UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

RECEIVED
FEB1 3 1990
OIL CON. DIV.
DIST. 3

1. Type of Well
GAS

5. Lease Number
SF-078578A

6. If Indian, All.or
Tribe Name

7. Unit Agreement Name

2. Operator
Meridian Oil Inc.

8. Farm or Lease Name
Howell K

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499

9. Well No.
302

4. Location of Well
2056'N, 1675'W

10. Field,Pool, Wildcat
Basin Fruitland Coal

11. Sec. T. R. M. or Blk
Sec.22,T-30-N,R- 8-W
NMPM

14. Permit No.	15. Elevations	12. County	13. State
	5832 'GR	San Juan	NM

16. Intent to/Subsequent Report of : workover

17. Describe proposed or completed operations:

It is intended to workover this well in the following manner:

MOL&RU. ND WH. NU BOP. TOOH w/2 3/8" tbg. TIH and CO to TD @ 2645'. Drill to 2690'. Run 4 1/2" liner w/top set @ ±2309'. Cmt liner. CO to PBTD & circulate clean. Land tbg. ND BOP. NU WH. MOL&RD.

MOL&RU. NDWH. NU BOP. TOOH w/tbg. Run CCL-GR-CBL from PBTD to 15' above liner top. PT csg 3000#/15 min. Spot acid and perforate Fruitland Coal formation. Evaluate and fracture treat well. Land tbg. Release rig. SI for build up. Return to production.

w/attachments

18. Authorized by: Peggy Bradfield (WS) 11-27-89
Regulatory Affairs Date

NOTE: This format is issued in lieu of US BLM Form 3160-5

APPROVED

(This space for Federal or State office use)

APPROVED BY _____ TITLE Ken Townsend
CONDITION OF APPROVAL, IF ANY: AREA MANAGER

FEB 0 5 1990

Pertinent Data Sheet - Howell K #302 November 10, 1989

Location: 2056' FNL, 1675' FWL, Section 22, T-30-N, R-8-W, San Juan County, NM

Field: Basin Fruitland Coal Elevation: 5832' GL TD: 2645'
PBTD: 2645'

Completed: 9/16/88 Initial Potential: No Flow AOF

Casing Record:

Hole Dia	Csg Size	WT & Grade	Depth	Set Cement	Top/Cmt
12 1/4"	9 5/8"	36.0# K-55	230'	150 sxs	Surface
8 3/4"	7"	20.0# K-55	2469'	450 sxs	180' TS

Tubing Record: 86 jts of 2 3/8" 4.7# J-55 8rd tubing. Set at 2617.01', "F" nipple at 2588.16'.

Open Hole: 6.25" from 2469' to 2645'

Formation Tops:

Ojo Alamo	1500'
Kirtland	1690'
Fruitland	2330'
Pic. Cliffs	2648'

Logging Record: MUD-LOG

Completion Summary: Completed open hole natural. Well gauged TSTM. Shut rams and injected 60 BBLS of water at 1300-psi. Clean out bridge at 2615'. Blew well for 5 days all gauges TSTM.

Workover Summary: None; Production Operations identified plugged tubing with slick line.

Production Summary: Initial Deliverability - 50 MCF/D
Latest Deliverability - 0 MCF/D
Cumulative Production - 1.042 MMCF 0 BBL Water

Booked Reserve Summary: Fruitland Coal
Remaining:
Ultimate Recovery:

Gas Transporter: El Paso Natural Gas Company Oil Transporter: MOI

Vendors:

CAPITAL WORKOVER PROCEDURE
HOWELL K #302

1. Notify the BLM 48 hours before starting workover operations. Prepare location for workover, install anchors and blow pit as required.

2. MOL W/WO rig. Hold safety meeting, install safety signs and proper fire equipment at strategic points. Comply with all BLM, NMOCD, AND MOI regulations. RU blow lines, record SITP and SICP, blow well down. Kill as necessary with water. ND wellhead NU double gate BOP.

3. TOOH W/86 jts of 2 3/8" 4.7# EUE 8rd tubing. Visually inspect tubing, lay down bad or plugged joints. Note: Operations indicates tubing is plugged with coal.

4. PU 6¼" Rx bit, bit sub, four 4 3/4" drill collars on 2 7/8" American open hole drill pipe. TIH and clean to TD at 2645'. Drill 45 additional feet to 2690'. Prepare hole for 4½" liner and open hole logging. TOOH.

5. RU logging company, run LDT,DIT,CNT,MLT, and NGT. RD release, make clean out trip.

6. PU 4½" shoe, 15' shoe jt, float collar, ±366' of 4½" 10.5# K-55 casing, and a Brown HyFlo liner hanger on the 2 7/8" DP.

   * Place csg centralizers across the coal intervals.
   * Pictured Cliffs is not developed in this section.

7. Set liner top at ±2309'. RU cement crew. Establish circulation with water. Mix and pump a 20 BBL gel spacer followed by 25 sxs of 50/50 poz class B w/2% gel, 2% HA-5 and 0.8% fluid loss tailed with 65 sxs of class B neat w/2% CaCl. Displace cement and bump plugs. Pack-off liner element. Reverse out excess cmt. TOOH laying down DP.

   * Adjust cement program to match current well conditions.

8. TIH and clean to PBTD with a 3 7/8" bit. Circulate the hole clean using produced Fruitland coal water. Land tubing at ±2617', ND BOP, NU wellhead.

9. RD and release rig.

10. MOL W/Daylight rig. Hold safety meeting, install safety signs and proper fire equipment at strategic points. Comply with all BLM, NMOCD, AND MOI regulations. RU blow lines, record SITP and SICP, blow well down as necessary. ND wellhead NU double gate BOP.

11. TOOH W/ 2 3/8" tubing, laydown bit sub and Rx bit.

12. RU wireline unit, run CCL-GR-CBL from PBTD to 15' above liner top.

    * Run CBL w/1000-psi applied pressure.
    * Evaluate for possible squeeze work.
    * Adjust perforations based on open hole logs.

3. Prepare to PT casing and liner. Hold safety meeting. Make sure wellhead is API and rated to 3000-psi working pressure. PT to 3000-psi for 15 minutes.

4. TIH to ±2640' and spot 200 gals of 7½% HCl inhibited acid. TOOH.

5. RU wireline unit w/lubricator. Adjust perfs based on open hole logs. Perforate w/ 3 1/8" hollow steel carrier gun loaded with HHS-PML XVI 16 grm 0.5" dia charges (avg pent 19"). Shoot 4 spf top down over the proposed intervals: 2496'-2512'; 2522'-32'; 2588'-91'; 2598'-2601'; 2614'-17'; 2636'-2645'. For a total of 176 holes. Note any drops in the fluid level.

6. Load hole with coal water

7. TIH to PBTD, Note any fill or tight spots in the tour report. Unload hole w/nitrogen. Swab well in and obtain gauges. TOOH.

8. If a decision is made to hydraulically fracture treat the well, proceed as follows:

   * Spot 7 frac tanks to allow mixing gel on the fly.
   * Check tanks and clean as necessary; filter all water to 25 microns
   * Nipple up treesaver.

   * RU treatment company; hold safety meeting. Test surface lines to 4000-psi. Pump job per the attached schedule Tag sand using Ir-192 at 0.4 Mc/1000 lbs proppant. Monitor treatment with the computer van. Add enough breaker (WCB-1, WCB-lt, and WEB-2) to allow the gel to break within one hour.
   * Nipple down treesaver when safe to do so.

   * Shut well in for three hours, record SICP every hour in the tour book. Flow well back through a choke and tied down 2 7/8" blowline. TIH and clean to PBTD.

   * Leave shut in over night. Flow back through a choke and 2 7/8" blowline. TOOH.

   * Run after-frac log.

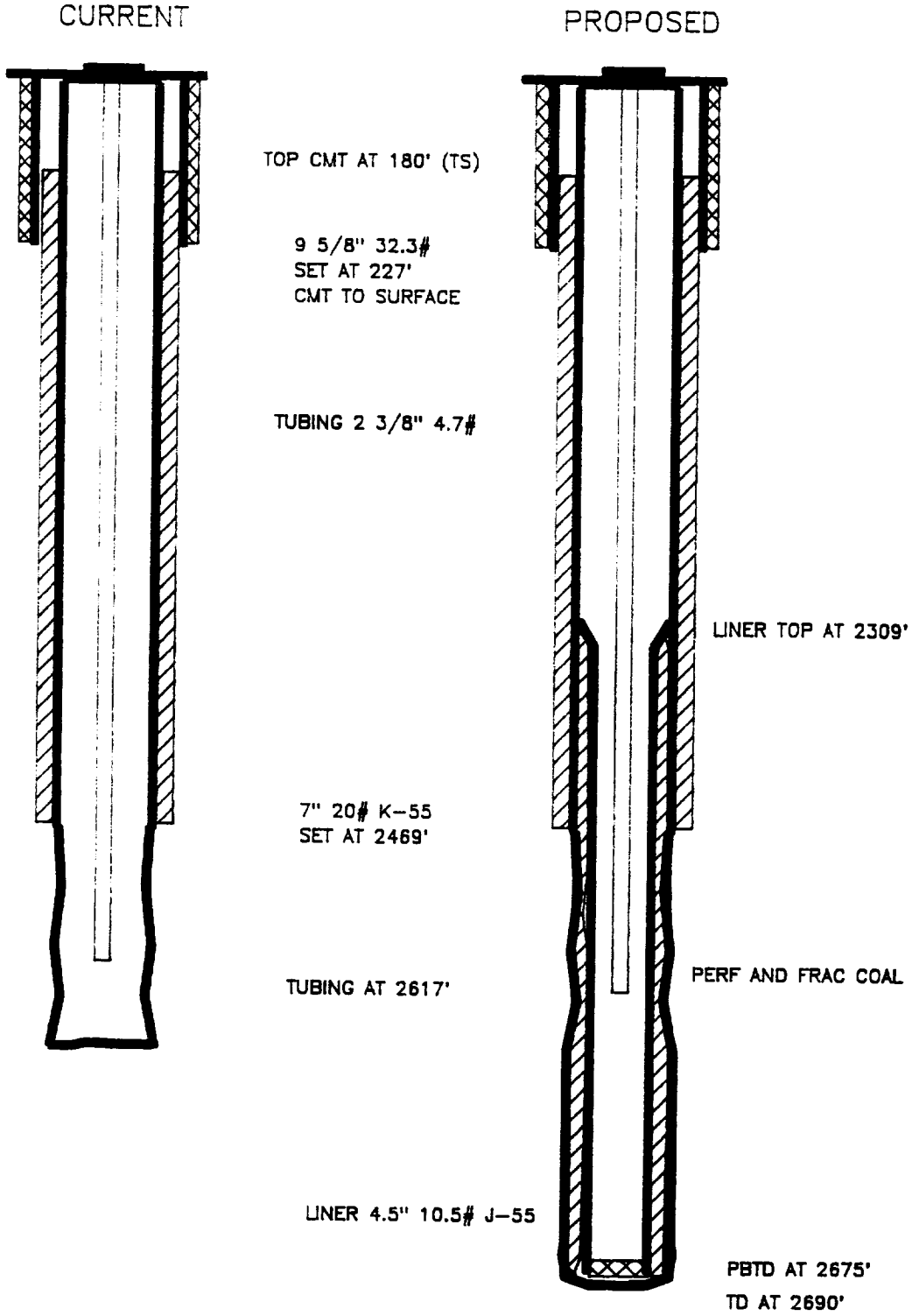
9. PU expendable check valve, one joint of tubing, SN and TIH cleaning to PBTD. Land tubing at ±2617'. ND BOP, NU WH. Pump off check valve. Record final 30, 45, and 60 minute gauges in tour report. RD and release rig.

10. Shut well in for 7 day pressure build up. Take BHP w/bomb in the seating nipple at the end of 7 days. Obtain gas and water sample for analysis. Clean up location and install production equipment.

11. Return the well back to production.

HOWELL K No. 302

WELLBORE DIAGRAM



11/08/89