# RECEIVED

|  | DEPARTMENT (   | OF THE INTERIOR   | DEC 0 8 2015   |   | FORM APPROVED<br>OMB No. 1004-0137<br>Expires: March 31, 2007   |
|--|--|---|--|---|---|
|  |  | ID MANAGEMENT<br>F<br>REPORTS ON WHELE  | armington Field Off  | 5. Lease Seri   | ial No.   |
| Do not use thi   | is form for prope  | osals to drill or to re<br>0-3 (APD) for such p   | -enter an  |   | Allottee or Tribe Name  |
|  | Victor State Of the Control of the C | E – Other instructions on p   |  | 7. If Unit of<br>NMNM1181   | CA/Agreement, Name and/or No. 129   |
| Oil Well   | Gas Well O   | ther  |  | 8. Well Nam<br>MC 8 COM   |   |
| Name of Operator     WPX Energy Production, LL   | С  |   |  | 9. API Well 1<br>30-039-313   |   |
| 3a. Address<br>PO Box 640 Aztec, NI  | M 87410  | 3b. Phone No. (include are 505-333-1816   | ea code)   | CONTRACTOR OF THE PROPERTY OF   | Pool or Exploratory Area<br>LYRBOOK GL  |
| 4. Location of Well <i>(Footage, SHL: 971' FSL &amp; 2186' FWL BHL: 2338' FSL &amp; 270' FWL</i>                         | SEC 7 23N 7W RIO A   | RRIBA   | AT.  | 11. Country of Rio Arriba, I  | or Parish, State<br>NM  |
|  | K THE APPROPRIATI  | E BOX(ES) TO INDICATE N   | The state of the s | REPORT OR O   | THER DATA   |
| TYPE OF SUBMISSION   |  |   | TYPE OF ACTION   |   |   |
| Notice of Intent   | Acidize  Alter Casing  | Deepen Fracture Treat   | Production (Sta  | rt/Resume)  | Water Shut-Off Well Integrity   |
|  | Casing Repair  | New Construction  | Recomplete   |   | Other   |
| Subsequent Report  | Change Plans   | Plug and Abandon  | Temporarily Al   | oandon  | CHANGE OF OPS-<br>CEMENT  |
| Final Abandonment Notice   | Convert to Injection   | Plug Back   | Water Disposal   |   |   |
| all pertinent markers and zo<br>subsequent reports must be<br>recompletion in a new inter<br>requirements, including rec | osal is to deepen direct<br>ones. Attach the Bond u<br>filed within 30 days fol<br>val, a Form 3160-4 must<br>lamation, have been con  | ionally or recomplete horizon<br>nder which the work will be p<br>lowing completion of the invest<br>be filed once testing has been<br>mpleted and the operator has | tally, give subsurface loc<br>performed or provide the<br>olved operations. If the o<br>en completed. Final Abar<br>determined that the site is  | ations and mea<br>Bond No. on fi<br>peration results<br>adonment Notic<br>ready for final                   | sured and true vertical depths of<br>le with BLM/BIA. Required<br>in a multiple completion or<br>ces must be filed only after all<br>l inspection.) |
| DV tool.   | 0  | IL CONS. DIV DIST.  | 3 BLM'S APPRO  | VAL OR ACC  | CEPTANCE OF THIS  |
| Attached: OPS Plan   |  | DEC 1 4 2015 OPERATOR F   |  | S NOT RELIEVE THE LESSEE AND<br>ROM OBTAINING ANY OTHER<br>TION REQUIRED FOR OPERATIONS<br>AND INDIAN LANDS |   |
| 14. I hereby certify that the forego Name (Printed/Typed) Lacey Granillo Signature  Approved by                          |  | Date CE FOR FEDERAL O   | 0-   | E USE   |   |
| Conditions of approval, if any, are certify that the applicant holds legal   |  | e rights in the subject lease   | Office CES   | 1 1/2   | Date 12-10-15   |

(Instructions on page 2)

NMOCD RV

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:** 12/8/15

FIELD: BASIN MANCOS / LYBROOK GALLUP

WELL NAME: MC 8 COM #409H

SURFACE: BLM

SH Location: SESW 7 23N-07W

**ELEVATION: 7307'** 

Rio Arriba CO., NM

BH Location: NWSW 12 23N-08W

MINERALS: FED

San Juan CO., NM

## MEASURED DEPTH:

I. GEOLOGY:

Surface formation - San Jose / Nacimiento

A. FORMATION TOPS: (KB)

| Name           | MD   | TVD   | Name          | MD    | TVD  |
|----------------|------|-------|---------------|-------|------|
| 0: 11          | 1110 | 1.100 |               | 4500  |      |
| Ojo Alamo      | 1449 | 1439  | Point Lookout | 4563  | 4491 |
| Kirtland       | 1763 | 1747  | Mancos        | 4761  | 4686 |
| Picture Cliffs | 2146 | 2122  | Gallup        | 5126  | 5043 |
| Lewis          | 2257 | 2231  | Kickoff Point | 5127  | 5044 |
| Chacra         | 2564 | 2532  | Top Target    | 5983  | 5728 |
| Cliff House    | 3670 | 3616  | Landing Point | 6284  | 5793 |
| Menefee        | 3717 | 3662  | Base Target   | 6284  | 5793 |
|                |      |       | TD            | 13420 | 5682 |

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

### 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, 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. <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.

#### III. MATERIALS

## A. CASING PROGRAM:

| CASING TYPE     | OH SIZE (IN) | DEPTH (MD) (FT) | CASING SIZE (IN) | WEIGHT(LB) | GRADE          | Collar |
|-----------------|--------------|-----------------|------------------|------------|----------------|--------|
| Surface         | 12.25"       | 320'            | 9.625"           | 36#        | J-55 or Equiv. | STC    |
| Intermediate    | 8.75"        | 6,284           | 7"               | 23#        | K-55 or Equiv  | LTC    |
| Prod. Liner     | 6.125"       | 6134' - 13,420' | 4-1/2"           | 11.6#      | N-80 or Equiv  | LTC    |
| Tie-Back String | N/A          | Surf 6134'      | 4-1/2"           | 11.6#      | N-80 or Equiv  | LTC    |

## 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. INTERMEDIATE CASING: 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 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. Place DV tool @ the top of the Chacra formation. If cement is circulated back to surface on the first stage, a cancelation device will be dropped to shift the dv tool closed and the 2nd stage cement job will be aborted at that time.
- 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)

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. INTERMEDIATE:

Stage 1: **Spacer #1:**20 bbl (112.cu-ft) Water Spacer. **Lead Cement:** 135 bbl, 385 sks (758 cu.ft.) of 12.3 ppg 1.97 ft<sup>3</sup>/sk 10.35 gal/sk. **Tail Cement:** 84 bbl, 361 sks (469 cu ft) 13.5 ppg 1.3 ft<sup>3</sup>/sk, 5.81 gal/sk. **Displacement:** 247 bbl mud.

Stage 2: **Spacer #1:**20 bbl (112.cu-ft) Water Spacer. **Lead Cement:** 66 bbl, 191 sks (372 cu.ft.) of 12.3 ppg 1.95 ft<sup>3</sup>/sk 10.35 gal/sk. **Tail Cement:** 16 bbl, 78 sks (90 cu ft) 15.8 ppg 1.15 ft<sup>3</sup>/sk, 5.81 gal/sk. **Displacement:** 176 bbl mud.

3. PRODUCTION LINER: Spacer #1:10 bbl (56.cu-ft) Water Spacer. Spacer #2: 40 bbl 9.5 ppg (224.6 cu-ft) Tuned Spacer III. Spacer #3: 10 bbl Water Spacer. Lead Cement: Extencem ™ System. Yield 1.29 cu ft/sk, 13.5 ppg, (580 sx / 789 cu ft. / 140 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/- 179 bbl Fr Water. Total Cement (789 cu ft / 140 bbls).

## IV. COMPLETION

## A. CBL

1. Run CCL for perforating.

## B. PRESSURE TEST

 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.
- 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 with a Liner Hanger and pack-off assembly then cemented to top of liner hanger.

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. After Stimulation and Testing operations are complete the 4-1/2" tie-back string will be removed from the well.