### STATE OF NEW MEXICO 614

### OIL CONSERVATION DIVISION

form C-107 herised 10. P. O. UOX 2088 HEW MEXICO B7501

Thurston    Section   Township   Finge   County			Lease		111	Well No.
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Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.  If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to we interest and royalty).  If more than one lease of different ownership is dedicated to the well, have the interests of all owners been condated by communitization, unitization, force-pooling, etc?  Yes No If answer is "yes," type of consolidation Communitization  If answer is "no." list the owners and tract descriptions which have actually been consolidated. (Use reverse so this form if necessary.)  No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitiz forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Consion.  CERTIFICATION  I hereby certify don't herefore and the first of the well unitially described the properties of the platform is used the properties of the platform is used to the well unitially described to the well unitial all interests have been consolidated. (Use reverse so this form if necessary.)  Sec.  SF-078115  Sec.  SF-078087  Appendix Properties of the platform is used the platform of the platform is used to the well unitially and the platform is used to the well unitially and the platform is used to the well unitial all interests have been consolidated. (Use reverse so the platform is used to the platform is used to the well unitial all interests have been consolidated. (Use reverse so the platform is used to the well unitial all interests have been consolidated. (Use reverse so the platform is used to the well unitial all interests have been consolidated. (Use reverse so the platform is used to the well unitial all interests have been consolidated.)  Thereby certify that the well unitial all interests have been consolidated. (Use reverse so the platform is used to the well unitial all interests have been consolidated. (Use reverse so the platform is used to the					••	
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# GRENIER #23E MESAVERDE RECOMPLETION Procedure C 31 31 11

- 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.
- 2. Set blanking plug in 2-3/8" tbg in S.N. @ 6987' & pressure test tbg to 2500 psi. TOH W/7019' 2-3/8" tbg & replace all bad jts. Run 4-1/2" csg scraper on 2-3/8" tbg to 6852' (50' above top Dakota perf). TOH. Run 4-1/2" cmt ret on 2-3/8" tbg & set @ 6852'. Sting out of cmt ret & pressure test tbg. Est rate into Dakota perfs & sq w/28 sx cmt (this will fill csg & Dakota perfs w/100% excess cmt). Sting out of ret & dump 5 sx cmt on top ret. Reverse out. Pressure test csg to 1000#.
- Spot 28 bbl mud from 6852'-5100': 15# sodium bentonite w/non-fermenting polymer, 9# gal weight, & 50 qs vis or greater. TOH.
- 4. MI wireline truck. Set 4-1/2" BP @ 5100' & top w/3 sx sand. Pressure test csg & BP to 2500 psi. Perf w/3-1/8" HCG w/10 gr Owen 316 charges which have an average penetration in Berea of 14.7" & average perf diameter of 0.28" @ 4990', 87', 83', 35', 4883', 79', 72', 53', 43', 39', 34', 23', 20', 17', 14', 11', 08', 05', 02', 4799', 96', 93', 90', 87', 84', 81', 78', 71'w/1 spf. Total 28 holes.
- 5. Fill 10 400 bbl. frac tanks with 2% KCL water. Filter all water to 25 microns. Usable water required for frac is 3410 bbls.
- 6. TIH w/4-1/2" pkr on 2-3/8" tbg & set @ 4550'. Pressure test tbg to 4500 psi. With 500# held & recorded on backside, breakdown & attempt to balloff Mesaverde perfs w/2500 gal 15% HCL acid & 56 perf balls. Max pressure = 4500 psi. Acid to contain 1 gal/1000 aqua flow, 2 gal/1000 LT-21 (clay & silt suspenders), 5 gal/1000 XA-2L (Fe control), and 2 gal/1000 I17 (corrosion inhibitor). Lower pkr to 5000' to knock off balls. TOH.
- 7. Frac Mesaverde down 4-1/2" csg with 150,000# 20/40 Arizona sand in 2% KCL slick water @ 40 BPM. All sand to be tagged with 0.40 mCi/1000# Ir-192 tracer. Max. pressure is 2500 psi and estimated treating pressure is 2200 psi. Treat per the following schedule:

<u>Stage</u>	Fluid (Gals.)	Sand Vol. (lbs.)
Pad 0.5 ppg 1.0 ppg 1.5 ppg <u>Flush</u> Totals	40,000 20,000 60,000 20,000 3,110 140,000	10,000 60,000 30,000 

If well is on a vacuum, underflush by about 25%. TOH.

# GRENIER #23E - MV RECOMPLETION PROCEDURE Page 2

Treat frac fluid with the following additives per 1000 gallons:

- \* 0.5 gals WFR-2 (Fri
- (Friction Reducer)
- \* 1.0 gal. SAA-02
- (Surfactant)

- \* 2% KCL
- 8. 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 # 9.
- 9. TIH w/notched collar on 2-3/8" tbg & C.O. to 5100'. Take pitot gauges when possible.
- 10. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 5100'-4200'.
- 11. TIH with 2-3/8" tbg with standard seating nipple one joint off bottom.

  Land tbg @ 4850'. Take final pitot gauges, water samples, and gas samples.
- 12. Replace bad valves on wellhead w/rebuilt valves. ND BOP and NU wellhead. Rig down & release rig.

Approved:

M. S. Kukpatrick For J.A. H J. A. Howieson 7-6-92

#### **VENDORS:**

Wireline: Blue Jet 325-5584 Frac & Cmt: Howco 325-3575 RA Tagging: Pro-Technics 326-7133

PMP

## **GRENIER #23E**

UNIT C SECTION 31 T31N R11W SAN JUAN COUNTY, NEW MEXICO

