

Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. **NM-0276225**

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator **Shell Oil Company (Western Division)**

3a. Address **P.O. Box 576, Houston, TX 77210**

3b. Phone No. (include area code)
(832) 337-2434

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)
Section 22 Township 8S Range 30E

7. If Unit of CA/Agreement, Name and/or No.
Cato San Andres Unit

8. Well Name and No. **Cato San Andres Unit #140**

9. API Well No. **30-005-20087**

10. Field and Pool or Exploratory Area
Cato; San Andres

11. Country or Parish, State
Chaves County, New Mexico, USA

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Please refer to attached Plug And Abandonment End of Well Report

Accepted for Record - contact Rick Flores at rflores@blm.gov for reclamation.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Title **SGWS Legacy Program Manager**

Signature *Samantha Baker*

Date **06/19/2024**

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title **Petroleum Engineer** Date **06/25/2024**

Office **RFO**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

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 States 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 23, 2024

Re: Plug and Abandonment – End of Well Report
Cato San Andres Unit #140 / API 30-005-20087
Section 22, Township 8S, Range 30E
Langan Project No.: 781014301

Work Summary:

3/11/24 – Arrived at Langan field office. Attended safety orientation from 8 AM to 11 AM. Traveled to location. Performed spiral gas check. Bled off well through 5.5". Held meeting on future plans for location and well procedure. Travel to locations CSAU 187, 186, 185, 198, and 188. Held meeting on well location needs and plans for bleeding off pressure. Returned to Langan field office. Held post work meeting and plans moving forward.

3/12/24 – Arrived at Langan field office. Held pre-work safety meeting. Drive to location. Hold job specific safety meeting. Completed spiral gas check. Begin backhoe work to fix location. Hold safety meeting on spotting in base beam. Spot base beam. Discuss moving rig into location. Spot rig. Discuss plan to R/U unit. R/U unit. Wait on approval from Shell to hot tap well without pumping kill fluid. Shell approved. Hold safety meeting and discuss hot work permit. R/U tapping tool. Discuss hot tap procedure further. Pressure test tapping tool to 500 psi. Test good with no bleed off. Verified pull out length. Tap bull plug. Hold meeting discussing suspended loads. Spotted closing unit. Unloaded equipment and secured well. Reported back to field office. Review work and discuss procedure on the next days work.

3/13/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to location. Hold job specific safety meeting. Completed spiral gas check. Spot cementing equipment. Hold safety meeting on R/U cementing equipment. Hold safety meeting on pressure testing lines. Pressure test lines to 1800 psi. Pump 40 bbl to kill well. Wait 30 minutes after kill to monitor for pressure. Rig down cementers. Hold safety meeting on NU

Technical Memorandum

Plug and Abandonment – End of Well Report
Cato San Andres Unit #140 / API 30-005-20087
Section 22, Township 8S, Range 30E
Langan Project No.: 781014301
May 23, 2024- Page 2 of 8

BOP. NU BOP. Have safety meeting on picking up tubing and suspended loads. Run 4 joints of tubing and cup packer followed by an additional joint. Attempt to pressure test BOP. BOP test failed. TOOH with packer. P/U casing scraper. TIH with casing scraper to 62'. Secured well and shut down for the day. Travel to field office and hold post job safety meeting.

3/14/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to location. Hold job specific safety meeting. Performed spiral gas check. Checked well pressures. Wait on CAD to repair the closing unit. Hold safety meeting on suspended loads. Used backhoe to do minor location work. TIH with 5 joints. Stacked out. L/D 1 joint. Ran cup packer to 14'. Attempted to pressure test but test failed. L/D packer and TOOH. Wait on pit and swivel. Held safety meetings on suspended loads. TIH with bit and tagged at 142'. TOOH with bit. L/D bit. TIH open ended. Tagged at 142'. TOOH. Shut in and secured well. Travel to field office hold safety meeting on work performed.

3/15/24 - Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to location. Hold job specific safety meeting. Performed spiral gas check. Checked well pressures. R/U BHA with overshot, grapple, and crossover. TIH and tagged at 142'. Attempted to fish. Was unable to latch onto fish. TOOH. Change BHA to drill bit. TIH and tagged at 142'. Drilled down to 409'. Plugged bit. TOOH. Cleaned BHA. Shut in and secured well. Travel to field office hold safety meeting on work performed.

3/16/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #187. Discussed pad needs. Drive to CSAU #140. Held job specific safety meeting. Performed spiral gas check. Checked well pressures. TIH with bit and swivel. Tagged at 409'. Began washing to bottom. Tagged hard at 976'. Began drilling up hard spot. Lost circulation. TIH to 1364'. TOOH to 909'. Pumped LCM pill, 20 bbls at 60 viscosity and 20% LCM. TOOH and let LCM sit overnight. Shut in and secured well. Travel to field office hold safety meeting on work performed.

3/17/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. Held job specific safety meeting. Performed spiral gas check. Checked well pressures. TIH open ended. Pumped LCM pill. 20 bbls, 60 viscosity, 20 % LCM.

Technical Memorandum

Plug and Abandonment – End of Well Report
Cato San Andres Unit #140 / API 30-005-20087
Section 22, Township 8S, Range 30E
Langan Project No.: 781014301
May 23, 2024- Page 3 of 8

TOOH. Make up bit. TIH and tagged at 3473'. TOOH. P/U 5.5" casing scraper. TIH to 3408. TOOH. Shut in and secured well. Travel to field office hold safety meeting on work performed.

3/18/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. Held job specific safety meeting. Performed spiral gas check. Checked well pressures. Moved in lubricator and wireline truck. Held safety meeting on rigging up equipment. R/U equipment. Pressure test lubricator. Tested to 1500 psi for 15 minutes. Attempted to do a gauge ring run but was stopped at 130'. R/D lubricator. Shut in and secured well. Travel to field office hold safety meeting on work performed.

3/19/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. Held job specific safety meeting. Performed spiral gas check. Checked well pressures. R/U lubricator. Attempted to pressure test lubricator but could not get a good test. RIH with camera to 130'. Was able to view parted casing. The parted casing was obstructing the well bore. POOH. R/D wireline services. R/D lubricator. TIH to 3570'. Established circulation with 52 bbls. R/U cementing services. Pumped plug #1 from 3570' to 3350'. R/D cementers. TOOH. WOC overnight. Shut in and secured well. Travel to field office hold safety meeting on work performed.

3/20/24 - Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. Wait on orders. Was put on standby.

3/21/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. Unload new tubing string and all handling equipment. Change pipe rams. Pick up tools to test pipe rams with cup packer. Test did not pass. L/D packer. TIH with mill shoe and 5 joints of 3-1/2" tubing. As requested by onsite supervision, landed pipe on pipe rams. Could not rig up lubrication system over surface equipment. Shut in and secured well. Traveled to field office. Discussed plans moving forward. Travel to town and fabricate landing joint to hand pipe off rams.

3/22/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. L/D cross overs. P/U modified joint to land pipe on

Technical Memorandum

Plug and Abandonment – End of Well Report
Cato San Andres Unit #140 / API 30-005-20087
Section 22, Township 8S, Range 30E
Langan Project No.: 781014301
May 23, 2024- Page 4 of 8

the rams. Land string. R/U wireline services. RIH with camera. Tagged fluid at 140'. Continued to run past fluid. Was too dark for the camera. R/D camera. R/U services for a CBL. RIH to log well. Wireline tagged cement at 3327'. POOH. R/D wireline services. Shut in and secured well. Travel to field office for meetings.

3/23/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. Performed spiral gas check. Checked well pressures. R/D lubricator. L/D crossovers and 3-1/2" guide string. P/U 2-3/8" handling tools and prepare to TIH. Hold safety drill and talk about weather. Langan, Shell, and Drake deemed the wind too strong to continue work. Shut in and secured well. Travel to field office for meetings.

3/24/24 – No work due to weather

3/25/24 – Arrived on location. Held safety meeting. Completed spiral gas check. Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. Make up test cut packer. Set packer at 15'. Attempted to test BOP. Test failed cup packer would not hold. TIH with 104 joints and tag TOC at 3363'. Hold safety meeting. R/U cementing services. Pressure tested hoses to 800 psi for 15 minutes. Establish circulation with 3 bbls, pumped 5 bbls total. Continued pumping plug #1 from 3363' to 2986'. R/D cementers. L/D 12 joints. R/U cementing services. Reverse circulated at 2953'. TOO H with 15 stands. WOC 4 hours. TIH and tagged plug #1 at 2955'. R/U cementing services. Held safety meeting. Continued pumping plug #1 from 2955' to 2645'. R/D cementers. L/D 10 joints and TOO H with 40 stands. Shut in and secured well. Held meeting at field office to discuss further work.

2/26/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. TIH with and tagged plug #1 at 2625'. R/U cementing services. Held safety meeting. Pumped bump plug from 2625' to 2465'. L/D 5 joints. Reverse circulate at 2466' established circulation with 5 bbls, pumped 18 total. R/D cementers. TOO H with 15 stands. WOC 4 hours. TIH and tagged plug #1 at 2466'. TOO H. Shut in well. R/D elevators, slips and pipe rams. Installed 3-1/2" slips and

Technical Memorandum

Plug and Abandonment – End of Well Report
Cato San Andres Unit #140 / API 30-005-20087
Section 22, Township 8S, Range 30E
Langan Project No.: 781014301
May 23, 2024- Page 5 of 8

pipe rams. P/U 5 joints of 3.5". Land on top of pipe rams. Secure well for the day. Held meeting at field office to discuss further work.

3/27/24 – Arrived at Langan field office. Held pre-work safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. Held meeting on windy conditions. Shut down due to wind. DES performed water hauling. Secure well for the day. Held meeting at field office to discuss further work.

3/28/24 – Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. R/U wireline services. RIH and perforated at 2445', 2343' and 2240'. POOH. R/D wireline services. TOOH with 3.5" tubing. Swap elevators, slips and rams to 2-3/8". Secure well for the day. Held meeting at field office to discuss further work.

3/29/24 – Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. TIH to 2465'. R/U cementing services. Continued pumping plug #1 from 2466' to 2140'. R/D cementers. L/D 10 joints. Reverse circulated at 2138'. Continued to TOOH. WOC 4 hours. TIH and tagged plug #1 at 2142'. R/U cementing services. Pressure tested lines to 800 psi. Pumped mud spacer from 2142' to 1825'. R/D cementers. L/D 10 joints. R/U cementing services. Attempted to pump plug #2 but cement pump experienced issues. TOOH with 10 stands. Secure well for the day. Held meeting at field office to discuss further work.

3/30/24 – Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. TIH with 10 stands. P/U pop joints to space cement plug. R/U cementing services. Pressure tested lines. Pumped plug #2 from 1826' to 1600'. R/D cementers. L/D 7 joints and reverse circulated at 1559'. TOOH. WOC 4 hours. TIH and tagged plug #2 at 1600'. TOOH. R/D all 2-3/8" equipment. Installed equipment for 3-1/2". P/U 3.5" tubing. Set tubing on top of rams. Shut in and secured well for the day. Held meeting at field office to discuss further work.

Technical Memorandum

Plug and Abandonment – End of Well Report
Cato San Andres Unit #140 / API 30-005-20087
Section 22, Township 8S, Range 30E
Langan Project No.: 781014301
May 23, 2024- Page 6 of 8

3/31/24 – Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. R/U wireline services. RIH and perforated from 1590' to 1580'. POOH. R/D wireline services. POOH with 3.5" tubing. Switch equipment from 3.5" to 2.375". TIH to 1600'. R/U cementing services. Pressure test lines to 800 psi. Continued pumping plug #2 from 1600' to 1297'. R/D cementers. L/D 9 joints. Reverse circulated. TOOH. WOC overnight. Shut down due to bad weather. Shut in and secured well for the day. Held meeting at field office to discuss further work.

4/1/24 - Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. TIH and tagged plug #2 at 1310'. TOOH. Swapped equipment from 2-3/8" to 3-1/2". TIH with 3-1/2" tubing. R/U wireline services. RIH and perforated from 1160' to 1150'. POOH. R/D wireline services. Windy conditions and rain shut down job. Shut in and secured well for the day. Held meeting at field office to discuss further work.

4/2/24 - Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. TOOH with 3.5" tubing. Swapped equipment from 3.5" to 2.375". TIH to 1307'. R/U cementing services. Pressure tested lines to 800 psi. Continued pumping plug #2 from 1310' to 1050'. R/D cementers. L/D 8 joints. TOOH with 16 stands. WOC 4 hours. TIH. While TIH a gust of wind caused the traveling blocks to swing against the pipe board. This resulted in a pinched drill line. The drill line and pipe board were inspected. Pictures and reports were completed for Drake and Langan HSE. Shutdown for the remainder of the day. Shut in and secured well for the day. Held meeting at field office to discuss further work.

4/3/24 - Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. TIH with 2-3/8" tubing. Tagged plug #2 at 1012'. R/U cementing services. Pumped mud spacer from 1012' to 400'. R/D cementers. L/D 8 Joints. R/U cementing services. Pumped plug #3 from 715' to 490'. R/D cementers. TOOH with 7 stands. R/U cementing services. Reverse circulated at 485'.

Technical Memorandum

Plug and Abandonment – End of Well Report
Cato San Andres Unit #140 / API 30-005-20087
Section 22, Township 8S, Range 30E
Langan Project No.: 781014301
May 23, 2024- Page 7 of 8

R/D cementers. Shut down operations to replace drill line. Held meeting at field office to discuss further work.

4/4/24 - Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. Cut drilling line at 880'. Inspect blocks, drill line and derrick board. Fill out inspection form. Mailed inspection form to DWS main office. Wait on approval. Secured location. Held meeting at field office to discuss further work.

4/5/24 - Arrived at Langan field office. Held safety meeting on work to be performed and goals. Job was shut down due to windy conditions over 28 MPH. Performed fire drill with the crew. Held safety meeting to discuss future work.

4/6/24 - Job was shut down due to windy conditions over 28 MPH.

4/7/24 - Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Shut down due to windy conditions. Held end of day safety meeting.

4/8/24 - Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. TIH with work string. Tagged plug #3 at 494'. TOOH. Swap all equipment to from 2-3/8" to 3-1/2". TIH with 3-1/2" tubing. Held safety meeting on wireline operations. R/U wireline services. RIH and perforated from 469' to 479'. POOH. R/D wireline equipment. L/D 3-1/2" tubing. Swap all equipment from 3-1/2" to 2-3/8". Held safety meeting. TIH with 2-3/8" tubing to 492'. R/U cementing services. Pressure tested lines to 800 psi. Pump 5 bbls fresh water. Continued pumping plug #3 from 492' to 140'. R/D cementers. L/D 11 joints. R/U cementers. Reverse circulate at 140'. R/D cementers. WOC overnight. Shut in and secured well. Held end of day safety meeting.

4/9/24 - Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. Unable to begin work due to high wind conditions. Did hazard hunt around location. Rechecked wind conditions. Shutdown due to high winds. Shut in and secured well. Held end of day safety meeting.

Technical Memorandum

Plug and Abandonment – End of Well Report
Cato San Andres Unit #140 / API 30-005-20087
Section 22, Township 8S, Range 30E
Langan Project No.: 781014301
May 23, 2024- Page 8 of 8

4/10/24 - Arrived at Langan field office. Held safety meeting on work to be performed and goals. Drive to CSAU #140. Completed spiral gas check. Checked well pressures. TIH with tubing and tagged plug #3 at 298'. R/U cementing services. Pressure tested lines to 800 psi. Continued pumping plug #3 from 298', pumped cement out of BH valve at surface, shut BH valve and opened 5.5" casing valve. Continued pumping cement up the 5.5" casing to surface. R/D cementers. L/D tubing. Washed up equipment. Rig down equipment and prepare to MOL. Drove to Langan Field office and held end of the day safety meeting.

Well #: Cato San Andres Unit 140 (Final) WBD
Status: Abandoned
API#: 30-005-20087

Date: 5/28/2024
Field: Cato San Andres Unit
Unit J, 1980 FEL, 1980 FSL, Sec 22, T08S, R30E, Chaves County

Surface

Elevation of casing head: 4153'		
DF	4160'	ASL
TD	3680'	
Completion Date: 7/9/1967		
Directional Drilled: Vertical		

Water Table Depth = 104'
Surface plug:
Cmt plug 3, Stg 3a
F/298' - T/surface
Annulus.

Plug 3, stg 3b
Plug 3, stg 3a

Fill Annulus = 38 cf / 5-1/2" csg = 21 cf
Parted csg @130' (verified w/camera)
Surface plug: Plug 3, stg 3a (inside 5-1/2) csg
F/298' - T/surface
9-5/8" csg set at 429'
cmt w/350 cf
TOC = surface

Junk/Plugs

Original drill well (1967)		
Drill 12-1/4" hole, set 9-5/8" conductor set at 429' cmt w/350 sxs, cmt at surface		
Drilled 7-5/8" hole to 3680', 5-1/2", 15.5# csg set at 3678', cmt w/350sxs of cmt, ETOC = 1736'.		
Well work (1968)		
4/1968: Sundry notice to frac well, no record in BLM history that fracture stimulation was completed.		
Abandonment (3/11/2024 - 4/10/2024)		
Plug 1, 4 stages F/ 3570' - 2142' - 235 sxs, Plug 2, 3 stages F/1826' - 1012' - 60 sxs, Plug 3, 3 stages F/715 - T/surface - 159 sxs.		

500 ft

Plug 3, stg 1

Perf F/469 - T/459

Cmt plug 1, Stg 1
F/715' - T/494'

Abandonment Fluid
plug F/1012' - 715'

1000 ft

Base of Red Beds = 1061'
Top of Rustler = 1066'
Bottom of Rustler - 1136'

Plug 2, Stg 3

Cmt plug 2, stg 3 F/1310'
- T/1012' (tag)

Perf F/1160' - T/1150'

Current Hole and Casing Information

Hole	Casing	WPF	Top	Bottom	CF	Sacks	ETOC	Comments
12-1/4"	9-5/8"	36#	0'	429'		350	Surface	
7-7/8"	5-1/2"	15-1/2#	0'	3678'		350	1736'	

Top of Yates = 1590'

Plug 2, Stg 2

Cmt plug 2, stg 2 F/1600'
- T/1310' (tag)

Perf F/1590' - T/1580'

Zones of Interest

Formation	Top	Base
Base of Red Beds	+/- 250'	1061'
Rustler	1066'	1136'
Yates	1590'	1690'
Queen	2240'	
Fourmile Draw	2343'	
Grayburg	2425'	
Top of San Andres	2745'	
San Andres	2343'	
Slaughter A (SA)*	3449'	3580'
Water Table Depth	104'	

(SA)* - San Andres

2000 ft

Abandonment Fluid
plug F/2142' - 1825'

Plug 2, Stg 1

Cmt plug 2, stg 1
F/1826' - T/1600' (tag)

Perforations

	Top	Bottom	Comments
Yates	1590'		
Grayburg/Queen	2230'	2240'	
Fourmile Draw	2333'	2343'	
Grayburg	2415'	2425'	
San Andres	3462'	3503'	San Andres Pay

Top of Queen = 2240'

Perf F/2240'-T/2230'

Top of Fourmile Draw = 2343'

Plug 1, Stg 4

Perf F/2343'-T/2333'

Top of Grayburg = 2445'

Cmt plug 1, stg 4 F/2466' - T/2142' (tag)
Perf F/2445'-T/2435'

2500 ft

Bump Plug

Cmt bump plug F/2625' - T 2466'
CBL TOC = 2554' (3.22.2024)

TOC = 2645', 100' above Top of San Andres at 2745

Top of San Andres = 2745

Plug 1, Stg 3

Cmt plug 1, stg 2 F/2925' - T/2625' (tag)

3000 ft

Plug 1, Stg 2

Cmt plug 1, stg 2 F/3363' - T/2955' (tag)

Cmt plug 1, stg 1: F/3570' - T/3363' (tag)

San Andres Pay = 3440'

Plug 1, Stg 1

5-1/2" csg set at 3678'
cmt w/350 sxs cmt
ETOC = 1736'
Perforated F/3462' - T/3503'

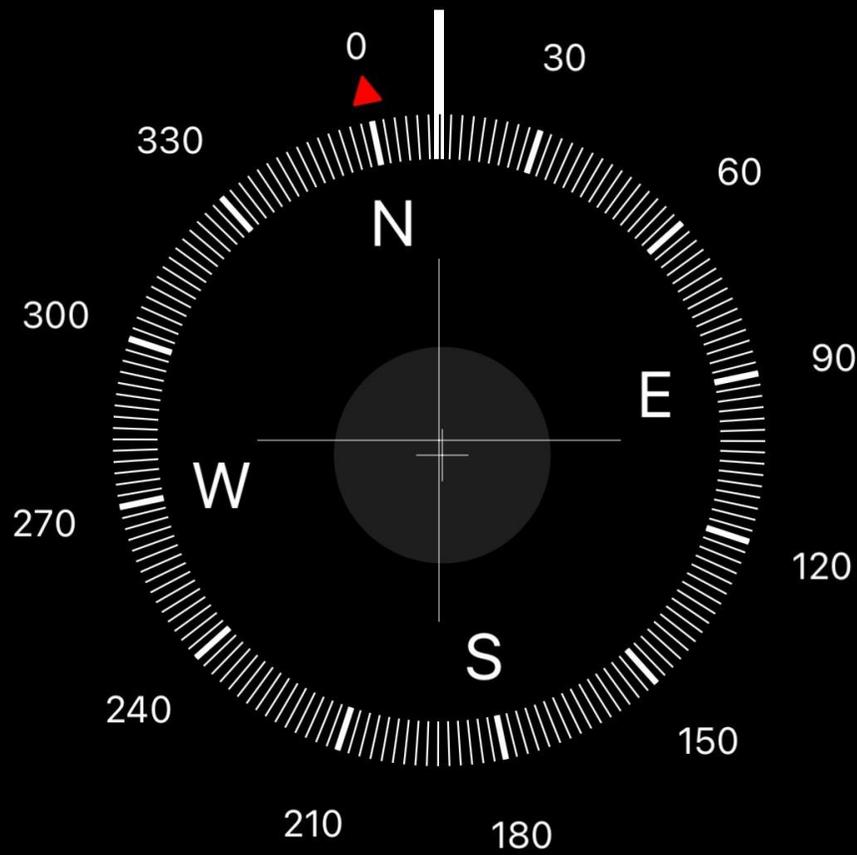
PBD = 3643'

3500 ft

TD = 3680'

4000 ft

CSA 11 # 190
30-005-20087
Shell
NM-0276225
SEC 220 TWIN
85 ABOVE UNIT J



11° N

33°36'13" N 103°51'57" W

Roswell, NM

4160 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

District IV
 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 364878

CONDITIONS

Operator: CANO PETRO OF NEW MEXICO, INC. 801 Cherry Street Fort Worth, TX 76102	OGRID: 248802
	Action Number: 364878
	Action Type: [C-103] Sub. Plugging (C-103P)

CONDITIONS

Created By	Condition	Condition Date
loren.diede	None	7/17/2024