Submit I Copy To Appropriate District Office	State of New Mexico	Form C-103
District I - (575) 393-6161	Energy, Minerals and Natural Resou	Revised July 18, 2013
1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> – (575) 748-1283		WELL API NO. 30-005-29024
811 S. First St., Artesia, NM 88210	OIL CONSERVATION DIVISI	5. Indicate Type of Lease
<u>District III</u> – (505) 334-6178 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 87505		
(DO NOT USE THIS FORM FOR PROPODIFFERENT RESERVOIR. USE "APPL	TICES AND REPORTS ON WELLS OSALS TO DRILL OR TO DEEPEN OR PLUG BACK T ICATION FOR PERMIT" (FORM C-101) FOR SUCH	7. Lease Name or Unit Agreement Name Cato San Andres
PROPOSALS.) 1. Type of Well: Oil Well	Gas Well Other	8. Well Number 587
Name of Operator Cano Petro on NM. INC		9. OGRID Number 248802
3. Address of Operator		10. Pool name or Wildcat
801 Cherry Street Unit 25 Suite	3200 Fort Worth, Texas 76102	Cato; San Andres
4. Well Location		
Unit Letter G	_ 2530feet from theN line and	1_2593_feet from theE line
Section 14	Township 08S Range	e 30E NMPM County Chaves
	11. Elevation (Show whether DR, RKB, RT)	G, GR, etc.)
12 (1 1		N. d. D.
12. Check	Appropriate Box to Indicate Nature of	Notice, Report or Other Data
NOTICE OF II PERFORM REMEDIAL WORK TEMPORARILY ABANDON PULL OR ALTER CASING DOWNHOLE COMMINGLE CLOSED-LOOP SYSTEM	COMME CASING	SUBSEQUENT REPORT OF: IAL WORK
OTHER:	□ OTHER:	
	vork). SEE RULE 19.15.7.14 NMAC. For Mu	details, and give pertinent dates, including estimated date altiple Completions: Attach wellbore diagram of
NMOCD plans to plug this	well in accordance with the attached procedure	e and any agreed modifications there to.
		Perf & Sqz all
		plugs where no
APPROVED WITH	CONDITIONS	cmt behind pipe.
THE WITH	UNIME	Perf & Sqz all csg
APPROVED "		shoes.
Alle		enses.
		Adhere to NMOCD
		COAs attached.
Spud Date:	Rig Release Date:	<u> </u>
I hereby certify that the information	n above is true and complete to the best of my l	knowledge and belief.
cll		
SIGNATURE CATS Walls	TITLE Authorized Repres	sentative DATE 3/14/23
		2.1.2 57.1125
Type or print name Ethan Wakefie For State Use Only	E-mail address: e.wakefie	eld@dwsrigs.com PHONE: 405 343 7736
APPROVED BY:	TITLE Petroleum S	SpecialistDATE6/1/23
Conditions of Approval (if any):	,	

Cano Petro

Plug And Abandonment Procedure Cato San Andres #587

2530' FNL & 2593' FEL, Section 14, 8S, 30E Chaves County, NM / API 30-005-29024

- 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 3,474'.
- 6. P/U 5-1/2" CR, TIH and set CR at +/- 3,424'. 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 3,424' 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 3,424'-3,204', 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 2,806'-2,586', 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.

12. Plug 3 (Grayburg Formation Top 2,398'-2,178', 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 (Tansill, Yates and Seven Rivers formation Tops 1,738'-1,375', 42 Sacks Type I/II Cement)

Mix 42 sx Type I/II cement and spot a balanced plug inside casing to cover the Tansill, Yates, and Seven Rivers formation tops.

14. Plug 5 (Surface Casing Shoe and Rustler formation top 1,105'-750', 59 Sacks Type I/II Cement)

Mix 59 sx Type I/II cement and spot a balanced plug inside casing to cover the Surface Casing Shoe and Rustler formation top.

15. Plug 6 (Surface, 600'-Surface, 182 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 182 sx cement and spot a balanced plug from 600' 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 600' 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 #587 API: 30-005-29024 Chaves County, New Mexico

Surface Casing

8.625" 24# @ 850 ft OH: 12.25"

Formation

Ruslter - 1055'

Tansill - 1475'

Yates - 1591'

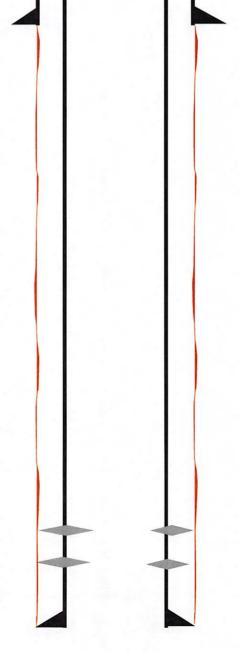
Seven Rivers - 1688'

Grayburg - 2348'

San Andres - 2756'

Perforations 3474 feet - 3652 feet

Production Casing 5.5" 15.5# @ 4015 feet OH: 7.875"



Proposed Wellbore Diagram

Cano Petro Of New Mexico Cato San Andres #587 API: 30-005-29024 Chaves County, New Mexico

8.625" 24# @ 850 ft

Plug 6

600 feet - Surface 600 foot plug 182 Sacks of Type I/II Cement

Plug 5

1105 feet - 750 feet 355 foot plug 59 Sacks of Type I/II Cement

Plug 4

1738 feet - 1375 feet 363 foot plug 42 Sacks of Type I/II Cement

Plug 3

2398 feet - 2178 feet 220 foot plug 25 Sacks of Type I/II Cement

Plug 2

2806 feet - 2586 feet 768 foot plug 25 sacks of Type I/II Cement

Plug 1

3424 feet - 3204 feet 220 foot plug 25 sacks of Type I/II Cement

Perforations

3474 feet - 3652 feet

Formation

Surface Casing

OH: 12.25"

Ruslter - 1055' Tansill - 1475' Yates - 1591' Seven Rivers - 1688' Grayburg - 2348'

San Andres - 2756'

Retainer @ 3424 feet

Production Casing 5.5" 15.5# @ 4015 feet OH: 7.875"



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)-748-1283 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
 - 1) 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 REQUIRMENTS

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 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.

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 221114

CONDITIONS

Operator:	OGRID:
J.A. Drake Well Service Inc.	330485
607 W Pinon	Action Number:
Farmington, NM 87401	221114
	Action Type:
	[C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
john.harrisor	Approved w/ conditions. Adhere to NMOCD COAs attached.	6/1/2023