

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division

Sundry Notices and Reports on Wells

1. Type of Well GAS	API # (assigned by OCD)
2. Name of Operator Meridian Oil Inc.	5. Lease Number E-80915
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	6. State Oil&Gas Lease E-80915
4. Location of Well, Footage, Sec., T, R, M 1740'FSL, 1080'FEL Sec.2, T-24-N, R-7-W, NMPM, Rio Arriba Co	7. Lease Name/Unit Name Canyon Largo Unit
	8. Well No. 220
	9. Pool Name or Wildcat Ballard Pic.Cliffs
	10. Unit Letter: I

Type of Submission

Type of Action

<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input checked="" type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other -	

13. Describe Proposed or Completed Operations

This well is identified as having a casing leak. The well will be repaired if possible. If not, it will be plugged and abandoned. (See attached procedure and wellbore diagram).

✓ If abandonment is determined necessary, an additional 50 sx cement plug will be placed inside and outside pipe from 1125-1025'.

**RECEIVED**  
OCT 14 1992  
OIL CON. DIV.  
DIST. 3

SIGNATURE *Charles Carlson* (TM) Regulatory Affairs October 12, 1992

(This space for State Use)

Approved by Original Signed by CHARLES CARLSON Title DEPUTY OIL & GAS INSPECTOR, DIST. # Date OCT 14 1992

IF ABANDONMENT IS NECESSARY DISPLACEMENT OF hole WITH MUD  
IS NOT REQUIRED

Procedure for Slimhole Casing Repair  
Canyon Largo Unit #220  
Pictured Cliffs Producer  
T24NR07WSec02I

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**Requirements:**

- 1-1/4" Slimline Drillpipe, 2430', 2.4# N-80, 1.812" OD box, 1-13/16" Slimline connections
- 2-1/4" workover bit, 3 blade drag bit with A-Rod connection
- Bit Sub with 1R Float, A-Rod box X 1-1/2" EU 10rd pin.
- 2-7/8" Casing Scraper, Baker Model "D" Roto-Vert, 2.188" OD, 1-1/2" EU 10rd connection.
- X-Over 1-1/2" EU 10 rd box X 1-13/16" Homco Slimline box.
- X-Over 1-14" IJ 10 rd pin X 1-13/16" Homco Slimline box.
- 2-7/8" Retrievable Bridge Plug, Guiberson Uni-Packer VI, 2.344" OD, w/solid mandrel XL On-Off retrieving head.
- 2-7/8" Retrievable Packer, Guiberson Uni-Packer VI, 2.344" OD/ 0.75" ID, 1-1/4" IJ 10rd connection.
- Profile Nipple for drill string.
- Cement will be Class B with 2% CaCl added in mix water (15.6 ppg, 1.18 ft<sup>3</sup>/sx, 5.2 gal/sx)
- Maximum Cement Volume for Repair: 307 sxs + 50% = 460 sxs
- Maximum Cement Volume for P&A: 142 sxs + 50% = 213 sxs

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Prior to move on, test rig anchors & repair if necessary. Construct reserve & blow pit. Notify BLM (599-8907) 24 hrs prior to commencing operations. Comply with all MOI, federal, & state regulations. Always Hold Safety Meetings.

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1. MORU daylight rig. Record Csg & Brdhead pressures. Place fire & safety equipment in appropriate areas. w/ 2-7/8" master valve closed, NU BOP & all lines. Test operation of BOP. Verify working pressure of master valve.
  2. PU 2-1/4" bit, float, & 2-7/8" csg scraper. TIH on 1-1/4" slimline drill pipe to PBTD of 2356'. Note & report fluid level. Circulate w/ air-mist to clean hole. TOOH.
  3. PU 2-7/8" RBP & PKR combination. TIH on 1-1/4" drillpipe. Set RBP @ 2250' (50' above top perforation at 2306'). Release RBP. Pull up to top of next joint. Set packer. Test below packer to 1000 psi for 5 minutes. Close rams and test annulus to 800 psi. Release PKR & pull up one jt. Dump 5 gal sand down 1-1/4" on RBP.
  4. Locate casing failure by testing below packer to 800 psi & annulus to 800 psi using rig pump. Pull uphole. Locate all holes. Establish rate & record pressures into each leak. Note TOC @ 1475' from temperature survey.
  5. Notify Production Engineering of pressure test results. Decision for either abandonment or repair will be made upon condition of the 2-7/8".

**REPAIR:**

6. If leak is below TOC. Squeeze below packer (set a minimum of 350' above leak). Monitor pressures on brdhead. RU cementers. Establish rate w/ 2% KCl down 1-1/4" drill pipe. Mix & pump 50 sxs Class B cement (w/ 2% CaCl accelerator) depending upon rates & pressure to 800 psi & 1 BPM maximum. Unseat packer & reverse out cement. Pull one stand & reset PKR. Reapply & hold pressure 2 hrs.  
  
If leak is above TOC. TOOH w/ 1-1/4" drillpipe. RU cementers. Establish rate down 2-7/8" csg (circulate to surface if possible). Use Class B cement (w/ 2% CaCl accelerator). Volume to circulate from TOC @ 1475' is 307 sxs (64 bbls). Displace cement to within 300 feet (1.75 barrels) of top failure. Hesitate 15 minute squeezes to 800 psi or 1.5 barrels. Hold final squeeze pressure for 2 hrs. Circulate cement if possible.

**Canyon Largo Unit #220**  
**Pictured Cliffs Casing Repair**

7. TIH w/ 2-1/4" bit on 1-1/4" drillpipe. Drill out top failure. Close rams & test csg to 500 psi maximum. Repeat drill out & test for each failure.
8. If test fails on any interval, resqueeze prior to drilling to next squeeze.
9. Once csg holds 500 psi, TIH w/ csg scraper. Clean out & circulate sand off RBP. TOOH.
10. TIH w/ retrieving tool on 1-1/4" drill pipe. Unload hole w/ air-mist. Latch on RBP & TOOH.
12. PU float, & 2-7/8" csg scraper. TIH on 1-1/4" drill pipe. Circulate hole clean to PBTD (2356') and verify removal of sand and fluid. TOOH & LD drill pipe.
13. ND BOP & lines. NU wellhead. Release rig and turn well over to Production Operations. Notify EPNG of well status, return well to production.

**PLUG & ABANDONMENT:** Notify BLM (100-0007) of Abandonment Decision.

7. **TOOH w/ RBP & PKR. TIH w/ 1-1/4" drill pipe open-ended to PBTD (2356'). RU cementers. Circulate hole w/ 5 bbls water ahead of all plugs. Spot cement plug & pull up to top of all plugs. Spot cement as follows:**

Plug #	Interval:	Length of Plug	Volume	sxs Cement	Excess
1	2356' - 1700**	656'	25.58 ft^3	21.70	20 %
→ 2	1700' - 1000'	700'	27.30 ft^3	23.00	20 %
3	1000' - 250***	750'	29.25 ft^3	24.50	20 %
4	250' - 180'	250'	84.95 ft^3	72.00	50 %
	180' to surf				

**\*After spotting Plug #1, pull up 500' minimum to 1200'. WOC 2 hrs before tagging next plug and proceeding.**

**\*\*After spotting Plug #3, pull up to 220' & reverse out until clean. WOC 2 hrs. Tag TOC. Fill hole w/ 9.0 ppg 50 visc mud from top of Plug #3 to 150'. 2-7/8" casing will be filled from PBTD to 500' minimum with cement.**

8. TOOH & LD drillpipe. RU wireline & shoot two 1/4" holes @ 180'. RD wireline.
9. Establish rate down 2-7/8" casing and out bradenhead to surface. Plug #4. **Cement will be circulated to surface.** Volume to circulate from 180' is 48 sxs (10.1 bbls). Circulate good cement to surface.
10. Cut off wellhead below bradenhead & install dryhole marker. Release rig.

**Approved:**

**J. A. Howieson**  
**Drilling Superintendent**

**Vendors:**

**Cementing  
Bridge Plugs & Packers  
District Tools  
Engineering  
Casing Scraper**

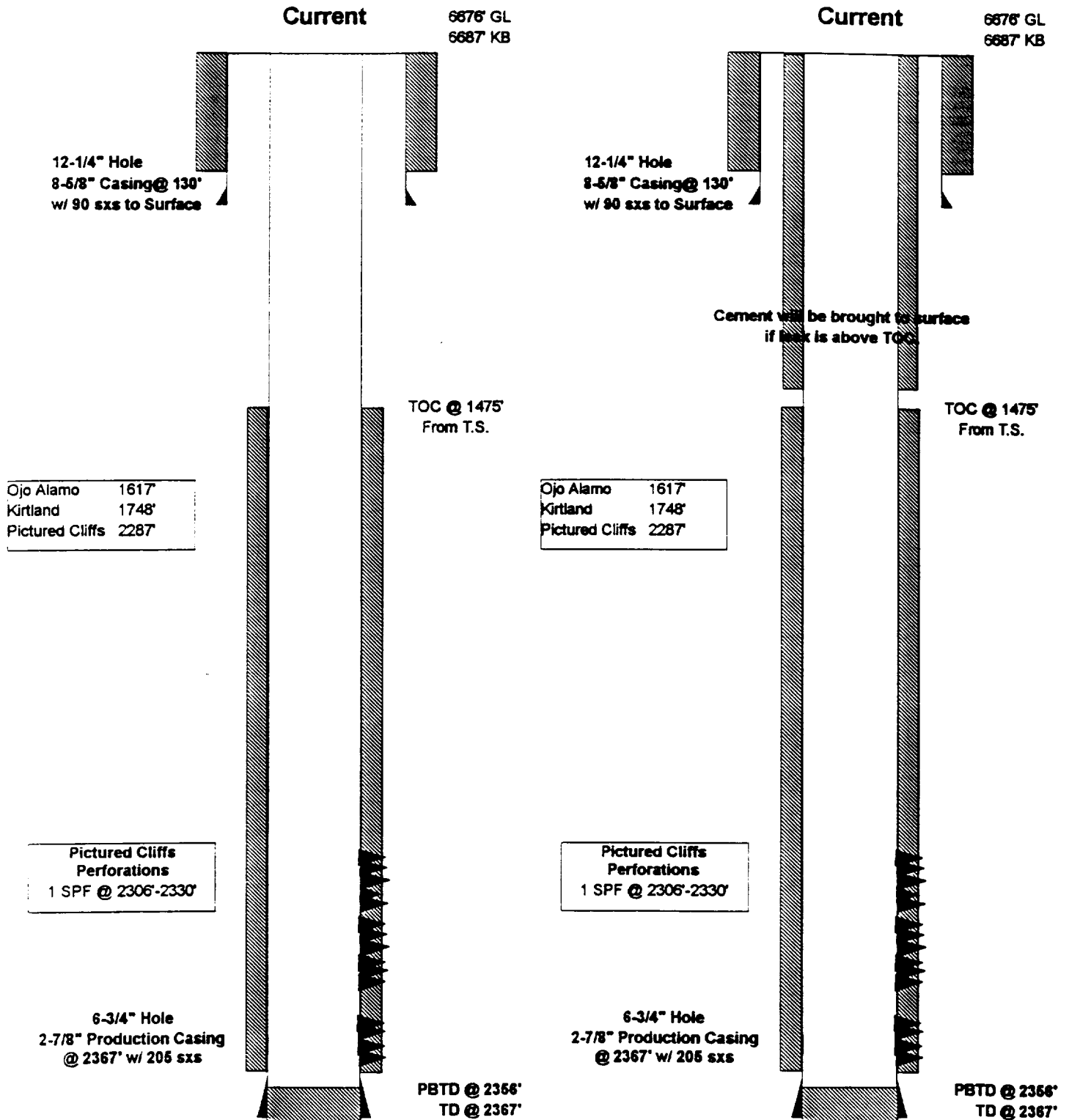
**Operator**

**—obssom**

# Canyon Largo Unit #220

T24NR07W02I

Pictured Cliffs Slimhole  
Casing Repair or Abandonment



Well was perforated 1 SPF and fraced w/ 30,000#  
10/20 sand @ 28 BPM. Well has a casing failure.  
This failure is most likely above TOC.

The well will be cleaned out, a BP will be set, the casing tested,  
and the leak identified. At this point the leak will either be repaired  
or the well plugged & abandoned with cement from PBTD to Surfac

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