

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

<p>1. Type of Well GAS</p> <hr/> <p>2. Name of Operator MERIDIAN OIL</p> <hr/> <p>3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700</p> <hr/> <p>4. Location of Well, Footage, Sec., T, R, M 1650'FNL, 1650'FEL Sec.2, T-26-N, R-5-W, NMPM</p>	<p>5. Lease Number Jic.Contract 150</p> <p>6. If Indian, All. or Tribe Name Jicarilla Apache</p> <p>7. Unit Agreement Name</p> <p>8. Well Name & Number Jicarilla G #8</p> <p>9. API Well No.</p> <p>10. Field and Pool Blanco MV/ Tocito Gl/ Basin Dk</p> <p>11. County and State Rio Arriba Co, NM</p>
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12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

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 checked="" 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 type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other - MV/Gl/Dk commingle	

13. Describe Proposed or Completed Operations

It is intended to complete the Tocito Gallup formation in this well and commingle with the Blanco Mesa Verde and Basin Dakota formations per the attached procedure and wellbore diagram. Application is being made to the New Mexico Oil Conservation Division for commingling.

RECEIVED

DEC 3 1993

OIL CON. DIV.

14. I hereby certify that the foregoing is true and correct **DIST. 3**

Signed *John J. Shadwell* (TEM) Title Regulatory Affairs Date 11/26/93

(This space for Federal or State Office use)

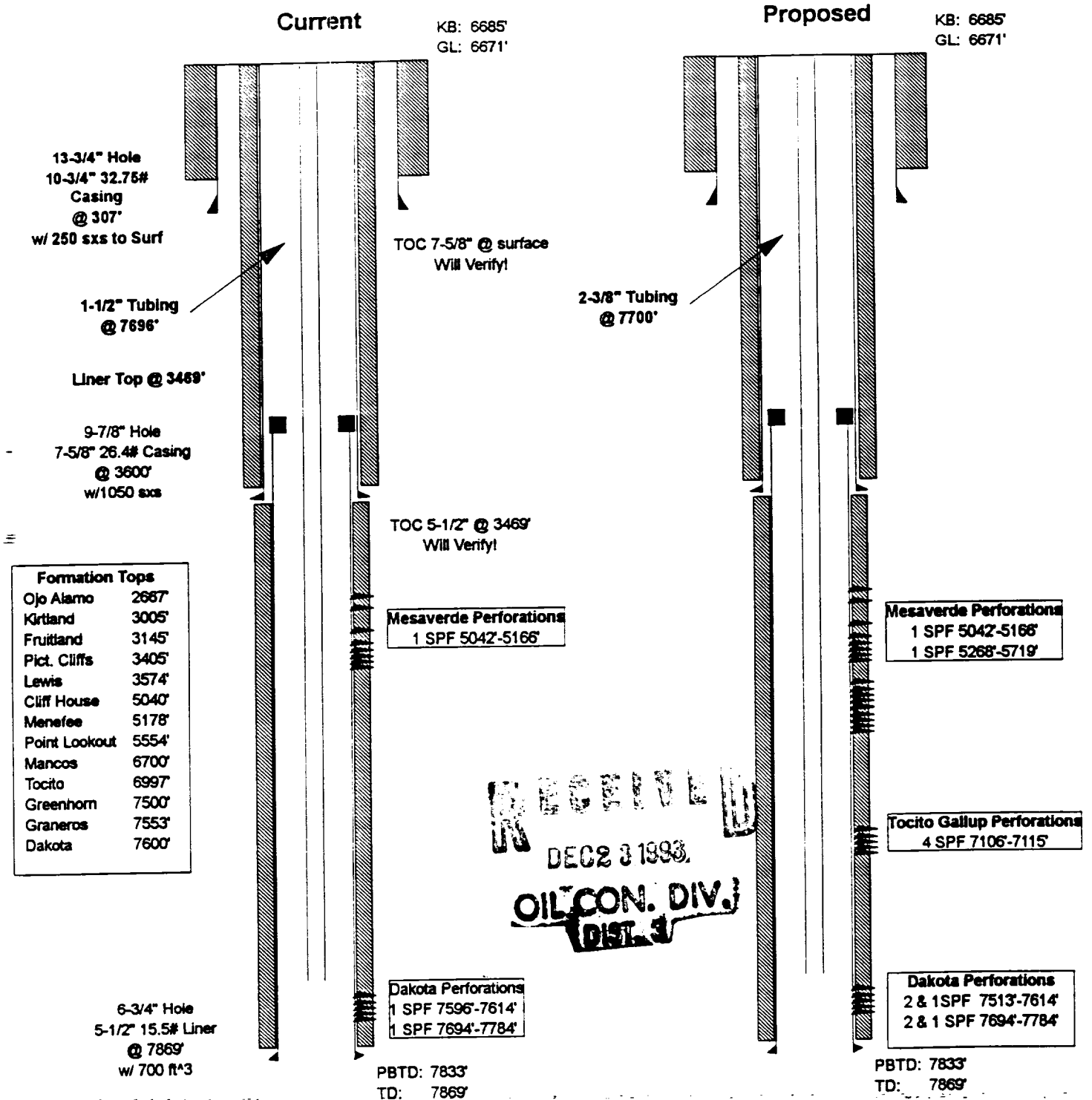
APPROVED BY (Original Signed) HECTOR A. VILLALOBOS Title AREA MANAGER Date DEC 21 1993

CONDITION OF APPROVAL, if any: submitted in lieu of Form 3160-5

C-104 for Plot 2

NMOCD

Jicarilla G # 8
T26NR05W02G
 Recompletion & Commingle



Production was commingled per DHC # R-8658 in the Mesaverde & Dakota in 1988.

Above demonstrates the tri-mingled production wellbore schematic for the Mesaverde, Tocito Gallup, & Dakota.

ILM
 11-16-93

PROCEDURE FOR WORKOVER

Jicarilla G # 8

Unit G, Sec 02-T26N-R05W

Mesaverde/Dakota

Add Point Lookout, Meneffee, & Tocito to Wellbore & Commingle

Prior to Starting Operation. Inspect Location. Dig & Fence Work Pit. Test & Install Anchors if necessary. Contact Gas Company of New Mexico to obtain Drill Gas Meter for workover operation. Comply with all BLM, NMOCD & MOI rules and regulations. **Always Hold Safety Meetings!!**

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- **** Require Two-hundred-fifty-five (255) joints 2-3/8" 4.7# J-55 EUE tubing on location.
 - **** Require Four (4) 3-1/8" Drill collars, all changeovers, floats, & subs.
 - **** Require (7500') 3-1/2" 9.3# N-80 Upset Frac Tubing String on location for Frac.
 - **** Five (5) 400 bbl Frac Tanks & one (1) 400 bbl rig tank w/ 1% KCl water filtered 25 micron
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1. Move on Location. Obtain & Record Bradenhead, Casing, & Tubing Pressure on Report. Lay manifold & all lines. Pump 50 bbls 1% KCl water down casing, followed by 20 bbls 1% KCl water down tubing. ND WH. NU BOP & stripping rubber. Open well on blooie line.
2. TOOH & LD 1-1/2" 2.9# EUE tubing from 7696'. (NOTE: 2-1/16" Blast Joints) Set plug in SN @ 7664' if necessary to TOOH. Contact Engineering if tubing is stuck.
3. RU wireline. Run 5-1/2" 15.5# casing gauge ring to 7550'. POOH. Run 5-1/2" wireline set RBP. Set RBP#1 @ 7550'. Note Liner top @ 3469'. Make additional run with dump bailer. Place 2 sxs sand on top of RBP#1.
4. PU 5-1/2" RBP & 5-1/2" Fullbore PKR assembly and TIH on 2-3/8" tubing. TIH to first RBP @ 7550'. Pump 55 bbls 1% KCl water to fill hole to Mesaverde. Set PKR and test RBP#1 @ 7550' & tubing to 3500 psi for 10 min. Pull tubing uphole and reset PKR @ 5200' Test 5-1/2" casing from 5200' to 7550' to 3000 psi for 10 min.
5. Pull tubing uphole. w/2-3/8" tubing, set RBP#2 @ 5000' (approx 50' above top MV perf). w/ PKR set above RBP. Test RBP#2 & tubing to 3500 psi. Hold and record pressure 10 minutes. Release pressure. Fill hole from bottom with 1% KCl water, approx 200 bbls to remove any gas pockets. TOOH. Fill hole full prior to logging.
6. RU wireline. Under Packoff, Run GR-CCL-CBL from RBP#2 to surface with 500 psi pressure. No Gaps. Record all cement tops on Report. When out of hole, pressure test casing from surface to 1000 psi. Hold pressure for 10 minutes. Engineering will evaluate Bond for potential squeeze.
7. TIH w/ retrievinghead on 2-3/8". Engage RBP#2 @ 5000', equalize pressure, & TOOH with RBP#2 & standback tubing.
8. RU wireline. Under Packoff, Run GR-CCL-CBL from 7550' to 5000'. Note: Hole should be full from RBP#1 to 5200'. POOH. Under Packoff, Run GR-Dual Spaced Cased Hole Neutron from 7550' to 5200'. POOH. Supply all logs to Production Engineering prior to perforating, to verify zones.
9. Prepare to Perforate Tocito Gallup as follows: w/ 4" HSC gun GOEX-116 19 gram charges 0.44" dia holes 4 SPF.

Holes from 7106' to 7115' (9' total of 36 holes).

PERFORATE

10. Change out rams, elevators, & rubbers. PU 5-1/2" fullbore PKR, (2.75" ID) 'F' nipple, & 3-1/2" 9.3# N-80 Upset Frac String (2.992" ID, 3.75" OD). TIH with Frac string to 7000' Set PKR @ 7000' +/- on pipe with good bond. Stimulate Tocito Gallup Interval per attached schedule. **STAGE # 1.** Nitrogen Foam & 63,000# 20/40 brady @ 15 BPM. All sand will be tagged w/ 0.3mc/1000# Ir-192. Max Pressure is 6000 psi. Flow well until closure on 1/8" choke. Release Stimulation Company.

11. Flow well back until returns of sand & liquid are minimal. Release PKR, TOOH & stand back 3-1/2" frac tubing string. MINIMIZE FLUID PUMPED DOWN TUBING TO COME OUT OF HOLE. Set plug in profile nipple if necessary.

12. RU wireline. Run 5-1/2" wireline set RBP. Set RBP @ 5750'. Make additional run with dump bailer. Place 2 sxs sand on top of RBP. Note Plug has not been tested!

13. Prepare to Perforate Point Lookout & Meneffee under a full lubricator as follows: w/ 3-1/8" HSC gun select fire GOEX-116 12 gram charges 0.30" dia holes 1 SPF bottom up. (Total of 26 holes).

**5719', 5734', 5697', 5661', 5652', 5600', 5585', 5583', 5582', 5579', 5577', 5575', 5569',
5550', 5536', 5530', 5497', 5481', 5475', 5400', 5557', 5331', 5295', 5291', 5283', 5268'**

14. Run 5-1/2" fullbore PKR, profile nipple, & 3-1/2" 9.3# N-80 Frac String. TIH with Frac string to 5730'. TEST RBP to 3500 psi prior to stimulation for 10 min. Pull up & set PKR @ 5200' on pipe with good bond. Breakdown Point Lookout & Meneffee Interval w/ 1000 gallons 15% HCl w/ 2gal/1000 corrosion inhibitor, 1gal/1000 surfactant, & 1gal/1000 iron control. Drop 50-7/8" RCN 1.3 sp gravity ball sealers in sets of 10 every 200 gallons. Ball off perforations to 3500 psi. Release Pressure, TIH and knock balls off perforations. Pull up and reset PKR @ 5200'.

15. **STAGE # 2** Frac well per attached schedule. 1% KCl water & friction reducer & 93,000# 20/40 brady @ 40 BPM. Max Pressure is 6000 psi. Sand will be tagged w/ 0.3mc/1000# Ir-192.

16. Flow well back until returns of sand & liquid are minimal. Release PKR, TOOH & LD 3-1/2" frac tubing string. MINIMIZE FLUID PUMPED DOWN TUBING TO COME OUT OF HOLE. Set plug in profile nipple if necessary. Change out rams, elevators, & rubbers.

17. TIH w/ 4-3/4" bit, float, & 2-3/8" tubing. Clean hole out to RBP @ 5750' with gas. Flare well. Clean well up and obtain good pitot gauge on entire Mesaverde. Record 15 min, 30 min, 45 min, & 1 hr. TOOH.

18. PU one jt 2-3/8" openended, SN, 6' perf sub, 5-1/2" PKR, & remaining 2-3/8" tubing. Set PKR @ 5250'. Set slips, close pipe rams. Continue to flow test well. Obtain good pitot gauge on Point Lookout & Meneffee.

19. RU wireline. Run 24hr digital pressure bomb. Set bomb in SN. Flow well 2 hrs, followed by shut-in for 22 hrs. Pull bomb from well. Release PKR & TOOH w/ 2-3/8".

20. PU retrieving head. TIH on 2-3/8" and engage RBP @ 5750'. Equalize pressure & TOOH with RBP.

21. TIH w/ 4-3/4" bit, float, & 2-3/8" tubing. Clean hole out to RBP @ 7550' with gas. Flare well. Clean well up and obtain good pitot gauge on Mesaverde & Tocito. Record 15 min, 30 min, 45 min, & 1 hr. TOOH.

22. PU one jt 2-3/8" openended, SN, 6' perf sub, 5-1/2" PKR, & remaining 2-3/8" tubing. Set PKR @ 7050'. Set slips, close pipe rams. Continue to flow test Tocito. Obtain good pitot gauge on Tocito.

23. RU wireline. Run 24 hr digital pressure bomb. Set bomb in SN. Flow well 2 hrs, followed by shut-in for 22 hrs. Pull bomb from well. Release PKR & TOOH w/ 2-3/8".

24. PU retrieving head. TIH on 2-3/8" and engage RBP @ 7550'. Equalize pressure & TOOH with RBP.

25. PU 4-3/4" bit, float, & four (4) 3-1/8" drill collars on 2-3/8" tubing. Clean well out to 7833' with gas. Flare well. Pull above Dakota Perforations & pitot test well. Record 15 min, 30 min, 45 min, & 1 hr. TOOH.

26. RU wireline. Run After-Frac Gamma-Ray Log across New Zones. POOH. Prepare to Re-perforate Dakota as follows under full lubricator: w/ 4" HSC gun GOEX-116 19 gram charges 0.44" dia holes 2 SPF. (Total of 116 holes).

7513'-7535' (22'-44 holes)	7818'-7826' (8'-16 holes)	7775'-7780' (5'-10 holes)
7696'-7709' (13'-26 holes)	7628'-7630' (2'-4 holes)	7600'-7608' (8'-16 holes)


27. PU 5-1/2" fullbore PKR & TIH on 2-3/8" tubing. Set PKR @ 7800'. Establish Rate below PKR & pump 400 gallons 15% HCl acid w/ 2gal/1000 corrosion inhibitor, 1gal/1000 iron sequestering agent, 3 gal/1000 acetic acid & drop 20-7/8" RCN 1.30 sp gravity ball sealers in two sets of ten (10) balls. Pump @ maximum rate and pressure. Ball off Perforations & displace acid. Max pressure 3500 psi. Release Pressure & PKR. DO NOT KNOCK BALL SEALERS OFF YET.

28. Pull tubing uphole & Reset PKR @ 7400' on good bonded pipe. Establish rate below PKR w/ 1% KCl water. Pump 1000 gallons 15% HCl acid, followed by 1500 gallons 1% KCl water, followed by 1000 gallons 15% HCl acid, flush with 1% KCl water. Ball off entire Dakota interval by dropping 350 -7/8" RCN 1.30 specific gravity ballsealers in fourteen sets of twenty-five (25) balls. Pump at maximum rate & maximum pressure. Release PKR, and run in w/ PKR to 7800', knocking balls off of perforations. DO NOT GO BELOW 7800' w/ PKR. TOOH w/ PKR.

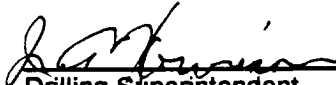
29. PU notched collar, float, & TIH w/ 2-3/8" tubing clean well out with gas to 7833'. Pull above Dakota and obtain good pitot gauge on entire well. Record 15 min, 30 min, 45 min, & 1 hr. TOOH.

30. TIH rabbiting tubing with production string as follows. One (1) jt 2-3/8" tubing openended, expendable check 'F' nipple (1.81" ID), eighteen (18) joints 2-3/8" tubing, One (1) 20' 3.062" blast joint for Tocito, forty-eight (48) joints 2-3/8" tubing, Four (4) 20' blast joints for Mesaverde, & remaining one-hundred-seventy-eight (178) jts 2-3/8" tubing. Land tubing @ 7700'. ND BOP, NU WH. Pump off expendable check and obtain final pitot test up 2-3/8" tubing for 15 min, 30 min, 45 min, & 1 hr. RD and release rig to next location.

31. Production Engineering will finalize Commingle Allocation Formula and submit it to the NMOCD. With Well shut-In, RU wireline and set 7day dip-in btm hole bomb in nipple. Recover bomb. Notify marketing that well will be restored to production.


TDS

Approved:


Drilling Superintendent

Suggested Vendors:

Stimulation Work:	Western Co. North America	327-6222
Logging/Perforating	Petro Wireline	326-6669
Pressure Bombs	Tetfeller Inc.	325-1731
BP/PKR/Blast jts	Baker Service Tools	325-0216
3-1/2" Frac String	Cave Enterprises	325-3401
Radioactive Tagging	Protechnics Intl	326-7133
Engineering	T. E. Mullins	326-9546-H
	IE m 11-14-93	325-9361-W