

Form 3160-5
(August 2007)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010**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.
NMNM0155254D

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
Shell Oil Company (Western Division)3a. Address
P.O. Box 576, Houston, TX 772103b. Phone No. (include area code)
(832) 337-24344. Location of Well (Footage, Sec., T., R., M., or Survey Description)
J-33-08S-30E 1980 FSL 1980 FEL7. If Unit of CA/Agreement, Name and/or No.
Cato San Andres Unit8. Well Name and No.
Cato San Andres Unit #1769. API Well No.
30-005-2019710. Field and Pool or Exploratory Area
Cato; San Andres11. 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"/> Fracture Treat	<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 checked="" 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 recompleat 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 recompleat 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 the attached Plug and Abandonment End of Well Report.

Accepted for Record

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

Samantha Baker

Title SGWS Legacy Program Manager

Signature

Samantha Baker

Date 01/27/2025

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title Petroleum Engineer

Date 01/28/2025

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.

Office RFO

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.

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: January 17, 2025

Re: Plug and Abandonment – End of Well Report
Cato San Andres Unit #176 / API 30-005-20197
Section 33, Township 8S, Range 30E
Langan Project No.: 781014301

Work Summary:

08/01/24 – Conducted PJSM and discussed Step 7 Safe Work Process. Updated JSAs and opened Hot Work Permit. Inspected equipment and work areas. PJSM with Langan discussed trenching and communication. Langan's backhoe operator completed trenching for hot tap operations. Installed hot tap tool. Worked 0.5" bit to ball in csg ball valve. Began to NU N2 bottle to hot tap Tool, did not use N2; ND N2 bottle. Drilled through front and back of ball in csg ball valve. Conducted H2S sweep at wellhead. Bled pressure from hot tap tool to 0 psi and removed tool. Installed gauge on production csg and B annulus showing 27 psi across both gauges. Bled WHP; gauges bled to 0 psi simultaneously. Pumped 5 bbls down production 4.5" csg. Monitored well, confirmed 0 psi, began to trickle FW (9.5 bbls total FW into well). Cut 4.5" stump from wellhead at 7" above wellhead flange. Welded 4.5" Bell Nipple onto 4.5" csg stump. Observed that 4.5" csg did not run through wellhead. Contacted office to discuss path forward. Secured well and moved off.

08/06/24 - Moved in and spotted equipment. Hand-dug trench to hot tap 8 5/8" csg outlet bull plug. Pumped 5 bbls of FW down 4.5" production cs. Made up NU HTT and pressure tested HTT with N2 - good. Attempted to hot tap bull plug without success. Welded 2" coupling onto 8 5/8" wellhead. Made up NU HTT and pressure tested. Hot tapped 4.5" wellhead with 3/4" bit (1 1/4"). Secured well. SDFN.

08/07/24 – Discussed LSRs, 7 Step, L&H, JSA Review. Inspected equipment and work areas. Cut off 4.5" wellhead. Welded Bell Nipple onto 4.5" csg stump. Prepped WH for WL evaluation.

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Secured well and location. Moved to well #163. MIRU WLU and crane. PJSM. MU/PU lubricator. PT lubricator: 200 psi/5 minutes, 500 psi/5 minutes - good. RIH with 3.625" GRJB, tagged restriction at 278'KB, POOH. RIH with 3.5" GRJB, tagged restriction at 278'KB, POOH. RD WLU and crane. Secured well. SDFN.

11/15/24 – Crew traveled. Inspected equipment and work areas. PJSM discussed Equipment Inspections, 7 Step, JSA review and rig move. Moved all equipment on location. Spotted and RU all support equipment. RU WOR. Moved new tubing onto pipe racks. Drifted, tallied, and prepped tubing (101 joints). Pressure tested BOP (stump test). NU BOP. Rigged up floor and tubing equipment, prepped to RIH. Rigged up H2S fixed monitors and tested (4 total). Ensured well was shut in. Policed location and SDFN. Crew traveled.

11/16/24 – Crew traveled. PJSM discussed Equipment Inspections, 7 Step, JSA review, H2S hazard. Inspected equipment and work areas. Made up 3.75" tri-cone bit and began RIH to tag. Tagged solid at 276' KB, rigged up power swivel. Began drilling on obstruction, 23 bbls to break circulation. Not making hole; it felt like drilling on metal. POOH with tubing and bit. Waited on WL downhole camera. RU WL and prepped to RIH with camera. RIH with camera, parted casing at 267' WLM, POOH and RD WL. Discussed and waited on orders. Made up 3-5/8" junk mill, (2) 3-1/8" drill collars and RIH with tubing. Above tag RU power swivel. Tagged at 276' KB, began milling on obstruction, made 6" and got formation and metal back in returns. Heavy sandstorm, rain and high winds came in. Began POOH with mill, tubing, and collars. Out of hole, mill looked like milling on possible tubing, further review of camera video showed possible tubing fish right below parted casing. Shut well in and SDFN. Crew traveled.

11/17/24 – Crew traveled. Inspected equipment and work areas. PJSM discussed Equipment Inspections, 7 Step, JSA review, H2S hazard. Made up 2-3/8" overshot with control ring, RIH to attempt to retrieve fish. Latched onto tubing fish, pulled 60K several times and started moving up hole, felt like dragging a packer, pulled uphole 25' and stuck again, pulled up to 80K several times. Decision made to run GR inside of tubing to possibly free point and cut above packer. Waited on wireline truck and personnel. RU Wireline and prepped to RIH through tubing with GR. RIH with 1.81" Gauge ring, tagged top of fish at 242' WLM, POOH with WL. Nothing smaller on

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location. Smaller WL tools, jet cutter, a couple 2-3/8" grapples for overshot and smaller tapered mill on location in morning. RD wireline and moved off to side of location. Shut well in for night with TIW in top of tubing and cap. Shut in 4.5" and 8-5/8" valves. Shut and locked BOP pipe rams. Crew traveled.

11/18/24 – Crew traveled. Attempted to get down Cato Road after heavy rains all night, road had standing water and was too muddy to travel on. Turned around and shut down for day to let road dry up. NPT-Wait on weather/road to dry up, for safe travel to location.

11/19/24 – Crew traveled. Inspected equipment and work areas. PJSM discussed Equipment Inspections, 7 Step, JSA review, H2S hazard. RU wireline, MU 1.43"-gauge ring, RIH to attempt to get into top of fish. Tagged at 255' (13' through top of fish). Tubing fish had some sort of fill in it. POOH with wireline. Pulled 17K on tubing and turned to the right, got 10 turns to the right and started working pipe to 80K. Pulled 2-3/8" collar at surface above the elevators. Dropped fish, overshot and tubing below BOP. Made up tubing spear and RIH to find top of 2nd fish. Fish 15' below BOP. Attempted to work loose. Grabbed with spear and got spear to surface. LD spear. Still stuck at original depth. Picked up 1 joint and checked if original fish would move down, 30' of movement down. Worked tubing at the SW (12K) between the 30' of movement, while rotating to the right. Pumped down tubing and up 4.5", 29 bbls to break circulation, then returns stopped, 2 bpm at 200-300 psi, looked as if possibly pumping into perforations below packer. RU wireline. MU 1.43"-gauge ring. RIH to attempt to get into top of fish. Tagged at 258'. Top of fish at 242' (16' inside of top of fish). POOH and RD WL. Conference call to determine next step, decision to wait on 1" WL tools (split shot, weight bars, CCL, rope socket and free point tool). Shut well in and SDFN. Site visit with Langan and Shell personnel. Crew traveled.

11/20/24 – Crew traveled. Inspected equipment and work areas. PJSM discussed Equipment Inspections, 7 Step, JSA review, H2S hazard. RU wireline, MU 1"-gauge ring with 1" cable head, weight bars and CCL. RIH to attempt to get into top of fish. Tagged at 260', 18' below top of fish. Wireline POOH and rigged down. Waited on orders. Decision made to RIH with wireline with dump bailer and impression block. Waited on Shell management for site visit. Shut well in and SDFN. Crew traveled.

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11/21/24 – Arrived on location, PJSM discussed trapped psi, 7 step, JSA review. Inspected equipment and work areas, checked WHP = 0 psi. Spotted in/RU WLU, MU 1.25" impression block BHA, MU/PU lubricator with pack-off, NU to TIW valve on tbg, pressure tested lubricator to 500 psi - good. RIH with 1.25" WL BHA, tagged at 263'KB, POOH, no impression on face of block, MU 1.65" WL bailer, tagged at 271', stroked bailer several times, POOH, no debris or fluid in bailer. RIH with 1.65" WL BHA, pushed restriction downhole, tagged at 571'KB, POOH, RIH with 1.7" GR BHA, pushed restriction to 636'KB, POOH. RD lubricator and WLU. Began Shell NPT to wait for 1" workstring and equipment. Ended Shell NPT, 1" equipment arrived on location, offloaded, and inspected 1" equipment. NU 1" equipment and PCE, adjusted rig floor and tbg tong height. Secured well, SDFN.

11/22/24 – Arrived on location, PJSM - JSA review. Inspected equipment and work areas, checked WHP = 0 psi. Confirmed PCE and 1" equipment ready to RIH, confirmed shop test chart. Began RIH with 1.875" 3-blade bit BHA (0.55" circulating port) and 1" CS Hydril workstring from working racks. Hard tag at 2441'KB, workstring fell through restriction, contacted office and BLM representative, decision made to continue downhole. Continued to RIH, hard tag at 2560'KB, attempted to work through restriction without rotating or pumping, could not work through restriction, contacted office and BLM Rep. Discussed plan forward with office, decision made to POOH with 1" workstring and BHA. POOH with 1" workstring to racks, LD BHA, RD/ND 1" PCE and equipment, adjusted rig floor. Secured well, SDFN.

11/23/24 – Arrived onsite, PJSM discussed trapped pressure, 7 Step. Inspected equipment and work areas, checked WHP = 0 psi. Moved 1" pipe and racks. Spotted in WLU. RU WLU, MU/PU WL 1.68" jet cutter BHA. Pressure tested lubricator to 800 psi - good. Lined up pump to tbg, pumped 4 bbls FW to break circulation, pumped 20 bbls total FW, pressured tbg to 150 psi, bled down immediately. RIH with 1.68" cutter to 2557', POOH to 2542' to cut tbg, noticed 10' section at 2392'-2402' with collars, contacted office, POOH. LD lubricator, landed tbg with hanger, NU 5K triple WL BOP and lubricator, pressure tested lubricator and PCE to 300 psi low/1000 psi high - good. RIH with 1.68" cutter to 2557', POOH to 2350' (above 10' unidentified section), cut 2 3/8" production tbg. POOH with WL, ND/LD lubricator and WL PCE. Un-landed tbg, pulled 30K (est string wt at 12K), worked with stuck tbg to 57K total wt, attempted to free stuck tbg, worked tbg

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up/down and rotated, did not free tbg, contacted office. MU/PU WL free point tools, RIH with 1.43" OD free point BHA, attempted to determine free point in tbg, POOH to swap out BHA, RIH with 1" free point tools, determined free point between 276'KB-304'KB, POOH. LD BHA, RD WLU. Secured well, SDFN.

11/24/24 – Arrived onsite, PJSM discussed trapped pressure, JSA review. Inspected equipment and work areas, checked WHP = 0 psi. MU/PU CBL BHA, MU 3K packoff to TIW, RIH down tbg with CBL, logged up from 2514', fill/restriction at 2400'KB, 2.375" x 4.5" annulus appeared clear from 2400'KB to 242'KB (top of fish), POOH. LD packoff and WL tools, RD WLU. Began NPT - Wait for WFD to arrive onsite. Ended NPT, WFD Fisherman arrived onsite, inspected tools, discussed plan forward. Attempted to release fishing tool without success, MU/PU WL lubricator and jet cutter BHA, contacted office, decision made to use chemical cutter to cut tbg, ND lubricator. Landed tbg hanger, RD workfloor, NU 7 1/16" 5K Annular BOP, RU workfloor, un-landed tbg hanger. Secured well, drained pump lines, SDFN.

11/25/24 – Arrived onsite, PJSM discussed hazardous materials, PPE, 7 step, JSA review. Inspected equipment and work areas, checked WHP = 0 psi. RU WLU, MU/PU 3K packoff lubricator and WL tools with Chemical cutter BHA. Pressure tested lubricator to TIW, 250 psi low/ 800 psi high - good. RIH with WL to 282'KB, cut tbg at 282', POOH, LD lubricator. Latched onto tbg, POOH with fish from 282'. MU/PU 3.75" tapered mill with 3.75" string mill BHA, RIH with BHA, 2-3.125" drill collars and 2.375" 8 RD EUE workstring, passed through parted csg at 267' without restriction, worked up and down through parted casing without issue, POOH. RIH with fishing tool overshot with packoff, latched onto fish at 282'KB, attempted to free tbg fish without success, contacted office, discussed plan forward, decision made to attempt to determine complete cut at 2350'KB. MU/NU WL CCL BHA and lubricator, pressure tested lubricator - good, RIH with WL tools to below 2350', seen cut at 2350', worked tbg up 15', POOH with CCL to 2300', observed all tbg couplings moved with pipe, determined incomplete cut at 2350', POOH. MU/NU WL 1.68" jet cutter BHA and 3K WL lubricator with packoff, WL BOP and TIW, pressure tested lubricator to 250 psi/800psi - good, RIH with WL tools to 2320'KB, lined up pump to tbg, pumped 4 bbls to break circulation, pressured tbg to 500 psi, cut tbg with jet cutter, pressure decreased to 250 psi, bled tbg pressure, POOH. Latched onto tbg, attempted to free

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tbg fish from 2320'KB without success. MU/NU WL CCL, 1.5625" sinker bar BHA and lubricator, RIH with WL tools to below 2320', seen cut at 2320', worked tbg up 15', POOH with CCL to 2275', observed all tbg couplings moved with pipe, determined incomplete cut at 2320', POOH. Secured well, SDFN. Discussed plan forward with office.

11/26/24 – Arrived on location, PJSM - STOP conversation, 7 step, complacency, JSA review. Checked equipment and work areas, checked WHP = 0 psi. MU/NU WL 3K lubricator with 1.67" OD chemical cutter BHA, pressure tested lubricator - good. RIH with WL to 575'KB, fired cutter, POOH. Tools to surface, ND lubricator, latched onto tbg, attempted to POOH, could not pull past restriction, string weight at 10K indicating incomplete cut at 575'KB, contacted office. Discussed plan forward. Secured well, shut down operations until 12/02/24 due to Thanksgiving holiday.

12/02/24 – Arrived on location, PJSM discussed equipment inspections, ice blocks (trapped pressure), JSA review. Inspected equipment and work areas, checked WHP = 0 psi. MU/PU WL Chemical cutter BHA and 3K lubricator. Lined up pump for pressure test, pressure tested lubricator to 250 psi/800 psi - good, RIH to 295'KB. Began NPT due to mud pump. Ended NPT, loaded tbg with FW, fired chem cutter, POOH with overshot BHA, observed crude oil on tools. MU/PU tbg jars BHA as follows; 3.75" overshot, XO, bumper sub, Jars, XO sub, 3 jts 2.375" L80, XO sub, Intensifier, XO sub, 2.375" workstring, RIH to tag at 307', could not latch fish, POOH. RIH with 3.875" tapered mill and 3.75" string mill BHA with 2 - 3 1/8" drill collars, tagged at 305'KB. RU power swivel, lined up pump to forward circulate, worked through restriction without issue, reamed from 285'-315', returns were oil/water mix, RIH with tapered mill to hard tag at 428'KB (potential fish top). RD power swivel, POOH, LD tapered mill BHA. Secured well, SDFN.

12/03/24 – Arrived onsite, PJSM discussed catwalk operations/procedure, LOF, overhead loads, JSA review. Inspected equipment and work areas, checked WHP - 0 psi, opened well. MU/PU tbg jars BHA as follows: 3.75" overshot, XO, bumper sub, Jars, XO sub, 3 jts 2.375" J55, XO sub, Intensifier, XO sub, 2.375" workstring, RIH to tag at 428', POOH with tbg fish, 289' total tbg recovered to racks (no NORM readings above background at .02 uR/hr). MU/PU tbg jars BHA as follows; 3.75" overshot, XO, bumper sub, Jars, XO sub, 3 jts 2.375" J55, XO sub, Intensifier, XO sub, 2.375" workstring, RIH to tag at 649'KB. Attempted to latch onto fish, worked tbg to catch

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fish without success. POOH with overshot and jars BHA, LD BHA. RIH with 3.875" tapered mill and 3.75" string mill BHA with 2 - 3 1/8" drill collars, tagged at 658'KB. RU power swivel, milled/reamed to 725'KB (potential tbg fish top), returns were scale/oil/FW, circulated wellbore. RD power swivel, POOH with mill BHA. Secured well, SDFN.

12/04/24 – Arrived onsite, PJSM discussed catwalk operations, buffer zones, JSA review. Inspected equipment and work areas, checked WHP = 0 psi. MU/PU tbg jars BHA as follows; 3.75" overshot with cutrite, XO, bumper sub, Jars, XO sub, 3 jts 2.375" J55, XO sub, Intensifier, XO sub, 2.375" workstring, RIH to tag at 725', POOH with tbg fish, 1760' tbg recovered to racks (no NORM readings above background at .02 uR/hr), 66 jts of 2.375" J55 production tbg + fish tops/bottoms = 10', 16', 14', 2-21' pieces recovered during fishing ops. Discussed plan forward with office and BLM. RIH with 2.375" workstring and Mule Shoe BHA from derrick and racks, tagged restriction at 2705'KB. Lined up pump to forward circulate wellbore, tested pump, and surface lines to 1500 psi - good, pumped 8 bbls of FW to break circulation at 4 bpm with 20 psi, pumped 60 bbls total FW until returns were clean. Prepped to pump plug, pumped cement plug #1, pumped 10.3 bbls, 49 SKS type I/II cement with 1.18 yield at 15.6 ppg at 3 bpm with 20 psi, pumped 7.6 bbls FW displacement at 2.5 bpm with 20 psi, shut down pump (Estimated 650' plug: 2705'KB - 2055'KB). POOH with workstring. Secured well, broke down fishing and milling BHAs, SDFN.

12/05/24 – Crew traveled. PJSM discussed Equipment Inspections, 7 Step, JSA review, overhead lifts and stop work authority. Inspected equipment and work areas. RIH with drill collars and laid down. ND annular and prepped to RIH to tag TOC. RIH to tag TOC, tagged at 2004', broke circulation with 4 bbls. Rigged up cementers and prepped to pump plug #2. Pumped cement plug #2, pumped 10 bbls FW spacer + 31 sacks, 6.4 bbls type 1/2 cement with 1.18 yield at 15.6 ppg with 2% calcium chloride + 5.5 bbl displacement, POOH with tubing (Estimated plug: 1600' - 2004', 404' plug). WOC and pressure tested BOP, could not get pressure test with test hanger, needed to stump test, ND BOP and stump tested, NU BOP and RU tubing equipment, prepped to RIH to tag TOC. RIH to tag TOC, tagged at 1560', discussed with office, planned to perforate in morning and pump cement. POOH and shut well in, SDFN. Crew traveled.

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12/06/24 – Crew traveled. PJSM discussed Equipment Inspections, 7 Step, JSA review, overhead lifts and stop work authority, catwalk operation safe practice. Inspected equipment and work areas. RU wireline equipment, prepped to RIH with (3) guns 6spf, pressure tested lubricator to 1500 psi. WL RIH with guns and stacked out at 1222' wlm, suspected scale inside 4.5" casing, WL POOH and RD. Waited on orders. Made up 3-7/8" tapered and string mill, RIH with tubing to clean up ID of casing to TOC at 1560'. Rigged up power swivel and began washing down. EOT at 1552' KB, circulated wellbore clean. RD power swivel and POOH with 42 joints in derrick. RU wireline equipment, prepped to RIH with (3) guns 6 spf, pressure tested lubricator to 1500 psi. RIH with guns and tagged at 1328', POOH. RIH with 2.15"-gauge ring, tagged at 1328' wlm, POOH and RD WL. Discussed plan forward. Planned to run strip guns through tubing in morning, shut well in and SDFN. Crew traveled.

12/07/24 – Crew traveled. Inspected equipment and work areas. PJSM discussed Equipment Inspections, 7 Step, JSA review, overhead lifts and stop work authority, wireline operations. Made up mule shoe and RIH with tubing to 1552', tagged solid at 1325'. POOH with mule shoe and tubing. Waited on orders. RU wireline, pressure tested lubricator to 1500 psi, prepped to RIH with 1' gun at 6spf. WL RIH and perforated at 1199' - 1200' with 6spf, POOH and RD wireline. RIH with mule shoe and 42 joints to 1325'. Broke circulation with 5 bbls. Prepped to pump cement plug #3. Pumped cement plug #3, pumped 10 bbls FW spacer + 53 sacks, 11 bbls type 1/2 cement with 1.18 yield at 15.6 ppg with 2% calcium chloride + 2 bbls displacement, POOH with tubing (Estimated plug: 625' - 1325', 700' plug). POOH with tubing, reversed out with 3 bbls at 600', WOC. RIH to tag TOC. Surface sample still very green. Ran into 700' and no tag. Decision made to let sit overnight before tagging. POOH with tubing. Shut well in and SDFN. Wait on cement. Crew traveled.

12/08/24 – Crew traveled. PJSM discussed Equipment Inspections, 7 Step, JSA review, overhead lifts and stop work authority, wireline operations. Inspected equipment and work areas. Made up mule shoe and RIH with tubing to tag TOC. Tagged TOC at 740'. Prepped to pump plug #4. Pumped cement plug #4. Pumped 10 bbls FW spacer + 30 sacks. 6.3 bbls type 1/2 cement with 1.18 yield at 15.6 ppg with 2% calcium chloride + 1 bbl displacement. POOH with tubing. Estimated plug: 350' - 740', 390' plug. POOH with tubing. WOC. RIH with tag tool and tagged

Technical Memorandum

Plug and Abandonment – End of Well Report
Cato San Andres Unit #176 / API 30-005-20197
Section 33, Township 8S, Range 30E
Langan Project No.: 781014301
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TOC at 320'. POOH with tubing. RU Wireline, pressure tested lubricator to 1500 psi, RIH and perforated 4.5" at 298'-300', POOH and RD WL. RIH and placed end of tubing at 318', shut in 4.5" casing and established circulation between 4.5" and 8-5/8". Could not circulate up the 4.5" x 8-5/8" annuli. Pumped 50 bbls away and pressured up to 1000 psi. Pumped down 8-5/8" and pressured up immediately to 2400 psi - acted as if cement was at surface. Talked with engineer and BLM, waited on orders. Pumped surface cement plug up the 4.5" casing from 320' to surface. Pumped 10 bbls FW spacer + 43 sacks, 10 bbls type 1/2 cement with 1.18 yield at 15.6 ppg. POOH with tubing (Estimated plug: surface - 320', 320' plug). POOH with tubing. Topped off 4.5" with cement. BLM request to top off 8-5/8" with 1" hose when cutting and capping. Rigged down floor and tubing equipment. ND BOP. Prepared all equipment to move off except WOR due to wind. Crew traveled.

01/08/25 – Arrived at CSAU #176. Completed PJSM with Drake and personnel on location. Completed spiral gas check. Checked gas and well pressures. Dug cellar 3ft down using backhoe. R/U welder, cut off wellhead. R/U cementing services, topped off with 24 sacks (18 sacks on backside and 6 inside). Installed P&A marker per all local regulations. Backfilled location.



Plug & Abandonment Program
Revision: 0

Cato San Andres Unit 176
J-33-8S-30E
Chaves County, NM

NEW MEXICO - CSAU 176 - WELLBORE SCHEMATIC

Location (Unit-Sec-Twp-Range): J-33-8S-30E
Surface Hole Latitude: 33.6035156
Surface Hole Longitude: -103.8837357
Bottom Hole Location: Vertical Well

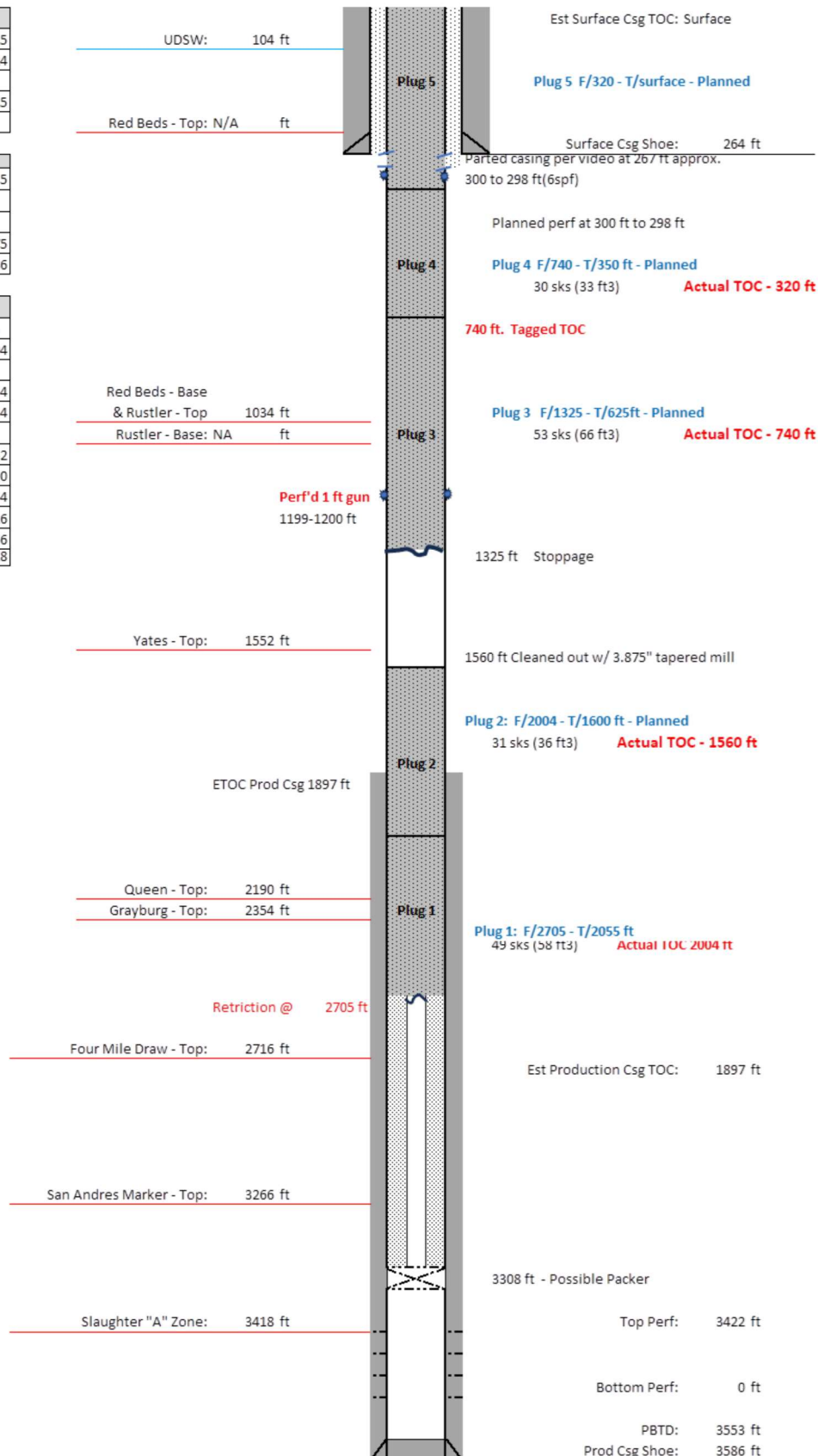
API: 30-005-20197

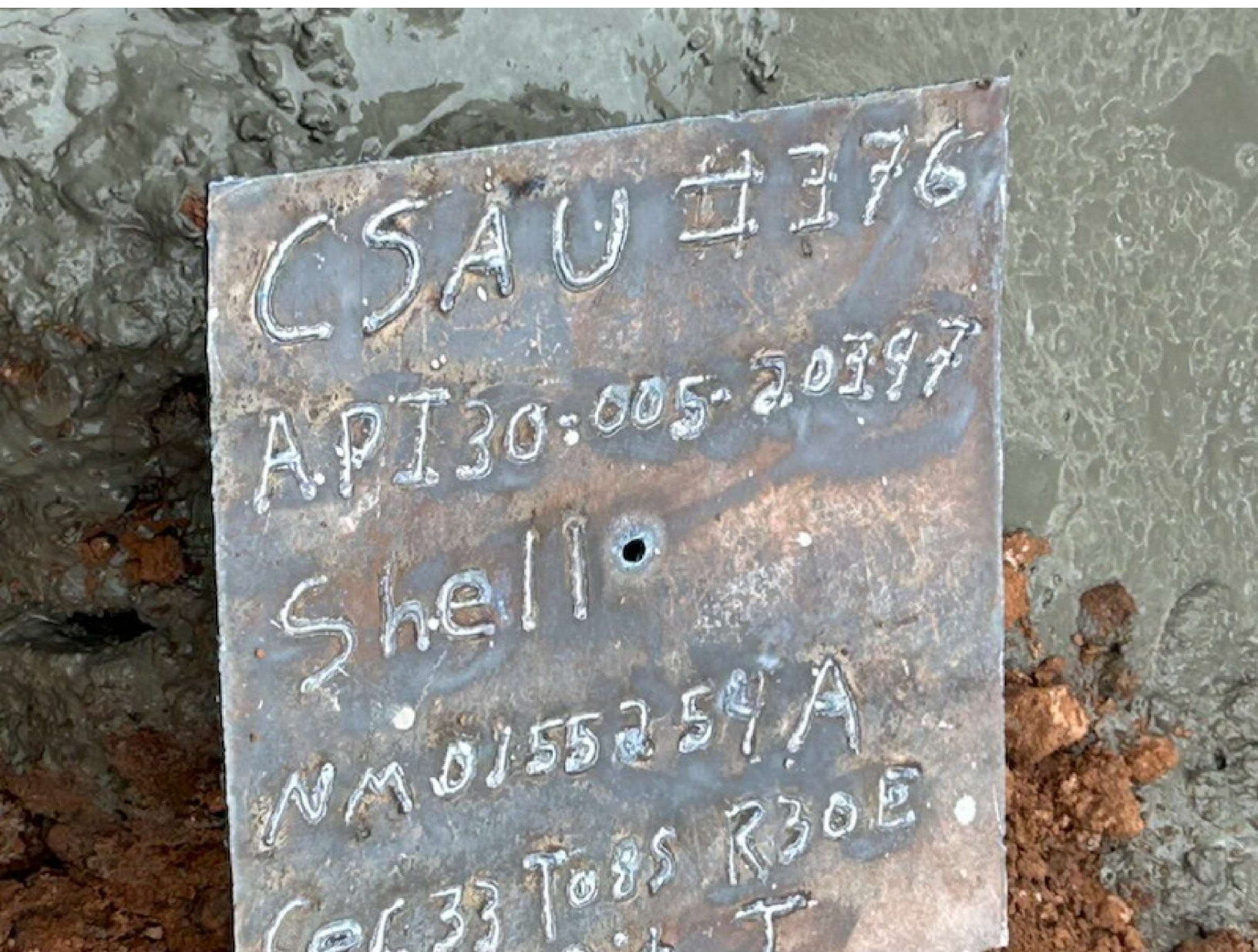
GL (ft): 4144
KB (ft): 10

Surface Casing Information	
Size (in):	8.625
Weight (lb/ft):	24
Grade:	J55
Hole Size (in):	12.25
Setting Depth:	

Production Casing Information	
Size (in):	4.5
Weight (lb/ft):	
Grade:	
Hole Size (in):	7.875
Setting Depth:	3586

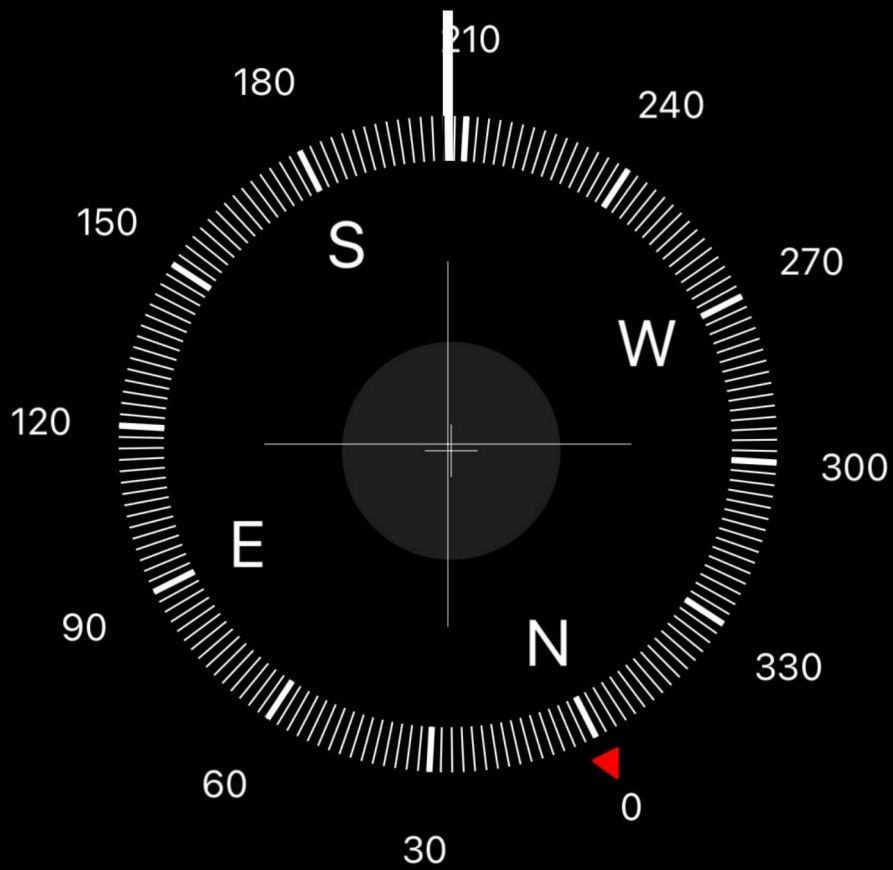
Formation Depth Information	
Formation	MD (ft)
USDW	104
Red Beds - Top	N/A
Red Beds - Base	1034
Rustler - Top	1034
Rustler - Base	NA
Yates - Top	1552
Queen - Top	2190
Grayburg - Top	2354
Four Mile Draw - Top	2716
San Andres Marker - Top	3266
Slaughter "A" Zone	3418





12:22

LTE



206° SW

33°34'29" N 103°53'1" W

Roswell, NM

4140 ft Elevation

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/contact-us>

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

CONDITIONS

Action 428359

CONDITIONS

Operator: CANO PETRO OF NEW MEXICO, INC. 801 Cherry Street Fort Worth, TX 76102	OGRID: 248802
	Action Number: 428359
	Action Type: [C-103] Sub. Plugging (C-103P)

CONDITIONS

Created By	Condition	Condition Date
loren.diede	None	2/13/2025