NM Oil Cons. Commission
Drawer DD
Artesia, NM 88210

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Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-62195

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation: VOLUNTARY

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.: MARATHON FEDERAL #2

2. Name of Operator: Marathon Oil Company

9. API Well No.: 30-005-62899

3. Address and Telephone No.: P.O. Box 552 Midland, Tx. 79702 915/682-1626

10. Field and Pool, or Exploratory Area: S. LONE WOLF/DEVONIAN

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
UNIT LETTER "F" 1650' FNL & 1980' FWL
SEC. 33, TWP 13S, RNG 29E

11. County or Parish, State: CHAVES CO., N. M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[X] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[X] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other CHEMICAL SQUEEZE	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

MARATHON OIL COMPANY HAS ATTEMPTED SEVERAL PROCEDURES TO REDUCE WATER PRODUCTION, FAILURE RATE, AND MAKE THIS WELL COMMERCIALLY PRODUCTIVE. THESE PROCEDURES ARE DETAILED ON THE ATTACHED WELL HISTORIES.

2-20-93 SCALE CLEAN UP AND INHIBITION

3-22-93 MARCIT POLYMER GEL TREATMENT

4-07-93 ACIDIZE DEVONIAN

6-02-93 STEP RATE TEST AND MARCIT GEL

6-23-93 SQUEEZE EXISTING PERFS & RECOMP LOWER DEVONIAN

BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA
SEP 03 1993
ROSWELL, NEW MEXICO

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

Signed Thomas M Price THOMAS M. PRICE Title ADVANCED ENGINEERING TECHNICIAN Date 8-30-93

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

ACCEPTED FOR RECORD
PETER CHESTER
Peter Chester
SEP 3 1993
BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

FORM 484 REV ~ 93

DATE ___ 93

Marathon Oil C npany

HISTORY OF OIL OR GAS WELL

FIELD South Lone Wolf

WELL NO. 2 LEASE Marathon Federal BLOCK SEC. ___ TWP. ___ R. ___

STATE New Mexico PARISH COUNTY Chavez AFE No.: ___

___ ELEV. ___

MEASUREMENTS TAKEN FROM: TOP OF OIL STRING ___ ELEV. ___; TOP OF ROTARY TABLE ___ ELEV. ___; GRD. OR MAT ___ ELEV. ___

HISTORY PREPARED BY Carrie Byrom

TITLE Secretary

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, including size of hole, size and number of bits, complete description of casing, cementing, fishing or drilling difficulties, surveys, all tests, all completion operations and procedure, etc.

DATE

PURPOSE: Scale cleanup & inhibition procedure.

FILE COPY

2-20-93 R/U pulling unit. Unseated pump. POH w/ 1-1/2" pump, 33K shear tool, K-bars on 7/8" steel & 1-1/4" fiberglass rods. R/U kill truck. Circ'd hole w/ 205 bbls 2% KCl wtr. Removed wellhead. Rel tbg anchor. Installed 6" 1500 series manual BOP. R/U Baker Scanalog. Top jt indicated 54% wall loss. POH w/ 30 jts. Had 1 more jt indicated, 24% wall loss. Baker operator indicated rod wear calibration on log may be off & recommended that we chg out trucks. R/D Baker Scanalog. Closed pipe rams. SDFN. DC = $3,065.

2-21-93 R/U Baker Scanlog. POH w/ mud jt, SN, 5-1/2" Baker tbg anchor on 2-7/8" L-80 tbg. L/D 97 jts 2-7/8" L-80 tbg due to pitting loss & rod wear loss. R/D Baker Scanalog. RIH w/ 5-1/2" Baker Model "C" RBP. Set plug @ 120'. POH. Closed blind rams. Tested blind rams to 3000# - OK. RIH w/ 5-1/2" Baker fullbore pkr. Set pkr @ 60'. Tested pipe rams to 3000# - OK. Rel pkr. RIH & rel RBP. POH. RIH w/ 2-7/8" tbg open-ended for killstring. Closed pipe rams. SDFN. DC = $4,881. (Note: Will need ± 100 jts 2-7/8 tbg for replacement.)

2-22-93 SDFS.

2-23-93 POH w/ 2-7/8" tbg open-ended. WIH w/ collar locator, 5-1/2" PPI pkr, 4' sub, SN on 2-7/8" tbg to 9700' (blank pipe). Dropped mandrel plug. Tested pkr & tbg to 2000 psi - OK. Dropped fluid control valve. WIH & located csg collars 9715' & 9760'. Broke circulation. Spotted 110 gals Unichem Scale Solve H. Displaced w/ 53.5 bbls 2% KCl wtr. RIH & straddled perfs from 9756-9758'. Opened fluid control valve (FCV) & attempted to pump into perfs. Max press 1000#. Perfs would not take fluid. Attempted to pump into the 8 other intervals. Perfs would not take fluid. RIH & displaced inhibitor across perf interval. Set pkr @ 9700'. Closed pipe rams. SDFN. DC = $4,540. CC = $12,486.

2-24-93 SITP 0 psi. Fished fluid control valve & mandrel plug. Pkr set @ 9700'. R/U pump truck. Attempted to pump chemical into perf interval 9738-9758. Pressured up to 1000 psi. Formation would not take fluid. R/D kill truck. Rel pkr. POH w/ 5-1/2" collar locator, PPI pkr, SN on 2-7/8" tbg. WIH w/ mud jt. SN, 3 jts 2-7/8 J-55 tbg, 5-1/2" Baker tbg anchor, 91 jts 2-7/8" J-55 tbg & 208 jts 2-7/8" L-80 tbg. Removed BOP. Set anchor w/ 12,000# tension. Installed hanger flange & wellhead. Tbg anchor @ 9621'. SN @ 9718'. SDFN. DC = $2,885. CC = $15,371.

2-25-93 RIH w/ gas anchor, 1-1/2" pump, (1) K-bar, 33K shear tool, 22 K-bars on 7/8" steel & 1.25" fiberglass rods. Seated pump. Spaced out rods. Hung well on. Well pumped up @ 4:20 p.m. Pumping 9-1/2 spm - 144" stroke. Pump capacity 359 BTF/day. SDFN. DC = $3,810. CC = $19,181.

PURPOSE: Perform stress frac.

3-02-93 MIRUPU. Anchors tested 7/92. Shut pumping unit down in a.m. POOH w/ (1) 1-1/2"x 26' polish rod w/ 1-3/4"x 18' liner, (1) 1.25"x 18' pony rod fiberglass, (163) 1.25"x 37.5' fiberglass rods, (117) 7/8"x 25' steel rods, (23) K-bars x 25' (L/D), (1) 33K shear tool, & (1) 2-1/2"x 1-1/2"x 20'x 33' RHBC pump w/ 10' gas anchor. Lost 2-1/2 hrs during this time due to rig problems which DA&S credited. R/U kill truck & circ'd hole w/ 200 bbls 2% KCl wtr. N/D wellhead. N/U BOP's. Rel TAC, started out of hole w/ 2-7/8" prod tbg string when well started flowing. Secured well. R/U kill truck & circ'd add'l 90 bbls 2% KCl wtr w/ some prod. wtr to work gas bubble out. Finished out of hole w/ total of 302 jts 2-7/8" tbg, (1) 2-7/8" mud jt, & TAC. WIH w/ 5-1/2" RBP & set @ ± 120'. POOH. Tested blind rams to 2000# - held OK. WIH & retrieved RBP. WIH w/ 5-1/2" tension pkr to ± 60' & tested pipe rams to 2000# - held OK. Rel pkr & POOH. WIH w/ kill string & secured well. SDFN. DC = $6,965.

3-03-93 SITP/SICP 0 psi. POOH w/ killstring. N/U frac valve & Wedge W.L. lubricator. R/U kill truck. Test lubricator to 1500 psi - OK. R/D kill truck, RIH w/ GR-CCL from 9776'-9550'. FL @ 580'. POOH w/ GR-CCL. R/U Servo-Dynamics. Stress frac tool on W.L. TIH w/ W.L., shot stress frac 9749'-9759' (across perfs 9750-58'). Start out of hole, W.L. unstranded 900' from being out of hole. Work W.L. thru lub. Measure psi indicator. Indicated psi @ 12,500 psi. Stress frac unsuccessful. Cut off 1300' W.L. & rehead. TIH w/ 2nd stress frac tool & shot over same interval. POOH. Measure psi indicator @ 9400 psi. This psi indicated 2nd stress frac successful. R/D Wedge. N/D frac valve (7"). TIH w/ 2-7/8" mud jt, 2-7/8" SN, 3 jts tbg, TAC & 299 more jts 2-7/8" tbg. N/D BOP. Set TAC in 12 pts tension. N/U wellhead. TAC @ 9624'KB, SN @ 9719'. Secure well, SDFN. DC = $15,635. CC = $22,600.

3-04-93 SITP/SICP 0 psi. WIH w/ (1) 1-3/4"x 12' gas anchor, (1) 2-1/2"x 1-1/2"x 30' RHBC pump, (1) 1-3/4" K-bar x 25', (1) 33K shear tool, (22) 1-3/4" K-bars x 25', (32) 7/8"x 25' steel rods (w/ no rod guides), (58) 7/8"x 25' steel rods (w/ rod guides), (27) 7/8"x 25' steel rods (w/ no rod guides), (163) 1.25"x 37.5' fiberglass rods, (1) 1.25"x 18' fiberglass pony rods, (1) 1-1/2"x 26' polish rod w/ 1-3/4"x 18' liner. Spaced pump out. Hung rods on pumping unit. Started well pumping @ 12:00p @ 10 spm, 144" stroke. TURNED WELL OVER TO HOBBS PRODUCTION OFFICE. R/D P.U. & sent rig to J.D. Slator #1. DC = $1,600. CC = $24,200.

3-05-93 Well pumped 0 BO & 190 BW. Ajax down. Could not keep running more than 10 minutes. Called out Triple H Engine Service to repair Ajax. DC = $300. CC = $24,500.

3-06-93 24-hr Production Test: Well pumped 0 BO & 290 BW. TL 195 BW; TR 480 BW. DC = $300.

3-07-93 24-hr Production Test: Well pumped 6 BO & 412 BW. FL 8270' FAP. TR = 892 BW, 6 BO. DC = $300.

3-08-93 24-hr Production Test: Well pumped 19.5 BO & 428 BW. Csg is on a vacuum. TR = 1320 BW, 25.5 BO. DC = $500.

3-09-93 24-hr Production Test: Well pumped 22 BO & 424 BW. TR 47 BO, 1744 BW.

3-10-93 Well pumped 14 BO & 495 BW in 24 hrs.

3-11-93 Well pumped 3 BO & 156 BW. Ajax down when pumper arrived. Could not keep Ajax running more than 5 minutes. Called Triple H Engine out to repair Ajax.

3-12-93	Well pumped 0 BO & 380 BW in 17 hours.
3-13-93	Well pumped 12 BO & 478 BW in 24 hrs.
3-14-93	Well pumped 14 BO & 400 BW in 24 hrs.
3-15-93	Well pumped 14 BO & 660 BW in 24 hrs.
3-16-93	Well pumped 16 BO and 484 BW in 24 hrs.
3-17-93	Well pumped 17 BO & 471 BW. DROPPED FROM REPORT.

PURPOSE: MARCIT treatment.

3-22-93 SITP - 0 psig. SICP - 50 psig. MIRU Permian Well Service. Unseat pump. POOH w/1.25" fiberglass rods, 0.875" steel rods (w/and w/o glides), 1.75" sinker bars, 1.5" insert pump, and 1.75" gas anchor. Pump 10 bbls 2% KCl down csg. ND wellhead. NU 6" 1500 series manual BOP's w/blind rams on bottom and pipe rams on top. Release TAC. POOH w/302 jts 2 7/8" tbg, TAC, & mud jt. RIH w/RBP to 127'. POOH. Test blind rams to 3000 psig-held OK. RIH w/2 jts 2 7/8" tbg and pkr. Test pipe rams to 3000 psig-held OK. Retrieve RBP and POOH. RIH w/RTTS pkr, SN, on 30 stands 2 7/8" tbg. Secure well. SDFN. DC = $3,550.

3-24-93 Finish RIH w/239 jts 2 7/8" tbg on RTTS pkr and SN. Set pkr @ 9622'. Load csg w/5 bbls KCl. Pressure test to 300 psig - held OK. RU to inject 2% KCl down tbg for injectivity test. Pump as follows:

Minutes	BPM	BBLS	PSIG	Minutes	BPM	BBLS	PSIG
5	1.0	5.5	250	30	0.7	24.6	1050
10	1.0	10.1	475	60	0.5	41.0	1400
15	0.9	14.5	600	110	0.25	52.0	2500
20	0.8	19.3	760	130	0.25	55.5	2500
25	0.7	21.8	950				

SD after 130 minutes. ISIP = 2250 psig. Pressure bled to 0 psig in 5 minutes. RU swab. IFL @ surface. Made 8 swab runs. Recovered 5 BO and 62 BW. FFL @ 2400' FS. Last 5 swab runs were from constant FL @ 3400' FS. Swab time was 2 hours. RD swab. RU on tbg w/pump truck. Load tbg w/19.7 bbls 2% KCl. Pumped as follows:

Minutes	BPM	BBLS	PSIG	Minutes	BPM	BBLS	PSIG
5	1.0	5.0	1100	30	1.0	28.9	1475
10	1.0	9.9	1200	35	1.0	33.5	1500
15	1.0	14.6	1250	40	1.0	38.0	1550
20	1.0	19.6	1300	45	1.0	42.5	1625
25	1.0	24.2	1400	50	1.0	46.9	1750

SD. ISIP = 1500 psig. Bled to 0 psig to 2 minutes. Secure Well. SDFN. DC = $3,600. CC = $7,150.

3-25-93 Release packer and FIH to 9779'. Set pkr & test CIBP to 2000 psi. Bled to 1000 psi in 45 sec and 0 psi in 2 min. Finish in hole to tag CIBP. Tag @ 9836' (CIBP had fallen down hole below lower perfs). POH. Start in hole w/RBP & RTTS pkr. SDFN. DC = $3,400. CC = $10,550.

3-26-93 FIH & set RBP & 9768'. Pull up 2' & set RTTS. Test to 2000 psi for 15 mins-OK. POH. RIH w/2 7/8" mud joint, 2 7/8" SN, 2 jts 2 7/8" tbg, 5 1/2" X 2 7/8" tbg anchor and 300 jts of 2 7/8" tubing. ND BOP's. Set TAC w/15 points tension & install wellhead. Bottom @ 9745', SN @ 9715' and TAC @ 9650'. Start in hole w/rods & pump. SDFN. DC = $5,839. CC = $16,389.

3-27-93 FIH w/rods & pump. Space out and hang well on. DC $1,000. TR 5 BO, 62 BW.

3-28-93 Well pumped 17 BO & 171 BW in 24 hr test. DC $0. TR 22 BO, 233 BW.

3-29-93 Well pumped 0 BO & 0 BW in 24 hr test. Load & test to 500 psi - OK. No pump action. Lower rods 8". Would not pump. Shut down unit. DC $0. TR 22 BO, 233 BW.

3-30-93 MIRU PU. Long stroke well and respace. Would not pump. Start out of hole w/rods. Shut down due to high winds. DC = $1,000. CC = $18,389.

3-31-93	POH w/ rods. Parted @ shear tool. RIH w/ fishing tool. Latch onto fish. POH. No recovery. SDFN.
4-01-93	RIH w/overshot. Attempt to fish rod w/o success. POH. Nipple down wellhead & release TAC. Install 6" 900 BOP's w/2 7/8" pipe rams. POH w/37 stands of tbg. RU swab. Swab fluid to casing. Sand line parted. Continue POH w/tbg. SDFN. DC = $1,500. CC = $21,389.
4-02-93	Finish POH w/tbg. Lay down bottom joint of tbg w/pump stuck inside. Lay down 1 3/4" K-Bar fish. Change out 2 joints of tbg. RIH w/tbg. Set TAC. ND BOP. NU wellhead. RIH w/7/8" steel rods & 1.25" fiberglass rods. Close well in. SDFN. DC = $1,500. CC = $21,389.
4-03-93	FIH & space pump. Well pumping at 9:15 A.M. DC $1,100.
4-04-93	Well pumped 3 BO & 67 BW. Found well down. RU pulling unit. Long stroke pump. Pump is sticking. Unseat pump & reseat. No pump action. Load & test. Put well on pump. DC $1,200.
4-05-93	Well pumped 3 BO & 3 BW. Ajax down. Pump stuck. POH w/rods & pump. RIH w/rods & pump. DC $1,200.
4-06-93	Put belts on unit. Start well pumping @ 12:30 P.M. Static FL @ 1902' FAP. DC = $1,000. CC = $27,389.

PURPOSE: Re-establish production from Upper Devonian.

4-07-93 Well pumped 66 BW and no oil in 4 1/2 hours. Belts thrown off unit when crew arrived. FL indicated 1309' fluid above pump. Removed horses head. Unseated pump. SOH w/1.25 fibergiass rods. (pulled 96 rods) Shut down due to high winds. DC = $540. CC = $28,029.

4-08-93 Finished out of hole w/rods. ND wellhead & install BOP's. Finish in hole & tag. Tally out of hole w/tubing. The fill/top of RBP is at 9758.5' KB. RIH w/retrieving head on 2 7/8" tbg. Washover and latch onto RBP. Start POH. DC = $1,700. CC = $29,729.

4-09-93 Finish out of hole w/tbg. RU Jarrel Services. Set CIBP @ 9774' KB. RD Jarrel. RIH w/RTTS pkr & SN on 300 jts of 2 7/8" tbg. Set RTTS @ 9642.87'. RU swab. Made 7 runs in 4 hours & recovered 0 BO & 47 BW. Initial FL - 0' FS & Final FL - 8,000' FS. Swab line kinked on eighth run. POH & SDFN. DC $5,933. TC $35,662.

4-10-93 Initial FL 8080' FS. Made 8 runs in 9 hours & recovered 0 BO & 10 BW. F FL swabbed down to SN on first run. Made 1 run/hour thereafter. Fluid entry = 100'/hour. 14 BFPD. DC $1,200.

4-11-93 Shut down for Easter Holiday.

4-12-93 Shut down for Easter Holiday.

4-13-93 Made 5 swab runs in 5 hours. Initial FL @ 9450' & Final FL @ SN. 100' of fluid entry/hr. Recovered 3 BW. DC = $700. CC = $37,562.

4-14-93 Well shut-in for engineering evaluation.

4-15-93 Open bypass & equalize. Release RTTS pkr. FIH 132.2' & tag CIBP @ 9775.07' KB (tbg tally). POH. RIH w/Howco R4 tension pkr to 60'. Test pipe rams to 2000 psi for 15 min - OK. POH. RIH w/Howco & set @ 120'. Test blind rams to 2000 psi for 15 min - OK. POH. RIH w/RTTS pkr & SN on 2 7/8" tbg to 9600'. Leave pkr swinging. Secure well & SDFN. DC = $1,200. CC = $38,762.

4-16-93 Finished in hole & tag CIBP @ 9775'. Pick up to 9760' & set RTTS. Test to 2500 psi - OK. Open bypass. Spot acid to 9700'. Reverse circulate acid to frac tank. Spot 300 gal 15% NEFE HCl across perfs. Pull up to 9298' & set RTTS. RD Howco. Let acid soak for 1 1/2 hrs. RU swab. Made 17 runs in 6 hrs & recovered 0 BO & 115 BW. Initial FL - 700' FS & final FL - 4500' FS. SDFN. DC = $4,040. CC = $42,802.

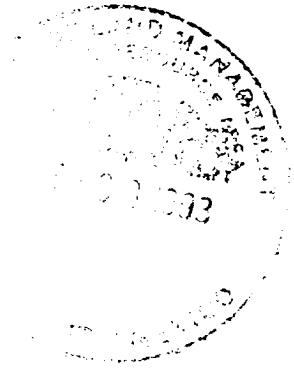
4-17-93 SITP = 0. Made 24 swab runs in 10 hrs & recovered 4 BO & 192 BW. Initial FL @ 700' FS & final FL @ 3000' FS. No oil after first run. Take in water sample to be analyzed. DC $1,300. TL 32 BO & 736 BW.

4-18-93 SITP = 0. Made 3 swab runs in 1 1/2 hrs & recovered 3 BO & 24 BW. Initial FL @ 700' FS & final FL @ 2500' FS. No oil after first run. RD swab. RU AA Oilfield Service for injectivity test on upper zone. Load tbg w/6 BW & caught pressure. .83 BPM @ 600 psi. Pumped a total of 43.3 bbl. ISIP = 1200 psi. Bled back 6 BW to truck. RD AA. Open bypass & release pkr. POOH. RIH w/mud jt, SN, 2 jts 2 7/8" tbg, TAC & 300 jts 2 7/8" tbg. ND BOP's. Set TAC w/14 pts tension & install wellhead. Bottom @ 9745'. SN @ 9715'. TAC @ 9648'. SDFN. NOTE: Chlorides -22,000 mg/l. DC $2500. TL 35 BO & 766 BW.

4-19-93 RIH w/rods & pump. Space out & hang well on. Start well pumping @ 10:30 AM. DC $1200. TL 35 BO & 766 BW.

4-20-93 Well pumped and flowed 8 BO & 400 BW. DC $500. TL 43 BO & 1166 BW.

4-21-93	Well pumped 0 BO & 31 BW. Ajax engine down. Restart ajax.
4-22-93	Well pumped 0 BO & 515 BW in 24 hours.
4-23-93	Well pumped 17 BO & 538 BW in 24 hours. FL = 7688' FAP.
4-24-93	Well pumped 17 BO & 523 BW in 24 hours. FL 52 jts from surface. DC $1000.
4-25-93	Well pumped 22 BO & 486 BW in 24 hours. FL 48 jts from surface. DC $300.
4-26-93	Well pumped 22 BO & 515 BW in 24 hours. FL 41 jts from surface.
4-27-93	Well pumped 17 BO & 95 BW in 18 hours. Ajax down.
4-28-93	Well pumped 28 BO & 543 BW in 24 hours. FINAL REPORT.



PURPOSE: Perform step-rate test & marcit gel treatment.

6-02-93 Safety anchors tested to 22,500# 7/92. MIRU Lucky Well Svc unit. Unseat pump. Install rod stripper & POOH w/ rods & pump. Circ'd hole w/ 210 bbls 2% KCl wtr. Installed 6" 1500 series manual BOP's. Released tbg anchor. POOH w/ tbg. RIH w/ 5-1/2" RBP & 4 jts tbg. Set RBP & POOH w/ tbg. Pressure test blind rams to 2000 psig - held OK. RIH w/ 5-1/2" tension pkr & 2 jts tbg. Set pkr. Pressure test pipe rams to 2000 psi - held OK. POOH w/ tbg & pkr. RIH w/ tbg & retrieved RBP. POOH w/ tbg & RBP. RIH w/ 5-1/2" RTTS pkr, SN & 299 jts 2-7/8" tbg to 9622'. Hydrotested tbg to 6000 psig while running in hole. SWIFN. DC = $13,200.

6-03-93 SITP/SICP 0 psig. Set pkr @ 9622' w/ 17 pts compression. R/U Halliburton & Holmes W.L. to perform step rate test. R/U full lub. Pressure tested lines & lub to 6000 psig. Load csg & press csg to 600 psig. RIH w/ tandem pressure gauges w/ surf readout to 9700'. Perform step rate test w/ 2% KCl wtr. Pump @ rates of 0.5, 0.75, 1.0, 1.4 & 1.7 BPM. Formation parting pressure was determined to be 8700 psig btm hole & 4400 psig surf @ 1.0 BPM. Ran injectivity test w/ 2% KCl wtr. Pumped 80 BW @ 0.75 BPM w/ constant BHP of 7270 psig & surf pressure of 1900 psig. R/D Holmes W.L. & lub. Pump marcit gel treatment as follows: Pump 100 bbls 2% KCl wtr @ 0.75 BPM. Pump 160 bbls 3000 ppm x-linked marcit gel. Pump 31 bbls 4000 ppm x-lined marcit gel. Pump 30 bbls 4000 ppm un-xlinked marcit gel. Pump 58 bbls 2% KCl wtr flush. Surf press inc. from 3000 psig to 4400 psig w/ pump rate decreasing from 0.75 BPM to 0.4 BPM during job. Avg pump rate 0.55 BPM. SWI to allow gel to viscosify. DC = $15,183. CC = $28,383.

6-04-93 WELL SI TO ALLOW GEL TO BUILD VISCOSITY. DC = $9,316. CC = $37,699.

6-05-93 WELL SI TO ALLOW GEL TO BUILD VISCOSITY. DC = $650.

6-06-93 WELL SI TO ALLOW GEL TO BUILD VISCOSITY. DC = $70.

6-07-93 WELL SI TO ALLOW GEL TO BUILD VISCOSITY. DC = $70.

6-08-93 SITP/SICP 0 psig. R/U swab. RIH w/ swab & tagged FL @ 500'FS. Made 15 SR's in 5 hrs. FFL 7600'FS. Swabbing from SN @ 9615'. Recov'd 100 BW w/ trace of oil. Last 3 SR's from SN. Recov'g 16 BF/hr. SWI for 90 min. Had 3000' of fluid entry. Made 3 SR's in 1-1/2 hrs. IFL @ 6000'FS. FFL @ 6500'. Swabbing from 8500'. Recov'd 30 BW w/ trace of oil. TR - 130 BW w/ trace of oil. R/D swab. Rel RTTS pkr. POOH w/ tbg & pkr. RIH w/ MA, perf'd sub, SN, 2 jts 2-7/8" tbg, 5-1/2" tbg anchor & 118 jts 2-7/8" tbg. SWIFN. DC = $11,792. CC = $42,260.

6-09-93 SITP/SICP 0#. FIH w/ mud jt, SN, 2 jts 2-7/8" tbg, 5-1/2" tbg anchor on 300 jts 2-7/8" tbg. Removed BOP. Set tbg anchor w/ 14,000# tension. Installed hanger flange. WIH w/ gas anchor, 1-1/2" pump, (1) K-bar, 33K shear tool, (22) K-bars on 7/8" steel & 1.25" fiberglass rods. Seated pump. Spaced out rods. Hung well on. Well pumped up @ 1:15p. PLACED WELL ON TEST. DC = $1,976. CC = $44,236.

6-10-93 Well pumped 0 BO & 36 BW. Ajax down.

6-11-93 Well pumped 0 BO & 189 BW in 24 hours.

6-12-93 Well pumped 0 BO & 250 BW in 24 hr test.

6-13-93 Well pumped 0 BO & 100 BW. Ajax down.

6-14-93 Well pumped 0 BO & 217 BW in 24 hr test.

6-15-93 Well pumped 0 BO & 200 BW in 24 hour test.

6-16-93	Well pumped 0 BO & 275 BW in 24 hour test.
6-17-93	Well pumped 0 BO & 285 BW in 24 hour test.
6-18-93	Well pumped 0 BO & 250 BW in 24 hour test.
6-19-93	Well pumped 0 BO & 249 BW in 24 hour test.
6-20-93	Well pumped 0 BO & 253 BW in 24 hour test.
6-21-93	Well pumped 0 BO & 252 BW in 24 hour test. JOB COMPLETE.

PURPOSE: Squeeze existing perfs & recomplete in lower Devonian.

6-23-93 MIRU Diamond Rental double derrick. L/D horsehead & polish rod. POOH w/ 5', 17', & 163 1-1/4" fiberglass rods, (119) 7/8" steel rods, 20K bars, (1) 33K shear tool, (1) K-bar & 30' insert pump. N/D WH. N/U 6" 900 BOP w/ 2-7/8" & blind rams. Circ'd 210 bbls 2% KCl wtr. Rel tbg anchor. Secured well & equipment. SDFN. DC = $2,842.

6-24-93 OWU on vacuum. POOH w/ 2-7/8" L-80 tbg, SN, perf sub, 1 jt & bullplug. R/U Wedge W.L. N/U 6" 900 frac valve. R/U lubricator & test to 1000 psi. RIH w/ Baker cmt retainer, GR & CCL. Set retainer @ 9688'. R/D W.L. P/U stinger & strap in hole w/ 2-7/8" tbg. Tag cmt retainer. R/U Dowell Schlumberger. Sting into retainer & test tbg to 4000 psi. Surf pressure w/ 8.6# prod wtr. Put 500 psi on annulus. Establish inj. rate into perfs @ 9738-9758' of .65 BPM @ 3650 psi. Mix 75 sx Class "H" cmt w/ .5% fluid loss. Displace cmt to 7600'. Sting into retainer & began squeezing perfs. Max pressure 3890 psi; min pressure 2500 psi. Max rate .57 bbls/min; min rate .19 bbls/min. Staged 51.3 sx to formation. Squeeze would not hold. S/D because of mixing time & daylight. Reversed out 19 sx. R/D cmt'rs. Pull 2 stds. Secure well. SDFN. DC = $11,535. CC = $14,383.

6-25-93 Open well - dead. POOH w/ 2-7/8" tbg. L/D Baker cmt retainer stinger. TIH w/ 4-3/4" bit, (6) 3" DC's & 2-7/8" 6.5# L-80 tbg to 8450'. Secure well. S/D - WOC. DC = $2,336. CC = $16,719.

6-26-93 GIH w/ 4-3/4" bit, (6) 5-1/2" DC's & 2-7/8" 6.5# L-80 tbg from 8450'. Tag cmt @ 9675'. Drill cmt./ Drill retainer @ 9688'. Fell out of cmt @ 9763'. Go to btm. Tag CIBP @ 9774'. Circ hole clean. Test squeeze to 1000 psi, OK. TOOH. L/D DC's. P/U 5-1/2" csg scraper. TIH. Tag CIBP @ 9774'. Pull 35 stds. Secure well. SDFN. DC = $5,770.

6-27-93 COOH w/ 2-7/8" tbg, 5-1/2" scraper & 4-3/4" bit. R/U Wedge W.L. N/U lub. Test lub to 1000 psi. GIH w/ csg gun, GR & CCl. Perf from 9763-9772' w/ 4 JSPF @ 90° phasing. Go down w/ gun & tag CIBP @ 9774'. COOH. R/D W.L. & lub. N/D 6" 900 frac valve. GIH w/ bullplug & mud anchor, perf sub, SN, 2 jts 2-7/8" tbg, TAC & 300 jts 2-7/8" 6.5# L-80 tbg. Land tbg @ 9745.39' w/ TAC @ 9643' & SN @ 9708'. Secure well. SDFN. DC = $4,108.

6-28-93 GIH w/ 2-1/2 x 1-1/2 x 28'x 30' pump, 26K shear tool, 21 K-bar, (119) 7/8" steel rods, (163) 1-1/4" fiberglass rods, 1-15', 1-5' sub & polish rod. Hung on & tie into flowline. Chk pump action - OK. RIG DOWN & RELEASE RIG. DC = $2,628. CC = $29,225.

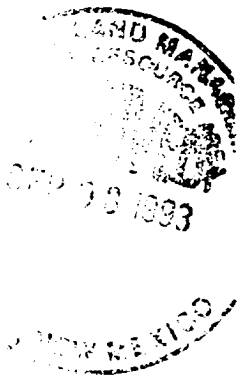
6-29-93 Well pumped 0 BO & 154 BW in 21 hr test/0 BO & 176 BW 24 hour avg.

6-30-93 Well pumped 0 BO & 109 BW in 24 hr test. CP - vacuum.

7-01-93 Well pumped 0 BO & 6 BW in 24 hr test. CP - vacuum.

7-02-93 Rods parted - rig on well.

7-03-93 Parted rods.



7-04-93	Well pumped 0 BO, 137 BW, 21 hour test.
7-05-93	Well pumped 0 BO, 6 BW in 24 hours.
7-06-93	Well pumped 0 BO, 6 BW, pump problems.
7-07-93	Started pumping at 4:30 PM MST. Well pumped 0 BO, 0 BW. Well down.
7-08-93	Well pumped 25 BW in 16 hours. Well not pumping at 8:00 AM MST. Ran dyno on well, indicated TAC to be unset and parted. Shut well down. DC = $200. CC = $32,975.
7-09-93	CP: 4 PSI, TP on strong vacuum. MIRU Pool Well Service 10:30 AM MST. RU kill truck and pumped 20 BW down tbg., tbg. still on strong vacuum. Unbeamed well unseat pump POOH w/fibergiass and steel rods w/1.5" sinker bars. Sinker bars badly bent at pins. Dropped standing valve and loaded tubing w/40 BW. Tested tbg. to 1000 PSI. Held OK for 5 mins. ND wellhead and checked TAC. Found TAC set properly. NU wellhead. SDFN. DC = $1,800. CC = $34,775.
7-10-93	RU fishing tool and fished standing valve. Laid down 20 - 1 1/2" x 25' K-Bar (sinker bars). PU 2 1/2" x 1 1/2" x 30' RHBC pump, 1 - 7/8" x 25' EL steel rod, shear tool, 19 - 7/8" x 25' EL steel rods, 32 - 7/8" x 25' Norris "90", 58 - 7/8" x 25' Norris "90" w/rod guides, 27 - 7/8" x 25' Norris "90", 163 - 1.25" x 37.5' Fiberglass rods, 1 - 1.25" x 18' and 6' Fiberglass ponies, 1 1/2" x 26' polish rod, 1 3/4" x 16' liner. Loaded tubing with 28 BW. Tested to 500 psi - OK, spaced well out and checked pump action - OK. RDMO PU. Started well pumping to facility at 2:30 PM MST. TL: 220 BW, TR: 0 BO & 151 BW. DC = $3,150. CC = $37,925.
7-11-93	Well pumped 97 BW, in 18 hours. Casing on vacuum. TL 220 BW, TR 0 BO & 248 BW.
7-12-93	Well pumped 3 BW in 24 hours. Casing on vacuum. Could not obtain fluid level. Well appears pumped off. Shut well down to prevent additional failure.
7-13-93	DROPPED WELL FOR FURTHER STUDY.