submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONSERVATION DIVISION RECEIVED
RECEIVED
'95 AUG 30 AM 8 52
95 AUG 16 PM 3:18
070 FARMINGTON, NM
RECEIVED BLM

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

2. **Name of Operator**
MERIDIAN OIL

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. **Location of Well, Footage, Sec., T, R, M**
1562'FNL, 1565'FEL, Sec.26, T-28-N, R-9-W, NMPM

5. **Lease Number**
NM-04209

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**

8. **Well Name & Number**
Hancock A #2

9. **API Well No.**
30-045-07178

10. **Field and Pool**
Blanco Mesaverde

11. **County and State**
San Juan Co, NM

12. **CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA**

| Type of Submission | Type of Action | |
|---|---|---|
| _X_ Notice of Intent | ___ Abandonment | ___ Change of Plans |
| | ___ Recompletion | ___ New Construction |
| ___ Subsequent Report | ___ Plugging Back | ___ Non-Routine Fracturing |
| | ___ Casing Repair | ___ Water Shut off |
| ___ Final Abandonment | ___ Altering Casing | ___ Conversion to Injection |
| | _X_ Other - Sidetrack workover | |

13. **Describe Proposed or Completed Operations**

It is intended to sidetrack the subject well according to the attached procedure and wellbore diagram.

RECEIVED
AUG 28 1995
OIL CON. DIV.
DIST. 3

14. **I hereby certify that the foregoing is true and correct.**

Signed [signature] (PMP1) Title Regulatory Administrator Date 8/14/95

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date _____
CONDITION OF APPROVAL, if any:

APPROVED

AUG 17 1995

Original Signed: STEPHEN MASON
DISTRICT MANAGER

NMOCD

HANCOCK A #2 MV
SIDETRACK PROCEDURE
G 26 28 9

**Plug Back Procedure**

1. Move rig on location - rig up.

2. Pull top section of wellhead - Rig up 7-1/16" (3M psi) BOP's. Pressure test BOP stack to 200 psi For 10 minutes and 1500 psi for 30 minutes using pipe rams, pup joint and tubing hanger. **Maximum allowable pressure = 1500 psi.**

3. TOOH w/ 4665' of 2-3/8" tbg, if tubing is stuck, then jet cut tubing as deep as possible and TOOH. Inspect tubing for any unusable joints. Lay down any unusable joints on float and call for workstring if needed.

4. TIH w/ tubing (inspect all pins and boxes for wear) w/ 7" casing scraper to 4380' TOOH. TIH w/ 7" cement retainer. Set @ 4370'. Test tubing to 2000 PSI for 15 minutes. Sting out of cement retainer, establish fresh water circulation, and burn any drip circulated to surface in the flare pit. Test casing to 1000 psi for 15 min. Sting back into retainer.

5. Squeeze cement below cement retainer into open-hole section as below to 1500 psi:

| **Open hole squeeze cement job** | | | | | |
|---|---|---|---|---|---|
| Cement: | Class B w/ 2% CaCl2 | | Capacity of 6-1/4" hole: | 0.2131 | cu.ft/ft |
| Sacks: | 125 | sacks | | | |
| Volume: | 148 | cu. ft. | | | |
| Density: | 15.6 | ppg | Excess Cement: | 100 | % |
| Yield: | 1.18 | cu ft/sk | Calculated Hole Volume: | 73.9145 | cu. ft. |
| Mix Water: | 5.2 | gal/sk | Total Volume Pumped: | 147.829 | cu. ft. |

6. Sting out of cmt retainer. Leave 1 bbl of cmt above retainer. Reverse at least 1 hole volume to pit.

7. Run CBL/CCL/GR to surface under 1000 psi (if possible). Locate TOC: 2190' (Temp Survey) Send a copy of each log to MOI immediately.

8. **Ensure good cement bond at whipstock location - approximately 3800'** If not, perforate squeeze holes at TOC and attempt to establish an injection rate. Mix and squeeze Class B cement w/ 2% CaCl2 as necessary under a 7" cement retainer.

9. If casing did not pressure test, TIH w/ 7" packer, find and record depth of leak(s). Squeeze using Class B cement w/ 2% CaCl2 as necessary.

10. If no squeeze work was performed above **3800'** then TIH w/ 7" CIBP and set at **3800'** The whipstock will be set on the CIBP.

11. TOOH. Lay down tubing on float and send to FIS yard for inspection and complete field transfer ticket. Lay down any used work string on float and send to MOI District Tools yard.

12. Secure well and pull tubing head. Rig down, and move off location. Call A-1 Wellhead Service, immediately to weld 7" casing extension and install 7" X 4-1/2" casing spool. Pressure test seals to 1500 psi. Make sure well is loaded with water before moving off location.

HANCOCK A #2 MV
SIDETRACK PROCEDURE
G 26 28 9

**Sidetrack Procedure**

1. Move drilling/completion rig on location - rig up.

2. Rig up 7-1/16" (5M psi) BOP's. Pressure test BOP stack to 200 psi for 10 minutes and 2500 psi for 30 minutes using pipe rams, pup joint and tubing hanger.
   **Maximum allowable pressure = 2500 psi.**

3. Read A-Plus well file and note all squeeze work. If squeeze work was performed, drill out cement with 6-1/4" bit, 14 drill collars, and 3-1/2" drill pipe. If the squeeze work is performed under a cement retainer, add 2 junk baskets on top of bit to catch metal cuttings. Test casing and each squeeze to to 1000 psi for 15 min. Resqueeze if necessary w/ Class B cement w/ 2% CaCl2.
   **Do not drill out any squeezes below 3800'**
   Tag CIBP set at **3800'** Circulate hole clean. Rerun CBL if squeeze was performed at whipstock location. Re-squeeze if necessary w/ Class B cement w/ 2% CaCl2.

4. TIH w/ 5-1/2" whipstock on 3-1/2" drill pipe. Set whipstock on 7" CIBP set at **3800'**
   Mill window in 7" casing. The window cutting operation will be turnkeyed - providing whipstock, starting mill, window mill, watermelon mill, and ditch magnets as required. Mill window using fresh water.

5. Once window is dressed off, circulate hole until metal cuttings are removed from the system. Unload hole with Gas and dry up wellbore.

6. TIH with Drilling Assembly w/ near bit reamer and 6-1/4" mill tooth bit. Take deviation survey after drilling 60' (should be between between 5 - 8 degrees). Drop reamer if angle is sufficient, if not drill another 30' and re-survey.

| Drilling Assembly |
|---|
| 6-1/4" insert bit (mill tooth bit for Kick-Off) |
| (14) 4-3/4" drill collars |
| 3-1/2" drill pipe to surface |
| 10 - 12K WOB, 50 - 55 RPM |

| Gas - Air / Mist Rates | |
|---|---|
| Medium: | Gas |
| Rate: | 1500 cfm |
| Mist: | 10 - 15 bbls/hr |
| Foamer: | 10 - 15 bbls/hr |

8. Drill to TD: (4900') Drill an extra 100' if mist drilling was required for OH logs.
   Gauge well at designated depths per geologist. Circulate wellbore clean at TD and TOOH.

9. Run open hole logs per Geologist (up front). Send copy to MOI immediately.
   After logging, Trip in hole with 6-1/4" bit to clean out. Circulate wellbore clean with Gas TOOH. Lay down drillpipe and drill collars.

10. Change pipe rams to 4-1/2", install 4-1/2" stripper rubber. Run casing and float equipment as specified. Threadlock all connections to float valve. Break circulation on last joint in hole with Gas and wash to bottom, (If mist drilled, tag bottom, pickup 5' then circulate clean). Circulate well until returns are clean. Notify BLM of cementing.

11. **Re-calculate all cement volumes - Check all volumes on location with service company.**
    Hold a safety meeting with all personnel on location in attendance. Monitor returns continuously.

12. Precede cement w/ 20 bbls gel water (2 sxs gel) - followed by 20 bbls fresh water.
    Mix and pump cement at 4 - 6 BPM. Cement 4-1/2" longstring as follows. Estimated TOC will

always be 200' inside 7" casing for sufficient overlap. Drop 4-1/2" cement displacement plug. Displace with fresh water. Maximum displacement pressure = 1000 psi over circulating pressure but not to exceed 2500 psi. Bump plug to 500 psi over maximum displacement pressure, not to exceed 2500 psi. Check float integrity. All volumes for cement job and displacement listed below: **Note: Do not shut down to wash pumps and lines on displacement in a gas drilled hole.**

| | | | | | |
|---|---|---|---|---|---|
| **Lead** | | | | | |
| Cement: | 50/50 Class B Pozmix w/ 0.3% Halad-344, 1/4 pps Cellophane, 3 pps Gilsonite. | | | | |
| Sacks: | 97 | sacks | | | |
| Volume: | 127 | cu ft | | | |
| Density: | 13.5 | ppg | | | |
| Yield: | 1.31 | cu ft/sk | | | |
| Mix Water: | 5.84 | gal/sk | | | |
| | | | | | |
| **Tail** | | | | | |
| Cement: | Class B w/ 2% CaCl2 | | Cap. between 4-1/2" csg & 6-1/4" hole: | 0.1026 | cu.ft/ft |
| Sacks: | 100 | sacks | Capacity of 4-1/2", 10.50# csg: | 0.0159 | bbls/ft |
| Volume: | 118 | cu ft | | | |
| Density: | 15.6 | ppg | Excess Cement: | 80 | % |
| Yield: | 1.18 | cu ft/sk | Calculated Hole Volume: | 136.24 | cu. ft. |
| Mix Water: | 5.2 | gal/sk | Total Volume Pumped: | 245.232 | cu. ft. |
| | 0 | | | | |
| Displacement: | 77.274 | bbls of fresh water. | | | |

13. Set minimum of 50,000# on slips and cut off casing. WOC 24 hrs prior to perforating. Production engineering will provide completion procedure after open hole log evaluation.

**Casing Program**

| Hole Size | Casing Size | Weight | Grade | Threads | Interval |
|---|---|---|---|---|---|
| 6-1/4" | 4-1/2" | 10.50# | K-55 | STC | 4900' to surface - longstring |

**Float Equipment**

Production Longstring

- 4.5" Float guide shoe
- 4.5" 40' shoe joint
- 4.5" Float collar
- 4.5" Casing to surface
- 4.5" 15' marker joint placed 50 feet above Upper Cliffhouse

Centralizers - none due to severe bend and gas/air drilled hole

HANCOCK A #2 MV
Workover Procedure
G 26 28 9
San Juan County, N.M.
Lat-Long: 36.636002 - 107.753815

1. Run 3-7/8" bit on 2-3/8" rental tbg & C.O. to PBTD. Role hole w/1% KCL water. TOH.

2. MI wireline truck. Run CBL from PBTD to 200' above clean TOC & coorelate to open hole logs. TIH w/4-1/2" pkr on 2 jts 2-7/8" N-80 tbg w/shaved collars to protect wellhead & pressure test 4-1/2" csg to 3800 psi. TOH.

3 Perf MV w/ about 35-0.28" holes picked by production Engineering Dept. Perf w/HSC gun w/12 gr Owen 306 charges which will make 0.28" holes & 14.6" of penetration in concrete.

4. TIH w/pkr on 2-3/8" tbg & set 300' above top perf (but below TOC). Breakdown & attempt to balloff w/2000 gal 15% HCL acid & 150% excess 7/8" 1.3 sp gr RCN perf balls. Acidize @ 7 BPM w/max pressure = 5000 psi. Lower pkr to below the bottom perf to knock off balls. TOH.

5. Spot & fill 14-400 bbl. frac tanks w/1% KCL water. Filter all water to 25 microns. Thirteen tanks are for frac & one tank is for breakdown water. Usable water required for frac is 4594 bbls.

6. Run 4-1/2" pkr w/ 2 jts 2-7/8" N-80 tbg. Frac MV down 4-1/2" csg w/190,000 gals. of slick water & 150,000# 20/40 Arizona sand. Pump at 50 BPM. Sand to be tagged w/ 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 3800 psi & estimated treating pressure is 3000 psi. Treat per the folowing schedule:

| Stage | Fluid Vol. (Gals.) | Sand Vol. (lbs.) |
|---|---|---|
| Pad | 40,000 | --- |
| 0.5 ppg | 30,000 | 15,000 |
| 1.0 ppg | 90,000 | 90,000 |
| 1.5 ppg | 30,000 | 45,000 |
| Flush | (2,950) | 0 |
| Totals | 190,000# | 150,000# |

If well is on vaccum near end of frac job, cut flush as necessary to avoid overflushing & slow rate during flush. Frac with the following additives per 1000 gal frac fluid.

* 3/4 Gal - FR-30 (Friction Reducer)
* 1.0 gal. Flowback 20 (Surfactant)
* 0.38# - Fracide (Bacteriacide)

7. TIH w/3-7/8" bit on 2-3/8" tbg & C.O. MV w/air/mist to PBTD. **Take pitot gauges when possible.**

8. When wellbore is sufficently clean, TOH & run after frac gamma-ray log from PBTD'-4000'.

9. TIH w/1-1/2" 2.9# EUE tbg w/standard seating nipple one joint off bottom & again cleanout to PBTD'. Use expendable check if necessary. When wellbore is sufficiently clean, land tbg @ 4550' KB. **Take final water & gas samples & rates.**

10. ND BOP & NU wellhead & tree. Rig down & release rig.

Approve:_____
Drilling Superintendent

VENDORS:

| | | |
|---|---|---|
| Wireline | Basin | 327-5244 |
| Fracturing: | Western | 327-6222 |
| RA Tagging: | Pro-Technics | 326-7133 |
| Cmt | Western | 327-6222 |

PMP

## Pertinent Data Sheet - HANCOCK A #2 MV

**Location:** 1562 FNL & 1565' FEL, Unit G, Section 26, T28N, R09W, San Juan County, New Mexico

**Field:** Blanco Mesaverde **Elevation:** 6014' GL
8' KB

**TD:** 4715'
**PBTD:** 4715'

**Completed:** 7-3-55 **Spud Date:** 8-22-55

**DP #:** 49145A
**Lease:** Fed NM 04209
**GWI:** 86.50%
**NRI:** 71.36%
**Prop#:** 012576101

**Initial Potential:**
MV: 2774 MCF/D 1060 PSI

**Casing Record:**

| Hole Size | Csg Size | Wt. & Grade | Depth Set | Cement | Cement (Top) |
|---|---|---|---|---|---|
| 13-3/4" | 9-5/8" | 25.4# S/W | 170' | 125 sx. | Circ Cmt |
| 8-3/4" | 7" | 20,23# J-55 | 4420' | 500 sx. | 2190' Temp Surv. |

**Tubing Record:**

| | Tbg. Size | Wt. & Grade | Depth Set |
|---|---|---|---|
| | 2-3/8": | 4.7# J-55 | 4665' |

**Formation Tops:**

| | | | |
|---|---|---|---|
| Ojo Alamo: | 1265 | Cliffhouse | 3910' |
| Kirtland Shale: | 1380' | Point Lookout | 4516' |
| Fruitland: | 1892' | | |
| Pictured Cliffs: | 2255' | | |

**Logging Record:** E-Log,Microlog, Temp Survey.

**Stimulation:** Fraced open hole 4420'-4715' w/15,000# sand in oil.

**Workover History:** None

**Production history:** Current Capacity =60 MCF/D. Cumulative = 1,290 MMCF & 872 BO.

**Pipeline:** EPNG

# HANCOCK A #2 MV

UNIT G SECTION 26 T28N R9W
SAN JUAN COUNTY, NEW MEXICO