| o' Submit 1 Copy To Appropriate District Office | State of New Mexico | | | rm C-103 |
|--|--|-------------------------|--|-----------|
| <u>District I</u> – (575) 393-6161 | Energy, Minerals and Natural Resources | | Revised August 1, 2011 | |
| 1625 N. French Dr., Hobbs, NM 88240 District II – (575) 748-1283 | | | WELL API NO. 30-039-31205 | |
| 811 S. First St., Artesia, NM 88210 | OIL CONSERVATION | | 5. Indicate Type of Lease | |
| <u>District III</u> – (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410 | 1220 South St. Fra | | STATE FEE [| |
| <u>District IV</u> – (505) 476-3460 | Santa Fe, NM 8 | 7505 | 6. State Oil & Gas Lease No. | |
| 1220 S. St. Francis Dr., Santa Fe, NM 87505 | | | E012079 | |
| SUNDRY NOTI (DO NOT USE THIS FORM FOR PROPOS | | UG BACK TO A | 7. Lease Name or Unit Agreeme 132829 | ent Name |
| PROPOSALS.) | ATION FOR PERMIT" (FORM C-101) FOR SUCH Gas Well Other | | 8. Well Number NE CHACO COM #244H | |
| 2. Name of Operator | 1.0 | | 9. OGRID Number | |
| WPX ENERGY PRODUCTION, L 3. Address of Operator | ıLC. | | 120782 10. Pool name or Wildcat | |
| 721 SOUTH MAIN AZTEC NM | | • | Chaco Unit NE HZ | |
| 4. Well Location | | | | |
| | feet from the SOUTH | line and 369 | feet from the WEST | line |
| Section 16 | Township 23N Range | | NMPM County RIO ARRI | • |
| [17] [2] [18] [18] [18] [18] [18] [18] [18] [18 | 11. Elevation (Show whether DR | | | AMPAGE ! |
| | 6859' | | | Terreta T |
| 12. Check A | appropriate Box to Indicate N | Vature of Notice, | Report or Other Data | |
| NOTICE OF IN | TENTION TO | CLIE | OCCOUENT DEPORT OF | |
| NOTICE OF IN PERFORM REMEDIAL WORK ☐ | PLUG AND ABANDON | REMEDIAL WOR | $BSEQUENT$ REPORT OF: RK \square ALTERING CA | SING [] |
| TEMPORARILY ABANDON | CHANGE PLANS | | ILLING OPNS. P AND A | |
| PULL OR ALTER CASING | MULTIPLE COMPL | CASING/CEMEN | _ | |
| DOWNHOLE COMMINGLE | | | | |
| OTHER: CHANGE OF OPS PLA | NS | OTHER: | | |
| | rk). SEE RULE 19.15.7.14 NMA | | nd give pertinent dates, including est impletions: Attach wellbore diagran | |
| | • | | | |
| WDV while to adjust the surface doubt for | 400? 4- 220? A44-b-d : d | otad Ou anatian al Dian | | |
| WPX plans to adjust the surface depth fro | om 400° to \sim 320°. Attached is an upda | ited Operational Plan | RECEIVED | |
| | • | | / 1000 | \ |
| | | | 1 0 20% | } |
| | | | FEB 1 S 2015 | |
| | | | 1104000 | / |
| | | | NMOCD | / |
| · | | | DISTRICTIII | |
| <u> </u> | · | | | |
| Spud Date: | Rig Release Da | ate: | | |
| | | | | |
| | | | | |
| I hereby certify that the information a | above is true and complete to the b | est of my knowledg | ge and belief. | |
| Grin Al | , | | | |
| SIGNATURE | E_PERMIT TECH III | DA | TE 2/11/15 | |
| 1000 | | | | |
| Type or print name | E-mail address | s: | PHONE: | |
| For State Use Only | / | | ern o n | 2015 |
| APPROVED BY: Mans To | TIBUEPERV | ISOR DISTR | LCT #3 DATE FEB 2 0 | 2010 |
| Conditions of Approval (if any): | PY | , Jen Didik | 101 110 | |



WPX ENERGY

Operations Plan

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

DATE:

11/13/13

FIELD:

Basin Mancos

WELL NAME:

Chaco 2306-16L #244H

SURFACE:

State

SH Location:

NWSW Sec 16-23N-6W

ELEVATION:

6,859' GR

BH Location:

SESE Sec 16-23N-6W

MINERALS:

State

Rio Arriba Co, NM

LEASE #:

E1207-9

I. GEOLOGY:

MEASURED DEPTH: 10,729'

Surface formation - San Jose

A. FORMATION TOPS: (KB)

| Name | MD | TVD | Name | MD | TVD |
|-----------------|-------|-------|---------------|--------|---------|
| Ojo Alamo | 1,342 | 1,332 | Point Lookout | 4,285 | 4,173 |
| Kirtland | 1,469 | 1,455 | Mancos | 4,491 | . 4,372 |
| Pictured Cliffs | 1,929 | 1,899 | Kickoff Point | 4,876 | 4,743 |
| Lewis | 1,967 | 1,935 | Target Top | 5,648 | 5,382 |
| Chacra | 2,265 | 2,223 | Landing Point | 6,044 | 5,492 |
| Cliff House | 3,510 | 3,425 | Target Base | 6,044 | 5,492 |
| Menefee | 3,534 | 3,448 | | | |
| | | | TD | 10,729 | 5,414 |

- B. MUD LOGGING PROGRAM: Mudlogger on location from surface csg to TD.
- C. **LOGGING PROGRAM:** 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 ¾" 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 +/- 4,876' (MD) / 4,743' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 6,044' (MD) / 5,492' (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 +/- 10,729' (MD) / 5,414' (TVD). Will run 4-1/2 in. Production Liner from +/- 5,894 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" | 6,044' | 7" | 23# | K-55 |
| Prod. Liner | 6.125" | 5,894' - 10,729' | 4-1/2" | 11.6# | N-80 |
| Tie-Back String | N/A | Surf 5,894' | 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 + (2) RSI (Sliding Sleeves) 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)

- 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.
- INTERMEDIATE: 20 bbl (112 cu-ft) Mud Flush III spacer + Lead: 850 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.
- 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 (563.3 cu ft / 95.5 bbls). Mix Foamed Cement w/ +/- 75,000 SCF Nitrogen. Est. TOC +/- 5,594 ft.

IV. COMPLETION

A. CBL

1. 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 (~5,700' 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 6,044 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be +/- 5,894 ft. (MD) +/- 77 degree angle. TOC: +/- 5,594 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.