UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wel	ls
1. Type of Well GAS	5. Lease Number SF-077764 6. If Indian, All. or Tribe Name
2. Name of Operator	7. Unit Agreement Name
MERIDIAN ©IL 3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700 4. Location of Well, Footage, Sec., T, R, M 990'FSL, 1650'FWL Sec.18, T-30-N, R-10-W, NMPM	8. Well Name & Number Schumacher #3 9. API Well No. 30-045-09447 10. Field and Pool Aztec PC/Basin Ft Co 11. County and State San Juan Co, NM
12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE Type of Submission	
13. Describe Proposed or Completed Operations It is intended to add the Fruitland Coal to this well and commingle with the Pict and wellbore diagram. DECE JUL 0 5 1 OIL CONO. DIST. 3	STATE OF PRINCIPAL PRINCIP
14. I hereby certify that the foregoing is true and signed (SBD) Title Regulatory A: (This space for Federal or State Office use) APPROVED BY Title	
CONDITION OF APPROVAL, if any:	APPROVED
	JUN 2 2 1894 O

NMOOD



District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer DD, Artesia, NM 88211-0719 District III 1000 Rio Bruzos Rd., Aztec, NM 87410 District IV PO Box 2088, Santa Fc, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department Company Company

Form C-102 Revised February 21, 1994 Instructions on back

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088
Submit to PM 2: 21

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

070 FARMINGTON, NM . AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

`^ 30-045 - 09	API Numbe	F	7162	¹ Pool Code 29/71280	1	Pool Name Basin Fruitland Coal/Aztec Pictured Cliffs						
' Property (So	,	'Property Name							' Well Number	
OGRID	No.	M	ERIDIA	'Operator Name IDIAN OIL INC.						Elevation 6325		
14538					10 Surf	ace Location		-				
UL or lot no.	Section 18	Township 30 N	Range 10 W	Lot Ida	Feet from t	m the North/South line Feet from th			East/West Wes	. I ''		
			11 Bot	tom Hole	Location	on If Differe	nt From	Surface	<u> </u>			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	he North/Sout	h line F	eet from the	East/Wes	line	County	
Dedicated Acr	es '3 Joint	or Infill 14	Consolidatio	n Code 15 O	rder No.				<u> </u>			
NO ALLOV	VABLE \	WILL BE	ASSIGNE	D TO THI	S COMPL	ETION UNTIL	ALL IN	TERESTS H	IAVE BE	EN CO	NSOLIDATED	
16				Not	resurv a pla	reyed, protect by C.O	epared	¹⁷ OPEI I hereby cert	RATOR ify that the in	formation	CIFICATIO contained herein is knowledge and beli	
								Signature Peggy Bradfield Printed Name Regulatory Representative Title 6-16 94 Date				
					வை	1 1 180	4					
					- Wills	CON. D	W.	I hereby cen	tify that the w	ell location	TIFICATIO	
					Parket and the State and the		-	or under my correct to th	supervision, e best of my l	and that to	al surveys made by he same is true and	
								6-16-9 Date of Surv	icy Just	SH II		
16:	50'	<u> </u>								385		
		, , ,						685/7	WER	OT I	a) significant	
S		مماريريا		IIII.		1		Certificate N	lumber		-3-	

Pertinent Data Sheet - SCHUMACHER #3

Location: 990' FSL, 1650' FWL, Section 18, T30N, R10W, San Juan County, New Mexico

Field: Aztec Pictured Cliffs Elevation: 6325' GL TD: 2920'

PBTD: N/A

<u>Completed:</u> 11-19-52 <u>Spud Date:</u> 10-17-52 <u>DP #:</u> 50877A PC

DP #: 50877B FTC

TOC unknown

Casing Record:

Hole SizeCsg SizeWt. & GradeDepth SetCementTop/Cement9 5/8"25.4# SPIRAL130'75 sxsSurface/Circ

5 1/2" 15.5# J-55 2822' 150 sxs

Tubing Record:

<u>Tbg Size</u> <u>Wt. & Grade</u> <u>Depth Set</u> 2890'

Formation Tops:

Ojo Alamo: 1409' Kirtland: 1559' Fruitland: 2456' Pictured Cliffs: 2820'

Logging Record:

Stimulation: PC

Open Hole: Shot w/ 200 qts. SNG 2836' - 2920'

Workover History:

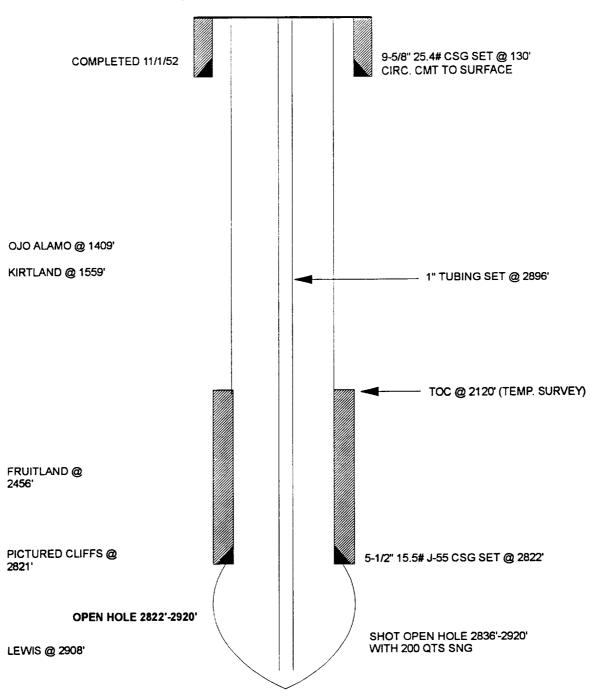
Production History:

Transporter: EPNG

SCHUMACHER #3

CURRENT AZTEC PICTURED CLIFFS

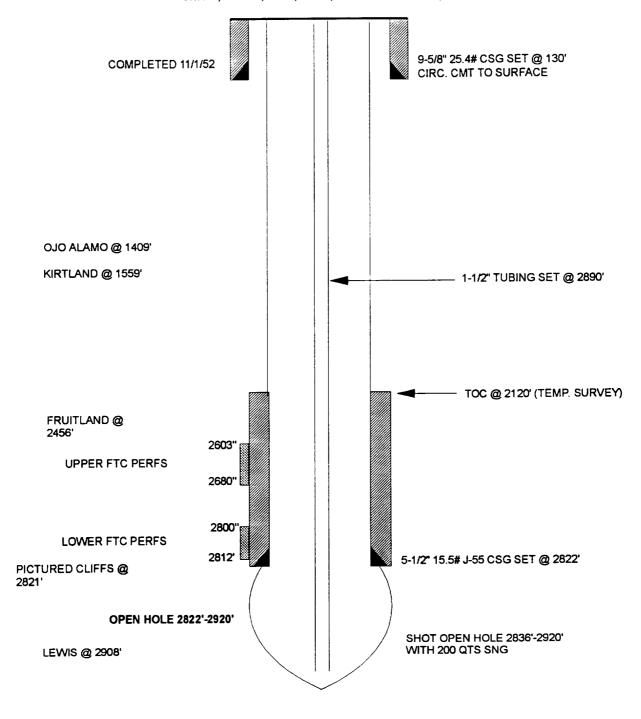
UNIT N, SEC 18, T30N, R10W, SAN JUAN COUNTY, NM



SCHUMACHER #3

PROPOSED

AZTEC PICTURED CLIFFS / BASIN FRUITLAND COAL UNIT N, SEC 18, T30N, R10W, SAN JUAN COUNTY, NM



SCHUMACHER #3 Recommend Completion Procedure SW/4 Section 18 T30N R10W

- 1. Test rig anchors and repair if necessary. Install 2-400 bbl frac tanks on location and fill with 2% KCl water. Filter all water to 25 microns. Heat water as required by weather.
- 2. MOL and RU. Comply to all NMOCD, BLM and MOI rules & regulations. Hold safety meeting. ND wellhead. NU BOP. Test operation of rams. NU two relief lines.
- 3. TOOH w/ 2896' of 1" 1.7# tbg, tally and inspect.
- 4. TIH w/ 4-3/4" bit on 2-3/8" work-string and clean out to open hole TD @ 2920'. TOOH.
- 5. TIH w/ 4-3/4" bit and 5-1/2" casing scraper on 2-3/8" tbg and clean out to 5-1/2" casing shoe @ 2822'. Load hole w/ 25 bbls 2% KCI water. TOOH.
- 6. RU & RIH w/ CNL-CCL-GR and log from casing shoe @ 2822' to 2400'.
- 7. RIH and wireline set 5-1/2" RBP @ 2820'. Correlate w/ GR-CCL-CNL to ensure RBP is set between PC and basal FTC.
- 8. TIH w/ fullbore packer and 2-3/8" tubing, load hole w/ 2% KCl water, set packer @2810', test RBP to 3000 psi for 15 minutes. Test tubing/casing annulus to 500 psi for 15 minutes. Equalize pressure and unseat packer. TOOH.
- 9. RU wireline and run CBL from PBTD (2820') to 150'. If CBL appears inadequate, re-run log with 500 psi surface pressure. If bond still appears unacceptable, contact production engineering. Send copy of CBL to production engineering.
- 10. Refill the 400 bbl tanks on location with 2% KCI water in preparation for Fruitland coal fracs. Filter all water to 25 microns. Heat water as required by weather.

SCHUMACHER #3 Recommend Completion Procedure SW/4 Section 18 T30N R10W Page 2

LOWER COAL

11. RU wireline and perf the following coal interval w/ 3-3/8" HSC w/ 16.0 gram charges, 0.4" holes @ 4 SPF (correlate depths to CNL-CCL-GR log).

2800 - 281<u>2'</u>

Total: 12 feet: 48 holes

- 12. TIH w/ 3-1/2", 9.3# N-80 FJ frac string to 2700', set packer @2700'. Load backside w/ 2% KCl water and pressure backside to 500 psi. Breakdown and attempt to ball off lower FTC w/ 2500 gallons 15% HCl acid and 120 7/8" 1.3 sp. gr. RCN perf balls. Max pressure 4000 psi. Acid to contain 1 gal/1000 SAA-2 (surfactant) and 2 gal/1000 C1A-2 (corrosion inhibitor). Lower pkr to 2815' to knock off perf balls. TOOH w/ frac string.
- 13. TIH w/ 2-3/8" tubing and retrieving head and clean out to PBTD @ 2820' with air, swab well in if necessary. Continue blowing well for 24 hours, take gas and water samples after 24 hours. Retrieve RBP @2820', TOOH
- 14. TIH w/ 3-1/2", 9.3# N-80 FJ frac string to 2700', set packer @2700'. Load backside w/ 2% KCl water and pressure backside to 500 psi. RU treatment company for frac. Hold safety meeting with all personnel. Pressure test surface lines to 5000 psi. Fracture treat lower coal/ PC according to attached schedule w/ 70Q foam at 20 BPM with 140,000 lbs of 20/40 mesh Arizona sand and TAIL WITH 20,000 #'s 12/20 mesh Arizona sand. Tag pad with 0.26 mCi/1000 gallons foams w/ Sc-46 tracer and sand with 0.4 mCi/1000# Ir-192 tracer. Flush with 9 bbls 2% KCl. Estimated treating pressure is 2500 psi. MAXIMUM PRESSURE IS LIMITED TO 4000 PSII Monitor backside and braden head pressures during frac. Monitor bottomhole and surface treating pressure, rate, foam quality and sand concentration with computer van. Frac during daylight only.
- 15. SI well for 3 hours for gel break.
- 16. After gel break, open well through choke manifold & monitor flow. Flow @ 20 bbls/hr, or less if sand is observed.
- 17. Refill 400 bbl frac tanks with 2% KCI water and filter to 25 microns. Heat water as required by weather.
- 18. When well ceases to flow, Release packer, TIH w/ pkr and frac string to 2800' to check for fill. TOOH. TIH w/ 2-3/8" tbg, setting tool, and 5-1/2" RBP to 2750'. Set 5-1/2" RBP @ 2750'.

SCHUMACHER #3 Recommend Completion Procedure SW/4 Section 18 T30N R10W Page 3

UPPER COAL

19. RU wireline and perf the following coal interval w/ 3-3/8" HSC w/ 16.0 gram charges @ 2 SPF (correlate depths to CNL-CCL-GR log).

2603 - 2610' 2626 - 2634' 2641 - 2650' 2671 - 2680

Total: 33 feet: 66 holes

- 20. TIH w/ frac string and set pkr @ 2730'. Pressure test BP to 3000 psi surface pressure.
- 21. TOOH w/ 3-1/2", 9.3# N-80 FJ frac string to 2500', set packer @2500'. Load backside w/ 2% KCl water and pressure backside to 500 psi. Breakdown and attempt to ball off lower FTC w3000 gallons 15% HCl acid and 165 7/8" 1.3 sp. gr. RCN perf balls. Max pressure 4000 psi. Acid to contain 1 gal/1000 SAA-2 (surfactant) and 2 gal/1000 C1A-2 (corrosion inhibitor). Lower pkr to 2700' to knock off perf balls. TOOH w/ frac string.
- 22. TIH w/ 2-3/8" tubing and clean out to PBTD @ 2750' with air, swab well in if necessary. Continue blowing well for 24 hours, take gas and water samples after 24 hours. TOOH
- 23. TIH w/ 3-1/2", 9.3#, N-80, FJ frac string to 2500', set packer @2500'. Load backside w/ 2% KCI water and pressure backside to 500 psi. RU treatment company for frac. Hold safety meeting with all personnel. Pressure test surface lines to 5000 psi. Fracture treat upper coal according to attached schedule w/ 70Q foam at 20 BPM with 100,000 lbs of 20/40 mesh Arizona sand and 10,000 #s 12/20 mesh Arizona sand. Tag pad with 0.26 mCi/1000 gallons foams w/ Sc-46 tracer and sand with 0.4 mCi/1000# Ir-192 tracer. Flush with 14 bbls 2% KCI. Estimated treating pressure is 2700 psi. MAXIMUM PRESSURE IS LIMITED TO 4000 PSII Monitor backside and braden head pressures during frac. Monitor bottomhole and surface treating pressure, rate, foam quality and sand concentration with computer van. Frac during daylight only.
- 24. SI well for 3 hours for gel break.
- 25. After gel break, open well through choke manifold & monitor flow. Flow @ 20 bbls/hr, or less if sand is observed.
- 26. When well ceases to flow, TOOH w/ pkr and frac string. T!H w/ retrieving head on 2-3/8" tbg and clean out upper zone until sand flow stops. <u>Take Pitot gauge before releasing</u> <u>BP</u>. Release RBP set @ 2750' and TOOH.
- 27. TIH w/ 4 3/4" bit on 2 3/8" tbg and clean out FTC and PC until sand stops. After clean up, flow test for 24 hrs, taking pitot gauges every 6 hrs. Take final Pitot gauge. TOOH laying down 2-3/8" tbg.

SCHUMACHER #3 Recommend Completion Procedure SW/4 Section 18 T30N R10W Page 4

- 28. RU wireline and run After Frac GR log from 2892' to 2500'.
- 29. TIH w/ 2890' of 1-1/2" tbg w/ standard seating nipple (ID = 1.375") one jt off bottom and pump-off plug on bottom. Land tbg string.
- 30. ND BOP and NU independent wellhead. Pump off plug. <u>Take final Pitot gauge.</u> Rig down & release rig.

Approve:

(12)4

VENDORS:

Wireline: SCHLUMBERGER 325-5006
Fracturing: WESTERN 327-6222
RA Tagging: Protechnics 326-7133