

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells, 7:40

1. Type of Well

GAS

2. Name of Operator

MERIDIAN OIL

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

1650'FSL, 720'FEL, Sec.10, T-28-N, R-10-W, NMPM

5. Lease Number

SF-080724A

6. If Indian, All. or Tribe Name

7. Unit Agreement Name

8. Well Name & Number
Zachry #409. API Well No.
30-045-2546910. Field and Pool
Blanco Mesaverde/
Armenta Gallup11. County and State
San Juan Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

☒ Notice of Intent☐ Abandonment☐ Change of Plans☐ Subsequent Report☐ Recompletion☐ New Construction☐ Final Abandonment☐ Plugging Back☐ Non-Routine Fracturing☐ Casing Repair☐ Water Shut off☐ Altering Casing☐ Conversion to Injection☒ Other - Pay add & Gallup TA

13. Describe Proposed or Completed Operations

It is intended to add pay to the Mesaverde formation of the subject well according to the attached procedure and wellbore diagram. The Gallup formation will be temporarily abandoned by setting a cast iron bridge plug due to economics.

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

Signed [Signature] 2) Title Regulatory Affairs Date 3/23/95

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date _____

CONDITION OF APPROVAL, if any:

RECEIVED
APR 10 1995
OIL CON. DIV.
DIST. 3

APPROVED

APR 08 1995

DISTRICT MANAGER

NMOC

Pertinent Data Sheet - Zachry 40

Location: 1650' FSL & 720' FEL, Unit I, Section 10, T28N, R10W, San Juan County, New Mexico

<u>Field:</u> Armenta Gallup Ext.	<u>Elevation:</u> 5737' GL	<u>TD:</u> 6055'
	5749' KB	<u>PBTD:</u> 6009'

Completed: 12/31/82 Spud Date: 11/22/82 DP #: 32410A

Casing Record:

<u>Hole Size</u>	<u>Csg. Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement (Top)</u>
14-3/4"	10-3/4"	40.5# K-55 ST&C	317'	275 sx. (surface)
9-7/8"	7-5/8"	26.4# K-55 LT&C	5386'	1650 sx. *(surface)
DV Tool @ 4209'				

Surface: 275 sx. Class "B" w/3% CaCl₂. 1/4 lb. Flocele/sk
***Intermediate:** 2 stage 65/35 Pozmix
1st stage:
 Lead 800sx. 65/35 Pozmix w/6% Gel, 1/4 lb. Cello flake/sx, 12-1/2 lb. Gilsonite/sx.
 Tail 100 sx. Class "B" w/2% CaCl₂.
2nd Stage:
 Lead: 650 sx. 65/35 Pozmix, w/12% Gel, 1/4 lb. Cello flake/sx, 12-1/2 lb. Gilsonite/sx.
 Tale: 100 sx. Class "B", w/ 2% CaCl₂. (Cement circulated to Surface)

Liner:

<u>Hole Size</u>	<u>Csg. Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement (Top)</u>
6-3/4"	5-1/2" liner	17.0# K-55 ST&C	6054'	125 sx. (5202')**
Liner Hanger @5202'				

Liner: 125 sx. 50/50 Pozmix w/2% Gel, 6-1/4 lb. Gilsonite/sx, 1/4 lb. Cello flake/sx, 10% salt.
 **(Reversed out 25 sacks of cement from the top of the liner hanger)

Tubing Record:

<u>Tbg. Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>
2-3/8"	4.70# J-55 EUE	5878'***
*** (Bullplug on bottom, 1 jt. mud anchor, 1 perfed jt., S.N. @ 5818')		

Formation Tops:

Ojo Alamo:	890'	Chacra:	2530'
Kirtland Shale:	950'	Cliffhouse:	3525'
Fruitland:	1680'	Point Lookout:	4420'
Pictured Cliffs:	1953'	Gallup	5460'

Logging Record: CDL/CNL/GR, DIL/GR, TEMP., CBL, GR--After Frac.

Pertinent Data Sheet - Zachry 40 Con't

Stimulation: Lower Gallup Prf'd w/S.F. 20 Holes, (6006',5998',92',80',71',62',55',46',31',5919',11',03',5896',92',89',81',76',70',5864',58', First attempt sanded off. Acidized, and sanded off after 32,000 lb. sd. Spot 250 gal 7-1/2%, Acidize lower Gallup w/1250 gals 7-1/2% Acetic Acid, Frac'd w/81,700 gals. 70% quality foam, 48,600# sd. Screened out with 32,100# 20/40 sd. in formation.

Middle Gallup Prf'd w/S.F. 23 Holes, (5684',88',91',99',5703',06',12',20',26',5735',39',48',52',58',63',66',77',82',87',94',5802',09',18', Frac'd w/80,100 gals 70% quality foam, 100,000# 20/40 sd.

Upper Gallup Prf'd w/S.F. 24 Holes, (5464',68',75',78',84',91',5509',22',5530',36',49',61',71',78',85',89',5601',03',12',23',32',36',44',48'. Frac'd w/60,000 gals 70% quality foam & 60,500# 20/40 sd.

Workover History: NONE

ZACHRY #40

CURRENT

ARMENTA GALLUP

UNIT I, SEC 10, T28N, R10W, SAN JUAN COUNTY, NM

COMPLETED 12/31/82

OJO ALAMO @ 890'
KIRTLAND @ 950'

FRUITLAND @ 1680'

PICTURED CLIFFS @ 1953'

CHACRA @ 2530'

CLIFF HOUSE @ 3525'

POINT LOOKOUT @ 44420'

7-5/8" 26.4# K-55 LT&C
CSG SET @ 5386'

GALLUP @ 5460'

LINER
CMT W/125 SX 50/50 POZ
TOC @ 5202'

CMT W/275 SX
CEMENT CIR.
TO SURFACE

10-3/4" 40.5# K-55 ST&C
CSG SET @ 317'

INTERMEDIATE

1st STAGE, CMT W/800 SX 65/35 POZ
& 100 SX CLASS "B"
2nd STAGE, CMT W/650 SX 65/35 POZ
& 100 SX CLASS "B"

2-3/8" 4.7# J-55 EUE TBG SET @ 5878'
Bullplug on bottom, 1 jt. mud anchor,
1 perfed jt, S.N. 5818'

DV TOOL @ 4209'

LINER HANGER @ 5202'

PERF 5464'-5648' 24-0.40" HOLES
FRAC W/ 86,000 GAL 70% Q FOAM, 60,500# 20-40
SND

PERF 5684'-5818' 23-0.40" HOLES
FRAC W/ 80,100 GAL 70% Q FOAM, 100,000# 20-40
SND

PERF 5858'-6006' 20-0.40" HOLES
FRAC W/ 81,700 GAL 70% Q FOAM, 48,600# 20-40 SND,
& 1500 GAL 7-1/2% ACETIC ACID

5-1/2" 17.0# K-55 ST&C LINER SET @ 5202'

TD 6055'
PBTD
6009'

ZACHRY #40

PROPOSED

ARMENTA GALLUP

UNIT I, SEC 10, T28N, R10W, SAN JUAN COUNTY, NM

COMPLETED 12/31/82

OJO ALAMO @ 890'
KIRTLAND @ 950'

FRUITLAND @ 1680'

PICTURED CLIFFS @ 1953'

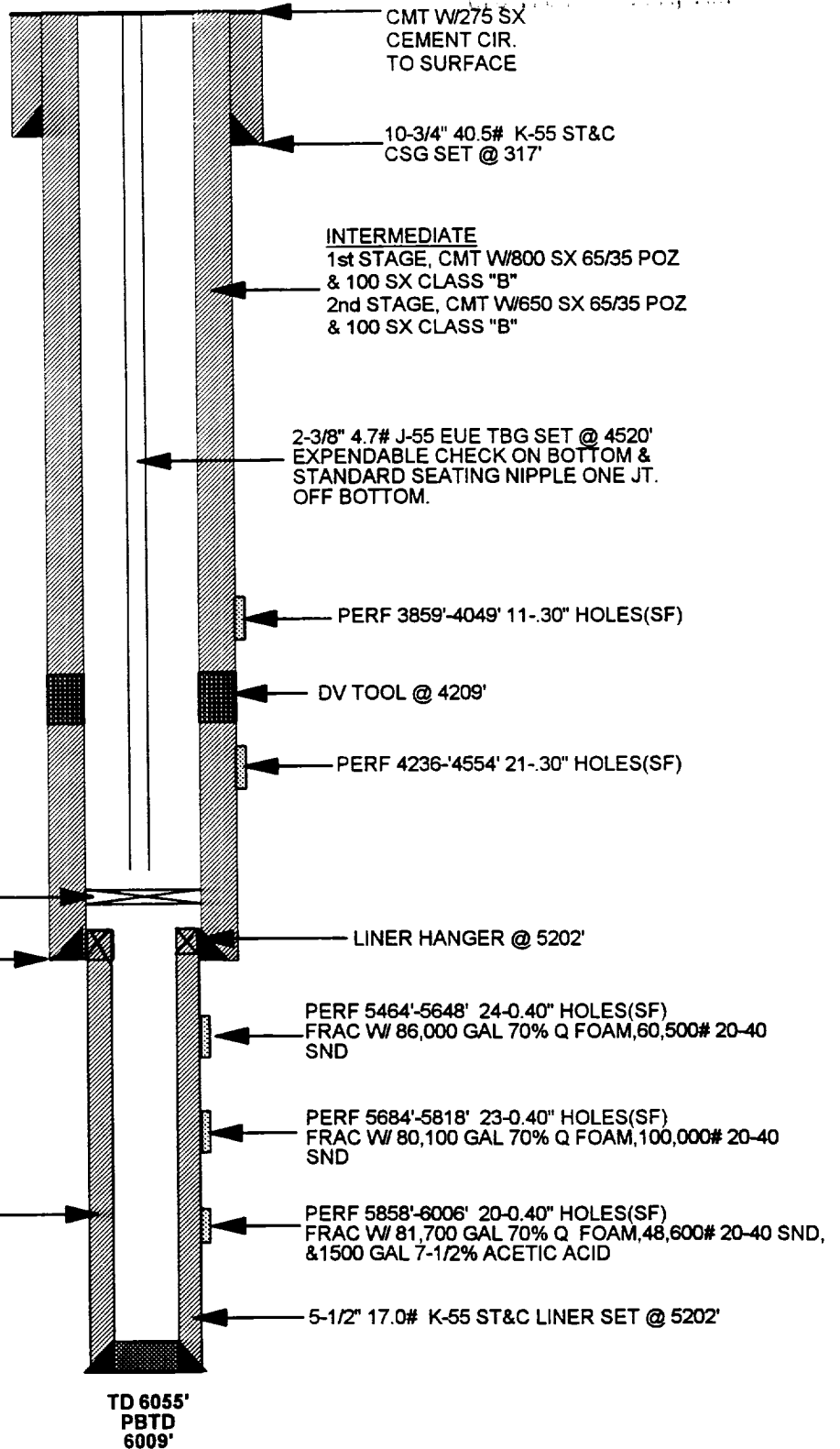
CHACRA @ 2530'

CLIFF HOUSE @ 3525'

POINT LOOKOUT @ 44420'

GALLUP @ 5460'

LINER
CMT W/125 SX 50/50 POZ
TOC @ 5202'



ZACHRY #40
Recommend Recompletion Procedure
Unit I Section 10 T28N R10W

1. Test rig anchors and repair if necessary. Install 10-400 bbl frac tanks on location and fill with 1% KCl water for fracture treatment. Filter all water to 25 microns. Heat water as required by weather.
2. MOL and RU. Comply to all NMOCD, BLM and MOI rules and regulations. Hold safety meeting. ND wellhead. NU BOP. Test operation of rams. NU two relief lines.
3. TOOH with 5878' of 2-3/8" tubing. Visually inspect for and replace all bad jts.
4. TIH on 2-3/8" tubing with 7" casing scraper and 6-1/8" bit. Clean out to top of liner hanger at 5202'. TOOH.
5. TIH with 2-3/8" tubing with 4-1/2" casing scraper and 2-7/8" bit. Clean out 4-1/2" liner from 5202' to PBTD at 6009' with air.
6. Blow to pit until sand production is minimal to absent. When well is clean, take 15, 30, 45 and 60 minute pitot gauges. TOOH.
7. Wireline set 7" CIBP at 4700'. Load hole with fresh water. TOOH.
8. RU wireline and run CBL/CCL/GR from PBTD 4700' to 2700' under 1000 psi surface pressure. TIH with 7" full-bore packer and 60' of 2-7/8" tubing and pressure test casing to 3300 psi. If pressure test does not hold, TIH with packer and tubing and locate failure. Contact Production Engineering and a repair procedure will be provided. Release packer and TOOH.

*****Point Lookout*****

9. Perforate with 4" Select-Fire HSC with centralizers and charges meeting requirements for average penetration in Berea of 12.0" and average perf diameter of 0.30". Perforate the following Point Lookout intervals with 1 spf.

4236'	4262'	4315'	4429'	4554'
4241'	4270'	4322'	4433'	
4246'	4275'	4345'	4473'	
4250'	4298'	4381'	4496'	
4256'	4307'	4409'	4500'	

Total: 21 holes.

10. TIH with 7" full bore packer on 2-7/8" tubing and set at 60'. RU stimulation company and prepare to breakdown and balloff with acid. Pump 1575 gal. of 15% HCl at 7-8 bbls/min. Drop a total of 42 7/8" 1.3 sp. gr. RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum pressure is 3400 psi.** Acid should contain clay stabilizer, corrosion inhibitor, and iron sequestering agent. TOOH with tubing and packer.

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Recommend Recompletion Procedure
Unit I Section 10 T28N R10W
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11. RU wireline. RIH with junk basket and retrieve ball sealers. Record number of hits and balls recovered.
12. TIH with 7" full-bore packer on 2-7/8" tubing and set at 60'. RU stimulation company. Hold safety meeting. Pressure test surface lines to 4400 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). **Maximum treating pressure is 3400 psi.** Fracture Point Lookout according to attached procedure. **Stimulation will be limited entry (approximately 2.0 bpm/perf), slickwater, 160,000 lbs. of 20/40 Arizona sand with maximum sand concentration of 2.0 ppg and 25% pad volume.** Flush to the top perf. Shut-in well immediately after stimulating well to keep in static condition. Release packer and TOOH.
13. RU wireline. Set 7" RBP at 4150'. Run dump bailer and dump 2 sxs sand on BP. TIH with 7" full-bore packer on 2-7/8" tubing and set at 60'. Test bridge plug and casing to 3400 psi for 15 minutes. Release packer and TOOH.

*****Menefee*****

14. Perforate with 4" Select-Fire HSC with centralizers and charges meeting requirements for average penetration in Berea of 12.0" and average perf diameter of 0.30". Perf the following Menefee intervals with 1 spf .

3859'	3909'	4049'
3863'	3931'	
3895'	3935'	
3898'	3939'	
3906'	3972'	

Total: 11 holes.

15. TIH with 7" full bore packer on 2-7/8" tubing and set at 60'. RU stimulation company and prepare to breakdown and balloff with acid. Pump 825 gal. of 15% HCl at 7-8 bbls/min. Drop a total of 22 7/8" 1.3 sp. gr. RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum pressure is 3400 psi.** Acid should contain clay stabilizer, corrosion inhibitor, and iron sequestering agent. Release packer and TOOH.
16. RU wireline. RIH with junk basket and retrieve ball sealers. Record number of hits and balls recovered.
17. TIH with 7" full-bore packer on 2-7/8" tubing and set at 60'. RU stimulation company. Hold safety meeting. Pressure test surface lines to 4400 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). **Maximum treating pressure is 3400 psi.** Fracture Menefee according to attached procedure. **Stimulation will be limited entry (approximately 2.0 bpm/perf), slickwater, 125,000 lbs. of 20/40 Arizona sand with maximum sand concentration of 2.0 ppg and 25% pad volume.** Flush to the top perf. Release packer and TOOH.

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Recommend Recompletion Procedure
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18. Flow back well (if needed) until returns diminish. TIH with retrieving head and 2-3/8" tubing and clean out to RBP at 4150' until sand returns and water production are minimal. Obtain pitot gauges. Release bridge plug and TOOH.
19. TIH with notched collar on 2-3/8" tubing and clean out to CIBP at 4700' until sand returns and water production are minimal. Obtain pitot gauges. TOOH.
20. TIH with 4520' of 2-3/8" tubing with standard seating nipple, a 6' perforated sub and one joint on bottom. Tag fill and do final cleanout if necessary. Land tubing string.
21. ND BOP and NU independent wellhead. Pump off check. Take final Pitot gauge and gas, oil and water samples.
22. Test bottom hole pump for pump action on surface.
23. TIH with approximately 4500' of 3/4" and 5/8" rods with new rebuilt pump. Seat pump and pressure test to 500 psi. Rig down and release rig.
24. Will move back on location and drill CIBP set at 4700' when appropriate regulatory approval is received.

Approve: _____
Regional Engineer

Approve: _____
Drilling Superintendent

VENDORS:

Wireline:	Petro	326-6669
Fracturing:	Dowell	325-5096
Down Hole Pump	Service Pump	326-5564
Production Engineer:	Office	326-9703
	Home	326-2381

LJB:ljb