

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
March 4, 2004

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.
30-045-25028

5. Indicate Type of Lease
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

8. Well Number
Kirtland #8

9. OGRID Number
019219

10. Pool name or Wildcat
Cha Cha Gallup

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Richardson Operating Company

3. Address of Operator
3100 LaPlata Highway, Farmington, New Mexico 87401

4. Well Location

Unit Letter O : 510 feet from the South line and 1920' feet from the East line

Section 11 Township 29N Range R15W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5126' GL

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL Sect Twp Rng Pit type Depth to Groundwater Distance from nearest fresh water well

Distance from nearest surface water Below-grade Tank Location UL Sect Twp Rng ;
feet from the line and feet from the line

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Richardson Operating Company proposes to plug and abandon this well according to the attached procedure and well-bore diagram.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Charles Neeley TITLE Agent/PE DATE 7/25/04

Type or print name Charles Neeley E-mail address: neece@acnet.com Telephone No. 505-486-0211

(This space for State use)

APPROVED BY Charles Neeley TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE JUL 26 2004
Conditions of approval, if any:

PLUG AND ABANDONMENT PROCEDURE

Richardson Operating Company

Kirtland #8

SW/SE Sec 11, T29N, R15W

San Juan County, New Mexico

Note: - All cement volumes use 50' excess inside of pipe & 50' excess of caliper outside of pipe. The stabilizing well-bore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures.

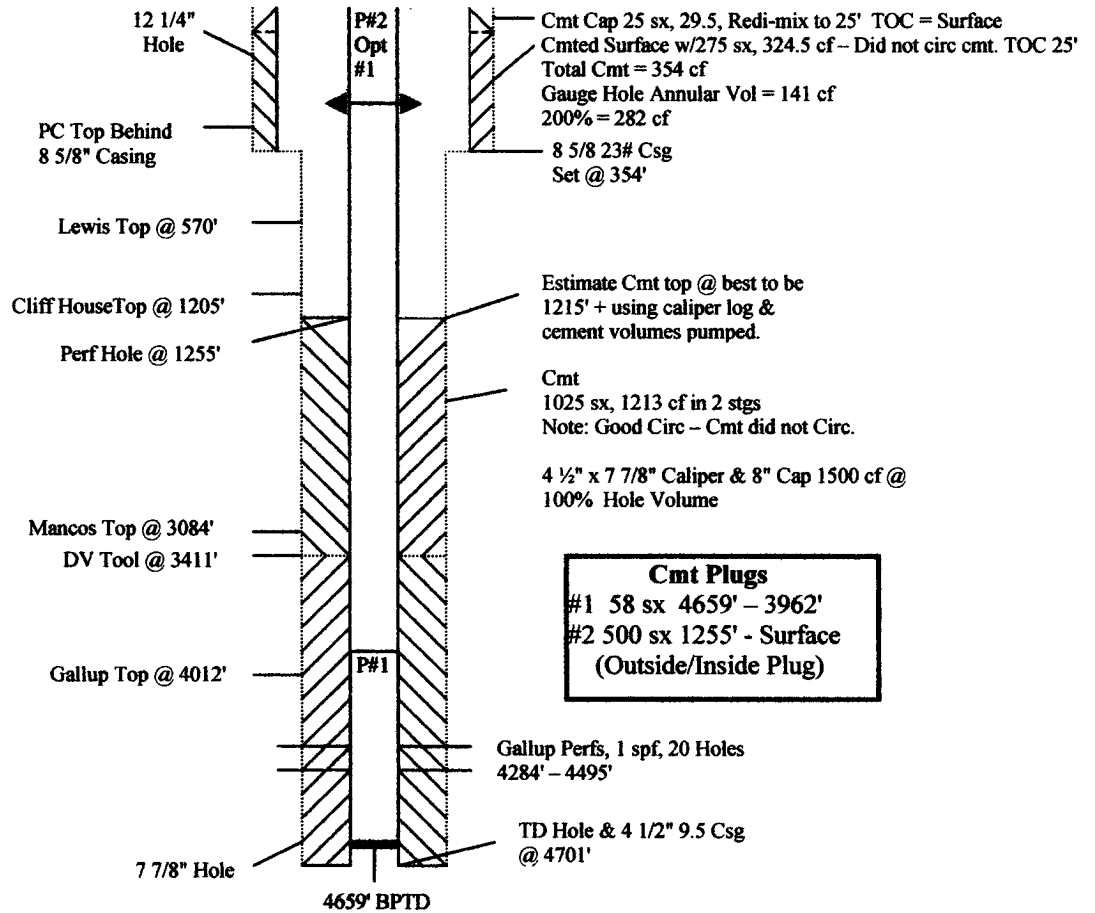
- Cement was not circulated on either primary cement job for the casing strings. Reportedly the cement top on the surface casing was found to be 25' below surface and was filled to surface using 25 sxs cement. On the 4 1/2" production string the APD called for 700 sx cement above the DV tool which was set at 3411'. Using the open hole caliper volumes from the Neutron Density Log, this 700 sx cmt would have brought the cement top, at best, to 1215' with the Mesaverde top at 1205'. Therefore it is necessary to run a CBL log to determine the cement top.

1. Install and/or test rig anchors. Prepare blow tank. Comply with all NMOCD and Richardson safety rules and regulations.
2. MOL and RUSU. Check tubing, casing and braden head for pressures. Blow well down, kill with water if necessary. ND wellhead and NU BOP and stripping head; test BOP.
3. POH and tally 2 3/8" tubing; visually inspect. If necessary LD and PU 2 3/8" work string.
4. **Plug #1 (Gallup perfs & Gallup Top, 4659' - 3962'):** RIH with open ended tubing to 4659' PBTD or as deep as possible; pump 30 bbls water down tubing. Mix 58 sxs Class B cement and spot balanced plug from 4659' - 3962' over Gallup perfs and Gallup top. POH with tubing and WOC. RIH and tag cement. Pull above cement and circulate well clean. Pressure test casing to 500#. TOH.
5. Rig up WL and run CBL to determine cement top. If cement top is more than 50' below the Mesaverde top at 1205', then shoot a squeeze hole at 1255' - establish circulation (down casing and out the 4-1/2" x 8-5/8" annulus) and set an outside/inside plug to surface - Step 6. If the cement top is found to be at least 50' above the Mesaverde top at 1205', then after setting a 100' inside cement plug across the Mesaverde top - Step 7, shoot a squeeze hole at 404' (50' below surface casing at 354') - establish circulation (down casing and out the 4-1/2" x 8-5/8" annulus) and set an Outside/Inside plug to surface - Step 8.
6. ✓ **Plug #2 Option 1 Outside/Inside plug (Mesaverde Top, 1255' - Surface):** Mix 500 sxs Class B cement and circulate outside/inside balanced plug from 1255' to Surface. Go to Step 9.
7. **Plug #2 Option 2 (Mesaverde Top, 1255' - 1155'):** TIH with EOT at 1255', Mix 12 sx Class B cement and circulate a balanced plug from 1255' to 1155'. Trip out hole. Shoot a squeeze hole at 404'.
8. **Plug #3 Option 2 Outside/Inside plug (404' - Surface):** Mix 121 sxs Class B cement and circulate outside/inside balanced plug from 404' to Surface.
9. ND BOP and cut off wellhead below surface casing flange and install P&A marker with cement to NMOCD specifications. RD and MOL. Cut off anchors.
10. Restore location per NMOCD rules, guidelines and stipulations. For production pit or below-grade tank closures a form C-144 must be filed and approved by NMOCD.
11. Arrange for NMOCD inspection of well and restored location.
12. File C-103 (Subsequent report of Plug and Abandonment) within 30 days after completing required restoration work as provided in NMOCD Rule 1103.

Richardson Operating Company
Kirtland #8
510' FSL & 1920' FEL
Sec 11, T29N, R15W
San Juan County, New Mexico

Well-Bore Diagram – Plug #2 - Option 1
Proposed Plugging Procedure

Elev: 5126' GL, KB 12'



Richardson Operating Company
Kirtland #8
510' FSL & 1920' FEL
Sec 11, T29N, R15W
San Juan County, New Mexico

Well-Bore Diagram – Plugs #2 & #3 – Option 2
Proposed Plugging Procedure

Elev: 5126' GL, KB 12'

