UNITED STATES

DEPARTMENT OF THE INTERIOR RECEIVED BUREAU OF LAND MANAGEMENT BLM

Sundry Notices and Reportson Ne	-}s PM 1:51	
1. Type of Well GAS 2. Name of Operator	vington, NM 6.	14-20-603-774 If Indian, All. or Tribe Name Navajo
MERIDIAN OIL		
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	-	. Well Name & Number Hun-Nop-Pi #1 . API Well No.
4. Location of Well, Footage, Sec., T, R, M 1532'FNL, 1452'FWL, Sec.19, T-26-N, R-8-W, NMPM	- 10	30-045-05761 3. Field and Pool Ballard Pictured Cliffs
F	11	l. County and State San Juan Co, NM
Final AbandonmentX_ Altering Casing X_ Other - Restimula 13. Describe Proposed or Completed Operations	ite	to Injection
It is intended to run and cement 3 1/2" casing i and fracture treat the Pictured Cliffs fo procedure and wellbore diagram.	n the subject ormation accor	well and then perforate ding to the attached
		ECENTED JUL 1 8 1996
	@ [][l Gom. Duv. Dist. 3
14. I hereby certify that the foregoing is true and Signed Vancy Oltmanns (PMP1) Title Regulato		cor_Date 7/10/96
(This space for Federal or State Office use) APPROVED BYTitle CONDITION OF APPROVAL, if any:	Dat	PPROVED

JUL 1 2 1996
DISTRICT MANAGER

HUN-NOP-PI #1 PC Workover Procedure F 19 26 8

San Juan County, N.M. Lat-Long: 36.476532 - 107.726608

- 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. TOH w/1" tbg & lay down. TlH w/4-3/4" bit on 2-3/8" rental tbg & C.O. w/air/mist to new TD 2050'. Load hole w/1% KCL water. TOH.
- 3. MI Blue Jet. Run an advanced integrated data processing GSL neutron log 2050'-1700' & coorelate to 5-1/2" shoe @ 1897'.
- 4. Run 3-1/2"-OD 9.2# J-55 NUE tbg to TD 2050' w/Omega type latching collar above 2' tbg sub w/notched collar on bottom. Cement w/155sx 50-50 Cl"B" POZ w/2% gel & 6-1/2#/sx kolite & 10% salt & 2% Cacl. (yield=1.44 cf/sx). This should circ cmt to surface w/50% excess. After cmt, break & wash lines, run 2 wiper balls & Omega wiper latching plug, followed by 100 gal 7-1/2% HCL acid. Displace acid w/1%KCL water. After plug seats, release pressure. Space out using tbg subs & install 3-1/2" csg in new csg spool. Install 6000 psi rental frac valve on 3-1/2" csg.
- 5. Pressure test csg to 6000 psi. MI Basin Perforating. Run GR-CCL & coorelate to neutron log. Perf PC w/about 16 holes over 150' of PC interval as per Production Engineering Dept. Perf w/2-1/8" SHOGUN SDP STP-2125-401NT 14 gr charges which make a 0.27" hole & 21.8" of penetration in concrete
- 6. Break down PC perfs down 3-1/2" csg w/2000 gal 15% HCL & 150% excess perf balls. Acidize @ 7 BPM w/max pressure = 6000 psi. Run junk basket to retrieve balls.
- 7. Spot & fill 2-400 bbl. frac tanks w/2% KCL water. Filter all water to 25 microns. One tank is for gel & one tank is for breakdown water. Usable gel water required for frac is 355 bbls.
- 8. Frac PC down 3-1/2" csg w/49,000 gals. of 70 quality foam using 30# gel as the base fluid & 80,000# 20/40 Arizona sand. Pump at 70 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 5500 psi. Treat per the following schedule:

	Foam Vol.	Gel Vol.	Sand Vol.
<u>Stage</u>	<u>(Gals.)</u>	(Gals.)	(lbs.)
Pad	14,000	4,200	
1.0 ppg	10,000	3,000	10,000
2.0 ppg	10,000	3,000	20,000
3.0 ppg	10,000	3,000	30,000
4.0 ppg	5,000	1,500	20,000
Flush	<u>(694)</u>	(208)	0
Totals	49.000	14.700	80.000#

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)

HUN-NOP-PI #1 PC - PC RESTEM

* 1.0# GVW-3 (Enzyme Breaker mix on fly)

* 1.0# B - 5 (Breaker mix on fly)

* 3.0 gal Fracfoam I (Foamer mix on fly)

* 0.38# FracCide 20 (Bacteriacide mix on full tank)

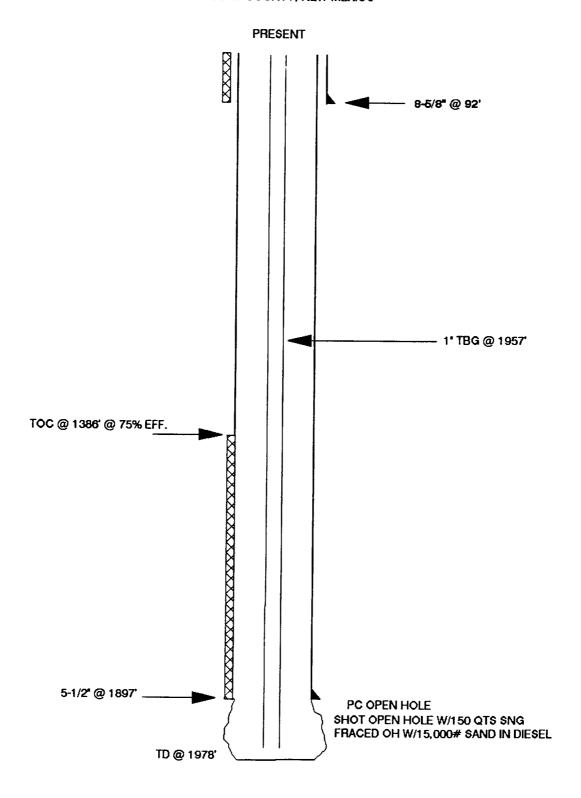
- 9. Open well through choke manifold & monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. Take pitot gauges when possible.
- 10. Change out frac valve w/tbg head. TIH w/notched collar on 1-1/4" IJ tbg & C.O. to 2048'. Monitor gas & water returns & take pitot gauges when possible.
- 11. When wellbore is sufficently clean, TOH & run after frac gamma-ray log from 2048'-1700'.
- 12. TIH w/1-1/4" IJ tbg w/standard seating nipple one joint off bottom & again cleanout to 2048'. Use expendable check if necessary. When wellbore is sufficiently clean, land tbg @ 1950' KB. Take final water & gas samples & rates.
- 13. ND BOP & NU wellhead & tree. Rig down & release rig.

Recommended:		Approve:	
Production Engineer		Drilling Superintendent	_
VENDORS:			
Logging:	Blue Jet	325-5584	
Perfing	Basin	327-5244	
Fracturing:	BJ	327-6222	
RA Tag:	Pro-Technics	326-7133	
Csg Equip:	Howco	325-3575	
Cmt	Howco	325-3575	

PMP

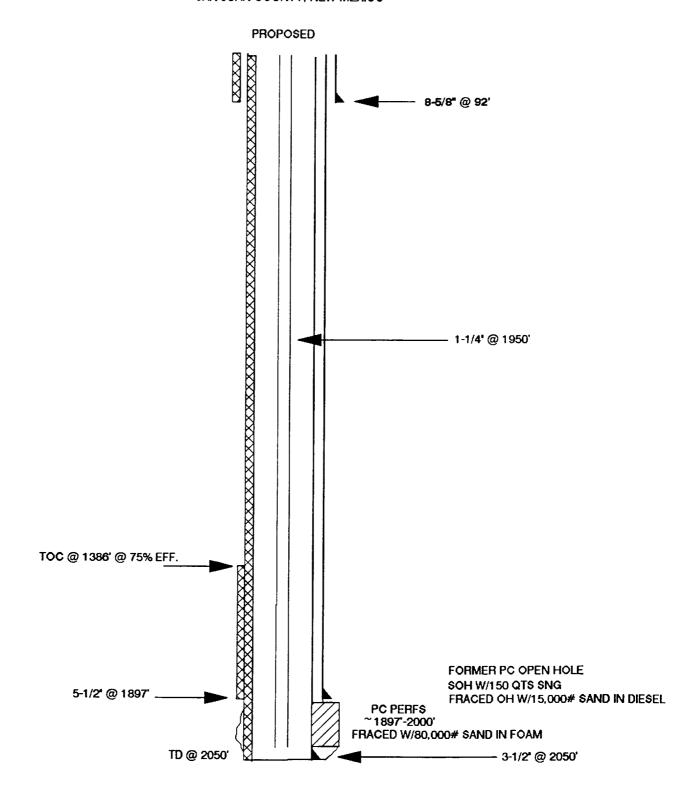
HUN-NOP-PI#1 PC

UNIT F SECTION 19 T26N R8W SAN JUAN COUNTY, NEW MEXICO



HUN-NOP-PI#1 PC

UNIT F SECTION 19 T26N R8W SAN JUAN COUNTY, NEW MEXICO



Pertinent Data Sheet - HUN-NOP-PI #1 PC

Location: 1532' FNL & 1452' FWL, Unit F, Section 19, T26N, R8W, San Juan County, New Mexico

Field: Ballard PC

Elevation:

6201' GL

1978' TD:

KB=7'

PBTD: 1978'

Completed: 4/15/55

Spud Date: 2/17/55

DP #: 50917A

Lease: Nav:14-20-603-774

GWI: 100% NRI: 87.5% Prop#: 012657200

Initial Potential: Initial Potential = 1527 MCF/D, SICP=619 psi

Casing Record:

Hole Size	Csq Size	Wt. & Grade	Depth Set	<u>Cement</u>	Cement (Top)
e13-3/4"	8-5/8"	28# J-55	92'	75 sx.	N/A
e7-7/8 "	5-1/2"	14# J-55	1897'	100 sx.	1386' @ 75% Eff.

Tubing Record:

Tbg. Size	Wt. & Grade	Depth Set	
1"	N/A	1957'	92 Jts

Formation Tops:

Ojo Alamo: 1120' Kirtland Shale: 1238' Fruitland: 1642

Pictured Cliffs:

1892'

Logging Record: E-log

Stimulation: Shot Open Hole w/150 Qts SNG. Fraced O.H. w/15,000# sand in diesel.

Workover History:

NONE

Production history: 1st delivered 11/56. Current capacity is 15 MCF/D. Cum is 528 MMCF.

W/ 12 MMCF booked.

Pipeline: EPNG

