

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. **NMNM 00276225**  
6. If Indian, Allottee or Tribe Name  
**N/A**

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		7. If Unit of CA/Agreement, Name and/or No. <b>Cato San Andres Unit</b>
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. <b>Cato San Andres Unit #150</b>
2. Name of Operator <b>Shell Oil Company (Western Division)</b>		9. API Well No. <b>30-005-20119</b>
3a. Address <b>P.O. Box 576, Houston, TX 77210</b>	3b. Phone No. (include area code) <b>(832) 337-2434</b>	10. Field and Pool or Exploratory Area <b>Cato; San Andres</b>
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) <b>D-26-08S-30E    660 FNL    660 FWL</b>		11. Country or Parish, State <b>Chaves County, New Mexico, USA</b>

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 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 recompleate 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 perfonned 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 detennined 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) <b>Samantha Baker</b>	Title <b>Legacy Program Manager</b>
Signature	Date <b>08/25/2025</b>

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title <b>Petroleum Engineer</b>	Date <b>08/26/2025</b>
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 <b>RFO</b>	

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**

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**300 Union Boulevard, Suite 405 Lakewood, CO 80228 T: 303.262.2000 F: 303.262.2001**

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**To:** Bureau of Land Management (BLM)

**From:** Langan Engineering and Environmental Services

**Info:** Shell Oil Company (Western Division)

**Date:** August 22, 2025

**Re:** Plug and Abandonment – End of Well Report  
Cato San Andres Unit #150 / API 30-005-20119  
Section 26, Township 8S, Range 30E  
Langan Project No.: 781014301

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**Work Summary:**

**12/18/2024** - Crew travel. Pre-job safety meeting - Discussed Equipment Inspections, 7 Step, JSA review, overhead lifts & stop work authority. Discuss daily operations. Met on #178 and travelled to #150. Hot tapped 9-5/8". Installed (2) 2" valves on one side installed (1) 2" valve on other side with tapped bull plug. Estimated 50 PSI on 9-5/8". Checked pressure on 2" line pipe with no pressure. Secure well. RDMO all prep work equipment.

**5/28/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSAs and discuss day's safety and operational goals. Discuss Wireline operations and lease road issues. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Rig up WOR. RU wireline. MU 1.75" GR with CCL. Pressure test to 1500 PSI. Open 2" and pump 5 bbls down tubing. Began to pressure up after 5 bbls. Shut down pump and flow back 1 bbl. RIH with 1.75" GR and stack out at 35'. POOH and make up 1.50" GR. RIH and stack out at 35'. Jar on wireline and fall through obstruction. Continue RIH. Stack out at 2198'. CCL showing 31' joints. POOH. At surface. Make up 3 arm caliper tool. RIH with caliper and tag at same spot, 2198'. Open caliper arms and log up. Out of hole with caliper. Average ID was 2" +/- . Saw a severe change in ID at 66'. Down to 1.75" - 1.8". Assuming this is the changeover from 2" to 2.375" tubing. Wait on orders. Make up circulation perf guns. 4 shots in 1'. 0 degrees phasing. PT WL. RIH and perforate tubing at 49'. Tubing went on vacuum after opening up to the 5.5" casing. POOH. RD wireline.

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Pump 40 bbls down tubing. Well continues to be on a vacuum. Shut well in. Shut down to repair lease road tomorrow. Crew travel.

**5/29/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Pre-job safety meeting with road repair crew. Discuss plan to repair lease road and use of spotters for trucks. NPT. Repair lease road.

**5/30/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Remove 2" valve off tubing. Make up 2-3/8" pup joint on top of 2" x 2-3/8" crossover and EUE tubing collar. Attempt to unland tubing. Tubing stuck. Got roughly 2" of movement. Could not get tubing slips or 5.5" cap free. 5.5" cap is sitting on top of broken 5.5" casing. Pull to 35K and parted 2"-line pipe collar off line pipe. Discussed with Shell management. Decision made to free point tubing and chemical cut tomorrow morning. Pump 20 bbls down tubing. Weld 2" collar onto tubing at surface. Make up 2" ball valve to secure well. Move catwalk on and 2-3/8" workstring. Ensure well is secure. All equipment rigged up. Shut down for night and wait on wireline and tools. Crew travel.

**5/31/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSAs and discuss days safety and operational goals. . . Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Pump 20 bbls down tubing. Cut off 2" collar. MU overshot with 2" grapple. Pull test to 35K. RU WL and pressure test to 1500 PSI. RIH with 1.43" free point tool. Stack out at 876'. Free point shows free pipe. POOH with free point tool. Make up 1-3/8" chemical cutter. PT WL. Pump another 20 bbls. RIH and cut tubing @ 90'. POOH with wireline and RD wireline. Cut off 5.5" stump off wellhead for flat surface for rig slips. LD 90' of cut off tubing. Begin WH welding repairs. Weld on 1/2" plate and 5.5" bell nipple. Stump test BOP. NU 5.5" flange and BOP. Shut well in and shut down for night. Crew travel.

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**06/01/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. . . Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Rig up floor and tubing handling equipment. Fill hole with 4.5 bbls. Make up 4-5/8" overshot with 2-3/8" grapple. Tag @ 68'. Attempt rotate down. Would not fall through. POOH. Make up 4.75" tricone bit and RIH. Tag at same spot. Rotate with tongs. Would not fall through. POOH. Attempt 4-5/8" overshot one more time. Tag and rotate down to 78'. POOH. Make up 4.75" skirted mill with 3.75" concave mill inside skirt. RIH and tag @ 78'. Rig up power swivel. Circulate with 0.5 bpm and begin rotating and washing down. Tagged TOF @ 90.37' KB. RD power swivel and POOH. Make up overshot and RIH. Latch onto fish at 90.37' KB. Assuming 3500' of tubing in hole. Pulled 40K. No movement. Calculated stuck at 1000'. RU WL. Make up 1.75" Paraffin knife & (2) weight bars. PT and RIH. Tag @ 125'. Jar to 151'. POOH. (Paraffin on tools). Make up 1.5 GR and RIH. Tag @ 168'. Could not jar down. POOH and RD WL. (Paraffin on tools). Pull 80% of J55 tubing. 57K and work up and down. Tubing did not pull free. Decision made to run in tubing with 1.75" bit and 1" workstring to clean out. Shut well in and shut down for night. Crew travel.

**06/02/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Wait on 1" workstring, handling equipment and PCE. Unload all 1" equipment. Unload and tally 1" workstring. RU equipment we have. Missing pump in tee and 1" stripping head. Wait on rest of 1" equipment. Finish 1" rig up. Ready to RIH. Clean up location. Secure well and shut down for night. Crew travel.

**06/03/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Prep work area. Make up 1.75" bit and begin RIH with 1" workstring. Tag solid at 306'. RU power swivel. Break circulation at 1 bpm with 90 PSI. Begin washing / rotating down. Bringing back a lot of

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scale in returns. Continue washing / rotating down. EOT @ 2177' with 70 joints in hole. Roughly 20' above Caliper log tag. Circulate wellbore clean. Hang back power swivel. LD 3 joints. Shut well in. Shut down for night. Crew travel.

**06/04/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Break circulation and continue to wash and rotate 1" workstring down 2-3/8" tubing. Tag solid @ 2300'. (joint#74). Plug off tubing. LD 1 joint and begin jarring 1" and unplug 1" tubing. Circulate wellbore clean. Heavy scale, formation and metal flakes in returns. Continue washing down. Drilling on solids. EOT @ 2363'. Circulate clean. Heavy solids in returns. Hang power swivel in derrick. POOH with 1" work string. Out of hole with 1". RD 1" handling equipment. RU wireline. Make up free point tool. Pressure test and RIH to free point 2-3/8" tubing. Free point 2-3/8" tubing. Showed 85% free at 1056'. Stuck 100% below that depth. POOH with FP tool. Make up chemical cutter. Pressure test. Ensure hole is filled with FW. RIH and cut 2-3/8" at 1056'. POOH. RD WL. POOH with cut fish. (30 joints + 10' + 22' sections. Shut well in and shut down for night. Crew travel.

**06/05/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Make up 4.75" skirted mill with 3.75" concave mill inside. RIH with 2.375" work string. Tagged @ 100'. RU power swivel. Wash down to top of fish. Heavy scale returns. Dress TOF @ 1061' KB. POOH with skirted mill. make up 4-11/16" overshot with 2-3/8" grapple. (4) 3-1/3" drill collars an accelerator and RIH with 2-3/8" work string. Latch onto fish at 1061' KB and begin jarring operations. Pull 10K over string weight. Shut well in and shut down for night. Crew travel.

**06/06/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Continue jarring on fish. Cocking jars and pulling 14K to 40K over. Weatherford hydraulic jars quit

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working. Release off fish and POOH. Out of hole with faulty jars. Make up new set of jars and RIH. Latch onto fish. Attempt to jar on fish. New jars not working at all. Release off fish. POOH with Faulty jars. Stand back drill collars and LD jars and accelerator. RIH with overshot and grapple in prep for wireline free point. Latch onto fish. Secure well. Shut down for night. Crew travel.

**06/07/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Rig up wireline. Pressure test. RIH to free point. 1022' = 100%, 1064' = 100%, 1501' = 0%. NPT - Drake wireline. Free point tool quit working. POOH. NPT - Drake wireline. Re-head wireline. RIH to free point. Decision to cut 2-3/8" tubing at 1278'. WL POOH. WL RIH to chemical cut tubing. Cutter failed. POOH. Make up another cutter. RIH and cut tubing at 1278'. POOH and RD wireline. POOH with cut tubing. Out of hole with workstring, overshot and (6) more joints + 25'. Pulled up to 15K over to get fish moving up hole. Make up skirted mill with concave mill inside. RIH to dress top of fish. Washed down through 50' of scale/formation. Circulate wellbore clean. POOH with skirted mill. Out of hole with skirted mill. Shut well in and shut down for night. Crew travel.

**06/08/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Make up overshot with grapple. RIH with (4) drill collars, accelerator and workstring. Latch onto fish and jar on fish. Pulling 15K - 55K. No release of fish or movement that we can tell. Secure well and shut down for night. Crew travel.

**06/09/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Release off fish and POOH with overshot, jars and drill collars. RIH with overshot. Latch onto fish @ 1283'. RU wireline and pressure test. Wireline RIH and free point. Decision to cut at 62% free at

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1376'. POOH. Wireline RIH and chemical cut at 1376'. POOH RD wireline. POOH with cut fish. Out of hole with (2) joints + 25'. Run in hole with skirted mill and wash down to TOF. Dress TOF and circulate wellbore clean. POOH with skirted mill. RIH with overshot, (4) drill collars and accelerator. Latch onto fish at 1376' and begin jarring operations. Secure well and shut down for night. Crew travel.

**06/10/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Begin jarring operations. Release off fish. POOH with overshot and jars. Make up overshot. RIH and latch on at 1376'. RU wireline and pressure test. Chemical cut tubing at 1650'. POOH and RD wireline. Fish not free. Release off fish and POOH with overshot. Make up overshot, drill collars and jars RIH and latch onto TOF @ 1376'. Jar on fish. Secure well and shut down for night. Crew travel.

**06/11/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. . . Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Begin jarring operations. Release off fish. POOH with overshot, DC's, jars and accelerator. Make up full opening overshot. RIH to latch onto fish @ 1376'. Rig up wireline. Make up free point tool. Pressure test. Run in hole to free point. 1532': 80% free. 1550': 6% free. WL POOH and prep to cut tubing at 1534'. Make up chemical cutter. RIH and cut tubing at 1534'. POOH and RD wireline. Pull out of hole with fish. SW should have been 7K. Pulled 55K to pull free. Plenty of scale and formation packed around fish. Make up skirted mill with concave mill inside. RIH and wash down to TOF. Heavy scale and formation in returns. Dress top of fish and circulate wellbore clean. POOH with skirted mill and LD mill. Prep to run jar BHA in morning. Secure well and shut down for night. 116' fish left above 1650'. Crew travel.

**06/12/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. . . Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Make up overshot with grapple. (4) Drill collars, Hydraulic jars with accelerator. RIH with

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workstring. Latch onto fish at 1534'. Begin jarring operations. Something came free. POOH with OS & jars. Out of hole grapple pulled off fish. Swap grapple out and add 2' extension to overshot. Make up overshot with grapple, 2' extension, jars, (4) drill collars and accelerator. RIH to TOF with workstring. Latch onto fish with a deeper bite. Begin jarring again. Secure well and shut down for night. Crew travel.

**06/13/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting. Review JSA's and discuss days safety and operational goals. Check pressures on well. 0 PSI. Check equipment and perform morning checks. Prep to go to work. Continue jarring operations. Release off fish and POOH with overshot and jar BHA. Make up. Full opening overshot and RIH and latch onto fish for wireline operations. Rig up wireline and free point tool. PT and RIH to free point. Could not get free point tool into TOF. POOH and attempt sinker bar. NO go. POOH and RD wireline. Release off fish. POOH with overshot. Make up skirted mill with concave mill inside. RIH. Rig up power swivel and begin dressing up top of fish. Milled off approx. 1' off top off fish. POOH with skirted mill. Secure well and shut down for night. Crew travel.

**06/14/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting, discussed LOTO, PAUSE, JSA review Inspected equipment & work areas, checked WHP = 0 PSI. Made up overshot with grapple, RIH with workstring, latched onto fish at 1535' RU WL, RIH with freepoint tools, tagged restriction at 1528'KB WLM, could not enter TOF with 1.44" OD freepoint tools. POOH RD WL, POOH with overshot BHA & workstring PU/MU 4.5" washpipe with 4.75" mill shoe, RIH from derrick with 2.375" 8RD EUE workstring (no collars or jars). Tagged restriction at 1528'KB (rig tally), RU power swivel Lunch Lowered workstring to 1528' with joint #44. PU on tubing, up weight 9K, began milling with washpipe mill shoe, WOB 2K, 1.5 BPM, 75 PSI Joint #44 Kelly Down, pumped bottoms up with 25 bbls FW (5.5 x 2.375 annulus volume), PU joint #45 Resumed milling, Joint #45 KD @ 1575'KB, pumped bottoms up, PU joint#46 Resumed milling, Joint #46 KD @ 1607'KB, pumped 10 bbls PU joint #47, resumed milling, Joint #47 KD @ 1640'KB, pumped 10 bbls PU joint #48, resumed milling to 1664'KB, hard tagged at 1664', pumped bottoms up x2 RD power swivel. POOH to

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derrick with workstring, LD washpipe BHA, production tubing fish retrieved with washpipe, LD fish. Secured well, shut down for night.

**06/15/2025** - NPT due to BLM Prairie Chicken Restrictions 0600-0900. Crew travel. Pre-job safety meeting discussed trapped pressure, H2S awareness, JSA review. Inspected equipment & work areas, checked WHP = 0 PSI. Made up overshot with jars & drill collars (2), RIH with workstring & fishing BHA, latched onto fish at 1650'. Set jars, began jarring fish, Set jars x 6, worked pipe to 57K, parted production tubing POOH with overshot BHA & workstring to derrick, LD jars, recovered 175' of production tubing. Lunch. RIH with overshot (no jars), tagged restriction at 1794'KB (estimated TOF 1825') RU power swivel, attempted to wash/rotate overshot to 1825' (est. TOF) witho success, pumped bottoms up (25 bbls FW). RD power swivel, POOH to derrick with workstring, LD overshot BHA. Secured well, shut down for night.

**06/16/2025** - Pre-job safety meeting, discussed exclusion zones, zone management, JSA review Inspected equipment & work areas. Checked WHP = 0 PSI PU 4.5" washpipe (4 joints), RIH from derrick with 2.375" workstring to 1795'KB (no tag) RU power swivel, PU joint #52, tagged at 1797'KB, began milling, cleaned to 1948' with joint #57 10' out. Pumped bottoms up x 2 RD power swivel, POOH with washpipe BHA RIH with overshot (no jars), latched fish at 1838'KB, attempted to POOH, pulled 30K, no movement RU WL to freepoint, RIH with freepoint tools, began to stack out at 2320', PU to 2306, began freepoint from 2306'-2308', found 100% free at 2270', 50% free at 2297'. POOH Rig crew discovered crack at bell nipple weld, contacted office, began NPT to wait for a welder to repair welds on wellhead. Welder arrived onsite, gas checked wellhead area, wellbore full of FW, repaired and reinforced bell nipple. Ended NPT. Secured well, shut down for night.

**06/17/2025** - NPT to repair lease road. Pre-job safety meeting - chemical cutter, trapped pressure, JSA review Inspected equipment & work areas. Checked WHP = 0 PSI. NU single ram WL PCE, RIH with WL chemical cutter. BHA Cut tubing at 2294', POOH with WL ND WL PCE, PU on tubing, worked tubing to 57K to complete chemical cut, parted tubing, cut was not completed. POOH Retrieved 13' fish, MU overshot with 3.06" grapple to catch 2 3/8" coupling, RIH with fishing BHA & workstring from derrick RIH with fishing BHA & workstring from

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derrick, latched fish at 1851'KB RU WL PCE, RIH with cutter BHA, fire cutter at 2263'. POOH ND WL PCE, PU on tubing, POOH with pup joints, cut confirmed with 11K string wgt. Secured well, shut down for night.

**06/18/2025** - Pre-job safety meeting, weather awareness, derrick operations, JSA review. Inspected equipment & work areas, checked WHP = 0 PSI NPT to replace BOP accumulator, NU annular BOP, wait for accumulator to arrive, swap connections on BOP for WFD accumulator, draw down test for WFD accumulator. Completed the required 21-day BOP test, Blinds 250 PSI, 5 minutes/800 PSI, 5 minutes, pipe rams 250 PSI, 5 minutes/800 PSI, 5 minutes, annular BOP 250 PSI, 5 minutes/800 PSI, 5 minutes – good. Ended NPT. Secured well, shut down for night.

**06/19/2025** - NPT to rebuild and replace rig driveline.

**06/20/2025** - Pre-job safety meeting, discussed corroded pipe, overhead loads, JSA review. Inspected equipment & work areas, checked WHP = 0 PSI RIH with 4.5" washpipe (4 joints) from derrick, PU 2 joints 4.5" washpipe from racks, RIH from derrick with 2.375" workstring to tag at 2255'KB with joint #65 8' in. LD joint #65 Pumped bottoms up with 25 bbls FW, PU joint #66, began milling, joint #66 KD at 2312'KB, pumped bottoms up, lunch RU power swivel, PU joint #65, began forward circulation at 2255'KB, began milling, cleaned to 2280' with joint #65 PU joint #67, began milling, joint #67 KD at 2344'KB, pumped bottoms up, continued cleaning wellbore to 2452' KB, pumped bottoms up, 25 bbls RD power swivel. POOH to derrick with workstring and washpipe (6 joints). Secured well, shut down for night.

**06/21/2025** - Pre-job safety meeting, discussed corroded pipe, overhead loads, JSA review. Inspected equipment & work areas, checked WHP = 0 PSI RIH with overshot & jars BHA with 3.5" drill collars (4), RIH with 2.375" workstring from derrick to TOF @ 2263'KB POOH to derrick with fish from 2263'-2294' (est. 31' production tubing). Began NPT, Rig broke down at driveline, secured well, waited for mechanic to troubleshoot the issue. Mechanic arrived onsite, determined to send parts to a machine shop on Monday. Shut down for weekend.

**06/22/2025** - NPT due to rig broke down at driveline.

# Technical Memorandum

Plug and Abandonment – End of Well Report  
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**06/23/2025** - NPT due to rig broke down at driveline.

**06/24/2025** - NPT due to rig broke down at driveline. Ended NPT, POOH with DCs, jars & overshot with 31' production tubing fish, contacted office. RIH with skirted mill to dress TOF, EOT 2136'KB. Secured well, shut down for night.

**06/25/2025** - NPT due to flooded lease roads.

**06/26/2025** - NPT due to flooded lease roads. Pre-job safety meeting - JSA review. RIH to tag @ 2321', RU power swivel, established forward circulation with 9 bbls FW, began milling TOF, 2.5 bpm with 160 PSI, milled 1', pumped bottoms up RD power swivel POOH with mill BHA, BD BHA RIH with overshot & jars Latched fish 2322', string weight 12K, pulled 21K, weight dropped back to 12K, repeated 4 times POOH with fishing BHA, overshot had 95' fish, LD fish (production tubing fish plugged). New TOF 2416'KB. Secured well, shut down for night.

**06/27/2025** - Pre-job safety meeting - JSA review. Inspected equipment and work areas, checked WHP = 0 PSI. RIH with skirted mill BHA to tag @ 2416', RU power swivel, established forward circulation with 2 bbls FW, began milling TOF, 2.5 bpm with 180 PSI, milled 28'', pumped bottoms up RD power swivel POOH to derrick with mill BHA. BD BHA RIH with overshot BHA with 3.06" grapple to catch the tubing coupling. Attempted to latch fish @ 2418', string weight 9K, pulled 3-5K, weight dropped back to 9K, repeated 4 times POOH with fishing BHA, overshot had no fish, TOF 2418'KB RIH with overshot BHA with 2.375" grapple. Attempted to latch fish @ 2418', string weight 9K, pulled 3-5K, weight dropped back to 9K, repeated 4 times. POOH with fishing BHA overshot had 45" fish, TOF 2422'KB. Contacted office for plan forward, decision to run CBL. Secured well, shut down for night.

**06/28/2025** - Tools to surface, RD WL & WL PCE Pressure tested 5.5" casing to 300 PSI - failed RIH from derrick with drill collars and washpipe. POOH to racks with drill collars and washpipe. RIH from derrick with 2.375" workstring & mule shoe BHA, tagged with joint #76 with 16' in at 2425'KB, LD joint #76, EOT 2409'KB RU TPW to tubing, pressure tested TPW to 1500 PSI – good. Established forward circulation with 2 bbls. FW Pumped Plug #1 from 2425' to 2025' (400'), pumped 9.52 bbls, 45 SKS of 15.6 ppg, 1.18 Yield Type I/II cement, displaced

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tubing with 7.5 bbls. FW POOH to racks with 24 joints & 2 joints to derrick. EOT 1540'. RU TPW to tubing, closed pipe rams, pumped 1.5 bbls FW to load tubing, pressured to 130 PSI, dropped to 80 PSI in 17 seconds, continued to attempt squeeze, noticed flow from 9 5/8" casing, closed outlet valve, 0 PSI on 9 5/8" wellhead gauge, continued squeeze, pressure began to hold at 128 PSI after 2.5 bbls squeezed, dropped to 120 PSI in 15 minutes. Bled pressure back and recovered 0.5 bbls. FW POOH to derrick with remaining workstring. Secured well, shut down for night.

**06/29/2025** - Pre-job safety meeting - discussed traffic, JSA review. Checked equipment and work areas, checked WHP = 0 PSI, opened BOP. RIH from derrick with 2.375" workstring & mule shoe BHA, tagged with joint #62 with 5' out at 1977'KB, POOH to derrick RU WL, NU WL PCE, torque to specs, MU/PU perf BHA, pressure tested WL lubricator & PCE against blind rams, 250 PSI - pass, 800 PSI - failed with no external leaks – good. RIH with perf BHA, tagged at 1955' KB WLM, shot perfs in 5.5" casing from 1957'-1954'. POOH Tools to surface, RD WL & WL PCE RIH from derrick with 2.375" workstring & mule shoe BHA, tagged with joint #62 with 5' out at 1977'KB, LD joint #62. EOT 1949'KB RU TPW to tubing, pressure tested TPW to 1500 PSI – good. Established forward circulation immediately with FW Pumped Plug #2 from 1977' to 1653' (324'), pumped 7.7 bbls, 36 SKS of 15.6 ppg, 1.18 Yield Type I/II cement with 2% CaCl<sub>2</sub>, displaced tubing with 6 bbls FW Began WOC (4 hrs), RD TPW from tubing, POOH to racks with 9 joints, RU TPW to tubing. PU tubing 10' to EOT 1653', reverse circulated with 10 bbls FW until clean, observed flow from 9 5/8" casing. Attempted squeeze, pumped 0.5 bbls FW down tubing, pressured to 100 PSI, dropped to 75 PSI in 46 seconds, continued to attempt squeeze, continued squeeze, pressure continued to drop slowly. 0.6 bbls squeezed, dropped to 80 PSI in 15 minutes, bled pressure back and recovered 0.5 bbls. FW POOH to derrick with 52 joints, lunch RD workflow, ND annular BOP, RU workflow. Continue to WOC, RIH from derrick with 2.375" workstring & mule shoe BHA, tagged with joint #52 at 1653'KB, POOH to derrick RU WL, NU WL PCE, torque to specs, MU/PU perf BHA, pressure tested WL lubricator & PCE against blind rams, 250 PSI - pass, 800 PSI - failed with no external leaks – good. RIH with perf BHA, tagged at 1653' KB, shot perfs in 5.5" casing from 1644'-1641'. POOH, tools to surface, RD WL & WL PCE RIH from derrick with 2.375" workstring & mule shoe BHA, tagged with joint

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#52 at 1653'KB, LD joint #52, EOT 1647'KB RU TPW to tubing, pressure tested TPW to 1500 PSI – good. Established forward circulation immediately with FW. Pumped Plug #3 from 1653' to 1100' (553'), pumped 13.1 bbls, 63 SKS of 15.6 ppg, 1.18 Yield Type I/II cement, displaced tubing with 3.9 bbls. FW RD TPW from tubing, POOH to racks with 17 joints, POOH to derrick with 34 joints. Secured well, shut down for night.

**06/30/2025** - Arrived onsite, Pre-job safety meeting - JSA review. Checked equipment and work areas, checked WHP = 0 PSI, opened BOP RIH from derrick with 2.375" workstring & mule shoe BHA, tagged with joint #37 with 15' out at 1170'KB NPT to wait for cementers to arrive. Stopped NPT, RU TPW to tubing, pressure tested TPW to 1500 PSI - good EOT. 1150'KB, pumped Plug #4 from 1170' to 525' (645'), pumped 15.3 bbls, 73 SKS of 15.6 ppg, 1.18 Yield Type I/II cement with 2% CaCl<sub>2</sub>, displaced tubing with 1.75 bbls FW WOC, RD TPW from tubing, POOH to racks with 20 joints, RU TPW to tubing, PU tubing 10' to EOT 533', reverse circulated with 13 bbls FW until clean. Observed flow from 9 5/8" casing, POOH to derrick RD power swivel from derrick, continued to WOC RIH from derrick with 2.375" workstring & mule shoe BHA, tagged at 540'KB, POOH RU WL, NU WL PCE, torque to specs, MU/PU perf BHA, pressure tested WL lubricator & PCE against blind rams, 250 PSI - pass, 800 PSI - failed with no external leaks – good. RIH with perf BHA to 512' KB, shot perfs in 5.5" casing from 512'-509', POOH, tools to surface RD WL & PCE RIH from derrick with 2.375" workstring & mule shoe BHA to EOT 533'KB. RU TPW to tubing, pressure tested TPW to 1500 PSI – good. Established forward circulation with 2.5 bbls of FW in 9 5/8", pumped Plug #5 from 540' to surface in 5.5" casing and 512' to surface in 9 5/8" casing, pumped 48.8 bbls, 233 SKS of 15.6 ppg, 1.18 Yield Type I/II cement RD TPW from tubing. POOH to racks, topped off cement in 5.5" casing with the last joint. RD work floor, ND BOP RD WOR. Secured location, shut down for night. Prepare to MIRU on well 142.

**07/21/2025** - Traveled to the CSA 150. Held safety meeting. R/U welder. Performed WH cutoff. Cement was at surface in both strings. Installed P&A marker. Backfilled cellar. Shutdown and traveled back to Roswell.



Plug & Abandonment Program  
Revision: 0

Cato San Andres Unit 150  
D-26-8S-30E  
Chaves County, NM

### NEW MEXICO - CSAU 150 - P&A SCHEMATIC

Location (Unit-Sec-Twp-Range): D-26-8S-30E  
Surface Hole Latitude: 33.6035156  
Surface Hole Longitude: -103.857338  
Bottom Hole Location: Vertical Well

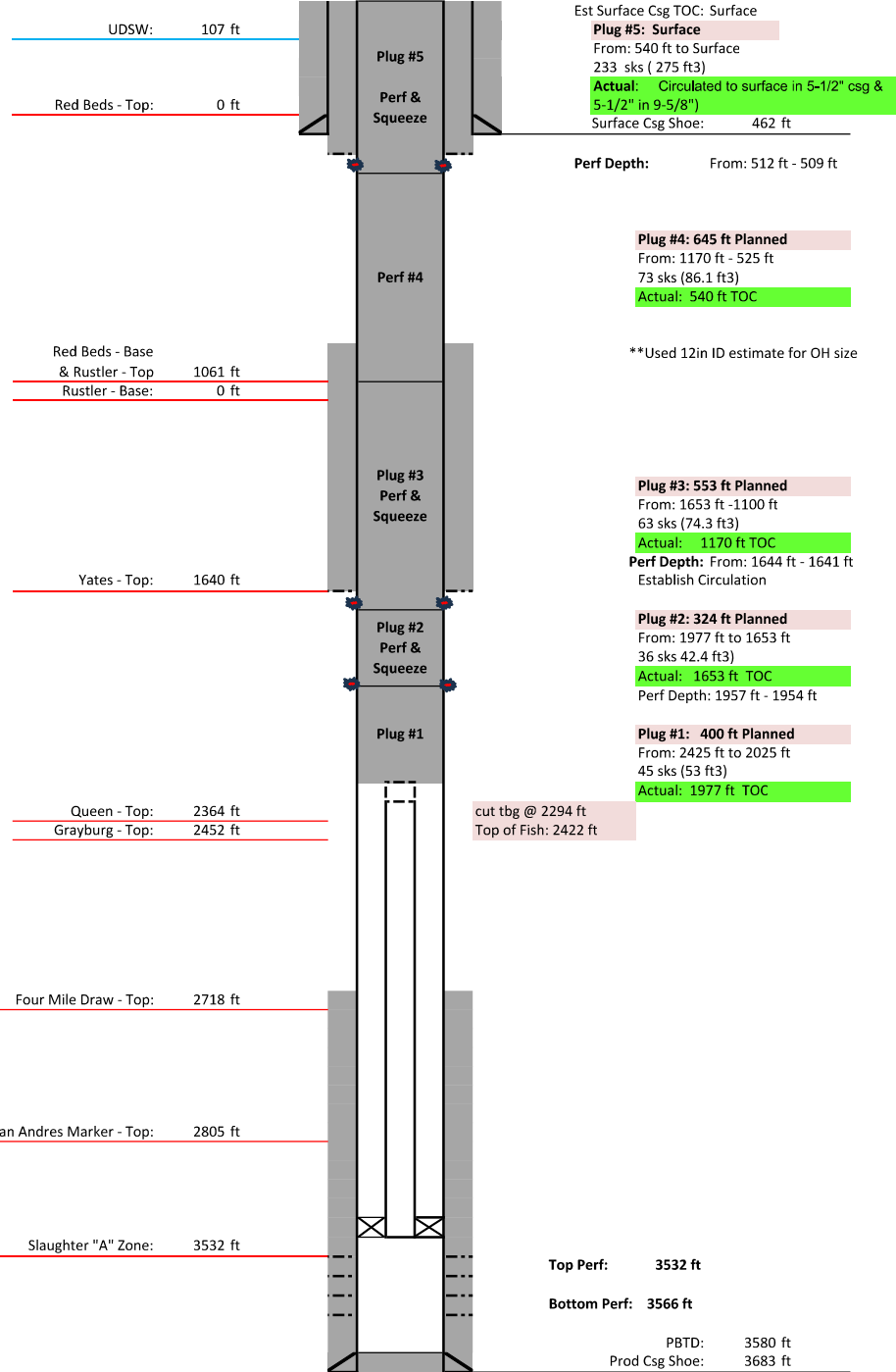
API: 30-005-20119

GL (ft): 0  
KB (ft): 10

Surface Casing Information	
Size (in):	9.625
Weight (lb/ft):	53.5
Grade:	0
Hole Size (in):	12.25
Setting Depth:	462

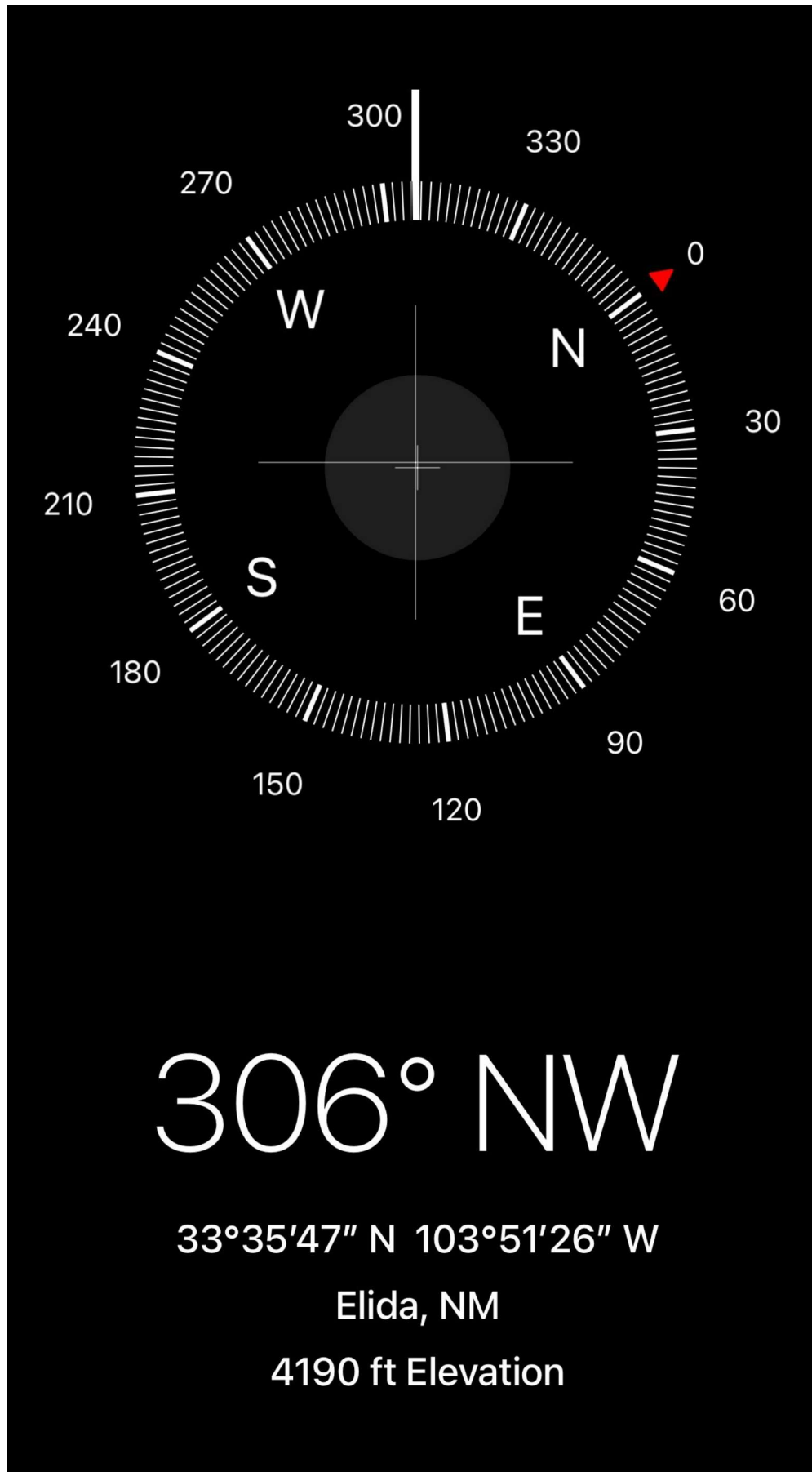
Production Casing Information	
Size (in):	5.5
Weight (lb/ft):	15.5
Grade:	N/A
Hole Size (in):	8.75
Setting Depth:	3683

Formation Depth Information	
Formation	MD (ft)
UDSW	107
Red Beds - Top	0
Red Beds - Base	1061
Rustler - Top	1061
Rustler - Base	0
Yates - Top	1640
Queen - Top	2364
Grayburg - Top	2452
Four Mile Draw - Top	2718
San Andres Marker - Top	2805
Slaughter "A" Zone	3532









Sante Fe Main Office  
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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 500658

CONDITIONS

Operator: CANO PETRO OF NEW MEXICO, INC. 801 Cherry Street Fort Worth, TX 76102	OGRID: 248802
	Action Number: 500658
	Action Type: [C-103] Sub. Plugging (C-103P)

CONDITIONS

Created By	Condition	Condition Date
loren.diede	None	9/2/2025