

Mallon Oil Company

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

a Mallon Resources Subsidiary

Feb 20

February 15, 2001

Mr. Frank Chavez
New Mexico Oil & Gas Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: Simms Federal #1 Water Disposal Well
NW SE Sec.13, T30N, R4W
East Blanco Field
Rio Arriba County, NM

DO FILE - Sub - 665

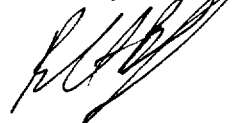
Dear Mr. Chavez:

The approved water disposal permit (SWD-665) for this well requested that coated/lined tubing be ran. The well was inadvertently set up with L-80 non-coated tubing. A verbal exemption was given to Mallon Oil Company by the New Mexico Oil & Gas Conservation Division to leave the non-coated tubing in the well for two years if the casing was MIT every six months. The next MITs are scheduled under this exemption to be performed by February 24th, 2001, August 24, 2001, and to run coated tubing into the well by February 24th, 2002. This well passed an MIT on August 24th, 2000.

In accordance with our conversation Mallon Oil Company is requesting the scheduled February 24, 2001 MIT be waived, in lieu of this test Mallon Oil Company will schedule a workover during the month of June 2001 to replace the non-coated tubing with a fiberglass lined (Duoline) tubing string. This will allow Mallon Oil time to order the required coated tubing string and have it delivered, which will take approximately three weeks. By scheduling the workover for June it will allow Mallon Oil to perform this work during the summer to minimize the impact on the private and Forest Service lands and roads, have longer daylight hours to accomplish the work, and minimize the problems associated with workovers during the winter months.

Upon receipt of your approval of this proposal Mallon will file a sundry notice of intent describing the work that will be completed in June, 2001 to bring the subject well into full compliance. Thank you for your assistance with this matter.

Sincerely,



Robert Blaylock
District Manager

Accepted this ____ day of February, 2001

Frank Chavez, District Supervisor NMOCD

CC: Mark Ashley
BLM

113540481

AMEND SWD

5/29/01

Mallon Oil Company

a Mallon Resources Subsidiary

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

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". The signature is fluid and cursive, with a long horizontal stroke at the beginning.

John Zellitti

District Petroleum Engineer

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

EXHIBIT #1

AMENDED ADMINISTRATIVE ORDER SWD-665

EXHIBIT #2

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

Submit 3 Copies To Appropriate District
Office
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.	

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.)		7. Lease Name or Unit Agreement Name: Simms Federal
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	8. Well No. 1	
3. Address of Operator P. O. Box 2797 Durango, CO 81302	9. Pool name or Wildcat Morrison / Entrada	
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 <u>Rio Arriba</u> 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 [Signature] TITLE District Petroelum Engineer DATE 05/04/01
Type or print name John Zellitti Telephone No. 970-382-9100
(This space for State use)

APPROVED BY _____ TITLE _____ DATE _____
Conditions of approval, if any:

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 tailer 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 fuctional 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 PBSD (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 tbq 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/ tbq & 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 tbq work string & clean up the liner top, TOOH w/ tbq, 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/ tbq & 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 tbq work string to RBP @ 8,630' KB, TOOH w/ tbq, 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" tbq workstring, circ. sand off of RBP set @ 8,630' KB, retrieve RBP, & TOOH w/ tbq & 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 tbq (Approximately 223 jnts @ 7,130').
- 2 7/8", 6.5#, L-80, EUE Duoline tbq pups as required to land pkr.

Land pkr @ 8,630' KB.

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

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

Confirm that the Duoline tbq 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

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

Mallon Oil Company

5/7/01

JZ

Existing Wellbore Diagram

Elev. GL @ 7,023'
Elev. KB @ 7,033' (10' KB) Est.

277'

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 perms (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.

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'.

PBTD @ 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 perms (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.

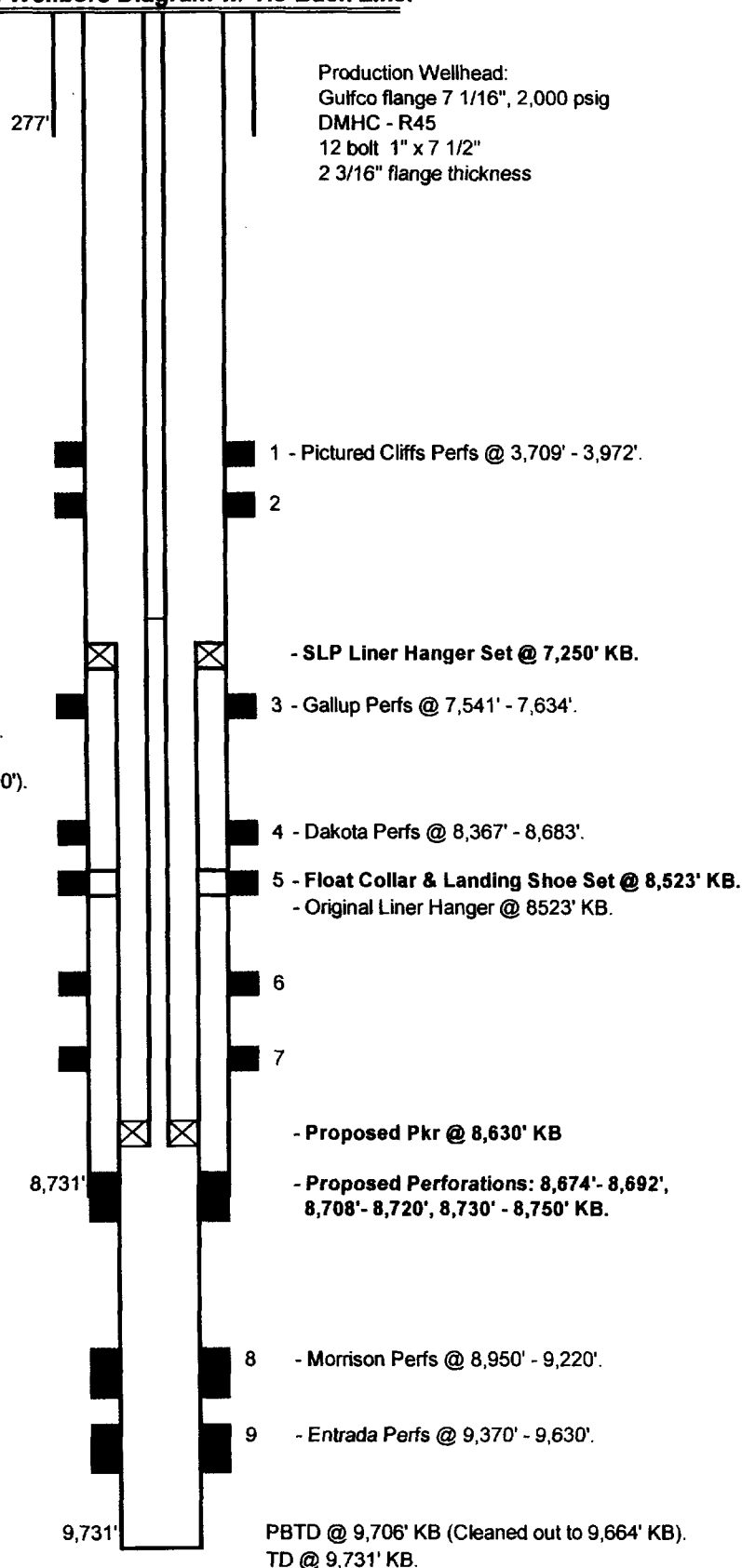
9) 9,370' - 9,410'

9,460' - 9,630'

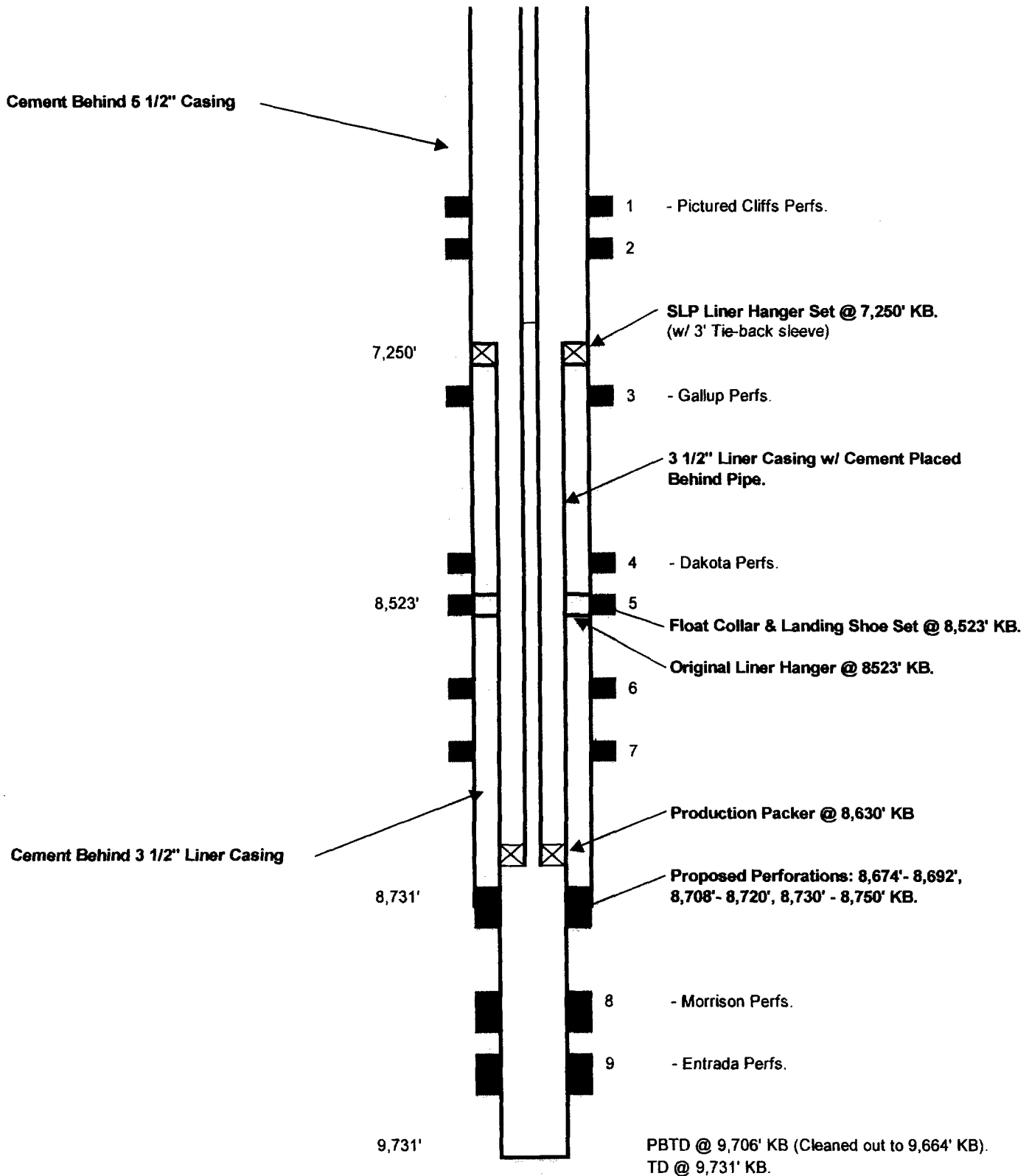
Mallon Oil Company

5/7/01

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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 Work**Summary 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-entry 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 H.ead
- 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 H.ead
- 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 Enterprizes:

- 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.



EXCEL⁺
EXTENDED

Version No 3441hc30

Data File: 0212_2052_s5401_002_vcls

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

Top Depth 8400.00

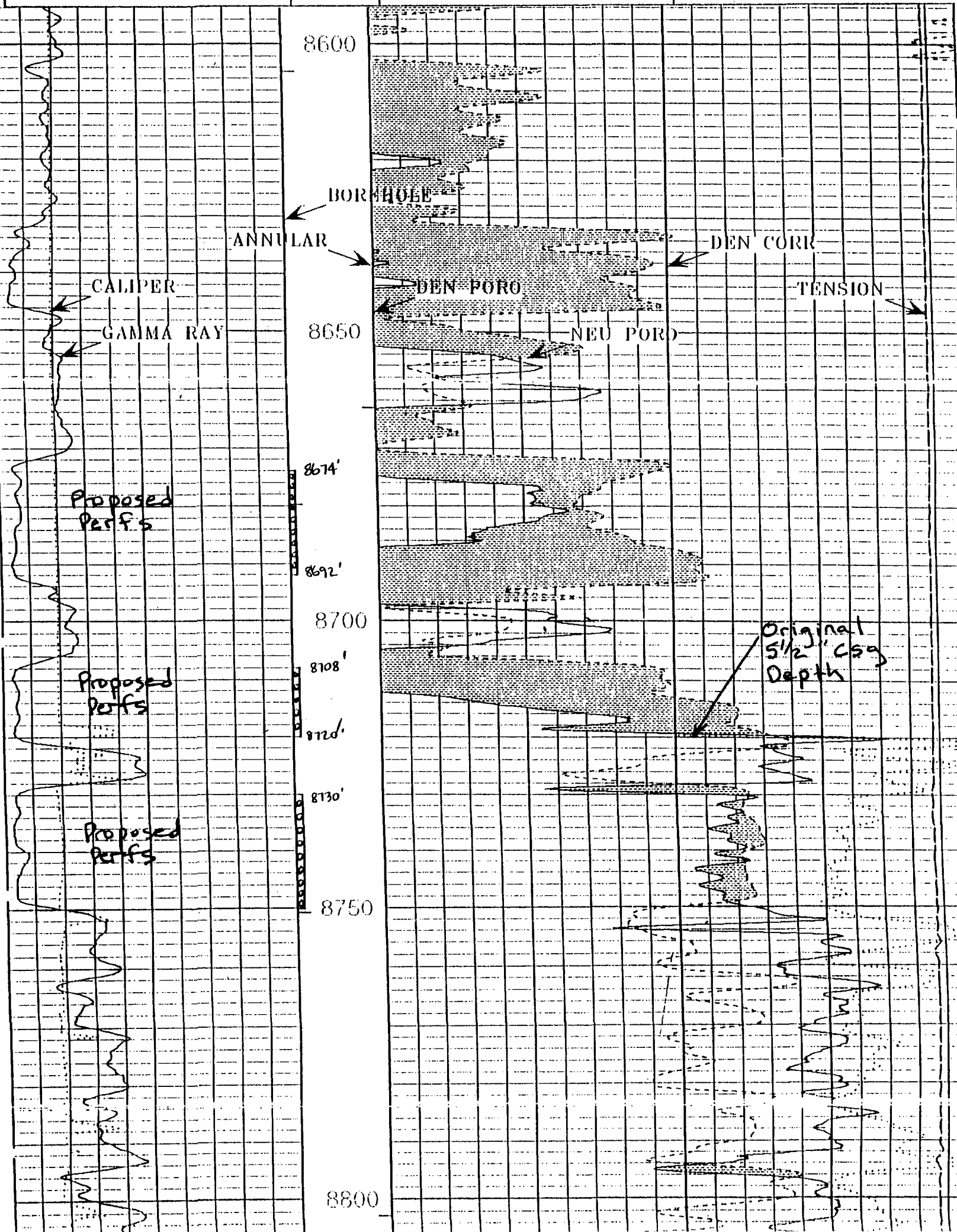
Bottom Depth 9742.50

Plot Time 02-12-98 21:17:45

Log Time 02-12-98 21:01:40

Simms Federal #1 SWD

0 3	GAMMA RAY API COUNTS CALIPER INCHES	200 130	Sec 13 ACTUAL AR	T30N, R4W	NEU PORO	
			BOR HOLE		DEH PORO	
			E240 FT	Spectral Density 2/12/98	25 T2000	DEH CORR GM/CC TENSION POUNDS



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 8714

1 1.035 55.202 2.650 1.0

0 GR API 200

6 CALIPER X 16

6 CALIPER Y 16

30

Ø (CDL)

30

Ø (CNS)

08-04-81

16:54

8727.0

152925

0047-23

01

0001-09

Simms Federal #1 SWD
Sec. 13, T30N, R4W

Induction
8/8/81

Original open hole
before deepening
for SWD.

18500

08600

00700

F. H.
T. D.

TENSION

SHORT NORMAL AM TO
INDUCTION RESISTIVITY

CONDUCTIVITY

0.0 -11014 100.0

400

00000 00000

0 0000 0-100 100

0 0000 0-100 100

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

a Mallon Resources Subsidiary

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

May 30, 2001

*Doc
SWD 665*

Mr. Charlie Perrin
New Mexico Oil & Gas Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: Simms Federal #1 SWD-665
East Blanco Field
Rio Arriba County, NM

Dear Mr. Perrin,

In accordance with your conditions of approval for the proposed workover on the Simms Federal #1 SWD well, I have received verbal approval from David Catanach with the Santa Fe OCD office to perforate the proposed interval (8,674' – 8,750' gross) which falls within the Burro Canyon Formation. The original picked top of the Morrison Formation at 8,600' is incorrect according to Steve Hayden and includes a portion of the Burro Canyon. In accordance with Steve's request, David Catanach will amend the administrative order SWD-665 to allow water injection in the Burro Canyon. The permitted interval will not change, just the nomenclature.

Sincerely,



John Zellitti
District Production Engineer
(970-382-9100)

Cc: Steve Hayden
David Catanach