UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

BUREAU OF LAND MANAGEMENT	/		
Sundry Notices and Reports on	Wells		
1. Type of Well GAS	 5. Lease Number SF-047017B 6. If Indian, All.or Tribe Name 7. Unit Agreement Name 		
2. Name of Operator Meridian Oil Inc.	8. Well Name & Number		
3. Address & Phone No. of Operator Box 4289, Farmington, NM 87499 (505)326-9700	Angel Peak B #37 9. API Well No.		
4. Location of Well, Footage, Sec, T, R, M. 795'N, 569'E Sec.24, T-28-N, R-11-W, NMPM Otero Ch/Basi 11. County and St San Juan Court			
X Notice of Intent Subsequent Report Subsequent Report Casing Repair	ACCION		
13. Describe Proposed or Completed Operations It is intended to open the Fruitland Coal format dual Otero Chacra/Basin Fruitland Coal per the a	tion and recomplete as a attached procedure.		
NOVI 41891 OIL CON. D \ DIST. 3			
14. I hereby certify that the foregoing is tru Signed Lagger Small (MP) Title Regulatory	e and correct. Affairs Date 11 6 91		
(This space for Federal or State office use)	NOV 1 2 1991		
APPROVED BY TITLE CONDITION OF APPROVAL, IF ANY:	ACET IMMAGES		

HMCCD

ANGEL PEAK B # 37 FRTC Completion Procedure A 24 28 11

- 1. Comply to all NMOCD, BLM, & MOI, rules & regulations.
 MOL and RU completion rig. NU 6" 900 series BOP with flow tee and
 stripping head. Test operation of rams. NU blooie line and 2-7/8"
 relief line with 3000 psi gate valves on tubing head. Blow well down.
- 2. TOOH W/2982' 2-3/8" tbg. Run 7" csg scraper on 2-3/8" tbg to 1950'. TOOH. Set 7" retrievable bridge plug @ 1950' on wireline & top w/ 10' sand.
- 3. Load hole w/2% KCL water. Run CBL from 1950'-600'. Pressure test to 3000#. Implement squeeze procedures if FRTC intervals have poor cmt bond or if csg fails pressure test.
- 4. Perf Fruitland Coal using 4" HSC guns with 23 gram GOEX HSC XXIII (or equivalent) charges. Shoot 4 SPF @ 1868'-1853'. Total of 60 holes.
- 5. Fill 2 400 bbl. frac tanks with 2% KCL water. Filter all water to 25 microns. One tank will be for gel, one tank for 2% KCL water for breakdown & flush. Usable gel water required for frac is 193 bbls.
- 6. TIH with 7" Baker SAP tool with a 4' spacer on 2-3/8" tbg. Wash perfs using 10 gallons of 7-1/2% HCL acid mixed with 5% xylene mutual solvent) per foot of perfs and a quaternary amine-type clay stabilizer at 3 gal/1000 gal. TOH.
- 7. Fracture treat lower coal with 27,000 gals. of 70% quality N2 foam and 40,000# Brady sand. Pump foam at 40 BPM. Use 8,100 gals. 30# (guar) gel for base fluid. Monitor bottomhole and surface treating pressures, rate, foam quality, & sand concentration, with computer van. All sand to be tagged with 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 3000 psi and estimated treating pressure is 1600 psi. Treat per the following schedule:

Stage	Foam Vol. (Gals.)	Foam <u>Quality</u>	Gel Vol. <u>(Gals.)</u>	Sand Vol. (lbs.)	Sand <u>Mesh</u>
Pad	10,000	70	3,000		
1.0 ppg	5,000	70	1,500	5,000	20/40
2.0 ppg	5,000	70	1,500	10,000	20/40
3.0 ppg	4,000	70	1,200	12,000	20/40
4.0 ppg	2,000	70	600	8,000	20/40
5.0 ppg	1,000	70	300	5,000	20/40
Flush	(*)	<u>0</u>	(*)		
Totals	27,000		8,100	40,000#	

^{*} Flush to be 3060 gals. 2% KCL water.

Treat frac fluid with the following additives per 1000 gallons:

* 30# YF-130 (Base Gel)

* 5.0 gals. (Foaming Agent)

* 1.0 gal. Aqua-Flow (Non-ionic Surfactant)

ANGEL PEAK B #37 - RECOMPLETION PROCEDURE Page 2

* 1.0# J-218 (Enzyme Breaker) * 1.0# J-318 (Breaker) * 0.35# M-275 (Bacteriacide)

* 2% KCL

- 8. Close blind rams. RD frac company. RU wireline w/ full lubricator. Set 7" retrievable bridge plug @ 1780'. Pressure test to 3000 psi.
- 9. Perf Fruitland Coal using 4" HSC guns with 23 gram GOEX HSC XXIII (or equivalent) charges. Shoot 4 SPF @ 1757'-55', 1742'-36', 1706'-1693'. Total of 84 holes.
- 10. TIH w/7" Baker SAP tool on 2-3/8" tbg. Space packing elements @ 4 feet & breakdown perforations from 1757'-1693' w/ 10 gal. 7-1/2% HCL acid per foot pay. Total 210 gal. acid mixed with 5% xylene mutual solvent per foot of perfs and a quaternary amine-type clay stabilizer at 3 gal/1000 gal & 1 gal/1000 corrosion inhibitor. Record breakdown pressures. TOH.
- 11. Fill 2 400 bbl. frac tanks with 2% KCL water. Filter all water to 25 microns. One tank will be for gel, one tank for 2% KCL water for breakdown. Usable gel water required for frac is 236 bbls.
- 12. Fracture treat upper coals with 33,000 gals. of 70% quality N2 foam and 50,000# Brady sand. Pump foam at 40 BPM. Use 9,900 gals. 30# (guar) gel for base fluid. Monitor bottomhole and surface treating pressures, rate, foam quality, & sand concentration, with computer van. All sand to be tagged with 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 3000 psi and estimated treating pressure is 2400 psi. Treat per the following schedule:

<u>Stage</u>	Foam Vol. (Gals.)	Foam <u>Quality</u>	Gel Vol. (Gals.)	Sand Vol. (lbs.)	Sand <u>Mesh</u>
Pad	10,000	70	3,000		
1.0 ppg	10,000	70	3,000	10,000	20/40
2.0 ppg	5,000	70	1,500	10,000	20/40
3.0 ppg	4,000	70	1,200	12,000	20/40
4.0 ppg	2,000	70	600	8,000	20/40
5.0 ppg	2,000	70	600	10,000	20/40
Flush	(2,700)	<u>70</u>	<u>(810)</u>		
Totals	33,000		9,900	50,000# ~	•

Treat frac fluid with the following additives per 1000 gallons:

* 30# YF-130 (Base Gel)

* 5.0 gals. (Foaming Agent)

* 1.0 gal. Aqua-Flow (Non-ionic Surfactant)

* 1.0# J-218 (Enzyme Breaker)

* 1.0# J-318 (Breaker)

* 0.35# M-275 (Bacteriacide)

* 2% KCL

Shut well in after frac for six hours in an attempt to obtain closure pressure and allow the gel to break.

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- 13. Open well through choke manifold & monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. When well ceases to flow, proceed with Step # 14.
- 14. TIH w/7" retrieving tool on 2-3/8" tubing & clean out to RBP @ 1780' w/ air/mist. Take pitot gauges when possible. When wellbore is sufficiently clean, retrieve RBP @ 1780', TOH. TIH w/7" retrieving tool on 2-3/8" tbg & C.O. to RBP @ 1950' w/air mist. Take pitot gauges when possible. When wellbore is sufficiently clean, retrieve RBP @ 1950'. TOH.
- 15. TIH w/notched collar on 2-3/8" tbg & C.O. to below Chacra perfs 3010'. Take pitot gauges when possible.
- 16. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 1960'-1600'.
- 17. TIH with 2-3/8" tbg (tailpipe) with standard seating nipple one joint off bottom, 7" fullbore production packer, and 2-3/8" tbg. Set pkr @ 1950' w/tailpipe to 2980'. TIH w/1-1/2" 2.75# IJ tbg w/standard S.N. & bull plugged perf jt on bottom. Land tbg @ 1860'.
- 18. ND BOP and NU wellhead. Rig down & release rig.

Approve:			
	R.	F.	Headrick

VENDORS:

Wireline: Blue Jet 325-5584 Fracturing: Howco 325-3575 RA Tagging: Pro-Technics 326-7133

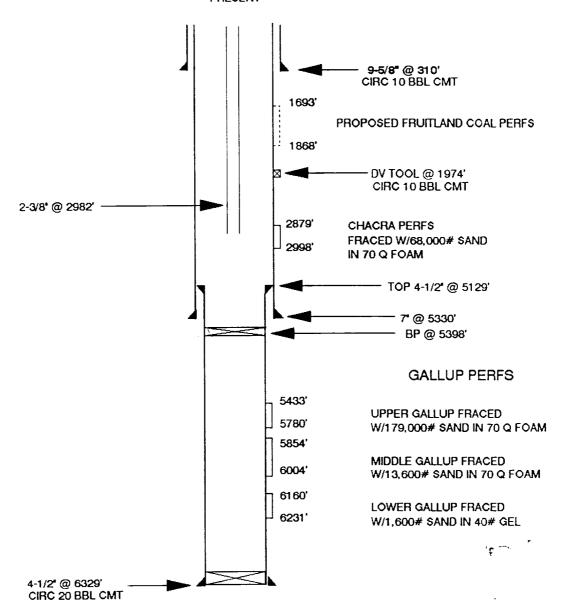
CONSULTANT: Alan Errett 327-5444

PMP

ANGEL PEAK B #37

UNIT A SECTION 24 T28N R11W SAN JUAN COUNTY, NEW MEXICO

PRESENT



ANGEL PEAK B #37

UNIT A SECTION 24 T28N R11W SAN JUAN COUNTY, NEW MEXICO RESERVE NOV1 41991

OIL CON. DIV. \DIST. 3



