# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry	Notices and Reports on Wel	ls		
1. Type of Well GAS	MAY 3 1 1994 LV	5. Lease Number NM-86430 6. If Indian, All. or Tribe Name		
2. Name of Operator MERIDIAN OIL	OIL CON. DIV. DIST. 3	_ 7. Unit Agreement Name		
		8. Well Name & Number		
3. Address & Phone No. of Op PO Box 4289, Farmington,	erator NM 87499 (505) 326-9700	Arco Little Fed 32 #3 9. API Well No. 30-039-		
4. Location of Well, Footage 1850'FSL, 1850'FWL Sec.32		10. Field and Pool W.Lindrith Gl Dakota 11. County and State Rio Arriba Co, NM		
12. CHECK APPROPRIATE BOX TO				
<b>Type of Submission</b> _x_ Notice of Intent	Type of Ac Abandonment Recompletion	Change of Plans New Construction		
Subsequent Report	Plugging Back Casing Repair	Non-Routine Fracturing Water Shut off		
Final Abandonment	Altering Casing _ _x_ Other -	Conversion to Injectio		
13. Describe Proposed or Co	ompleted Operations			
	REVISED			
w/ production tbg. Ru Canyon perforation, ro approximately 7553' - approximately 1,600 g	) will be perforated and stimulated in this van CBL to verify TOC. If good top is not seemedial cement work will be performed. For 7584'.TIH w/ 2-3/8" workstring and set pagals acid and fracture stimulate. Run after a zone. RIH w/ RBP and set at 6590'.	een at least 50' above proposed top Burr Perforate the Burro Canyon from icker at +/-7500'. Breakdown w/		
TOC. If good top is n work will be performed approximately 2,400 good verify if frac stayed in to production and eva	rated and stimulated in this wellbore in the lot seen at least 50' above proposed top N d. Perforate the Niobrara from approxima gals acid and fracture stimulate. Run after zone. RIH w/ 2-3/8" production tbg and labuate for pumping unit application. The Noivision Order R-7495. Attached is a procession.	liobrara perforation, remedial cement ately 6280' - 6560'. Stimulate w/ frac gamma ray log in an attempt to and at approximately 7575'. Return well liobrara will be commingled with the		
Signed Jaggy Sha ahul	Arten	<u>ffairs</u> Date 4/29/94		
(This space for Federal or APPROVED BY Statute William CONDITION OF APPROVAL if a	State Office u <b>sa</b> lfitands and M <u>Model</u> Title	ineral Rus 1970, 50. Date MAY 2.6 1994		

# Pertinent Data Sheet - Arco Little Federal 32 #3

1850' FSL, 1850' FWL, Unit K, Section 32, T-24-N, R-03-W Rio Arriba Co., NM Location:

Field:

West Lindrith Dakota West Lindrith Gallup

Elevation: 7204' GL

TD: 7638' PBTD: 7520'

Spud Date: 5/28/78 Completed: 7/13/78

DP#: 45426A (DK) Prop. #: 012691801

**GWI:** 100% NRI: 83.93%

## Casing Record:

Hole Size	Casing Size	Weight & Grade	<u>Depth Set</u>	<u>Cement</u>	Top/Cament
12-1/4"	8-5/8"	24.0# S.W. & C.	364'	350 sx	Surface
7-7/8"	4-1/2"	10.5# K-55	7616'	750 sx*	(Calc)

<sup>\*</sup> Two stages, DV set @ 3337': Stg 1 Calc TOC @ 5900' Stg 2 Calc TOC @ 2000'

Tubing Record:

Depth Set Weight & Grade Tubing Size 7257' ~ 4.70# K-55 2-3/8"

## Formation Tops:

2707 Oio Alamo 31201 **Pictured Cliffs** 3213' Lewis 3995 Chacra 4675 Cliffhouse 4772 Menefee 5245 Point Lookout 5390' Mancos 62181 Gallup 7198' Greenhom 7277 Dakota 7550 Burro Canyon

Logging Record: IES, CNL, FDC-GR and Caliper.

Stimulation;

Perfed Dakota:

7276' - 7405'

Frac'd Dakota:

2 stages; Paguate:

41,000 gal. and 40,000 lbs. 20/40 sand. 80,000 gai, and 80,000 lbs. 20/40 sand

Two Wells:

Production:

Oil:

EUR: 40,514 BO

CUMM: 38,461 BO

CURRENT: 0.6 BOPD

Gas:

EUR: 1,821 MMCF

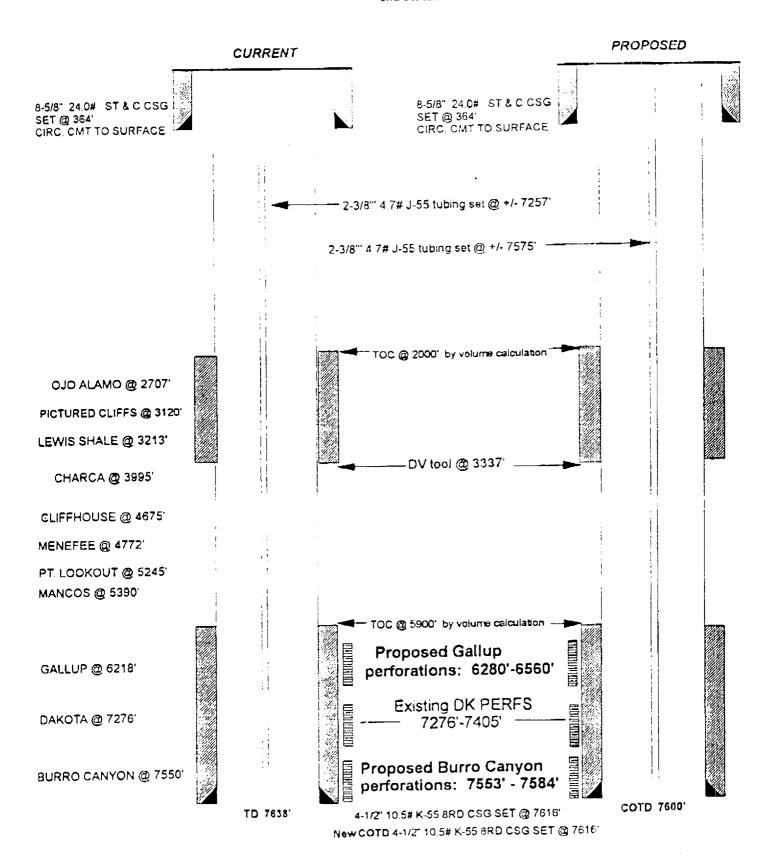
CUMM: 1.691 MMCF CURRENT: 5 MCFD

Workover History: N/A.

<sup>&</sup>quot;Constriction @ 6273', NOWSCO 1" tbg fish.

# Arco Little Federal 32 #3

Unit K, Sec. 32, T24N, R3W Rio Arriba Co., NM Burro Canyon/Gallup Pay Adds and Stimulations



# Arco Little Federal 32 #3

Unit K. Section 32, T24N, R3W Recommended Recompletion Procedure Gallup and Burro Canyon Pay Adds & Completions

Note: Notify BLM (761-8762) and NMOCD (334-6178) 24 hours prior to rig activity.

Inspect location and install and/or test rig anchors. Install 1 - 400 bbt rig tank and fill w/ 2% KCl water. Approximately 243 jts. 2-3/8" 4.7# J-55 tubing will be required (MOI, District Tools) for production. Approximately 243 jts. 2-3/8" 4.7# N-80 tubing will be required (MOI, District Tools) for treatment. Comply with all BLM, NMOCD, Jicarilla Apache, and MOI rules and regulations. Notify engineering when work has commenced. Hold Safety Meetings on a regular basis.

- 1. Install 3 X 400 bbl frac tanks and fill with 2% KCl water.
- 2. Hold Safety Meeting. MIRU. Place fire and safety equipment in easily accessible locations. NU relief line and blooie line to laydown flow tank. Obtain and record all wellhead pressures.
- 3. Blow down tubing. If tubing will not blow down, kill well with KCI water. PBTD is 7520'.
- 4. TOOH with 7257' of 2-3/8" 4.70# tubing, visually inspect and tally tubing.
- 5. PU 2-3/8", 4.7# workstring. TIH w/ 3-7/8" bit on tubing and cleanout to 7600'. (FC @ 7571', Shoe @ 7614') Circulate w/water until returns are clean. Roll hole w/ 2% KCI water. TOOH. TIH w/ packer, set at 7250' and pressure test backside to 1000 psi for 15 min. TOOH
- 6. RU wireline. RIH with 4-1/2" 10.5# guage ring and check pipe. Run GR CBL CCL in 4-1/2 casing from new COTD to Surface pipe (TOC was calculated at 5900'). Good TOC must be above 7500' for the Burro Canyon and 6170' to complete the Gallup interval. Evaluate GR - CBL - CCL and send copy to production engineering.

#### Burro Canyon Stimulation:

7. Perforate the following interval w/ 3-1/8" HSC -3125-306, 12 gram Owen charges 0.31" holes w/ 12.02 " penetration, 2 spf (180° phasing):

7553' - 7584', (62 Holes)

- 8. RD wireline. TIH w/ 2-3/8" N-80 workstring and set packer at 7500', load backside and monitor pressure.
- 9. RU stimulation company. Hold Safety Meeting. Pressure test surface treating lines to 7000 psi. Maximum STP during acid job is 6000 psi. Pump 1,600 gals 15% HCI w/additives at a rate of 3-4 BPM, attempt to ball-out the perforations. Drop a total of 93 7/8" RCN ball sealers (1.3sp.gr.) spaced evenly throughout the job. Record rates and pressures while attempting to achieve ball-out.
- 10. RD stimulation company. Lower packer to 7590' to knock off ball sealers. RU wireline, RIH w/ wireline and obtain a 24 hour Pressure Build-up test. RD wireline. Attempt to flow test well and obtain post breakdown flow rates. If sufficient gas production exists, the Burro Canyon will not be fracture stimulated.

# Arco Little Federal 32 #3 Burro Canyon/Gallup Pay-Add

10. (con't)

Decision Point: The addition of the Gallup interval may be postported for two - three months based on the test results of the Burro Canyon. Contact Production Engineering prior to setting the RBP above the Dakota.

If minimal gas rates are present, set packer at 7500' and prepare to fracture stimulate.

- 11. RU stimulation company. Prepare to fracture stimulate the Burro Canyon. Pressure test surface treating lines to 7000 psi. Maximum treating pressure is 6000 psi. Fracture and tag the Burro Canyon according to the attached procedure. Flow-back the well immediately using a variable choke manifold (1/4 1/3 bpm max.). Increase choke size as needed to keep the well from logging off, if possible. When pressures and flow rates allow, TOOH w/ tubing.
  - <u>Decision Point:</u> The addition of the Gallup interval may be postponed for two three months based on the test results of the Burro Canyon. Contact Production Engineering prior to setting the RBP above the Dakota.
- 12. PU RBP, TIH and set RBP at 6590' and top w/ 2 sx sand. Pressure test casing and RBP to 3200 psi. (If casing holds 3200 psi, acidize and fracture stimulate the Gallup interval down the casing, if the pressure test does not hold, the Gallup will be stimulated down workstring.) TOOH w/ tubing.

#### Gallup Stimulation:

13. Perforate the following interval w/ 3-1/8" HSC -3125-306, 12 gram Owen charges 0.31" holes w/ 12.02 " penetration, 2 spf (180° phasing):

6280' - 6330', 6350' - 6418', 6450' - 6560'. (110 Holes)

- 14. RD wireline. TIH w/ workstring and set packer at 6250'.
- 15. RU stimulation company. Hold Safety Meeting. Pressure test surface treating lines to 7000 psi. Maximum STP during acid job is 6000 psi. Pump 2.400 gals 15% HCl. wiedditives at a rate of 3-5 BPM, attempt to ball-out the perforations. Drop a total of 165 7/8" RCN ball sealers (1.3sp.gr.) spaced evenly throughout the job. Record rates and pressures while attempting to achieve ball-out.
- 16. RD stimulation company. Lower packer to 6570' to knock off ball sealers. RU stimulation company. Prepare to fracture stimulate the Gallup.
- 17. Pressure test surface treating lines to 7000 psi. Maximum treating pressure is 6000 psi. Fracture and tag the Gallup according to the attached procedure. Flow-back the well immediately using a variable choke manifold (1/4 1/3 bpm max.). Increase choke size as needed to keep the well from logging off, if possible. When pressures and flow rates allow, TOOH w/ tbg and pkr.
- 18. TIH w/ retreleving head and 2-3/8" 4.70# N-80 workstring and clean out to the retrievable bridge plug at 6590' with air until sand production is minimal. RIH w/ wireline and obtain a 24 hour Pressure Build-up test. Obtain gauge, oil rate and sample, and water rate and sample. Latch onto the retrievable bridge plug and TOOH.

# Arco Little Federal 32 #3 Burro Canyon/Gallup Pay-Add

- 19. TIH w/ notched collar and 2-3/8" 4.70# N-80 workstring and clean out to 7600" COTD with air until sand production is minimal. RIH w/ wireline and obtain a 24 hour Pressure Build-up test. Obtain gauge, oil rate and sample, and water rate and sample. TOOH.
- 20. RU wireline, run After-frac Tracer Survey-GammaRay 7600' 6100' (report if fracs stayed in zone, if possible), POOH. RD wireline. Send copy of logs to Production Engineering.
- 21. TIH w/ one joint 2-3/8" 4.7# J-55 tubing w/ expendable check on bottom, 'F' nipple, and 2-3/8" production tubing. Cleanout to 7600' with air. Land tubing @ +/-7575' (25' of rathole). ND BOP, NU WH. Contact Production Operations for swabbing/well tie-in. RD and MOL.

Approved: NB. 1
Drilling Superintendent

## Suggested Vendors/Contacts:

Wireline: Radioactive Tag: Tubing: Packer/Bridge Plug Pressure Build-up: Stimulation: Production Oper.: Engineering:	Basin Perforating ProTechnics, Intl MOI, District Tools Mountain States Tefteller Inc. WCNA Bruce Voiles Brian Ault	327-5244 326-7133 328-9826 326-5141 325-8476 327-6222 326-9571 326-9871 w 328-6613 h
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