAND M	ANAGEMENT	IED TO TO	lia E	xpires: March 31, 2007	
SUNDRY I	NOTICES AND REP	ORTS ON WELLS	manife on the solution	45: Itease Seria	l No. 359	
		to drill or to ^r re-ente APD) for such prope		6. If Indian, A	llottee or Tribe Name	
F		her instructions on page 2.	* =	7. If Unit of CA/Agreement, Name and/or No.		
1. Type of Well				132829		
M				8. Well Name NE CHACO		
Oil Well Ga	s Well Other			9. API Well N		
WPX Energy Production, LLC		_		30-039-31293		
3a. Address PO Box 640 Aztec, NM 8	7410	3b. Phone No. <i>(include area code)</i> 505-333-1816		10. Field and Pool or Exploratory Area Chaco Unit NE HZ		
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Descrip SHL: 1371' FSL & 377' FWL SEC 16 23N 6W BHL: 554' FSL & 17' FWL SEC 17 23N 6W		ption)		11. Country or Parish, State Rio Arriba, NM		
12. CHECK T	HE APPROPRIATE BOX(ES) TO INDICATE NATUR	RE OF NOTICE, R	EPORT OR OTI	HER DATA	
TYPE OF SUBMISSION	·	TY	TE OF ACTION			
Notice of Intent	Acidize	Deepen	Produ (Start/Resu		Water Shut-Off	
Z Notice of Intent	Alter Casing	Fracture Treat		mation	Well Integrity	
Subsequent Report	Casing Repair	New Construction	Recon	nplete C	Other HANGE OF OPS PLANS	
	Change Plans	Plug and Abandon	Tempe Abandon		ı	
Final Abandonment Notice	Convert to Injection	Plug Back		· Disposal		
13. Describe Proposed or Completeduration thereof. If the proposa all pertinent markers and zones subsequent reports must be file recompletion in a new interval, requirements, including reclam	l is to deepen directionally on the Attach the Bond under who within 30 days following a Form 3160-4 must be file	or recomplete horizontally, g nich the work will be perform completion of the involved o ed once testing has been com	tive subsurface located or provide the Experations. If the oppleted. Final Aband	ations and measu Bond No. on file peration results in donment Notices	red and true vertical depths of with BLM/BIA. Required a a multiple completion or must be filed only after all	
WPX plans to adjust the surfa	ace depth from 400' to	~320'. Attached is an	updated Opera	tional Plan.	•	
CONDITIONS OF APPF Adhere to previously issued sti		RECEIVED FEB 2 0 2015	ACTI OPE AUTI	ION DOES NO RATOR FROM HORIZATION	OR ACCEPTANCE OF THIS OT RELIEVE THE LESSEE AND I OBTAINING ANY OTHER REQUIRED FOR OPERATIONS INDIAN LANDS	
14. I hereby certify that the foregoing	s true and correct.	- 1101000	-/		·	
Name (Printed/Typed) LACEY GRANILL	Ω_{0}	DISTRICT	itle PERMITTII	NG TECH III		
Signature			oate 2/11/15			
3,3,12,3,10	THIS SPACE FO	OR FEDERAL OR ST		USE		
Approved by	7 11		Petroleur		7 - 17 0 - 10	
<u> </u>	lambekas	des not up and a second	_ Title Engl	neer Da	te 2-17-2015	
Conditions of approval, if any, are attacthe applicant holds legal or equitable ti applicant to conduct operations thereon	tle to those rights in the subje			Ď		

(Instructions on page 2)

NWOCD A

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.



WPX ENERGY

Operations Plan

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

DATE:

10/20/2014

FIELD:

Chaco Unit NE HZ (oil)

WELL NAME:

NE Chaco COM #210H

SURFACE:

STATE

SH Location:

NWSW Sec 16-23N-6W

ELEVATION:

6,858' GR

BH Location:

SWSW Sec 17-23N-6W

Rio Arriba Co. NM

MINERALS:

、BLM

MEASURED DEPTH: 10,897

LEASE #:

NMSF 078359

I. GEOLOGY:

Surface formation - San Jose

A. FORMATION TOPS: (KB)

Ojo Alamo	1338	1329	Point Lookout	4259	4170
Kirtland	1465	1452	Mancos	4464	4369
Picture Cliffs	1921	1896	Gallup	4877	4771
Lewis	1958	1932	Kickoff Point	4914	4807
Chacra	2254	2220	Top Target	5617	5379
Cliff House	3490	3422	Landing Point	6018	5439
Menefee	3514	3445	Base Target	6018	5439
			TD	10,897	5,354

- **B.** MUD LOGGING PROGRAM: Mudlogger on location from surface csg to TD.
- C. <u>LOGGING PROGRAM:</u> LWD GR from surface casing to TD. LWD GR / E- Sonic will be run in Lateral.
- **D.** NATURAL GAUGES: Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

- A. <u>MUD PROGRAM</u>: LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 3/4" Directional Vertical hole, the curve portion of the wellbore. 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. <u>BOP TESTING</u>: 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 +/- 4,914' (MD) / 4,807' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 6,018' (MD) / 5,439' (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 +/- 10,897' (MD) / 5,354 (TVD). Will run 4-1/2 in. Production Liner from

+/- 5,868 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 5/8	36#	J-55
Intermediate	8.75"	6,018'	7	23#	K-55
Prod. Liner	6.125"	5,868' - 10,897'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf 6,024'	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., 2,300ft., 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 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. INTERMEDIATE: 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: (900 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 +/- 5,724 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. 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 (~6,000' 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 6,018 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be \pm - 5,868 ft. (MD) +/- 78 degree angle. TOC: \pm - 5,568 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