| Submit I Copy To Appropriate District Office                                    | State of New Mexico  | Form C-103   |
|---|--|--|
| District I - (575) 393-6161   | Energy, Minerals and Natural Resources   | Revised July 18, 2013  |
| 1625 N. French Dr., Hobbs, NM 88240<br>District II – (575) 748-1283             |  | WELL API NO.<br>30-005-27986   |
| 811 S. First St., Artesia, NM 88210   | OIL CONSERVATION DIVISION  | 5. Indicate Type of Lease  |
| <u>District III</u> – (505) 334-6178<br>1000 Rio Brazos Rd., Aztec, NM 87410    | 1220 South St. Francis Dr.   | STATE FEE  |
| District IV - (505) 476-3460  | Santa Fe, NM 87505   | 6. State Oil & Gas Lease No.   |
| 1220 S. St. Francis Dr., Santa Fe, NM<br>87505                                  |  |  |
| SUNDRY NOT<br>(DO NOT USE THIS FORM FOR PROPO<br>DIFFERENT RESERVOIR. USE "APPL | CICES AND REPORTS ON WELLS OSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A ICATION FOR PERMIT" (FORM C-101) FOR SUCH   | 7. Lease Name or Unit Agreement Name<br>Cato San Andres  |
| PROPOSALS.)  1. Type of Well: Oil Well  | Gas Well  Other  | 8. Well Number 544   |
| Name of Operator     Cano Petro on NM. INC                                      |  | 9. OGRID Number  |
| 3. Address of Operator  |  | 248802<br>10. Pool name or Wildcat   |
| 801 Cherry Street Unit 25 Suite   | 3200 Fort Worth, Texas 76102   | Cato; San Andres   |
| 4. Well Location  | 8 1,1 2  |  |
| Unit Letter M   | _ 1307feet from theS line and _10_fee  | t from the W line  |
| Section 11  | Township 08S Range 30E   | NMPM County Chaves   |
|   | 11. Elevation (Show whether DR, RKB, RT, GR, etc.  |  |
|   |  |  |
| 12 Check  | Appropriate Box to Indicate Nature of Notice,  | Papart or Other Date   |
|   |  | •  |
|   |  | SEQUENT REPORT OF:   |
| PERFORM REMEDIAL WORK   | SECURIOR SECU | 14 773344 37 37 37 37 37 37 37 37 37 37 37 37 37   |
| TEMPORARILY ABANDON PULL OR ALTER CASING  |  |  |
| DOWNHOLE COMMINGLE  |  | 1 30B  |
| CLOSED-LOOP SYSTEM  |  |  |
| OTHER:  | ☐ OTHER:   |  |
|   | pleted operations. (Clearly state all pertinent details, an  |  |
| of starting any proposed w<br>proposed completion or re                         | ork). SEE RULE 19.15.7.14 NMAC. For Multiple Co  | mpletions: Attach wellbore diagram of  |
|   | - Anna Carlotte  |  |
| NMOCD plans to plug this  | well in accordance with the attached procedure and any   | agreed modifications there to.   |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   | APP  | PROVED   |
|   |  |  |
| Spud Date:  | Rig Release Date:  | 24 hrs. prior to any work  |
| Spud Date.  | done   |  |
|   |  |  |
| I hereby certify that the information   | above is true and complete to the best of my knowledg  | e and belief.  |
|   |  |  |
| SIGNATURE ETT WORK  | TITLE Authorized Representative  | DATE 3/14/23   |
| T   |  | SACROCAL CONTROL CONTR |
| Type or print name Ethan Wakefie For State Use Only                             | ld E-mail address: <u>e.wakefield@dwsr</u>   | igs.com PHONE: 405 343 7736  |
| TOI State Use Offly   |  |  |
| APPROVED BY:  | TITLE Petroleum Speciali   | st DATE 4/21/23  |
| Conditions of Approval (if any):  | TITLE Petroleum Speciali   | StDATE4/21/23  |

# **Cano Petro**

# Plug And Abandonment Procedure Cato San Andres #544

1307' FSL & 10' FWL, Section 11, 8S, 30E Chaves County, NM / API 30-005-27986

- 1. Hold pre-job safety meeting. Comply with all NMOCD, BLM safety and environmental regulations. Test rig anchors prior to moving in rig if not rigged to base beam.
- 2. Check casing, tubing, and Bradenhead pressures.
- 3. Remove existing piping on casing valve. RU blow lines from casing valves and begin blowing down casing pressure. Kill well as necessary. Ensure well is dead or on a vacuum.
- 4. ND wellhead and NU BOP. Function test BOP.
- 5. P/U 5-1/2" bit or casing scraper on 2-3/8" work string and round trip as deep as possible above top perforation at 3,410'.
- 6. P/U 5-1/2" CR, TIH and set CR at +/- 3,360'. Pressure test tubing to 1000 psi. Sting out of CR. Load hole, and pressure test casing to 800 psi. If casing does not test, then spot or tag subsequent plugs as appropriate. POOH w/ tubing.
- 7. RU wireline and run CBL with 500 psi on casing from CR at 3,360' to surface to identify TOC. Adjust plugs as necessary for new TOC. Email log copy to

Brandon Powell at <u>Brandon.powell@state.nm.us</u> upon completions of logging operations.

- 8. Rig up to pump cement down tubing. Pump water to establish rate down tubing.
- 9. Circulate wellbore with 9.5 ppg salt gel.

NOTE: All Plugs Include 100% excess outside casing and 50% Excess inside casing

10. Plug 1 (San Andres Perforations 3,360'-3,140', 25 Sacks Type I/II Cement)

Mix 25 sx Type I/II cement and spot a balanced plug inside casing to cover the San Andres perforations.

11. Plug 2 (San Andres formation top 2,750'-2,530', 25 Sacks Type I/II Cement)

Mix 25 sx Type I/II cement and spot a balanced plug inside casing to cover the San Andres Formation top.

12. Plug 3 (Grayburg Formation Top 2,348'-2,128', 25 Sacks Type I/II Cement)

Mix 25 sx Type I/II cement and spot a balanced plug inside casing to cover the Grayburg formation top.

13. Plug 4 (Seven Rivers, Yates, and Tansill formation Tops 1,692'-1,358', 38 Sacks Type I/II Cement)

Mix 38 sx Type I/II cement and spot a balanced plug inside casing to cover the Seven Rivers, Yates, and Tansill formation tops.

14. Plug 5 (Rustler formation Top 1,180'-960', 25 Sacks Type I/II Cement)

Mix 25 sx Type I/II cement and spot a balanced plug inside casing to cover the Rustler formation top.

# 15. Plug 6 (Surface Casing Shoe, 577'-Surface, 175 Sacks Type I/II Cement)

Attempt to pressure test the bradenhead annulus to 300 psi; note the volume to load. If BH annulus holds pressure, then establish circulation out casing valve with water. Mix approximately 175 sx cement and spot a balanced plug from 577' to surface, circulate good cement out of casing valve. TOH and LD tubing. Shut well in and WOC. If BH annulus does not test, then perforate at the appropriate depth and attempt to circulate cement to surface filling the casing from 577' and the annulus from the squeeze holes to surface. Shut in well and WOC.

16. ND cementing valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL and restore location per BLM stipulations.

# **Existing Wellbore Diagram**

Cano Petro Of New Mexico Cato San Andres #544 API: 30-005-27986 Chaves County, New Mexico

## **Surface Casing**

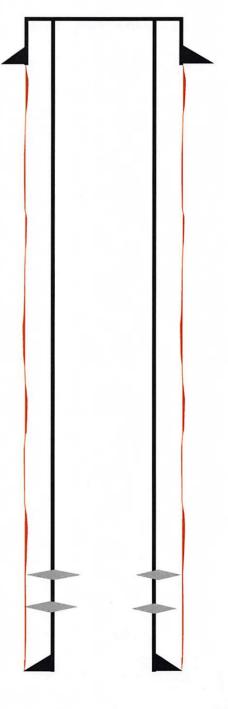
8.625" 24# @ 527 ft OH: 12.25"

# **Formation**

Rustler - 1130'
Tansill - 1458'
Yates - 1548'
Seven Rivers - 1642'
Grayburg - 2298'
San Andres - 2700'

Perforations
3410 feet - 3586 feet

Production Casing 5.5" 15.5# @ 3940 feet OH: 7.875"



# **Proposed Wellbore Diagram**

Cano Petro Of New Mexico Cato San Andres #544 API: 30-005-27986 Chaves County, New Mexico

#### Plug 6

577 feet - surface 577 foot plug 175 Sacks of Type I/II Cement

## Plug 5

1180 feet - 960 feet 220 foot plug 25 Sacks of Type I/II Cement

#### Plug 4

1692 feet - 1358 feet 334 foot plug 38 Sacks of Type I/II Cement

## Plug 3

2348 feet - 2128 feet 220 foot plug 25 Sacks of Type I/II Cement

#### Plug 2

2750 feet - 2530 feet 220 foot plug 25 sacks of Type I/II Cement

#### Plug 1

3360 feet - 3140 feet 220 foot plug 25 sacks of Type I/II Cement

#### **Perforations**

3410 feet - 3586 feet

#### **Surface Casing**

8.625" 24# @ 527 ft OH: 12.25"

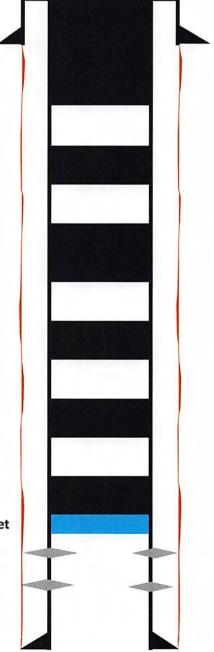
# Formation Rustler - 1130'

Tansill - 1458' Yates - 1548' Seven Rivers - 1642' Grayburg - 2298'

San Andres - 2700'

Retainer @ 3360 feet

Production Casing 5.5" 15.5# @ 3940 feet OH: 7.875"



District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 203639

#### **CONDITIONS**

| Operator:                    | OGRID:                              |
|------------------------------|-------------------------------------|
| J.A. Drake Well Service Inc. | 330485                              |
| 607 W Pinon                  | Action Number:                      |
| Farmington, NM 87401         | 203639                              |
|                              | Action Type:                        |
|                              | [C-103] NOI Plug & Abandon (C-103F) |

#### CONDITIONS

| Created By   |        | Condition<br>Date |
|--------------|--------|-------------------|
| john.harrisc | n None | 4/21/2023         |