UNITED STATES

DEPARTMENT OF THE INTERIOR SCEIVED BUREAU OF LAND MANAGEMENT SCEIVED RIM MAIL ROOM

	BELL MAIL NO	/	
Sundry N	Notices and Reports on Wells	: n9	
	50 31 20 MILL	5.	Lease Number
	AND THE PERSON OF THE PERSON O	NIM	SF-077980A
l. Type of Well	070 FARMINGTON	, 1 ViV 1 6.	If Indian, All. or
GAS			Tribe Name
			TIESE NAME
		7.	Unit Agreement Name
. Name of Operator			
MERIDIAN OIL			Huerfano Unit
		8.	
. Address & Phone No. of Ope			Huerfano Unit #237
PO Box 4289, Farmington,	NM 87499 (505) 326-9700	9.	
			30-045-21218
. Location of Well, Footage,	Sec., T, R, M	10.	Field and Pool
1990'FNL, 1550'FWL, Sec.17	, T-26-N, R-9-W, NMPM		Basin Fruitland Coal
Z.		11.	County and State
U			San Juan Co, NM
2. CHECK APPROPRIATE BOX TO	INDICATE NATURE OF NOTICE, REP	ORT, OTHER	DATA
Type of Submission	Type of Action		
X_{-} Notice of Intent		ange of Pl	
Subsequent Report		w Construc	
subsequent Report	Plugging Back No	n-Routine	
Final Abandonment	Casing Repair Wa	ter Shut o	II.
IIIII ADANGONNENC	Altering Casing Co	nversion to	o Injection
	X_ Other - Stimulate		
	are and wellbore diagram.	[]	DECEIVED OCI - 4 1995 OLL CON. DIV. DUST. 3
			DIBL' 3
		·~	
4. I hereby certify that the	he foregoing is true and corre	ct.	
igned Vlaty Male	ula(PMP1)Title Regulatory Ad	ministrato	r_Date 9/21/95
This space for Federal or Sta			
PPROVED BY	Title	Date	
ONDITION OF APPROVAL, if any		AF	PROVED
			SEP 2 7 1995
		k.	STRICT MANAGER
		/~ [MOINFUL MARAGEN

HUERFANO UNIT #237 FRTC Workover Procedure C 17 26 9

San Juan County, N.M. Lat-Long: 36.492523 - 107.814789

- 1. Comply to all NMOCD, BLM, & MOI rules & regulations. MOL and RU completion rig. NU 6" 900 series BOP w/flow tee and stripping head. NU blooie line & 2-7/8" relief line.
- 2. Set blanking plug in S.N. of 2-3/8" tbg @ 2075' & pressure test tbg to 2000 psi. Lower tbg to tag fill. TOH w/67 jts 2-3/8" tbg. If fill is above 2120', TIH w/3-7/8" bit on 2-3/8" tbg & C.O. w/air/mist to 2140'..
- 3. Spot and fill 3-400 bbl. frac tanks w/1% KCL water. Filter all water to 25 microns. Two tanks are for gel & one tank for breakdown water. Usable water required for frac is 528 bbls.
- 4. TIH w/4-1/2" ret BP pkr combo on 2-3/8" tbg. Set ret BP (w/ball catcher) @ 2000' & pkr @ 1990' & test ret BP & tbg to 4000 psi. W/ pkr @ 1974', spot 100 gal 15% HCL acid. PU to 1930' & set pkr. Breakdown & attempt to ball off FRTC perfs (1960'-74') w/1000 gal 15% HCL acid & 56 1.3 sp gr 7/8" RCN perf balls @ 6 BPM w/ max pressue of 4000 psi. TOH w/tbg, pkr, & ret BP.
- 5. TIH w/4-1/2" pkr on 2-7/8" 6.5# N-80 w/shaved collars (3.5" O.D. 2.441" I.D.) rental frac string & set @ 1850'. Load backside w/1% KCL water. Pressure backside to 500 psi & monitor during frac job.
- 6. Fracture treat FRTC down frac string w/74,000 gals. of 70 quality foam using 30# gel as the base fluid & 150,000# 20/40 Arizona sand. Pump at 45 BPM. Monitor bottomhole & surface treating pressures, rate, foam quality, & sand concentration with computer van. Sand to be tagged w/ 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 6000 psi & estimated treating pressure is 5000 psi. Treat per the following schedule:

	Foam Vol.	Gel Vol.	Sand Vol.
<u>Stage</u>	(Gals.)	<u>(Gals.)</u>	<u>(lbs.)</u>
Pad	20,000	6,000	
1.0 ppg	10,000	3,000	10,000
2.0 ppg	10,000	3,000	20,000
3.0 ppg	20,000	6,000	60,000
4.0 ppg	10,000	3,000	40,000
5.0 ppg	4,000	1,200	20,000
Flush	(450)	(134)	0
Totals	74,000	22,200	150,000#

Shut well in after frac for six hours in an attempt to allow the gel to break. Treat frac fluid w/the following additives per 1000 gallons:

*	30# J-48	(Guar Gel mix in full tank - 16,000 gal)
*	1.0 gal. Aqua Flow	(Non-ionic Surfactant mix in full tank)
*	1.0# GVW-3	(Enzyme Breaker mix on fly)
*	1.0# B - 5	(Breaker mix on fly)
*	5.0 gal Fracfoam I	(Foamer mix on fly)
*	0.38# FracCide 20	(Bacteriacide mix on full tank)

7. Open well through choke manifold & monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. Take pitot gauges when possible.

- 8. Release pkr & TOH w/frac string. TIH w/3-7/8" bit on 2-3/8" tbg & clean out to 2140' w/air/mist.
- 9. Monitor gas & water returns & take pitot gauges when possible.
- 10. When wellbore is sufficently clean. TOH & run after frac gamma-ray log from 2140'-1600'.
- 11. TIH w/2-3/8" tbg w/standard seating nipple one joint off bottom & again cleanout to 2140'. When wellbore is sufficiently clean. land tbg @ 2000' KB. <u>Take final water & gas samples & rates.</u>
- 12. ND BOP & NU wellhead & tree. Rig down & release rig.

Approve:		
C	rilling Superintendent	

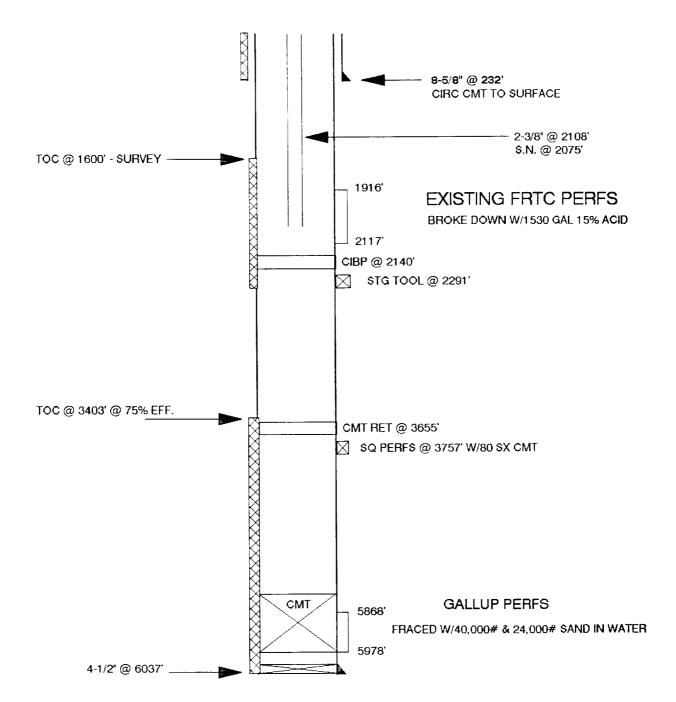
VENDORS:

Wireline:	Basin	327-5244
Fracturing:	Western	327-6222
RA Tagging:	Pro-Technics	326-7133
Packers:	Schlum.	325-5006

PMP

HUERFANO UNIT #237 FRTC

UNIT C SECTION 17 T26N R9W SAN JUAN COUNTY, NEW MEXICO



Pertinent Data Sheet - HUERFANO UNIT #237 FRTC

Location: 1090' FNL & 1550' FWL, Unit C, Section 17, T26N, R09W, San Juan County, New Mexico

Field: Basin Fruitland Coal

Elevation:

6478' GL

10' KB

6037' TD: **PBTD:** 2140'

Completed: 9/20/73 **Spud Date:** 3/24/73

DP #: 44901B Lease: Fed: SF-077980A

Recompleted: 10/16/90

GWI: 66.06%

NRI: 52.21% Prop#: 071120221

Initial Potential: Pitot Gauge FRTC = TSTM

Casing Record:

Hole Size	Csq Size	Wt. & Grade	Depth Set	<u>Cement</u>	Cement (Top)
12-1/4" 7-7/8"	8-5/8" 4-1/2"	24# KS 10.5# KS Stage Tool @	232' 6037' 2291'	182 cf 800 cf 346 cf	Circ Cmt 3403' @ 75% Eff. 1600' - Survey

Tubing Record:

Tbg. Size	Wt. & Grade	Depth Set	
2-3/8"	4.70# J-55	2108'	67 Jts
		SN @ 2075'	

Formation Tops:

1190' ' Ojo Alamo: Kirtland Shale: 1368' 1915' Fruitland: 2118' ' Pictured Cliffs:

Logging Record: Density, Induction, Temp, Cased Hole Neutron

Stimulation: Perfed GL 5868'-5978' & fraced 1st stg w/40,000# sand in water & 2nd stg w/24,000# sand in water.

10/16/90: Sq GL w/70 sx cmt. Perf 4 sq holes @ 3757' & set cmt ret @ 3655'. Sq Workover History: w/80 sx cmt. Set drillable BP @ 2140'. Perf FRTC @ 1916'-18', 1960'-74', 2024'-30', 2036'-40', 2044'-48', 2062'-66', 2072'-80', 2084'-87', 2102'-04', & 2110'-17' - (54') w/108 holes. Broke down perfs w/spit tool & 1530 gal 15% HCL acid (1960'-74' would not break). Swabbed well for 2 days. Swabbed well down. Very little gas. 11/7/90: Swabbed well down - no fluid.

Production history: FRTC not 1st delivered. Gallup cum = 122 MMCF. SIBHP=518 psi @ 2100'.

Pipeline: EPNG