Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 201

(June 2013)	DEP	ARTMENT OF THE I	NTERIOR			Exp	ores: January 31, 2018		
	BURI	EAU OF LAND MAN	AGEMENT		5. Leas	e Serial No.	IMNM0155254D		
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an						dian, Allottee o	or Tribe Name		
		form for proposals t Use Form 3160-3 (A							
SUBMIT IN TRIPLICATE - Other instructions on page 2						7. If Unit of CA/Agreement, Name and/or No.			
1. Type of Well						Cato San Andres Unit			
✓ Oil Well Gas Well Other					8. Well Name and No. Cato San Andres Unit #186				
2. Name of Operato	^r Shell Oil Compa	ny (Western Division)			9. API	Well No. 30-00	05-20217		
3a. Address P.O. E			3b. Phone No. (832) 337-24	(include area code	·	10. Field and Pool or Exploratory Area Cato; San Andres			
4. Location of Wall	(Footage See T P	2.,M., or Survey Description)	(032) 337-24			intry or Parish,	State		
	Unit E 1980 FN					Chaves County, New Mexico, USA			
	12. CHE	CK THE APPROPRIATE BO	OX(ES) TO IN	DICATE NATURE	E OF NOTICE, RE	PORT OR OTH	HER DATA		
TYPE OF SU	JBMISSION			TY	PE OF ACTION				
Notice of Int	ent	Acidize	Deep	en	Production (Start/Resume)	Water Shut-Off		
redice of the		Alter Casing	Hydi	aulic Fracturing	Reclamation		Well Integrity		
✓ Subsequent I	Report	Casing Repair		Construction	Recomplete		Other		
		Change Plans							
	onment Notice	Convert to Injection		Back	Water Dispos		ork and approximate duration thereof. If		
completed. Fina is ready for fina Please refer t	al Abandonment Not I inspection.) to attached Plug a	fices must be filed only after and Abandonment End of North Record - cont	all requirement Well Report act Rick f	s, including reclar	nation, have been c	ompleted and t	160-4 must be filed once testing has been the operator has detennined that the site clamation.		
14. I hereby certify t	that the foregoing is	true and correct. Name (Pri	nted/Typed)	Title SGV	VS Legacy I	Program	Manager		
Signature	Samanth	a Baker		Date 06	/19/2024				
		THE SPACE	FOR FED	ERAL OR ST	ATE OFICE U	JSE			
Approved by				Petr	oleum Engi	neer	06/25/2024		
certify that the appli	cant holds legal or e	ned. Approval of this notice of equitable title to those rights duct operations thereon.			RFO	1			
Title 18 U.S.C Section	on 1001 and Title 43	3 U.S.C Section 1212, make	it a crime for a	nv person knowing	gly and willfully to	make to any de	epartment or agency of the United States		

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United State any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

LANGAN

Technical Memorandum

300 Union Boulevard, Suite 405

Lakewood, CO 80228

T: 303.262.2000

F: 303.262.2001

To:

BLM

From:

Langan

Info:

Shell

Date:

May 30, 2024

Re:

Plug and Abandonment – End of Well Report

Cato San Andres Unit #186 / API 30-005-20217

Section 4, Township 9S, Range 30E Langan Project No.: 781014301

Work Summary:

4/20/24 - Arrived at Langan field office. Held safety meeting on goals and work to be completed for the day. Drove to CSA 187. Preformed LEL check. Performed rig inspection. Checked well pressures. Moved equipment to location. Spot in equipment and unit. R/U unit. R/U cementing services. Pressure tested lines to 1800 psi. Pumped 40 bbls down 4.5" casing. Well went on vacuum and 120 psi on BH. Waited 30 minutes. 80 psi on 4.5" casing and 80 psi on BH. While waiting to set the cement pit pressure released around the BH causing dirt and debris to go up in the air. Waited 30 minutes. Pumped 20 bbls down 4.5" casing. Waited 30 minutes and fluid started coming out at surface around the BH. Waited 30 minutes. Pumped 20 bbls down 4.5" casing. Waited 30 minutes. Again, fluid started coming out at surface around the BH. Wait on orders. Shut in and secured well. Drove to Langan field office for EOD meeting.

4/21/24 - Arrived at Langan field office. Held safety meeting on goals and work to be completed for the day. Drove to CSA 187. Preformed LEL check. Performed rig inspection. Checked well pressures. Held safety meeting. R/U cementing services. Pumped 58 bbls of brine water down the 4.5" casing. R/D cementers. Well Went on a vacuum. 10 minutes later it started coming around the BH at surface and out the 4.5" casing. Monitored well. Well went from 10 psi to 120 psi flowing water and gas out of the 4.5" casing and around the BH at surface. R/D unit and moved away from the WH. Monitored well for the rest of the day. Drove to Langan field office for EOD meeting.

4/22/24 - Arrived at Langan field office. Held safety meeting on goals and work to be completed for the day. Drove to CSA 187. Preformed LEL check. Performed rig inspection. Checked well pressures. Held safety meeting. Moved base beam away from wellhead. Cleared around the wellhead to make room for dump trucks. Spotted additional cement bin. Wait on orders. Secured Well. Drove to Langan field office for EOD meeting.

4/23/24 - Arrived at Langan field office. Held safety meeting on goals and work to be completed for the day. Drove to CSA 187. Preformed LEL check. Performed rig inspection. Checked well pressures. Moved in gravel trucks and backhoe. Fixed cellar and location. Spotted base beam and rig. R/U unit. Wait on orders. Attempted to NU BOP but did not have the correct equipment. Shutdown. Left all valved on 4.5" and BH open to pits overnight. Night watch to monitor well overnight. Fixed cattle guard while leaving the field.

Plug and Abandonment – End of Well Report Cato San Andres Unit #186 / API 30–005–20217 Section 4, Township 9S, Range 30E Langan Project No.: 781014301 May 30, 2024 – Page 2 of 5

4/24/24 - Arrived at Langan field office. Held safety meeting on goals and work to be completed for the day. Drove to CSA 187. Preformed LEL check. Performed rig inspection. Checked well pressures. Held additional safety meetings. NU BOP. P/U 4.5" packer. TIH to 15'. Attempted to pressure test BOP but was unsuccessful. Packer became stuck in hole. Released packer. Replaced collar. Tied back onto packer. Was able to release the packer. TOOH. Shutdown and wait on orders. Ran hard lines from 4.5" casing and the BH to an open pit. Secured location.

4/25/24 - Arrived at Langan field office. Held safety meeting on goals and work to be completed for the day. Drove to CSA 186. Preformed LEL check. Performed rig inspection. Checked well pressures. Held additional safety meetings. TIH and tagged at 195'. TOOH. Wait for orders on how to proceed. Shutdown and secured well.

4/26/24 - Arrived at Langan field office. Held safety meeting on goals and work to be completed for the day. Drove to CSA 186. Preformed LEL check. Performed rig inspection. Checked well pressures. R/U wireline services. R/U wireline camera services. RIH. Found multiple holes from 345' to 649'. POOH. R/D wireline services. TIH and tagged at 879'. Worked pipe to 960'. TOOH to 800'. Wait on orders. R/U cementing services. Pumped 15 bbls of fresh water, did not circulate. Mixed and pumped 20 bbl LCM pill. TOOH. Shutdown and secured well. Travel to field office for EOD meeting.

4/27/24 - Arrived at Langan field office. Held safety meeting on goals and work to be completed for the day. Drove to CSA 186. Preformed LEL check. Performed rig inspection. Checked well pressures. Shutdown due to wind. Fixed cattle guard. Shutdown and secured well. Travel to field office for EOD meeting.

4/28/24 - Arrived at Langan field office. Held safety meeting on goals and work to be completed for the day. Drove to CSA 186. Preformed LEL check. Performed rig inspection. Checked well pressures. TIH and tagged at 868'. R/U power swivel. Washed clean from 686' to 912'. Shut down do to saber sub. Installed new saber sub. L/D 4 joints. Shut in and secured well. Travel to field office for EOD meeting.

4/29/24 - Arrived at Langan field office. Held safety meeting. Discussed near miss and ways to mitigate the incident. Travel to location. Held safety meeting on tripping pipe. TOOH. Continue safety standdown. Wait on orders from shell.

4/30/24 - Arrived at Langan field office. Held safety meeting. Waited for the work string to be delivered. Performed spiral gas check. Transferred old work string to pipe yard. Unloaded new string. Spotted tubing trailer. Checked well pressures. TIH to 769'. Shutdown and secured well. Closed pipe rams. Left well open to pit. Traveled to field office for EOW meeting.

5/1/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. P/U mill. TIH to 850'. R/U power swivel. Milled to 991'. R/U cementers. Pumped 20 bbl LCM slug. Let LCM set for 1 hr. Milled to 1294'. R/U cementers. Pumped 20 bbl LCM slug. TOOH. Shut down. Left well open to pits. Traveled to field office for EOW meeting.

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5/2/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. TIH and tagged at 929'. Fell through bridge. Tagged again at 1022'. P/U power swivel. Began working through tight hole to 1427'. Hit a solid bridge. Could not mill any further. TOOH. Had to ream out from 1312' to 1076'. R/D swivel and TOOH. Traveled to field office for EOW meeting.

5/3/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. R/U wireline services. RIH and tagged bridge at 792'. POOH. R/D wireline services. Wait on orders and procedure to move forward. Travel to next 4 locations to inspect well heads and discuss hot tapping. Traveled to field office for EOW meeting.

5/4/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. Moved tubing trailer to a different location. Swapped out 2-3/8" tubing with 2-3/8" PH 6 tubing. Moved trailer back to location. Unloaded hot shot truck with BHA equipment. Prepped tallied BHA. R/U power swivel. Changed out saver sub. Shut down due to high winds. Traveled to field office for EOW meeting.

5/5/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. Prepped and tallied 2-3/8" PH6 tubing and BHA. P/U 2-7/8" drill collars and BHA. TIH and tagged at 800'. R/U power swivel. Drilled from 800' to 1507'. Drilled through some tight spots. No returns at surface. R/D power swivel and TOOH. Secured well and equipment. Noticed well started to come around through the 5.5" casing. Made arrangements to get water to cement pit. Well flowed back approx. 150 bbls of produced water in 4 hours.

5/6/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. Crew dug up cellar to replace BH with new valve. Waited for new orders. Travel to field office for EOD meeting.

5/7/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. Spotted trailed with new 3" flow line. Replaced 2" line from well head to roll off boxes with 3" line. Held safety meeting on lifting, hoisting, and suspended loads. TIH and tagged at 911'. L/D collars due to amount of stands in the derrick. R/U swivel. Milled to 942'. Well began to partially circulate. Pumping 1 bpm returning 0.25 bpm. Pumped 40 bbls to circulate out gas. Milled to 1020'. Hit a solid bridge and lost circulation. TOOH. While tripping out of hole the casing below the BOP began to fail. Shut down operations. Travel to field office for EOD meeting.

5/8/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. ND BOP. Break off bad collar. NU with new fittings. Prepped PH6 tubing. Secured well. Left open to pits. Travel to field office for EOD meeting.

5/9/24 (Day) - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. P/U mill, collars, and PH6 tubing. TIH and tagged at 1041'. R/U power swivel. Milled to 1412'. Wait on Shell and BLM orders. TOOH. L/D work string. Switch from PH6 to EUE tubing. TIH to 1507'. Shutdown tower. Night shift to take over.

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5/9/24 (Night) - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. R/U cementing services. Tested lines to 1800 psi. Pumped 5 bbls of fresh water. Pumped plug #1 from 1505' to 1182' with 25 sacks. R/D cementers. TOOH and L/D tubing. WOC 8 hours. TIH and tagged plug #1 at 1362'. R/U cementing services. Pumped 10 bbls of fresh water. Waited on orders. Shutdown tower. Held EOD safety meeting.

5/10/24 (Day) - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. TIH to 1346'. R/U power swivel. Clean out to plug #1 at 1385'. Wait on orders. R/D swivel. R/U cementing services. Pumped plug #2 from 1385' to 743' with 50 sacks. R/D cementing services. TOOH. WOC. TIH and tagged at 1080'. R/U cementing services. Pumped plug #2 from 1080' to 736' with 25 sacks. TOOH. WOC. Held EOD safety meeting.

5/10/24 (Night) - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. Tagged soft cement at 870'. Pushed through soft cement to 906' where hard cement was tagged. Attempted to circulate but tubing pressured up. TOOH to unclog tubing. TIH to 865' and circulated 14 bbls (full casing volume) with no returns. Discussed with BLM and received approval to pump 42 sack plug (49.5 cf) from 865' - 320'. Pumped plug #4 from 865' to 320'. TOOH. WOC. Shutdown. Held EOD safety meeting.

5/11/24 (Day) - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. TIH tagged plug #4 at 800'. r/U cementing services. Pumped plug #5 from 800' to 323'. TOOH WOC. TIH and tagged plug #5 at 400'. R/U cementers. Circulated well. Shut 4.5" circulate attempted to circulate through BH but was unsuccessful. Shutdown and secured well. Wait on orders. Held EOD safety meeting.

5/12/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Moved tubing trailer, lights, and prepped location for wireline pressure control equipment. R/U lubricator and wireline BOPs. R/U wireline services. RIG and tagged at 280'. POOH. R/D wireline services. Moved tubing trailer. TIH and tagged cement stringer at 323'. R/U power swivel. Cleaned out stringers to 400'. R/D swivel. TOOH. Shutdown and secured well. Held EOD safety meeting.

5/13/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. P/U 3.25" mill. TIH to 400'. TOOH. Move tubing trailer and sport wireline pressure control equipment. R/U wireline services. RIH and perforated at 400'. Could not pull guns from hole. Pulled out of rope socket. Tied on the 4.5" casing. Pumped 2.5 bbls down the backside of the surface casing. Shutdown pump. TIH with tubing. Tagged at 333'. Wait on orders. Secured location. Held EOD safety meeting.

5/14/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. TIH and tagged a 330′. R/U cementing services. Pumped plug 6 from 323′ to 268′. TOOH WOC. TIH and tagged at 310′. Wait on shell to make decision on how to proceed. R/U cementing services. Continued pumping plug #6 from 310′ to 258′. TOOH. Shutdown. Held EOD safety meeting.

LANGAN

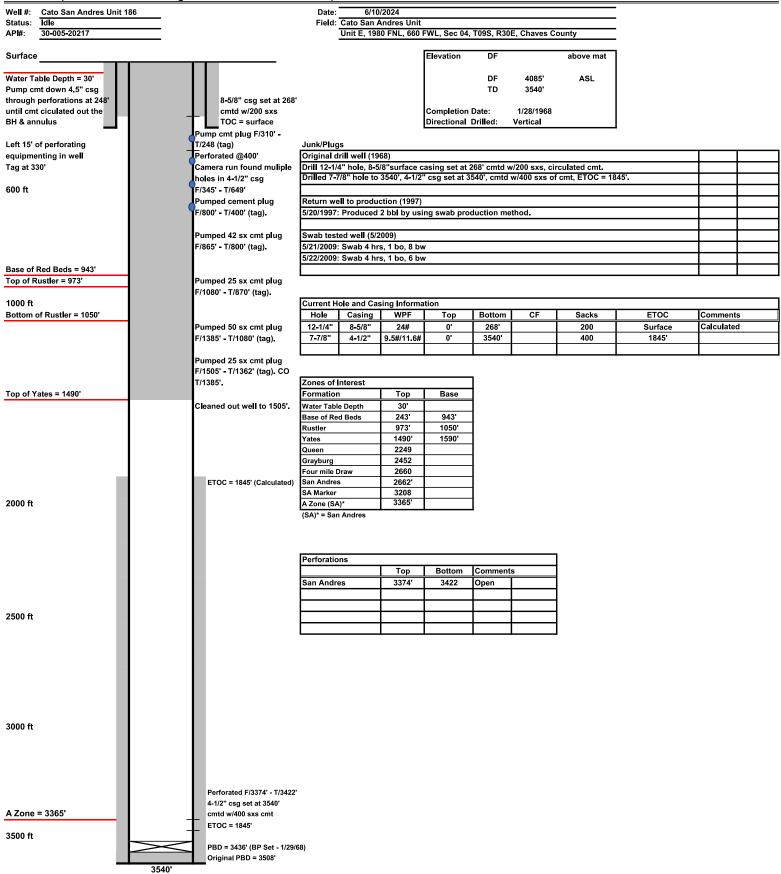
Plug and Abandonment – End of Well Report Cato San Andres Unit #186 / API 30–005–20217 Section 4, Township 9S, Range 30E Langan Project No.: 781014301 May 30, 2024 – Page 5 of 5

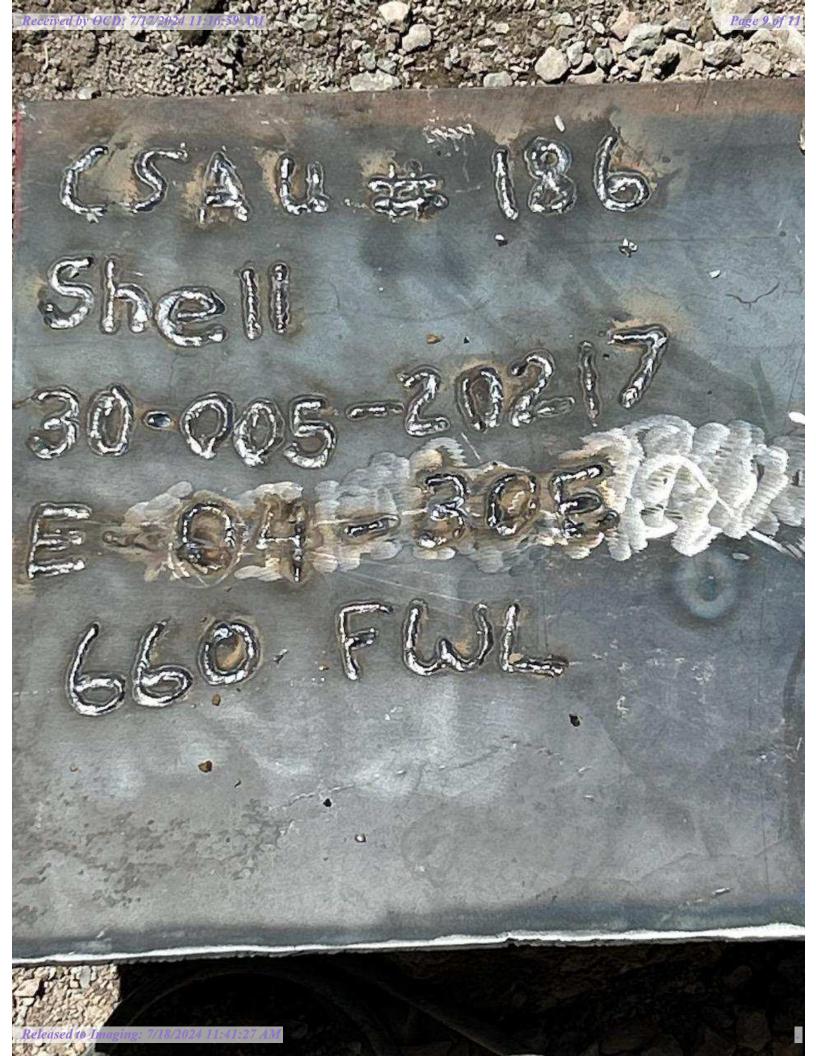
5/15/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. TIH and tagged at 248' TOOH. R/U cementing services. Attempted to pressure test well, test failed. Wait for orders. R/U wireline pressure control equipment. R/U wireline services. TIH and perforated at 248'. POOH. R/D wireline services. R/U cementing services. Shutdown due to lightning. Held EOD meeting.

5/16/24 - Arrived at Langan field office. Held safety meeting. Traveled to location. Performed spiral gas check. Checked well pressures. Held safety meeting. R/U cementing services. Began pumping surface plug, pumped 0.5 bbl and circulated through the BH. Shutdown. Wait on orders. Pumped a sweep with green dye down 4.5". Circulation of the green die required 10.5 bbls. Wait on orders. R/U cementing services. Pumped down 4.5" casing until cement circulated out the BH and annulus. N/D BOP. R/D equipment and unit. Travel to field office for EOD meeting.

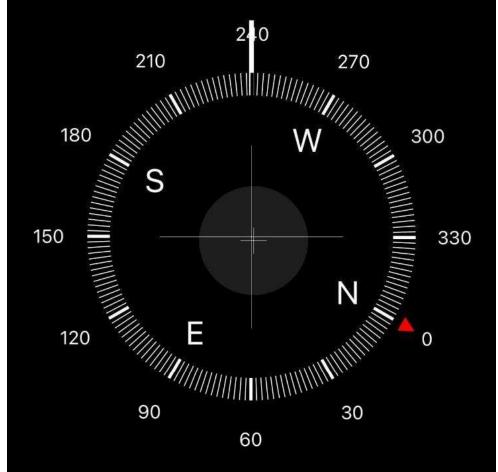
5/17/24 - Arrive at field office for meeting. Travel to location to begin removing all rig guidelines to have pull tested. Removed all hydraulic hoses showing ware to have replaced. Rig down derrick. Held EOD meeting.

Proposed Well Bore Diagram after Abandonment Operations









239° SW

33°33′50″ N 103°53′33″ W 4080 ft Elevation

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 364873

CONDITIONS

Operator:	OGRID:
CANO PETRO OF NEW MEXICO, INC.	248802
801 Cherry Street	Action Number:
Fort Worth, TX 76102	364873
	Action Type:
	[C-103] Sub. Plugging (C-103P)

CONDITIONS

Created By	Condition	Condition Date
loren.diede	None	7/18/2024