State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

David Martin Cabinet Secretary

Brett F. Woods, Ph.D. 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 <u>3160-4 or 3160-5</u> form.

Operator Signature Date: 1/30/15 Well information:

| API WELL# | Well Name | Well # | Operator Name | Туре | Stat | County | Surf_Owner | UL | Sec | Twp | N/S | Rng | W/E |
|---------------|------------|-----------|------------------------|------|------|--------|------------|----|-----|-----|-----|-----|-----|
| 30-045-35564- | CHACO 2308 | 407H | WPX ENERGY PRODUCTION, | 0 | N | San | F | A | 11 | 23 | Ν | 8 | W |
| 00-00 | 11A | | LLC | | | Juan | | | | | | | |

Application Type:

| | P&A | Drilling/Casing Change | Location Change |
|--|-----|------------------------|-----------------|
|--|-----|------------------------|-----------------|

Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84)

🛛 Other: Remedial work

Conditions of Approval:

Remediation is required to provide isolation between the Kirtland and Ojo formations. The decision was based on the log evaluation and a meeting with Halliburton and WPX.

NMOCD Approved by Signature

<u>2/5/15</u> Date

| • | | | · · · · · · · · · · · · · · · · · · · | | X | |
|--|---|--|---------------------------------------|-----------------------------|---|--|
| Form 3160-5 | UNITED STA | TES | الدر المناسما | J |) FORM APPROVED | |
| (February 2005) | DEPARTMENT OF TH | | | 30.98 | OMB No. 1004-0137 | |
| В | UREAU OF LAND M. | ANAGEMENT | JAN 30 2 | 2013 | Expires: March 31, 2007 | |
| | | | | 5. Lease S | | |
| | NOTICES AND REP | | | ไท่พทพิสัต | - | |
| | form for proposals | | | 6: If Indiar | i, Alottee or Tribe Name | |
| | Use Form 3160-3 (A | | | 7 1011.4 | | |
| | MIT IN TRIPLICATE - Otl | her instructions on page | e 2. | 132829 | of CA/Egreement, Name and/or No. | |
| 1. Type of Well | | | | | | |
| | | | | | me and No. 308 – 11A #407H | |
| Oil Well Gas Well Other Chaco 2308 – 11A #407H 2. Name of Operator 9. API Well No. | | | | | | |
| WPX Energy Production, LLC | | | | 30-045-3 | | |
| 3a. Address | | 10. Field and Pool or E | Exploratory Area | 10. Field | and Pool or Exploratory Area | |
| PO Box 640 Aztec, NM | | 505-333-1816 | | Basin Ma | | |
| 4. Location of Well (Footage, Sec SHL: 335' FNL & 1047' FWL, Se | | otion) | | 11. Countr San Juan | y or Parish, State | |
| BHL: 1265' FNL & 230' FEL, Se | | | | San Juan | | |
| 12. CHECK | THE APPROPRIATE BOX(| ES) TO INDICATE NAT | FURE OF NOTICE, F | EPORT OR | OTHER DATA | |
| TYPE OF SUBMISSION | <u> </u> | | TYPE OF ACTION | | · · · · · · · · · · · · · · · · · · · | |
| | | | | uction | | |
| Notice of Intent | Acidize | Deepen | (Start/Res | | Water Shut-Off | |
| | Alter Casing | Fracture Treat | Recla | amation | Well Integrity | |
| — | Casing Repair | New Construction | n Reco | mplete | Other · | |
| Subsequent Report | Change Plans | Plug and Abando | | oorarily | <u>No Remedial Work</u> Required-CAST CBL | |
| | | | Abandon | - Discoul | <u>Mqanta Chor Chi</u> | |
| Final Abandonment Notice 13. Describe Proposed or Complet | ted Operation: Clearly state a | Plug Back | | r Disposal date of any r | proposed work and approximate | |
| duration thereof. If the propos | sal is to deepen directionally | or recomplete horizontall | y, give subsurface loc | ations and me | easured and true vertical depths of | |
| all pertinent markers and zone subsequent reports must be fil | | | | | file with BLM/BIA. Required ts in a multiple completion or | |
| recompletion in a new interva | al, a Form 3160-4 must be file | ed once testing has been o | completed. Final Abar | donment Not | ices must be filed only after all | |
| requirements, including reclar <u>1/12/15-</u> Andrew Brunk receiv | | | | | | |
| remedial work would be neces | | review of the logs that | | cement ison | ation looked good and no | |
| Blm representation by: | | | | | OR ACCEPTANCE OF THIS | |
| Troy Salyers | | | | | `RELIEVE THE LESSEE AND OBTAINING ANY OTHER | |
| Chip Harraden | ATT | | | | REQUIRED FOR OPERATIONS | |
| Ray Espinoza | | | | | INDIAN LANDS | |
| 1/29/15- Andrew Brunk and La | acev Granillo met with BL | M and discussed the C | AST CBL logs re-rar | n on 1/26/15 | 5. BLM was still in agreement | |
| that no remedial work was rec | | | | | | |
| been initiated as per NMOCD I | requirements. A subseque | ent squeeze sundry wi | ll be filed upon com | pletion. | | |
| Blm representation by: Troy Salyers | | | | | | |
| Chip Harraden | | | | | / RECEIVED \ | |
| Ray Espinoza | | | | | <u> </u> | |
| 14. I hereby certify that the foregoing Name (<i>Printed/Typed</i>) | g is true and correct | | | | FEB 0 4 2015 | |
| Lacey Granillo | | | Title Permit Teo | ch III | | |
| (XNA) | TRAC | | | | N.AJCD | |
| Signature | | | Date 1/30/15 | | / | |
| | (THIS SPACE FO | OR FEDERAL OR | STATE OFFICE | EUSE | | |
| Approved by | \bigvee | | ~~ | | | |
| Iroy Salve | \$5 | | Title PE | | Date 30 2015 | |
| Conditions of approval, if any, are att the applicant holds legal or equitable | ached. Approval of this notice title to those rights in the subje | does not warrant or certify act lease which would entitle | e the Office 📥 | | | |
| applicant to conduct operations thereo | | · | office FF | 0 | | |
| Title 18 U.S.C. Section 1001 and Title | le 43 U.S.C. Section 1212, mal | te it a crime for any person | knowingly and willfull | y to make to a | ny department or agency of the | |
| United States any false, fictitious or f | raudulent statements or repres | entations as to any matter | within its jurisdiction. | | | |

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|--|--|--|-----------------------|--|--|--|--|--|--|
| | 5. Lease Serial No. , NMNM 109397 | | | | | | | | |
| | OTICES AND REPO | to drill or to re-ente | eran | 6. If Indian, Allottee or Tribe Name | | | | | |
| | | PD) for such prope | | | | | | | |
| SUBM | 7. If Unit of CA/Agreement, Name and/or No. 132829 | | | | | | | | |
| 1. Type of Well | 8. Well Name and No. | | | | | | | | |
| Oil Well Ga | s Well Other | | | Chaco 2308 – 11A #407H | | | | | |
| 2. Name of Operator | | | | 9. API Well No. | | | | | |
| WPX Energy Production, LLC 3a, Address | | 10. Field and Pool or Expl | orotom. Anon | 30-045-35564 10. Field and Pool or Exploratory Area | | | | | |
| PO Box 640 Aztec, NM 8 | 7410 | 505-333-1816 | oratory Area | Basin Mancos | | | | | |
| SHL: 335' FNL & 1047' FWL, Sec | 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 335' FNL & 1047' FWL, Sec 11, T23N, R8W BHL: 1265' FNL & 230' FEL, Sec 12, T23N, R8W | | | | | | | | |
| 12. CHECK T | HE APPROPRIATE BOX(E | ES) TO INDICATE NATUR | RE OF NOTICE, R | EPORT OR OTHER DATA | | | | | |
| TYPE OF SUBMISSION | | TY | PE OF ACTION | · · · · · · · · · · · · · · · · · · · | | | | | |
| | | Deepen | Produ | I Water Shut-Off | | | | | |
| Notice of Intent | Alter Casing | Fracture Treat | (Start/Resu | mation Well Integrity | | | | | |
| | Casing Repair | New Construction | | nplete Other <u>CEMENT SQUEEZE</u> | | | | | |
| Subsequent Report | Change Plans | Plug and Abandon | | orarily | | | | | |
| | 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.) | | | | | | | | | |
| Remedial work has already b Attached is the Cement Sque | eze Procedure. | | nd verbal appr | oval from both NMOCD and BLM. | | | | | |
| RECEIVED FEB 0 4 2015 NIN 10000 | | | | | | | | | |
| 14. I hereby certify that the foregoing i Name (Printed/Typed) Lacey Granillo | s true and correct | | itle Permit Tec | h III | | | | | |
| Signature / V | THIS SPACE FO | R FEDERAL OR ST | ATE OFFICE | USE | | | | | |
| Approved by | H | | | · · · · | | | | | |
| Conditions of approval, if any, are attact the applicant holds legal or equitable til applicant to conduct operations thereon | tle to those rights in the subjec | loes not warrant or certify that t lease which would entitle th | Title PE Office FF | Date 1302015 | | | | | |
| Title 18 U.S.C. Section 1001 and Title | 43 U.S.C. Section 1212, make | e it a crime for any person kno | | y 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.

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Chaco #407H

Cement Squeeze procedure

- 1. Set bridge plug between 1550'-1600' ensuring it is not in a collar.
- 2. Shoot perforations @ 1492' (as per state). Shoot 2 spf @ 180* phasing.
- 3. Pressure test perforations to 300 psi (.663 psi/ft) and watch pressure bleed off to determine cement remediation procedure. If no leak off occurs call engineer for higher max pressure for test.
 - a. If large leak off occurs, set cement retainer and proceed with cement retainer procedure.
 - b. If small pressure leak off occurs, plan to proceed with balanced plug cement procedure.
- 4. Small pressure leak off occurred, 110 psi bleedoff after 1 minute, 200 psi bleedoff after 7 minutes.
- 5. Proceed with balanced plug cement procedure.
- 6. TIH with tubing 20' below perforations, 1512'.
- 7. Pump 60 sx of FineCem with .1 CFR3 with HES. This gives us a 200' 8 bbl balanced plug, to squeeze with.
- 8. Pull out of cement laying down tubing until out of hole.
- 9. Pressure up on wellbore to 300 psi and watch pressure.
 - a. If pressure falls off continue bumping pressure up to 300 psi until pressure does not fall off.
 - b. When pressure does not fall off, pressure up the wellbore to a higher pressure in increments of 50 psi checking with engineer to ensure quality cement across perforations.
 - i. ***IMPORTANT*** FineCem cement is cement designed for small leaks. If we pressure up too much and break down formation, there is the possibility of the well going on vacuum and taking all of our cement. Be prepared to shut in the wellbore to keep this from happening.

10. Once the well has stopped bleeding off at the pressure agreed upon between well-site consultant and engineer, shut well in with said pressure, and leave for 36 hours (as per HES).

If you have any questions about this procedure please call:

Garrett Stacey (972) 834-9141

Thank you.