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District I
1625 N. French Dr., Hobbs, NM 87240
District II
811 South First, Artesia, NM 87210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised March 25, 1999

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

WELL API NO. 30-039-22756
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name: Simms Federal
8. Well No. 1
9. Pool name or Wildcat Morrison / Entrada

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/>	
2. Name of Operator Mallon Oil Company	
3. Address of Operator P. O. Box 2797 Durango, CO 81302	
4. Well Location Unit Letter <u>J</u> : <u>1,730</u> feet from the <u>South</u> line and <u>1,820</u> feet from the <u>East</u> line Section <u>13</u> Township <u>30N</u> Range <u>04W</u> NMPM Rio Arriba County	
10. Elevation (Show whether DR, RKB, RT, GR, etc.) 7023' GL	

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: Casing Repair ☐

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Mallon Oil Company is proposing to workover this well to repair a slight casing leak and to install a lined tubing string. The last MIT performed in August 2000 passed with 9.5% pressure loss, indicating a slight casing leak. Mallon Oil Company is proposing to pull the existing injection tubing and packer, isolate the potential leak or leaks using a retrievable bridge plug and packer, and then cement squeeze accordingly to repair the leak and return casing integrity. If wellbore conditions dictate, Mallon Oil Company will run a tie-back 3-1/2" casing liner from the existing liner top at 8523' to a point above the problem area and cement the liner in place. Mallon Oil Company is also requesting approval to perforate additional zones within the approved injection interval to ensure future injectivity. The proposed perforation intervals are at 8,674'-8,692', 8,708'-8,720' and 8,730'-8,750' KB with 2 SPF. Please refer to the attached workover procedure, electric logs, and wellbore diagram. Mallon Oil Company is proposing to start this workover on Monday, June 4, 2001.

OCD permitted interval - Morrison / Entrada 8,600' - 9,570' KB

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John Zellitti TITLE District Petroleum Engineer DATE 05/04/01

Type or print name John Zellitti Telephone No. 970-382-9100

(This space for State use)

APPROVED BY Art Kuylen TITLE DEPUTY OIL & GAS INSPECTOR DATE MAY 11 2001

Conditions of approval, if any:

conditional upon approval by Santa Fe OCD, modifying SW0665 to include the Barro Canyon Fm

Simms Federal #1

NW SE Sec.13, T30N, R4W
1,820' FEL & 1,730' FSL
East Blanco Field, Unit-J
Rio Arriba County, NM

**Mallon Oil Company
Well Workover Procedure**

5/7/01

JZ

Project: Install fiberglass lined tubing as per the New Mexico OCD. Pressure test casing for leaks and cement squeeze according. If well conditions dictate, install a 3 1/2" tie-back liner up over the problem interval and cement in place. Also, perforate additional zones for injection. Last MIT 8/24/00 (P @ 369 psig, lost 34 psig in 30 minutes, 9.48% loss).

Workover Procedure

Prepare For Shut Down.

- 1) Shut down hydrogen sulfide gas injection (Go to flare at amine plant). Flush the injection system with a minimum of 2,500 bbls produced water without hydrogen sulfide gas.
- 2) Shut down high volume water producing wells.
- 3) Pull down all SWD water storage tanks, including gunbarrel, as far as possible prior to the shut down.
- 4) Pull down all individual well water storage tanks as far as possible prior to the shut down.
Note: MIRU trailer mounted water filter & filter all water off loaded from trucks prior to pumping water into the SWD gunbarrel.
- 5) Line out ten 500 barrel frac tanks for additional storage & have on stand-by.
- 6) MIRU 500 bbl frac tank on the Simms well, manifold to rig pump, & fill w/ 450 bbls filtered 2 % KCl wtr.
- 7) MIRU workover rig the night before the shut down for an early start.
- 8) Notify all Venders involved & double check equipment & supplies required. Line out all safety equipment necessary to perform job.
- 9) Notify Rice Engineering at least one week prior to running Duoline-20 tbg string & confirm date that tool hand is expected on location.
- 10) Line out slips & elevators for the 3 1/2" CS Hydrill liner casing, 2 7/8" EUE 8R, & 2 1/16" Benoit BTS-FGL tbg.
- 11) Line out tbg work strings, elevators, slips, & cross-overs:
1,800' of 1.25", 4.16#, HLS drill pipe.
8,800' of 2 7/8", 6.5#, N-80, EUE, 8R tbg.
- 12) We have approximately 10 to 12 days water storage capacity in field to complete this job.
- 13) Make up torque is very important in running the Duoline tubing strings. Assure that rig tongs are in good working order with functional torque gauges.

Workover procedure

- 1) MIRU workover rig & equipment the night before the shut down of the water injection well, dig swab pit & fence.
Note: Warning - 98% hydrogen sulfide gas injection.
- 2) Hold safety meeting for H2S hazard, load tbg w/ 50 bbls 2% KCl wtr, pressure test the csg annulus to 500 psig, & shut-in 30 minutes, record SI pressure every 5 minutes.
- 3) ND wellhead, NU BOP, release 3 1/2" pkr @ 8,638' KB, TOO H & lay down 2 7/8" tbg, 2 1/16" tbg, & pkr.
Note: Inspect nickel plated pkr & report condition.
- 4) PU & TIH w/ 4 3/4" bit & 5 1/2" csg scraper on 2 7/8", 6.5#, N-80 tbg work string to the liner top @ 8,523' KB, TOO H w/ tbg & bit, & scraper.
- 5) PU & TIH w/ 2 3/4" bit, approximately 1,200' of 1.25", 4.16#, HLS DP, & cross over on 2 7/8", 6.5#, N-80 tbg work string to PBDT (Well cleaned out to 9,664' KB on last workover), TOO H w/ tbg & bit.
- 6) PU & TIH w/ 2 3/4" bit, 3 1/2" csg scraper, approximately 200' of 1.25", 4.16#, HLS DP, & cross over on 2 7/8", 6.5#, N-80 tbg work string to 3,638' KB, TOO H w/ tbg, bit, & scraper.
Note: Do not drop csg scraper below original pkr setting depth.
- 7) RU perforators, RIH w/ carrier gun & perforate from 8,974' - 8,692', 8,708' - 8,720', & 8,730' - 8,750' KB w/ 2 spf, 120 degree phasing.
Note: Use Spectral Density Log dated 2/12/98 for perforation correlation.
- 8) PU & TIH w/ 3 1/2" RBP & 3 1/2" pkr, approximately 200' of 1.25", 4.16#, HLS DP, & cross over on 2 7/8", 6.5#, N-80 tbg work string.
- 9) Set 3 1/2" RBP @ 8,630' KB, set pkr just above RBP & pressure test RBP to 1,000 psig, release pkr, pull up hole & set pkr @ 8,543' KB, pressure test 3 1/2" liner to 500 psig, release pkr, TIH & spot 2 sx sand on top of RBP @ 8,630' KB, TOO H w/ tbg & pkr.
- 10) TIH w/ 5 1/2" pkr on 2 7/8" tbg, set pkr @ 8,427' KB, pressure test liner top & lower Dakota perms down tbg to 500 psig, shut-in for 30 minutes, & record pressure every 5 minutes.
Note: Disconnect rig pump lines from tbg valve during test to assure no surface tbg leaks.
- 11) Release pkr & TOO H w/ tbg & pkr.
- 12) TIH w/ 5 1/2" RBP & 5 1/2" pkr on 2 7/8" tbg, set RBP @ 8,427' KB, test RBP, pull up hole, & set pkr @ 7,736' KB, pressure test upper Dakota perms down tbg to 500 psig as per standard procedure.
- 13) Release pkr & RBP, pull up hole, set RBP @ 7,736' KB, test RBP, & set pkr @ 7,462' KB, pressure test Gallup perms down tbg to 500 psig as per std procedure.
- 14) Release pkr & RBP, pull up hole, set RBP @ 7,462' KB, test RBP, release pkr, & pressure test the Pictured Cliffs perms & csg to surface to 500 psig as per std procedure.
Note: If no test, isolate PC perms & test dn tbg w/ RBP set @ 4,000' KB, & pkr set @ 3,650' KB.
- 15) Release pkr & RBP, TOO H w/ tbg, pkr & RBP.
Note: A decision will be made as to any remedial cementing required prior to TOO H w/ RBP & pkr. Engineering to supply remedial cementing procedure.

Note: If well dictates we will run a tie-back liner above the problem area & circ. cement behind pipe. Step-14 assumes tie-back liner to extend above the Gallup perforation interval. Actual setting depth of liner hanger will be specified by Engineering after pressure test data is reviewed.

16) PU & TIH w/ Weatherford SLP liner hanger assembly as follows:

- 3 1/2" Alignment Shoe.
- 3 1/2" Float Collar w/ Double Check.
- 3 1/2" Cross-over from float collar thread to CS Hydrill thread.
- 3 1/2", 9.3#, L-80, CS Hydrill csg liner (Approximately 1,275').
- 3 1/2" Cross-over from CS Hydrill thread to liner hanger thread.
- 5 1/2" x 3 1/2" Weatherford SLP Liner Hanger.
- Liner hanger running tool.
- 2 7/8", 6.5#, L-80, EUE tbg work string.
- Liner Hanger Set @ 7,250' KB.

Note: Install 3 1/2" wiper plug (LWP five fin) in liner setting tool prior to running. Install cementing manifold & 2 7/8" wiper plug (PDP three fin) in cmt head.

17) Land liner, cement, set liner hanger assembly, & reverse out cmt according to Weatherford & Halliburton recommended procedures. Land liner hanger at approximately 7,250' KB.

Note: Detailed liner running procedure will be provided by Weatherford prior to job.

18) TOOH w/ tbg & setting tool, WOC.

19) Pressure test csg to 500 psig according to standard procedure.

20) PU & TIH w/ 4 3/4" bit & 5 1/2" csg scraper on 2 7/8", 6.5#, N-80 tbg work string & clean up the liner top, TOOH w/ tbg, scraper, & bit.

21) PU & TIH w/ 2 3/4" bit, 1,400' of 1.25", 4.16#, HLS DP, & cross over on 2 7/8", 6.5#, N-80 work string & drill out wiper plugs & float collar at 8,522' KB, TOOH w/ tbg & bit.

22) PU & TIH w/ 2 3/4" bit & 3 1/2" csg scraper, 1,500' of 1.25", 4.16#, HLS DP, & cross over on 2 7/8", 6.5#, N-80 tbg work string to RBP @ 8,630' KB, TOOH w/ tbg, scraper, & bit.

23) PU & TIH w/ 3 1/2" RBP ret. head, 1,500' of 1.25", 4.16#, HLS DP work string, & cross over on 2 7/8" tbg workstring, circ. sand off of RBP set @ 8,630' KB, retrieve RBP, & TOOH w/ tbg & RBP.

24) TIH w/ injection BHA as follows:

- 2 1/16" IJ 10R Re-entry Guide (Nickel plated).
 - 3 1/2" x 2 1/16" IJ 10R Arrow Set-1 6K pkr (Nickel plated).
 - 2 1/16" IJ 10R Seating Nipple w/ 1.375" ID (Nickel plated).
 - 2 1/16" Benoit BTS-FGL Thread x 2 1/16" IJ 10R Cross-over (Nickel plated).
 - 2 1/16", 3.25#, L-80, Benoit BTS-FGL Duoline Tbg (Approximately 47 jnts @ 1,500').
 - 2 7/8" EUE 8R x 2 1/16" Benoit BTS-FGL Thread Cross-over (Duoline-20).
 - 2 7/8", 6.5#, L-80, EUE Duoline tbg (Approximately 223 jnts @ 7,130').
 - 2 7/8", 6.5#, L-80, EUE Duoline tbg pups as required to land pkr.
- Land pkr @ 8,630' KB.

Note: 2 1/16" tbg to be Benoit BTS-FGL premium thread connection.

Duoline Technical hand to be on location to run the Duoline tbg.

Confirm that the Duoline tbg connection crush rings are on location.

25) Mix 110 gals Baker Petrolite corrosion inhibitor in 150 bbls 2% KCl wtr, pump the corrosion

inhibitor down the csg annulus, set packer @ 8,630' KB according to Weatherford & Duoline recommended procedure.

- 26) ND BOP, NU wellhead, cap off csg annulus w/ 2% KCl wtr.
- 27) Notify the New Mexico OCD & perform a pressure integrity test according to their specific instructions.
- 28) RDMO workover rig & return the well to injection.

Note: Always keep kill string in well for any shut-ins.

Filter all completion & kill fluids to 5 micron.

Record all wellhead pressures daily.

Record accurate swab data w/ initial fluid levels daily.

Record all depths corrected back to ORKB (Original rotary kelly bushing).

Think Safe - Be Safe!

Simms Federal #1**Mallon Oil Company**

5/7/01

JZ

NW SE Sec.13, T30N, R4W

1,820' FEL & 1,730' FSL

East Blanco Field, Unit-J

Rio Arriba County, NM

Elev. GL @ 7,023'

Elev. KB @ 7,033' (10' KB) Est.

Existing Wellbore Diagram

Production Wellhead:

Gulfco flange 7 1/16", 2,000 psig

DMHC - R45

12 bolt 1" x 7 1/2"

2 3/16" flange thickness

Surface Casing

9 5/8", 32.3#, J-55, ST&C, set @ 277' KB.

Cmt w/ 275 sx / Hole @ 12 1/4".

Production Casing

5 1/2", 15.5#, K-55, LT&C, set @ 8,731' KB.

DV tools @ 4,201' & 6,605' KB.

Cmt w/ 640 sx / Hole @ 7 7/8".

Liner Casing

3 1/2", 9.3#, L-80, CS Hydrill, set @ 9,731' KB.

Arrow Sealbore Pkr (3.0" ID) @ 8,523' KB.

Cmt w/ 65 sx 50/50 POZH / Hole @ 4 3/4".

Tubing

2 7/8", 6.5#, L-80, EUE (256 jnts @ 7,821.20', Org. tbg).

2 7/8", 6.5#, L-80, EUE (21 jnts @ 600.83', New tbg).

2 7/8" x 2 1/16" Cross-over @ 0.55' (Nickel Plated).

2 1/16", 3.25#, L-80, IJ (6 jnts @ 199.58', New tbg).

3 1/2" Arrow Set-1 6K Pkr @ 4.96' (Nickel Plated).

2 1/16" Re-entry guide (Plastic coated).

Pkr set @ 8,638' KB.

Squeezed Perforations**Pictured Cliffs: Squeezed w/ 45 sx cmt.**

1) 3,709' - 3,715'

2) 3,722', 3,945', 3,972'

Gallup: Squeezed w/ 75 sx cmt.

3) 7,541' - 7,634'

Dakota: Squeezed w/ 155 sx cmt.

4) 8,367' - 8,375'

5) 8,484' - 8,530'

6) 8,633' - 8,636' (Morrison)

7) 8,670' - 8,683' (Morrison)

Liner top/Dakota (8,427' - 8,543') squeezed

w/ 50 sx 50/50 POZ cmt, Dec. 1999.

Gallup perfs (7,462' - 7,736') squeezed

w/ 25 sx Micro Matrix cmt, Dec. 1999.

Injection Perforations**Morrison: Perf w/ 2 spf.**

8) 8,950' - 8,982'

9,020' - 9,064'

9,098' - 9,220'

Entrada: Perf w/ 2 spf.

9) 9,370' - 9,410'

9,460' - 9,630'

Permitted Injection Intervals:

Morrison @ 8,600' - 9,220' KB.

Entrada @ 9,300' - 9,570' KB.

277'

8,731'

9,731'

1 - Pictured Cliffs Perfs @ 3,709' - 3,972'.

2

3 - Gallup Perfs @ 7,541' - 7,634'.

4 - Dakota Perfs @ 8,367' - 8,683'.

5

- Liner Hanger @ 8523' KB.

6

7

- Pkr @ 8,638' KB

8 - Morrison Perfs @ 8,950' - 9,220'.

9 - Entrada Perfs @ 9,370' - 9,630'.

PBDT @ 9,706' KB (Cleaned out to 9,664' KB).

TD @ 9,731' KB.

Simms Federal #1

NW SE Sec.13, T30N, R4W

1,820' FEL & 1,730' FSL

East Blanco Field, Unit-J

Rio Arriba County, NM

Elev. GL @ 7,023'

Elev. KB @ 7,033' (10' KB) Est.

Surface Casing

9 5/8", 32.3#, J-55, ST&C, set @ 277' KB.

Cmt w/ 275 sx / Hole @ 12 1/4".

Production Casing

5 1/2", 15.5#, K-55, LT&C, set @ 8,731' KB.

DV tools @ 4,201' & 6,605' KB.

Cmt w/ 640 sx / Hole @ 7 7/8".

Liner Casing 1

3 1/2", 9.3#, L-80, CS Hydrill, set @ 9,731' KB.

Arrow Sealbore Pkr (3.0" ID) @ 8,523' KB.

Cmt w/ 65 sx 50/50 POZH / Hole @ 4 3/4".

Proposed Liner Casing 2

5 1/2" x 3 1/2" Weatherford SLP Liner Hanger.

3 1/2", 9.3#, L-80, CS Hydrill csg liner (1,275').

3 1/2" Float Collar w/ Landing Shoe.

Liner Hanger Set @ 7,250' KB.

Proposed Tubing

2 7/8", 6.5#, L-80, EUE Duoline-20 tbg pups.

2 7/8", 6.5#, L-80, EUE Duoline-20 tbg (223 jnts @ 7,130').

2 7/8" EUE 8R x 2 1/16" BTS Cross-over (Duoline-20).

2 1/16", 3.25#, L-80, IJ PT Duoline-20 Tbg (47 jnts @ 1,500').

2 1/16" BTS x 2 1/16" IJ 10R Cross-over (Nickel plated).

2 1/16" IJ 10R Seating Nipple w/ 1.375" ID (Nickel plated).

3 1/2" x 2 1/16" IJ 10R Arrow Set-1 6K pkr (Nickel plated).

2 1/16" Re-entry Guide (Nickel plated).

Proposed Pkr Set @ 8,630' KB.

Squeezed Perforations**Pictured Cliffs: Squeezed w/ 45 sx cmt.**

1) 3,709' - 3,715'

2) 3,722', 3,945', 3,972'

Gallup: Squeezed w/ 75 sx cmt.

3) 7,541' - 7,634'

Dakota: Squeezed w/ 155 sx cmt.

4) 8,367' - 8,375'

5) 8,484' - 8,530'

6) 8,633' - 8,636' (Morrison)

7) 8,670' - 8,683' (Morrison)

Liner top/Dakota (8,427' - 8,543') squeezed

w/ 50 sx 50/50 POZ cmt, Dec 99.

Gallup perfs (7,462' - 7,736') squeezed

w/ 25 sx Micro Matrix cmt, Dec 99.

Injection Perforations**Morrison: Perf w/ 2 spf.**

8) 8,950' - 8,982'

9,020' - 9,064'

9,098' - 9,220'

Entrada: Perf w/ 2 spf.

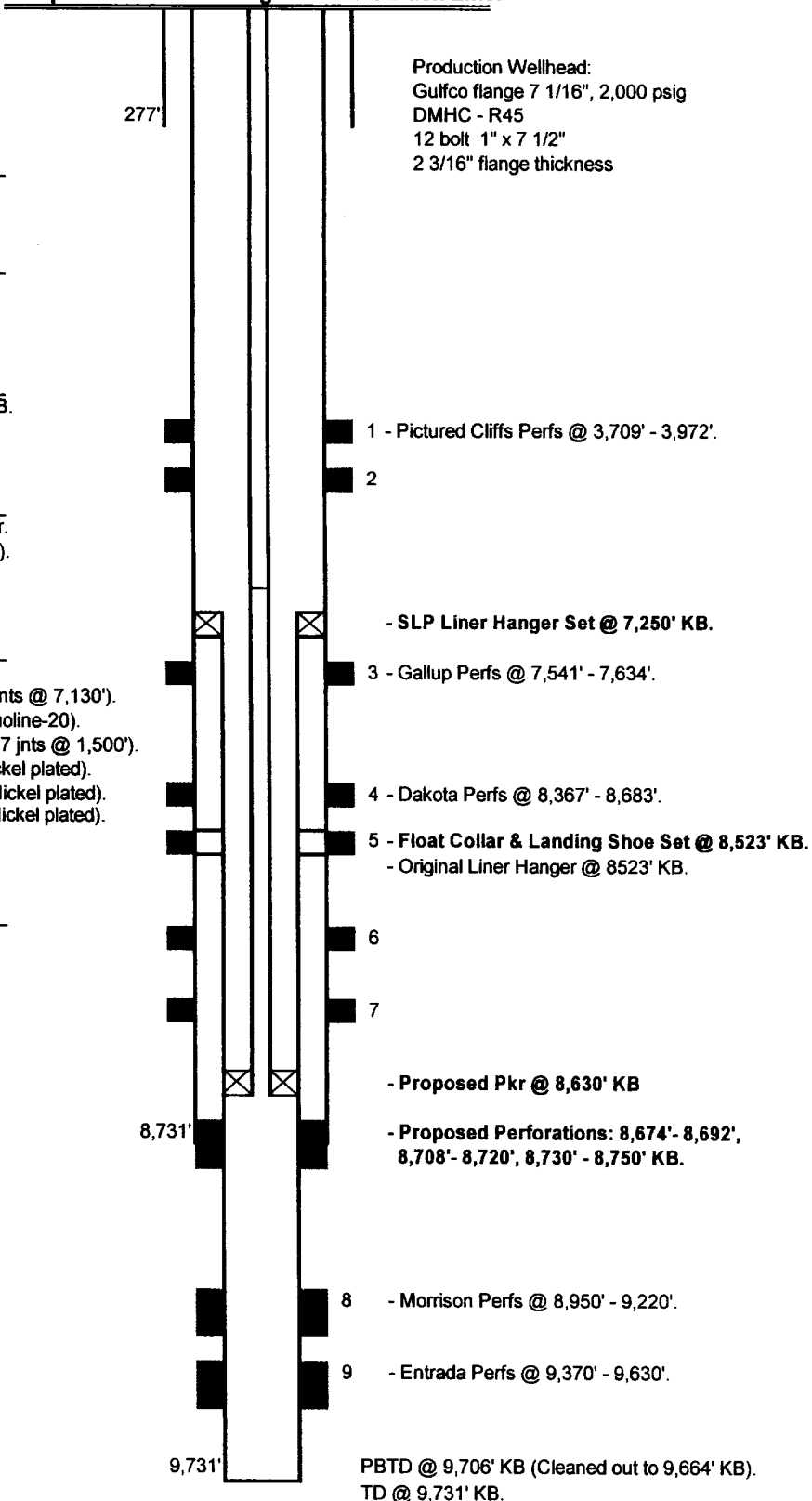
9) 9,370' - 9,410'

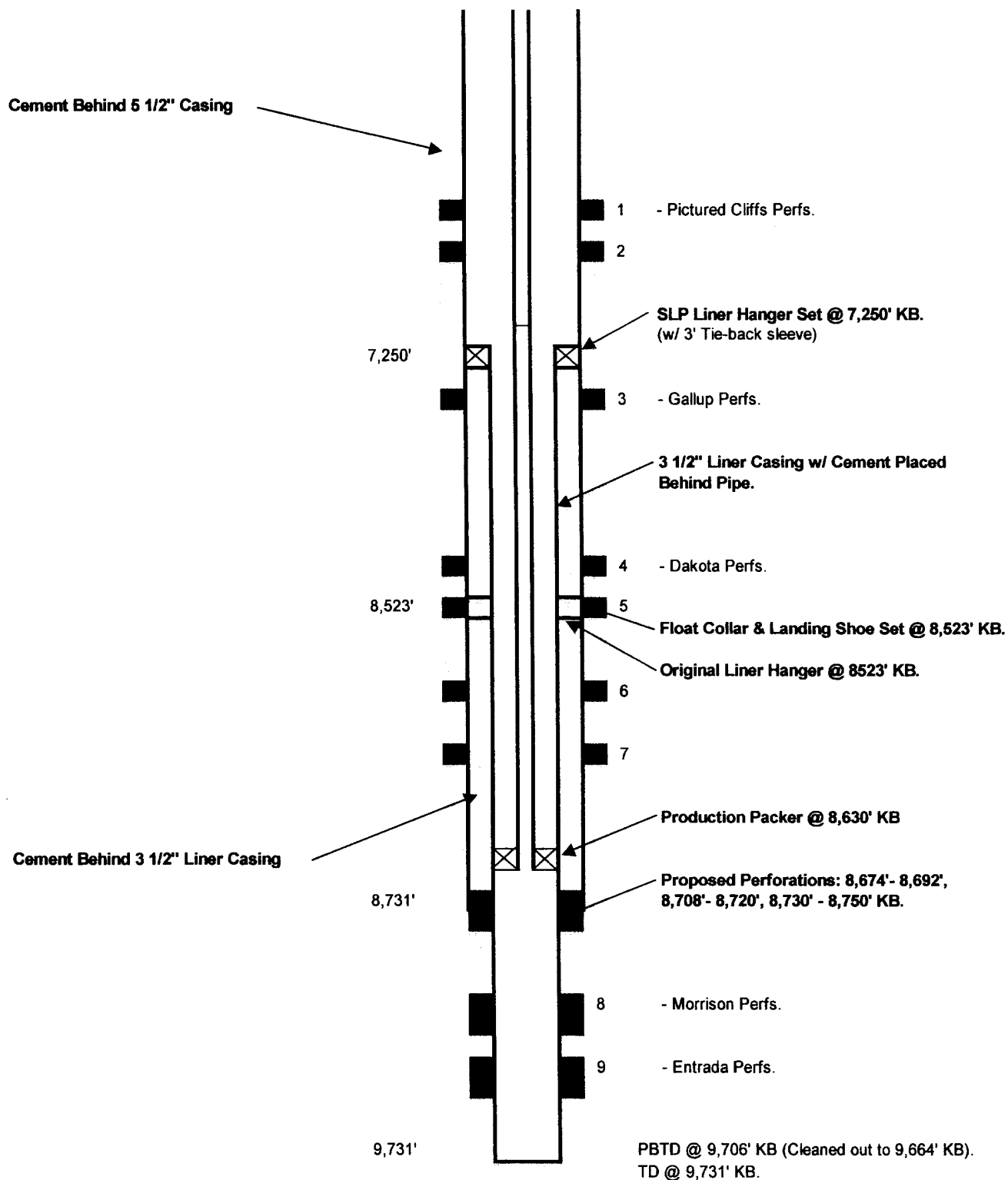
9,460' - 9,630'

Mallon Oil Company

5/7/01

JZ

Proposed Wellbore Diagram w/ Tie-Back Liner

Proposed Tie-Back Liner w/ Cement Diagram

Simms Federal #1

NW SE Sec.13, T30N, R4W

1,820' FEL & 1,730' FSL

East Blanco Field, Unit-J

Rio Arriba County, NM

Mallon Oil Company**December 1999 Workover Summary**

5/7/01

JZ

Summary Of Casing Tests & Remedial WorkSummary Of Casing Tests:

- | | |
|---|-----------------------------------|
| 1) Pictured Cliffs Perforations & Casing To Surface
(Surface to 7,462' KB) | No Leak |
| 2) Gallup Perforations.
(7,462' to 7,736' KB) | Leaked 40 psig in
20 minutes. |
| 3) Upper Dakota Perforations & Casing Interval.
(7,736' to 8,427' KB) | No Leak |
| 4) Lower Dakota Perforations & Casing Liner Hanger.
(8,427' to 8,543' KB) | Leaked 420 psig in
20 minutes. |
| 5) Casing Liner Test.
(8,543' to 8,646' KB) | No Leak |

Summary Of Remedial Work:

- | | |
|--|---|
| 1) Squeezed Lower Dakota Perforations
& Top Of Casing Liner Hanger.
(8,427' to 8,543' KB) | Squeeze w/ 50 sx (14 bbls) 50/50 POZ.
Squeeze to 1,750 psig. |
| 2) Squeezed Gallup Perforations.
(7,462' to 7,736' KB) | Squeeze w/ 25 sx (5 bbls) Micro Matrix.
Squeeze to 1,000 psig. |
| 3) Drill out cmt, test squeezes to 400 psig for 30 minutes (No loss), clean out well to 9,664' KB. | |
| 4) TIH w/ injection BHA as follows:
2 1/16" Re-entrty guide (Plastic coated).
3 1/2" Arrow Set-1 10K Pkr @ 4.96' (Nickel Plated).
2 1/16", 3.25#, L-80, IJ (6 jnts @ 199.58', New tbg).
2 7/8" x 2 1/16" Cross-over @ 0.55' (Nickel Plated).
2 7/8", 6.5#, L-80, EUE (21 jnts @ 600.83', New tbg).
2 7/8", 6.5#, L-80, EUE (256 jnts @ 7,821.20', Original tbg).
Pkr set @ 8,639' KB. | |
| 5) Pump 110 gals Baker/Petrolite corrosion inhibitor in 140 bbls 2 % KCl wtr down csg annulus. | |
| 6) Perform MIT on 12/10/99. | |

Simms Federal #1

NW SE Sec.13, T30N, R4W
1,820' FEL & 1,730' FSL
East Blanco Field, Unit-J
Rio Arriba County, NM

**Mallon Oil Company
Tubing & Casing Data**

5/7/01

JZ

Summary Of Casing & Tubing Data

Production Casing: 5 1/2", 15.5#, K-55, LT&C, set @ 8,731' KB.
ID @ 4.950" DD @ 4.825"
Pc = 4,040 psig Pb = 4,810 psig
Capacity @ 0.0238 bbls/ft

Casing Liner: 3 1/2", 9.3#, L-80, IJ Hydrill, set @ 9,731' KB, liner hanger @ 8,523' KB.
ID @ 2.992" DD @ 2.867"
Pc = 10,530 psig Pb = 10,160 psig
Capacity @ 0.0087 bbls/ft

Tubing: 2 7/8", 6.5#, L-80, EUE, 8R
ID @ 2.441" DD @ 2.347" Cplg OD @ 3.668"
Pc = 11,160 psig Pb = 10,570 psig
Jnt Yield = 144,960 lbs
Capacity @ 0.00579 bbls/ft

2 1/16", 3.25#, L-80, IJ
ID @ 1.751" DD @ 1.657" IJ OD @ 2.325"
Pc = 11,180 psig Pb = 10,590 psig
Jnt Yield = 71,370 lbs
Capacity @ 0.00298 bbls/ft

Tbg & Csg Capacities: 5 1/2", 15.5# csg @ 0.0238 bbls/ft.
3 1/2", 9.3# liner csg @ 0.0087 bbls/ft.
2 7/8", 6.5# tbg @ 0.00579 bbls/ft.
2 1/16", 3.25# tbg @ 0.00298 bbls/ft.

Annulus Capacities: 2 7/8" tbg x 5 1/2" csg @ 0.0158 bbls/ft.
2 1/16" tbg x 5 1/2" csg @ 0.0197 bbls/ft.
2 1/16" tbg x 3 1/2" csg @ 0.00456 bbls/ft.
3 1/2" csg x 5 1/2" csg @ 0.0119 bbls/ft.

Simms Federal #1
NW SE Sec.13, T30N, R4W
1,820' FEL & 1,730' FNL
East Blanco Field, Unit-J
Rio Arriba County, NM

Mallon Oil Company
Proposed Production Tubing

5/7/01
JZ

Summary Of Production Tubing String Required

Proposed Tubing String

- 1) 2-7/8", 6.5#, L-80, EUE, 8R Duoline-20 tbg pups to land tbg string.
- 2) 2-7/8", 6.5#, L-80, EUE, 8R Duoline-20 tbg.
- 3) 2-7/8", L-80, EUE, 8R pin w/ 2-7/8" tbg collar x 2-1/16", L-80, Benoit BTS-FGL premium thread pin cross-over (Duoline-20).
- 4) 2-1/16", 3.25#, L-80, Benoit BTS-FGL premium thread Duoline tbg.
- 5) 2-1/16", L-80, Benoit BTS-FGL premium thread box x 2-1/16", L-80, IJ, 10R pin cross-over (Nickel plated).
- 6) 2-1/16", L-80, IJ, 10R Std Seating Nipple w/ 1.375" ID (Nickel plated).
- 7) 3-1/2" x 2-1/16", IJ, 10R Arrow Set-1 6K pkr (Nickel plated).
- 8) 2-1/16", IJ, 10R Re-entry Guide (Nickel plated).

Material & Labor To Be Supplied By Rice Engineering Corporation:

- 1) 2-7/8" x 4', 6.5#, L-80, EUE, 8R Duoline-20 tbg pup.
2-7/8" x 6', 6.5#, L-80, EUE, 8R Duoline-20 tbg pup.
2-7/8" x 8', 6.5#, L-80, EUE, 8R Duoline-20 tbg pup.
- 2) 8,800' of 2-7/8", 6.5#, L-80, EUE, 8R Duoline-20 tbg.
- 3) Quantity two (2) - 2-7/8", L-80, EUE, 8R pin w/ 2-7/8" tbg collar x 2-1/16", L-80, Benoit BTS-FGL premium thread pin cross-over (Duoline-20).
- 4) 2,000' of 2-1/16", 3.25#, L-80, Benoit BTS-FGL premium thread Duoline tbg.
- 5) Quantity two (2) - 2-1/16", L-80, Benoit BTS-FGL premium thread box x 2-1/16", L-80, IJ, 10R pin cross-over (Nickel plated).
- 6) 2-7/8" tbg crush rings & 2-1/16" teflon seals (Do we need extra rings?).
- 7) Stabbing guides for fiberglass lined tubing if required.
- 8) Tool hand on location to run fiberglass tubing (Approximate start date June 1st, 2001).

Note: Cut cross overs ASAP & ship item #5 red label to Weatherford for nickel plating @
Weatherford Completion & Oilfield Service Attention: Marc Clark (505-326-5141)
514 East Animas
Farmington, New Mexico 87401

Material & Labor To Be Supplied By Weatherford Completion & Oilfield Service:

- 1) 2-1/16", L-80, IJ, 10R Std Seating Nipple w/ 1.375" ID (Nickel plated).
- 2) 3-1/2" x 2-1/16", IJ, 10R Arrow Set-1 6K pkr (Nickel plated).
- 3) 2-1/16", IJ, 10R Re-entry Guide (Nickel plated).
- 4) Nickel plating on cross-overs shipped from Rice Engineering.
- 5) Tool hand on location to run & set packer (Approximate start date June 1st, 2001).

Simms Federal #1

NW SE Sec.13, T30N, R4W
1,820' FEL & 1,730' FNL
East Blanco Field, Unit-J
Rio Arriba County, NM

**Mallon Oil Company
Proposed Tie Back Liner**

5/7/01

JZ

Summary Of Tie Back Liner Required

Proposed Tubing & Tie Back Liner Running String

- 1) Swivel & Cementing Head w/ Wiper Plug Dropping Head
- 2) 2-7/8", 6.5#, L-80, EUE, 8R Work String.
- 3) Casing Liner / Liner Hanger Running Tool For 2 7/8", 6.5#, 8R Tubing String.
- 4) 5 1/2" x 3 1/2" SLP Liner Hanger w/ Pack-off and 3' Tie-back Sleeve.
- 5) 3 1/2" Cross-over from CS Hydrill thread to liner hanger thread.
- 6) 3 1/2", 9.3#, L-80, CS Hydrill csg liner (Approximately 1,275').
- 7) 3 1/2" Cross-over from float collar thread to CS Hydrill thread.
- 8) 3 1/2" Float Collar w/ Double Check.
- 9) 3 1/2" Alignment Shoe.

- Liner Hanger Set @ 7,250' KB.
- Alignment Shoe Set @ 8,523' KB.

Material & Labor To Be Supplied By Weatherford Completion & Oilfield Service:

- 1) Swivel & Cementing Head w/ Wiper Plug Dropping Head
- 2) Casing Liner / Liner Hanger Running Tool For 2 7/8", 6.5#, 8R Tubing String.
- 3) 5 1/2" x 3 1/2" SLP Liner Hanger w/ Pack-off and 3' Tie-back Sleeve.
- 4) 3 1/2" Cross-over from CS Hydrill thread to liner hanger thread.
- 5) 3 1/2" Cross-over from float collar thread to CS Hydrill thread.
- 6) 3 1/2" Float Collar w/ Double Check.
- 7) 3 1/2" Alignment Shoe.
- 8) 3 1/2" Casing Liner Wiper Plug (LWP five fin).
- 9) 2 7/8" Tubing Wiper Plug (PDP three fin).
- 10) Liner Running Procedure.
- 11) Tool hand on location to run & set casing liner.

Material To Be Supplied By Cave Enterprises:

- 1) 3 1/2", 9.3#, L-80, CS Hydrill csg liner (Approximately 1,400').

Material To Be Supplied By Mallon Oil Company:

- 1) 2-7/8", 6.5#, L-80, EUE, 8R Work String.



EXCELL
Advanced

Version No 3.44 : hc-3.0

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Format File: /field_data/data2/0212_2052_s5401/poro.spc

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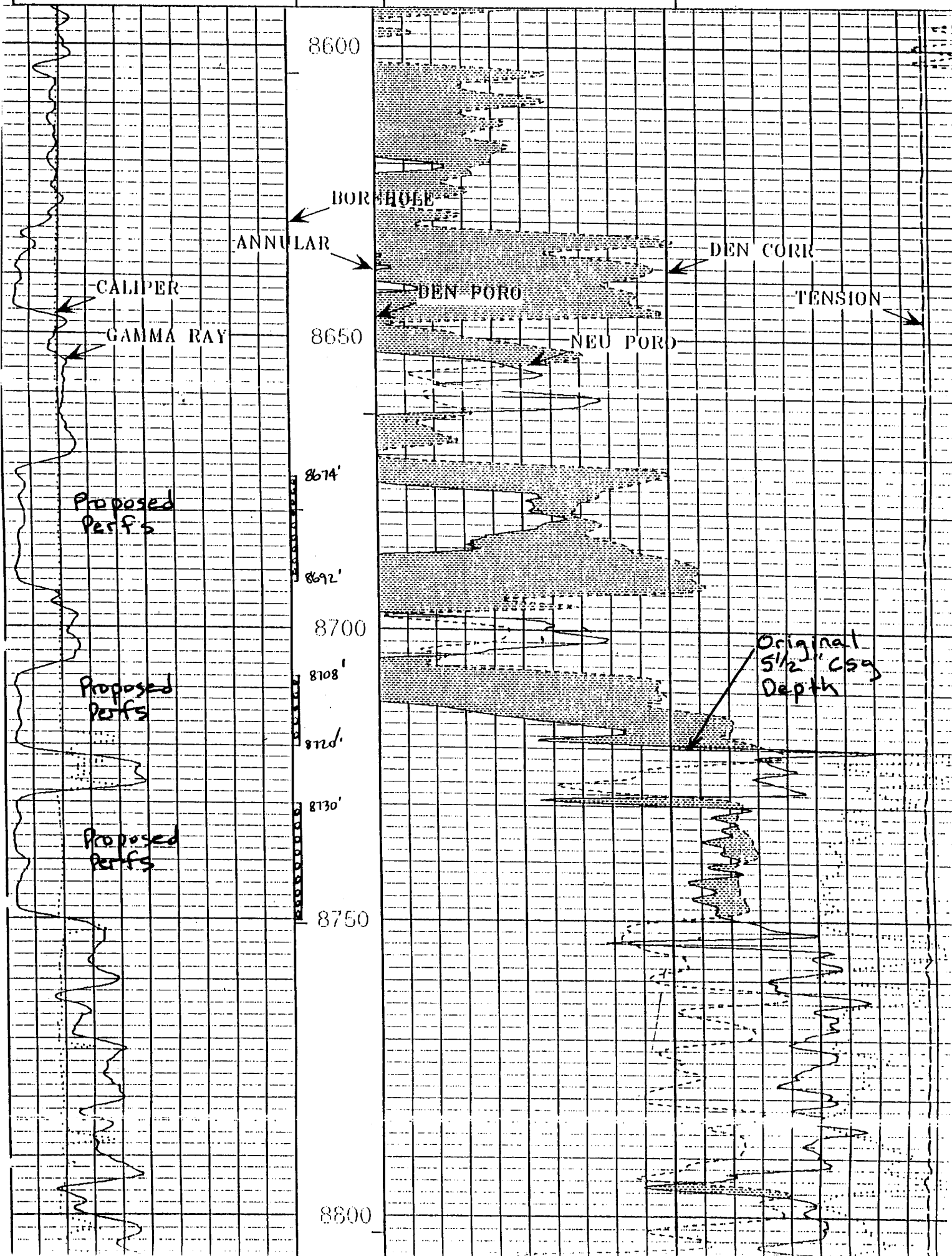
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Log Time: 02-12-98 21:03:42

Simms Federal #1 SWD

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CALIPER INCHES		13	BOR HOLE	DEN PORO	10
		1240 FT	Spectral Density 2/12/98		25
				TENSION POUNDS	2000



3%

Simms Federal #1 SWD

Sec 13, T30N, R4W

Density / Neutron Porosity

8/4/81

* Original open hole
before deepening
for SWD

08600

GAMMA RAY

CALIPER

TENSION

08700

F.R.

T.D.

DENSITY POROSITY

0 0.620 2.150 - 87.14

1 1.035 55-202

2 650 1.0

0 GR API 200

6 CALIPER X 16

6 CALIPER Y 16

30

ϕ (CDL)

30

ϕ (CNS)

08-04-81

16:54

8727.0

152925

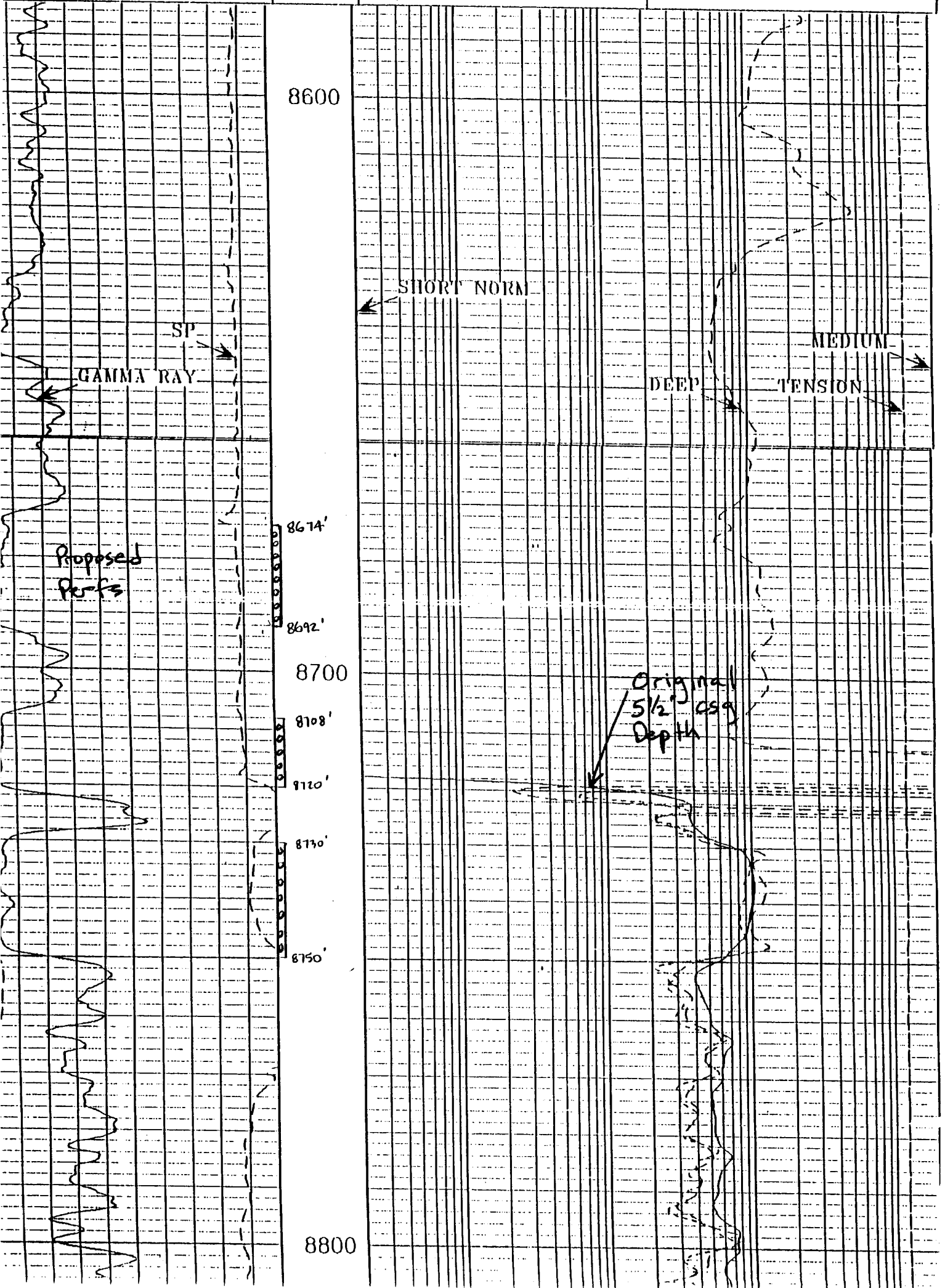
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0001-09

Simms Federal #1 SWD

GAMMA RAY API COUNTS SP -120(+)	200	Sec. 13 1:240 FL	, T30N, R4W		
			2	DEEP OFIM-M	2000
			2	MEDIUM OFIM-M	2000
			2	SHORT NORM OFIM-M	2000
			Dual Induction 2/12/98		12000



Simms Federal #1 SWD

Sec. 13, T30N, R4W

Induction

8/8/81

Original open hole
before deepening
for SWD.

18500

08600

00700

SP

TENSION

F. R.

T. D.

SHORT NORMAL AM.TS
INDUCTION RESISTIVITY

CONDUCTIVITY

0.0 -1101+ 100.0

400

0.010

0.010

0 RESIST 0-M 100

0 RESIST 0-M 100

Mallon Oil Company

Denver/Colorado ♦ Durango/Colorado ♦ Carlsbad/New Mexico

a Mallon Resources Subsidiary

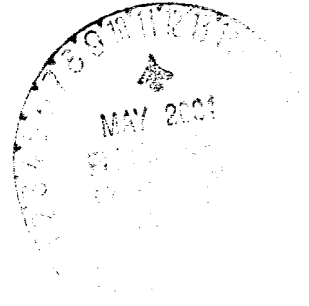
May 9, 2001

New Mexico Energy, Minerals, &
Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, NM 87505

Attention: Mr. David Catanach

Re: Simms Federal No. 1 &
Administrative Order SWD-665

Dear Mr. Catanach,



Mallon Oil Company is requesting an amendment to Administrative Order SWD-665 approved by your office on May 28, 1998. This approved administrative order SWD-665 was then amended to include injection into the Morrison and Entrada Formations from 8,600' – 9,570'. The amendment also included approval to inject 100 MCF per day of hydrogen sulfide gas into the Simms Federal #1 well. The amendment was approved on June 28, 1998 (See Exhibit #1, Amended Administrative Order SWD-665).

At this time Mallon Oil is proposing to workover the Simms Federal #1 to repair a possible casing leak, run new Duoline-20 fiberglass lined tubing, and add perforations to the permitted Morrison interval (See Exhibit #2, Workover procedure, logs of proposed perforation intervals, and sundry notice). However, it has been brought to our attention by Steve Hayden (Geologist with the New Mexico OCD, Aztec office) that our proposed perforation interval (8,674' – 8,750' gross) actually falls within the Burro Canyon Formation. The original picked top of the Morrison Formation at 8,600' is incorrect according to Steve and includes a portion of the Burro Canyon. In accordance with Steve's request, Mallon Oil is requesting that the approved administrative order SWD-665 be amended to allow injection in the Burro Canyon. The permitted interval will not change, just the nomenclature. We have received verbal approval from the New Mexico OCD (Aztec office) to perforate the additional intervals during the proposed workover. Please contact Steve Hayden or Charlie Perrin if you have any questions or concerns.

Also, the final amended order SWD-665 contains a typographical error. The permit reads that Mallon Oil is authorized to inject 100 MCF per day of 0.22% H₂S gas. The permit should read, 100 MCF per day of 100% H₂S gas (See Exhibit #3, letter requesting approval for 100% H₂S gas injection and a letter of approval for the permit modification, dated September 16, 1997). The 0.22% was the average H₂S gas concentration found in the Ojo Alamo Formation prior to our amine treatment.

Summarizing, Mallon Oil requests that the Burro Canyon Formation be included as a disposal interval for the subject well and secondly that the verbiage regarding the disposal of H₂S gas be amended to read that Mallon Oil Company has permission to dispose of 100 MCF per day of 100% H₂S gas.

Thank you for your consideration of this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "John Zellitti", with a stylized, cursive script.

John Zellitti

District Petroleum Engineer

Cc: Charlie Perrin (New Mexico OCD, Aztec Office)

EXHIBIT #1

AMENDED ADMINISTRATIVE ORDER SWD-665



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

AMENDED ADMINISTRATIVE ORDER SWD-665

*APPLICATION OF MALLON OIL COMPANY FOR SALT WATER DISPOSAL,
RIO ARRIBA COUNTY, NEW MEXICO.*

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Mallon Oil Company made application to the New Mexico Oil Conservation Division on February 25, 1998, for permission to **amend the completion interval** for salt water disposal in its Simms Well No.1 located 1730 feet from the South line and 1820 feet from the East line (Unit J) of Section 13, Township 30 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant herein, Mallon Oil Company, is hereby authorized to complete its Simms Well No.1 located 1730 feet from the South line and 1820 feet from the East line (Unit J) of Section 13, Township 30 North, Range 4 West, NMPM, Rio Arriba County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Morrison and Entrada formations at approximately 8,600 feet to 9,570 feet through 2 7/8-inch plastic-lined tubing set in a packer located at approximately 8,500 feet.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 1720 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Morrison or Entrada formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator is hereby authorized to inject 100 MCF of .22% H₂S gas per day providing that a mechanical integrity pressure test is conducted annually, and safety guidelines are followed pursuant to Rule 118.

The operator shall notify the supervisor of the Aztec district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Aztec district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

Amended Administrative Order SWD-665

Mallon Oil Company

May 28, 1998

Page 3

The operator shall submit monthly reports of the disposal operations on Division Form C-115, and in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 28th day of June, 1998.


LORI WROTENBERY, Director

LW/BES/kv

cc: Oil Conservation Division - Aztec

EXHIBIT #2

**WORKOVER PROCEDURE,
LOGS OF PROPOSED PERFORATION INTERVALS,
AND SUNDRY NOTICE**

EXHIBIT #3

**LETTER REQUESTING APPROVAL FOR
100% H₂S GAS INJECTION AND
LETTER OF APPROVAL FOR THE PERMIT
MODIFICATION,
DATED SEPTEMBER 16,1997**

Mallon Oil Company

Denver/Colorado ♦ Carlsbad/New Mexico

a Mallon Resources subsidiary

September 15, 1997

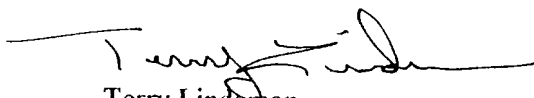
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Gentlemen:

Mallon Oil Company is requesting an amendment to Administrative Order SWD-665 approved by your office on July 7, 1997. This order granted Mallon Oil approval to inject produced water from the Picture Cliffs, Ojo Alamo, and Fruitland Coal formation into the Entrada formation at approximately 9300 feet.

Mallon Oil Company is presently operating an Amine Plant in this field to remove the H_2S from the gas production of the Ojo Alamo formation. This production contains .22% H_2S (see attached analysis) which is presently being flared under approval from the EPA. In an effort to promote a more environmentally sound and safer operation we are requesting approval to inject 100 MCFD of 100% H_2S gas into the disposal stream to the Entrada formation. The produced water from the Ojo Alamo formation contains some H_2S in solution, therefore, there will be no additional compounds introduced into the Entrada that was not previously permitted. Thank you for your consideration of this proposal.

Sincerely,



Terry Lindeman
Exploration/Production Superintendent



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

September 16, 1997

Mallon Oil Company
P.O. Box 3256
Carlsbad, New Mexico 88220

Attention: Mr. Terry Lindeman

Re: Permit Modification
SWD-665

Dear Mr. Lindeman:

Reference is made to your request dated September 15, 1997, for authorization to inject approximately 100 MCF per day of H₂S gas into the Simms Well No. 1 located in Unit J of Section 13, Township 30 North, Range 4 West, NMPM, Rio Arriba County, New Mexico, a disposal well permitted by Division Order No. SWD-665.

Pursuant to Division and/or Federal UIC Rules and Regulations, your request is hereby approved subject to the following conditions:

- a) the volume of injected H₂S gas shall be limited to 100 MCF per day; and,
- b) the operator shall conduct a mechanical integrity pressure test on an annual basis, and shall notify the Aztec district office of the Division prior to testing.

Division Order No. SWD-665 is hereby amended to include these conditions.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay", written over the typed name and title.

William J. LeMay
Director

xc: NMOCD-Aztec
File-SWD-665