

Submit 1 Copy To Appropriate District Office  
 District I – (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II – (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III – (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV – (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

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

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.)		WELL API NO. 30-005-27961
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Cano Petro on NM. INC		6. State Oil & Gas Lease No.
3. Address of Operator 801 Cherry Street Unit 25 Suite 3200 Fort Worth, Texas 76102		7. Lease Name or Unit Agreement Name Cato San Andres
4. Well Location Unit Letter <u>J</u> <u>2577</u> feet from the <u>S</u> line and <u>2460</u> feet from the <u>E</u> line Section <u>11</u> Township <u>08S</u> Range <u>30E</u> NMPM County Chaves		8. Well Number <u>534</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number 248802
		10. Pool name or Wildcat Cato; San Andres

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input checked="" type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

NMOCD plans to plug this well in accordance with the attached procedure and any agreed modifications there to.

SEE ATTACHED CONDITIONS  
 OF APPROVAL

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE \_\_\_\_\_ TITLE Authorized Representative \_\_\_\_\_ DATE 10/31/22

Type or print name Drake McCulloch \_\_\_\_\_ E-mail address: [drake@dwsrigs.com](mailto:drake@dwsrigs.com) \_\_\_\_\_ PHONE: 505 320 1180

For State Use Only

APPROVED BY: Kerry Fortner \_\_\_\_\_ TITLE Compliance Officer A \_\_\_\_\_ DATE 3/7/23  
 Conditions of Approval (if any):

## CONDITIONS FOR PLUGGING AND ABANDONMENT

### OCD - Southern District

The following is a guide or checklist in preparation of a plugging program, this is not all inclusive and care must be exercised in establishing special plugging programs in unique and unusual cases, Notify NMOCD District Office II at (575)-263-6633 at least 24 hours before beginning work. After MIRU rig will remain on well until it is plugged to surface. OCD is to be notified before rig down. Company representative will be on location during plugging procedures.

1. A notice of intent to plug and abandon a wellbore is required to be approved before plugging operations are conducted. A cement evaluation tool is required in order to ensure isolation of producing formations, protection of water and correlative rights. A cement bond log or other accepted cement evaluation tool is to be provided to the division for evaluation if one has not been previously run or if the well did not have cement circulated to surface during the original casing cementing job or subsequent cementing jobs. Insure all bradenheads have been exposed, identified and valves are operational prior to rig up.
2. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to a permitted disposal location.
3. Trucking companies being used to haul oilfield waste fluids to a disposal – commercial or private – shall have an approved NMOCD C-133 permit. A copy of this permit shall be available in each truck used to haul waste products. It is the responsibility of the operator as well as the contractor, to verify that this permit is in place prior to performing work. Drivers shall be able to produce a copy upon request of an NMOCD Field inspector.
4. Filing a subsequent C-103 will serve as notification that the well has been plugged.
5. A final C-103 shall be filed (and a site inspection by NMOCD Inspector to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to Meet NMOCD standards) before bonding can be released.
6. If work has not begun within 1 Year of the approval of this procedure, an extension request must be file stating the reason the well has not been plugged.
7. Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.
8. Produced water will not be used during any part of the plugging operation.
9. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
10. All cement plugs will be a minimum of 100' in length or a minimum of 25 sacks of cement, whichever is greater. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
11. Class 'C' cement will be used above 7500 feet.
12. Class 'H' cement will be used below 7500 feet.
13. A cement plug is required to be set 50' above and 50' below, casing stubs, DV tools, attempted casing cut offs, cement tops outside casing, salt sections and anywhere the casing is perforated, these plugs require a 4 hour WOC and then will be tagged
14. All Casing Shoes Will Be Perforated 50' below shoe depth and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing.

16. When setting the top out cement plug in production, intermediate and surface casing, wellbores should remain full at least 30 minutes after plugs are set
17. A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.
18. A CIBP with 35' of cement may be used in lieu of the 100' plug if set with a bailer. This plug will be placed within 100' of the top perforation, (WOC 4 hrs and tag).
19. No more than 3000' is allowed between cement plugs in cased hole and 2000' in open hole.
20. Some of the Formations to be isolated with cement plugs are: These plugs to be set to isolate formation tops
  - A) Fusselman
  - B) Devonian
  - C) Morrow
  - D) Wolfcamp
  - E) Bone Springs
  - F) Delaware
  - G) Any salt sections
  - H) Abo
  - I) Glorieta
  - J) Yates.
  - K) Cherry Canyon - Eddy County
  - L) Potash---(In the R-111-P Area (Page 3 & 4), a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, WOC 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.
21. If cement does not exist behind casing strings at recommended formation depths, the casing can be cut and pulled with plugs set at recommended depths. If casing is not pulled, perforations will be shot and cement squeezed behind casing, WOC and tagged. These plugs will be set 50' below formation bottom to 50' above formation top inside the casing

#### DRY HOLE MARKER REQUIREMENTS

The operator shall mark the exact location of the plugged and abandoned well with a steel marker not less than four inches in diameter, 3' below ground level with a plate of at least ¼" welded to the top of the casing and the dry hole marker welded on the plate with the following information welded on the dry hole marker:

1. Operator name 2. Lease and Well Number 3.API Number 4. Unit Letter 5. Quarter Section (feet from the North, South, East or West) 6. Section, Township and Range 7. Plugging Date 8. County (SPECIAL CASES)-----AGRICULTURE OR PRARIE CHICKEN BREEDING AREAS

In these areas, a below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to NMOCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to NMOCD (We typically require a current survey to verify the GPS)

#### SITE REMEDIATION DUE WITHIN ONE YEAR OF WELL PLUGGING COMPLETION

## R-111-P Area

### T 18S – R 30E

Sec 10 Unit P. Sec 11 Unit M,N. Sec 13 Unit L,M,N. Sec 14 Unit C -P. Sec 15 Unit A G,H,I,J,K,N,O,P. Sec 22 Unit All except for M. Sec 23, Sec 24 Unit C,D,E,L, Sec 26 Unit A-G, Sec 27 Unit A,B,C

### T 19S – R 29E

Sec 11 Unit P. Sec 12 Unit H-P. Sec 13. Sec 14 Unit A,B,F-P. Sec 15 Unit P. Sec 22 Unit A,B,C,F,G,H,I,J K,N,O,P. Sec 23. Sec 24. Sec 25 Unit D. Sec 26 Unit A- F. Sec 27 Unit A,B,C,F,G,H.

### T 19S – R 30E

Sec 2 Unit K,L,M,N. Sec 3 Unit I,L,M,N,O,P. Sec 4 Unit C,D,E,F,G,I-P. Sec 5 Unit A,B,C,E-P. Sec 6 Unit I,O,P. Sec 7 – Sec 10. Sec 11 Unit D, G—P. Sec 12 Unit A,B,E-P. Sec 13 Unit A-O. Sec 14-Sec 18. Sec 19 Unit A-L, P. Sec 20 – Sec 23. Sec 24 Unit C,D,E,F,L,M,N. Sec 25 Unit D. Sec 26 Unit A-G, I-P. Sec 27, Sec 28, Sec 29 Unit A,B,C,D,F,G,H,I,J,O,P. Sec 32 Unit A,B,G,H,I,J,N,O,P. Sec 33. Sec 34. Sec 35. Sec 36 Unit D,E,F,I-P.

### T 19S – R 31E

Sec 7 Unit C,D,E,F,L. Sec 18 Unit C,D,E,F,G,K,L. Sec 31 Unit M. Sec 34 Unit P. Sec 35 Unit M,N,O. Sec 36 Unit O,P.

### T 20S – R 29E

Sec 1 Unit H,I,P. Sec 13 Unit E,L,M,N. Sec 14 Unit B-P. Sec 15 Unit A,H,I,J,N,O,P. Sec 22 Unit A,B,C,F,G,H,I,J,O,P. Sec 23. Sec 24 Unit C,D,E,F,G,J-P. Sec 25 Unit A-O. Sec 26. Sec 27 Unit A,B,G,H,I,J,O,P. Sec 34 Unit A,B,G,H. Sec 35 Unit A-H. Sec 36 Unit B-G.

### T 20S – R 30E

Sec 1 – Sec 4. Sec 5 Unit A,B,C,E-P. Sec 6 Unit E,G-P. Sec 7 Unit A-H,I,J,O,P. Sec 8 – 17. Sec 18 Unit A,B,G,H,I,J,O,P. Sec 19 Unit A,B,G,H,I,J,O,P. Sec 20 – 29. Sec 30 Unit A-L,N,O,P. Sec 31 Unit A,B,G,H,I,P. Sec 32 – Sec 36.

### T 20S – R 31E

Sec 1 Unit A,B,C,E-P. Sec 2. Sec 3 Unit A,B,G,H,I,J,O,P. Sec 6 Unit D,E,F,J-P. Sec 7. Sec 8 Unit E-P. Sec 9 Unit E,F,J-P. Sec 10 Unit A,B,G-P. Sec 11 – Sec 36.

### T 21S – R 29E

Sec 1 – Sec 3. Sec 4 Unit L1 – L16,I,J,K,O,P. Sec 5 Unit L1. Sec 10 Unit A,B,H,P. Sec 11 – Sec 14. Sec 15 Unit A,H,I. Sec 23 Unit A,B. Sec 24 Unit A,B,C,D,F,G,H,I,J,O,P. Sec 25 Unit A,O,P. Sec 35 Unit G,H,I,J,K,N,O,P. Sec 36 A,B,C,F – P.

### T 21S – R 30E

Sec 1 – Sec 36

### T 21S – R 31E

Sec 1 – Sec 36

### T 22S – R 28E

Sec 36 Unit A,H,I,P.

**T 22S – R 29E**

Sec 1. Sec2. Sec 3 Unit I,J,N,O,P. Sec 9 Unit G – P. Sec 10 – Sec 16. Sec 19 Unit H,I,J. Sec 20 – Sec 28. Sec 29 Unit A,B,C,D,G,H,I,J,O,P. Sec 30 Unit A. Section 31 Unit C – P. Sec 32 – Sec 36

**T 22S – R 30E**

Sec 1 – Sec 36

**T 22S – R 31E**

Sec 1 – Sec 11. Sec 12 Unit B,C,D,E,F,L. Sec 13 Unit E,F,K,L,M,N. Sec 14 – Sec 23. Sec 24 Unit C,D,E,F,K,L,M,N. Sec 25 Unit A,B,C,D. Sec 26 Unit A,BC,D,G,H. Sec 27 – Sec 34.

**T 23S – R 28E**

Sec 1 Unit A

**T 23S – R 29E**

Sec 1 – Sec 5. Sec 6 Unit A – I, N,O,P. Sec 7 Unit A,B,C,G,H,I,P. Sec 8 Unit A – L, N,O,P. Sec 9 – Sec 16. Sec 17 Unit A,B,G,H,I,P. Sec 21 – Sec 23. Sec 24 Unit A – N. Sec 25 Unit D,E,L. Sec 26. Sec 27. Sec 28 Unit A – J, N,O,P. Sec 33 Unit A,B,C. Sec 34 Unit A,B,C,D,F,G,H. Sec 35. Sec 36 Unit B,C,D,E,F,G,K,L.

**T 23S – R 30E**

Sec 1 – Sec 18. Sec 19 Unit A – I,N,O,P. Sec 20, Sec 21. Sec 22 Unit A – N, P. Sec 23, Sec 24, Sec 25. Sec 26 Unit A,B,F-P. Sec 27 Unit C,D,E,I,N,O,P. Sec 28 Unit A – H, K,L,M,N. Sec 29 Unit A – J, O,P. Sec 30 Unit A,B. Sec 32 A,B. Sec 33 Unit C,D,H,I,O,P. Sec 34, Sec 35, Sec 36.

**T 23S – R 31E**

Sec 2 Unit D,E,J,O. Sec 3 – Sec 7. Sec 8 Unit A – G, K – N. Sec 9 Unit A,B,C,D. Sec 10 Unit D,P. Sec 11 Unit G,H,I,J,M,N,O,P. Sec 12 Unit E,L,K,M,N. Sec 13 Unit C,D,E,F,G,J,K,L,M,N,O. Sec 14. Sec 15 Unit A,B,E – P. Sec 16 Unit I, K – P. Sec 17 Unit B,C,D,E, I – P. Sec 18 – Sec 23. Sec 24 Unit B – G, K,L,M,N. Sec 25 Unit B – G, J,K,L. Sec 26 – Sec 34. Sec 35 Unit C,D,E.

**T 24S – R 29E**

Sec 2 Unit A, B, C, D. Sec 3 Unit A

**T 24S – R 30E**

Sec 1 Unit A – H, J – N. Sec 2, Sec 3. Sec 4 Unit A,B,F – K, M,N,O,P. Sec 9 Unit A – L. Sec 10 Unit A – L, O,P. Sec 11. Sec 12 Unit D,E,L. Sec 14 Unit B – G. Sec 15 Unit A,B,G,H.

**T 24S – R 31E**

Sec 3 Unit B – G, J – O. Sec 4. Sec 5 Unit A – L, P. Sec 6 Unit A – L. Sec 9 Unit A – J, O,P. Sec 10 Unit B – G, K – N. Sec 35 Unit E – P. Sec 36 Unit E,K,L,M,N.

**T 25S – R 31E**

Sec 1 Unit C,D,E,F. Sec 2 Unit A – H.



## **Cano Petro**

### **Plug And Abandonment Procedure**

#### **Cato San Andres #534**

2577' FSL & 2460' FEL, Section 11, T8S, R30E

Chaves County, NM / API 30-005-27961

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 3,470'.
6. P/U 5-1/2" CR, TIH and set CR at +/- 3,420'. 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 3,420' to surface to identify TOC. Adjust plugs as necessary for new TOC. Email log copy to

Brandon Powell at [Brandon.powell@state.nm.us](mailto:Brandon.powell@state.nm.us) 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 (Perforations 3,420'-3,200', 25 Sacks Type I/II Cement)**

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

**11. Plug 2 (San Andres and Grayburg Formation Tops 2,813'-2,260', 62 Sacks Type I/II Cement)**

Mix 62 sx Type I/II cement and spot a balanced plug inside casing to cover the San Andres and Grayburg formation tops.

**12. Plug 3 (7 Rivers and Yates formation Tops 1,729'-1,482', 28 Sacks Type I/II Cement)**

Mix 28 sx Type I/II cement and spot a balanced plug inside casing to cover the 7 rivers and Yates formation tops.

**13. Plug 4 (Rustler formation Top 1,143'-923', 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.

**14. Plug 4 (Surface Casing Shoe, 570'-Surface, 173 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 173 sx cement and spot a balanced plug from 570' 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 570' and the annulus from the squeeze holes to surface. Shut in well and WOC.

15. 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.



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## Existing Wellbore Diagram

Cano Petro Of New Mexico  
Cato San Andres #534  
API: 30-005-27961  
Chaves County, New Mexico

### Surface Casing

8.625" 24# @ 520 ft  
OH: 12.25"

### Formation

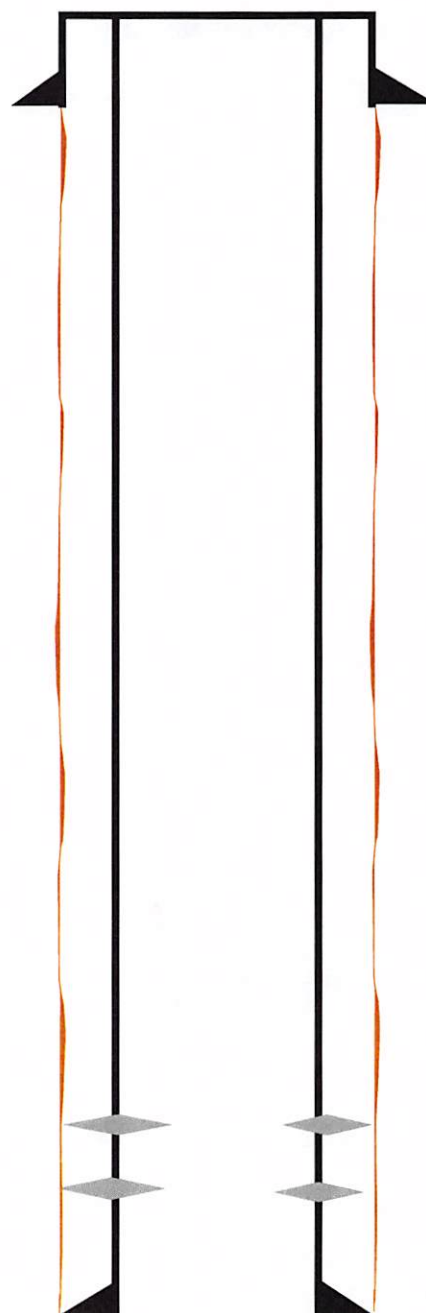
Rustler - 1093'  
Yates - 1582'  
7 Rivers - 1679'  
Grayburg - 2360'  
San Andres - 2763'

### Perforations

3470 feet - 3636 feet

### Production Casing

5.5" 15.5# @ 4010 feet  
OH: 7.875"



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## Proposed Wellbore Diagram

Cano Petro Of New Mexico  
Cato San Andres #534  
API: 30-005-27961  
Chaves County, New Mexico

### Surface Casing

8.625" 24# @ 520 ft  
OH: 12.25"

### Plug 5

570 feet - Surface  
570 foot plug  
173 Sacks of Type I/II Cement

### Plug 4

1143 feet - 923 feet  
220 foot plug  
25 Sacks of Type I/II Cement

### Plug 3

1729 feet - 1482 feet  
247 foot plug  
28 Sacks of Type I/II Cement

### Plug 2

2813 feet - 2260 feet  
553 foot plug  
62 Sacks of Type I/II Cement

### Plug 1

3420 feet - 3200 feet  
220 foot plug  
25 sacks of Type I/II Cement

### Perforations

3470 feet - 3636 feet

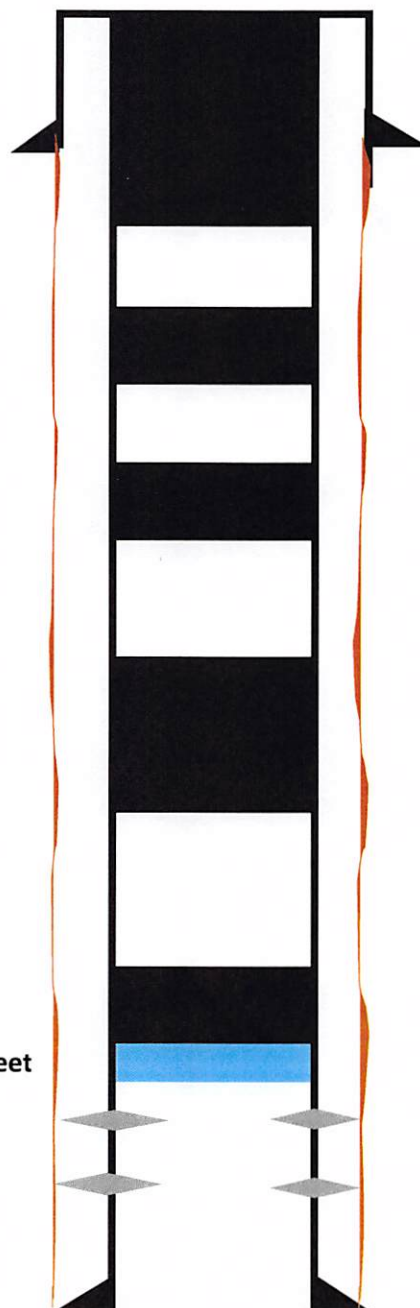
### Formation

Rustler - 1093'  
Yates - 1582'  
7 Rivers - 1679'  
Grayburg - 2360'  
San Andres - 2763'

Retainer @ 3420 feet

### Production Casing

5.5" 15.5# @ 4010 feet  
OH: 7.875"



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**District IV**  
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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

COMMENTS  
  
Action 177641

COMMENTS

Operator: J.A. Drake Well Service Inc. 607 W Pinon Farmington, NM 87401	OGRID: 330485
	Action Number: 177641
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

COMMENTS

Created By	Comment	Comment Date
plmartinez	DATA ENTRY PM	3/8/2023

**District I**  
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Oil Conservation Division  
1220 S. St Francis Dr.  
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CONDITIONS  
  
Action 177641

CONDITIONS

Operator: J.A. Drake Well Service Inc. 607 W Pinon Farmington, NM 87401	OGRID: 330485
	Action Number: 177641
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kfortner	See attached COA	3/7/2023