

P-W

HUMBLE #3 NAVAJO
SW SE 4-41N-28E APACHE CO. 515

COUNTY Apache AREA 40 mi W/Shiprock ^{East Boundary Belts} LEASE NO. 14-20-603-413

WELL NAME Humble No. 3 Navajo ⁸⁻¹⁻⁷⁰ ~~Merrion & Bayless~~ ¹⁰⁻¹⁻⁸¹ Oil & Gas Corp.

LOCATION SW/SE SEC 4 TWP 41N RANGE 28E FOOTAGE 330' FSL - 1650' FEL
 ELEV 5400' GR 5410' KB SPUD DATE 8-27-69 STATUS Producing SWD TOTAL DEPTH 5010'
 COMP. DATE 11-30-69 PBTD 4965'
 CONTRACTOR Mesa Drillers, Box 108, Lubbock, TX 79408

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY	DRILLED BY CABLE TOOL	PRODUCTIVE RESERVOIR	INITIAL PRODUCTION
8 5/8"	995	640 sx		X		Paradox	72 oil, 179 MCF
5 1/2"	5000	178 sx +					172 water

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Ismay	4573-4644		X	
Lower A2	4644-4737			
Desert Creek	4737-4839			
Akah	4839-5010	T.D.		

See EBB Water Disposal Project

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
IES-2			SAMPLE DESCRP.
Sidewall Neutron Por. -2			SAMPLE NO. #1489 Tuc.2582
			CORE ANALYSIS None
			DSTs None

REMARKS * Merrion & Bayless new operators as of 8-1-70.
* 10-1-81 Name changed to Merrion Oil & Gas Corp.
* Purchase by Central Resources 1-1-97

APP. TO PLUG _____
 PLUGGING REP. _____
 COMP. REPORT 12-5-69
12-8-70

WATER WELL ACCEPTED BY _____

BOND CO. United States Fidelity & Guaranty ^{filed in} 1/15/8 BOND NO. 010130-972-74 91372
 BIA DATE _____
 BOND AMT. \$ 25,000 CANCELLED 6-9-97/11/97 ORGANIZATION REPORT 3-22-67
 FILING RECEIPT 9597 LOC. PLAT X WELL BOOK X PLAT BOOK X
 API NO. 02-001-20115 DATE ISSUED 8-25-69 DEDICATION W/2 of SE/4

PERMIT NUMBER 515

Dist: Orig+4 (BLM); 1-Ariz O; 1-EPA-Jim Walker; 1-Navajo EPA (Shiprock, NM); 1-A (Gallup, NM);
 1-Navajo Nation (Window Rock, AZ); 1-Land, 1-Acctng, 1-Well File

Form 5160-5
 (June 1950)

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No.
 14-20-603-413

6. If Indian, Apache or Tribe Name
 Navajo Tribal

7. If Unit or CA, Agreement Designation
file 515

8. Well Name and No.
 Navajo No. 3

9. API Well No.
 02-001-20115

10. Field and Pool, or Exploratory Area
 East Boundary Butte

11. County or Parish, State
 Apache County,
 Arizona

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

1. Type of Well
 Oil Well Gas Well Other SWD

2. Name of Operator
 Merrion Oil & Gas Corporation

3. Address and Telephone No.
 610 Reilly Avenue, Farmington, NM 87401-2634 (505) 327-9801

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
 330' fsl & 1650' fel
 Section 4, T41N, R28E

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Tubing Leak
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

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.)

Note: Corrected API as per Steve Rauzi - Arizona Geological Survey.

Merrion Oil & Gas Corporation repaired tubing leak on the above referenced well as follows:

8/27/96 MIRU Big 'A' Well Service. Spot pump and pit, haul in 300 bbls of fresh water. ND WH & NU BOP. Release Loc-Set packer and TOH (tally). Pulled 84 joints of 2-3/8" plastic lined EUE tubing. Next joint was non-upset 2-3/8" tubing - did not have correct size slips for NU 2-3/8" tubing. Left 1 joint of 2-3/8", EUE tubing on top.

8/28/96 Change out slips and elevators for 2-3/8", NU, Buttress threads. Continue TOH with packer & tubing, 70 joints of 2-3/8", NU tubing. Found hole in 2-3/8", EUE to 2-3/8", NU crossover.

*** CONTINUED OTHER SIDE ***

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

Signed Connie Dinning Title Engineer

(This space for Federal or State office use)

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



8/29/96 PU Baker A2 Loc-Set packer. RIH on 70 jts of 2-3/8", NU, Buttress tubing and 84 joints of 2-3/8", EUE tubing. Set packer at 4798' KB and press test casing/tubing annulus. Pressured up to 500 psi but bled off in approx. 2 mins. Made multiple attempts to pressure test, but never held pressure. Release packer and move up hole approx. 12' and set packer. Pressured up to 500 psi but still bled off. Release packer and move up to 4604' KB (above Ismay/Desert Creek squeezed perms) and set packer. Pressure test did not hold, pressured up to 500 psi but bled off (same as before). Release packer, move up hole and set at 2127'. Pressure test did not hold (same as before). Release packer, move up hole to 2002' (above Coconino squeeze perms). Pressured up to 500 psi but bleed off same as before. Release packer and set 2 more times on the way out with the same result. Tried to set packer at 90' but unable to get slips to hold. POOH with packer and installed bull plug on bottom and pressure test packer, mandrel and bottom 90' of tubing, held 500 psi - OK.

8/30/96 Received 159 jts of 2-3/8", EUE tbg from Farmington yard to use as workstring. PU Baker Model 'C' RBP & Model 'C1' fullbore pkr. RIH on 153 jts of 2-3/8" tbg (workstring). Set RBP at 4810' KB. Pull up hole to 4779' (did not set packer) & load hole w/30 bbls of fresh water. Install TIW valve on tbg & pump dwn csg to press test csg. Press up to 650 psi - held OK. TIH & release RBP. TOH w/RBP/pkr assembly (laying dwn workstring). Install SN & standing valve on bottom of 2-3/8", NU, Buttress tbg & TIH. Press test tbg, would not hold press. TOH looking for hole, found hole in collar between 7th & 8th jt off bottom. SDFN.

8/31 - 9/02/96 Shut down for weekend and Holiday.

9/03/96 LD 25 jts of 2-3/8", NU, Buttress tubing. PU Baker A2 Loc-Set packer. RIH on 24 jts of PL, 2-7/8", EUE tubing, 84 joints of PL, 2-3/8", EUE tubing and 45 joints of PL, 2-3/8", NU, Buttress tubing (4772.27'). ND BOP and NU WH. Pump 90 bbls of packer fluid down casing/tubing annulus. SD pump. ND WH and set packer at 4782' KB. NU WH and fill casing/tubing annulus with 20 more bbls of packer fluid. Press test casing/tubing annulus. Press up to 500# - did not hold. Reset packer and made several attempts to press test, but would never hold pressure. ND WH & NU BOP. Release packer and TOH. LD packer and TIH hole with 24 jts of 2-7/8" tubing (bull plugged on bottom). Press test to 500# - held OK. TOH with 2-7/8". SDFN.

9/04/96 RIH with 84 jts of PL 2-3/8", EUE tubing and 45 jts of PL 2-3/8", NU, Buttress tubing (bull plugged on bottom). Press tested tbg on the way in. Found small leak in 13th joint from bottom (2-3/8", EUE). Damaged 1 joint with tongs and also found 1 joint with a corroded collar. LD bad joints and press tested entire string to 500# for 30 mins - held OK. TOH. SDFN.

9/05/96 LD 12 jts of 2-3/8", NU, Buttress tubing. PU Baker A-2 Loc-Set packer and RIH on 39 jts of PL 2-7/8", EUE, 81 jts of PL 2-3/8", EUE and 33 jts of PL 2-3/8", NU, Buttress tubing. ND BOP and NU WH. Pump 70 bbls of packer fluid down backside (csg/tbg annulus). ND WH and set packer at 4779' KB. NU WH & pump 20 more bbls of packer fluid down backside to fill up annulus. Press test backside to 500# - held OK. RU Cementers Inc and press test (MIT) backside - held 500# for 30 mins. Pumped 500 gal of 28% HCl down tubing and displaced with 21 bbls of fresh water. Pumped acid 2-3/4 bpm at 500#. Performed Step Rate Injection Test as follows:

Rate (bpm)	Pressure (actual) (psi)	Fluid Pumped (bbls)
0.25	0	1.25
0.50	0	2.5
0.75	0	3.75
1.00	20	5
1.50	80	7.5
2.00	300	10
2.50	420	12.5
3.00	620	15

(Test witnessed and approved by Melvin Capitan - Navajo EPA 9/5/96)

Pumped remaining water (in rig pit) down tubing to dispose. RDMOL at 4:00 PM 9/5/96.

M.I.T.

Dist: 0-4 (BLM-Fmtgn, NM); 1-Ariz OCD; 1-EPA-Jim Walker; 1-Navajo EPA (Shiprock, NM);
 1-BIA (gallup, NM); 1-Navajo Nation (Window Rock, AZ); 1-Crystal; 1-Accounting; 1-Well
 File

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

5. Lease Designation and Serial No.
 14-20-603-413

6. If Indian, Allottee or Tribe Name

Navajo Tribal

7. If Unit or CA, Agreement Designation

P/N 515

8. Well Name and No.

Navajo No. 3

9. API Well No.

02-001-87064 20115

10. Field and Pool, or Exploratory Area

East Boundary Butte

11. County or Parish, State

Apache, AZ

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other SWD

2. Name of Operator

Merrion Oil & Gas Corporation

3. Address and Telephone No.

610 Reilly Ave., Farmington, NM 87401-2634 (505) 327-9801

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

330' fsl & 1650' fel,
 Section 4, T41N, R28E

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Squeeze Casing Leak
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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.)

Merrion Oil & Gas Corporation plans to squeeze casing leak on the above referenced well as follows:

Prior to Move In: Check wellsite for anchors.

Check for Casing Leak

- MIRU pulling unit. Nipple up BOPs.
- Release Lok-set packer and tally out of hole.
- PU 5 1/2" RBP and RCP. RIH, set RBP above Akah perfs @ 4785' KB ±.
- Set RCP above RBP and pressure test with water (use pump truck) to 1,000 psi.
- Move packer up hole and isolate casing leak(s). (Check old perforated intervals and shallow squeeze holes as depicted on attached schematic.) Pressure test to 500 psi maximum pressure.
- Note pump-in pressure and rates for squeeze design.



*** CONTINUED OTHER SIDE ***

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

Signed

George W. Blinn

(This space for Federal or State office use)

Title Engineer

Date 8/20/96

Approved by

Conditions of approval, if any:

Title

Date

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.

Squeeze Casing Leak

1. After leak(s) isolated, move RBP and reset at depth necessary to minimize exposing casing to squeeze pressures. Dump sand on RBP.
2. Reset RCP \approx 200 feet above leak. Mix and pump 50 sx Class B cement. Displace below RCP. Shut down and stage remaining cement until 100' \pm remaining in casing or until squeeze pressure of 500 psi attained.
3. Flow back slowly to check squeeze. Leave 200 psi on squeeze overnight. SDON to WOC.
4. If other leaks present, move up hole and repeat squeeze sequence.
5. Drill out squeeze(s) and pressure test to 500 psi.
6. Clean out and retrieve RBP. POH.

Acidize Akah Perfs

1. RIH w/ Lok Set packer on production string, set packer @ 4,785' KB.
2. Pump 200 gals. 28% HCl w/ inhibitor, then 150 gals. acid w/ 20 ball sealers, follow w/ 150 gals. acid.
3. Displace acid into perfs (4,848' - 4,866' KB) and let soak for 30 minutes.
4. Displace acid into formation with water.
5. Unset packer and move downhole past all perfs to knock balls to bottom.
6. Move back uphole with packer and set at 4,785' KB. Pressure test annulus to 300 psi.
7. If pressure holds, unset packer and circulate packer fluid, reset packer.

Step Rate Injection Test

Rig up acid pump w/ chart recorder and pump fresh water into perforations at the following rates:

<u>Rate</u>	<u>Estimated Friction Pressure</u>
1/4 BPM	0 psi
1/2 BPM	68 psi
3/4 BPM	80 psi
1 BPM	90 psi
1 1/2 BPM	170 psi
2 BPM	315 psi
2 1/2 BPM	436 psi
3 BPM	630 psi

Pump at each rate until pressure stabilizes and hold for 5 minutes before proceeding to the next rate.

Perform MIT

1. Notify Connie Dinning to set up testing schedule with the EPA and Navajo tribe.
2. MIRU pump truck w/ chart recorder to pump into casing/tubing annulus.
3. Hold pressure @ 300 psi for 30 minutes.
4. Put well back on to injection.

MERRION OIL AND GAS CORP.
WELLBORE SCHEMATIC

NAVAJO NO. 3

SECTION 4, T41N, R28E
APACHE COUNTY, ARIZONA

ENG: G.F. SHARPE DRFT: M.E.G.
DATE: 6-17-91

Dead Point
50' 100' - 100'
50' (shallow)

Post-It™ brand fax transmittal memo 7671		# of pages 1	
To: STEVE RAHTEL	From: DONNIE DIRMING		
Co: A.Z. GEO SURVEY	Co: MERRION OIL & GAS		
Dept: OIL & GAS TRAC.	Phone: (505) 327-3909		
Fax: (520) 770-3505	Fax: (505) 326-5900		

ELEVATION:
SURFACE: 5073'

CASING:
8 5/8", 25#
@ 995' W/640 SX CEMENT

CEMENT ACROSS COCONING SAND
COCONING-SQUEEZE HOLES 2050'
SQZ W/150 SX CLASS H W/1% CaCl

2 3/8" PL TUBING @ 4785'
TOP OF CEMENT @ 3775' ESTIMATED

PERFORATIONS	
ISMAY	4717-4723'
DESERT CREEK	4763-4768'

SQZ ISMAY & DESERT CREEK W/100 SX
CLASS H W/.6% FLUID LOSS AND 1% CaCl

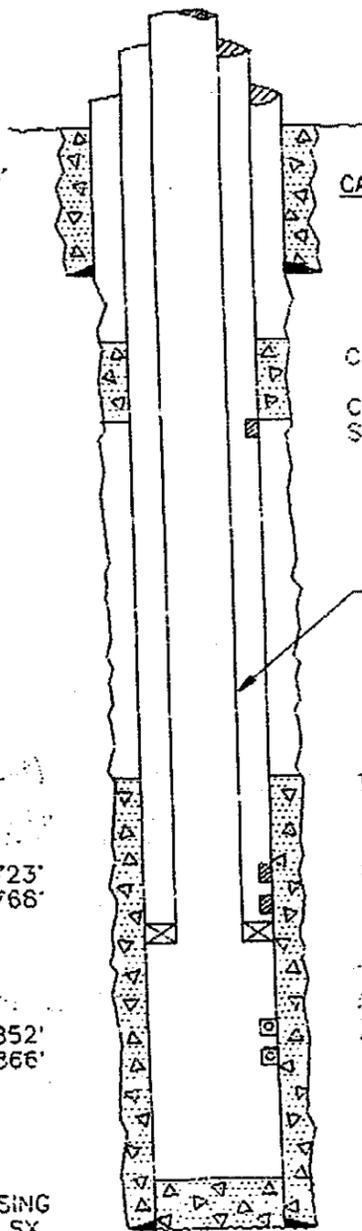
AKAH	4848-4852'
AKAH	4862-4866'

BAKER LOK-SET PKR @ 4785'

ACIDIZE AKAH W/6000 GAL HCl

5 1/2", 14# CASING
@ 5000' W/178 SX

PBTD: 4965'
TD: 5010'



Distribution:
 0+4 (BLM-Farmington, NM)
 1 - (Arizona Oil & Gas)
 1 - (BIA-Window Rock, AZ)

Form 3160-5
 (June 1990)

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. 14-20-603-226
2. Name of Operator Merrion Oil & Gas Corporation	6. If Indian, Allottee or Tribe Name Navajo Tribe
3. Address and Telephone No. P.O. Box 840, Farmington, New Mexico 87499 (505) 327-9801	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1980' FSL & 1915' FWL Section 3, T41N, R28E	8. Well Name and No. Navajo 3-11
	9. API Well No. 02-001-20095
	10. Field and Pool, or Exploratory Area East Boundary Butte
	11. County or Parish, State Apache, Arizona

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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.)

We request your approval for a temporary permit to transport water from the subject well to the Navajo No. 3 disposal well on Lease No. 14-20-603-413. The water is being transported through a 3" water line, as it has been for many years. Unfortunately, we recently discovered that a right-of-way was never filed on the line. A right-of-way application has been filed to replace the old water line with a new 3" plastic line. We need the temporary permit to continue to use our current line until the new line can be approved and installed.

not necessary - see letter dated 1/25/93 SLB

JAN 21 1993

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

Signed [Signature] Title Reservoir Engineer Date 1/18/93

(This space for Federal or State office use)

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

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

APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO POROUS FORMATION

Operator Merrion Oil & Gas Corp.		Address P. O. Box 840, Farmington, NM 87499	
Federal, State or Indian Lease Number. or lessor's name if fee lease Navajo Tribal 14-20-603-413	Well No. 3	Field East Boundary Butte	County Apache
Location 330' FSL & 1650' FEL, Sec 4, T41N, R28E			
CASING AND TUBING DATA			
Name of string	Size	Length	Cement Data
Surface Casing	8-5/8"	995	640 sx (circ to surface)
Intermediate			
Long String	5-1/2"	5000'	178 sx (top @ 3775' estimated)
			Name, Model and Depth of Tubing Packer
Tubing	2-3/8"	4785'	Lok-Set at 4785'
Name of Top and Bottom of Injection Zone Akah 4848' - 4866'			
Is Injection through Tubing, Casing or Annulus? Plastic lined tubing	Perforations or Open Hole? Perforation	Is this a new well Drilled for Disposal? No	
List all Cement Squeeze Operations. Giving Interval and Number Sacks Cement Sqz 4717'-4768' (Ismay/Dsrt Crk) w/ 160 sx, Sqz 2050' (Coconino) w/ 150 sx			
Is Injection Zone Productive of Oil or Gas in This Field? Yes	Depth of Deepest Fresh Water Zone Coconino - 1950'	Depth of Shallowest Productive Zone 4714' - Ismay	
Anticipated Daily Injection Volume (bbls.)	Minimum 250	Maximum As needed	Open or Closed System? Closed
Is Injection to be by Gravity or Pressure? As necessary (injectivity plot attached)	Approx. Pressure (Psi) As necessary	Source of Water to be Injected MOG operated wells	
Are there any other Salt Water Disposal Wells using this same Zone in this Field? No	Yes or No No	If so name one such well below	
Name of Operator of Disposal Well in same zone	Lease Name	Well No.	
Is this well so cased and completed that water can enter no other formation than the above set out injection zone? Yes	Yes or No Yes	Have notices of this application been mailed or given to all operators within 1/2 mile of this injection well? Yes	Yes or No Yes
List names and addresses of all operators within one-half (1/2) mile of this injection well: Merrion Oil & Gas Corporation (as above)			

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the George F. Sharpe of the Merrion Oil & Gas Corp company, and that I am authorized by said company to make this report; and that this report under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge

- INSTRUCTIONS:**
1. Attach a complete full-scale electrical log of this well, if available. Indicate on electrical log, or by other evidence, the base of fresh water zones in this field.
 2. Attach waivers from all operators within one-half (1/2) mile of injection well, or copies of letters notifying such operators of this application. Also attach waiver from surface owners of land on which the disposal well is located, or copy of letter from operator making this application notifying such surface owners of this application and requesting waivers.
 3. ~~Should all necessary operators not accompany application, the State of Arizona Oil & Gas Conservation Commission shall hold such application for a period of ten (10) days from date of receipt. If, after said ten (10) day period, no protest or request for a hearing is received, the application will then be processed.~~

Date approved 6-28-91
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By Steven L. Ravig (Ordet No. 61)

George F. Sharpe
 Signature

6/17/91
 Date

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Application To Dispose of Salt Water By Injection
 Into a Porous Formation
 File Two Copies

Form No. 15

Permit No. 515

5WD

**NAVAJO #3 SWD WELL
East Boundary Butte Field
Revised Application for Permit for Injection**

1.) Plat is attached showing injection well location and the location of all other wells in area of influence.

2.) Production Intervals:

<u>Name</u>	<u>Depth</u>
Ismay	4565'
Desert Creek	4740'
Leadville	5510'

3.) Injection Interval:

<u>Name</u>	<u>Top Depth</u>	<u>Net Thickness</u>
Akah	4842'	50'

The Akah is a grey, dense limestone with vugular and some fracture porosity. The reservoir pressure is estimated to be 2110 psi.

4.) Copies of logs for Navajo #3 attached.

5.) A wellbore schematic is attached which describes the casing in the injection well. The well passed a mechanical integrity test on 2-14-91 which was witnessed by the EPA and the State of Arizona.

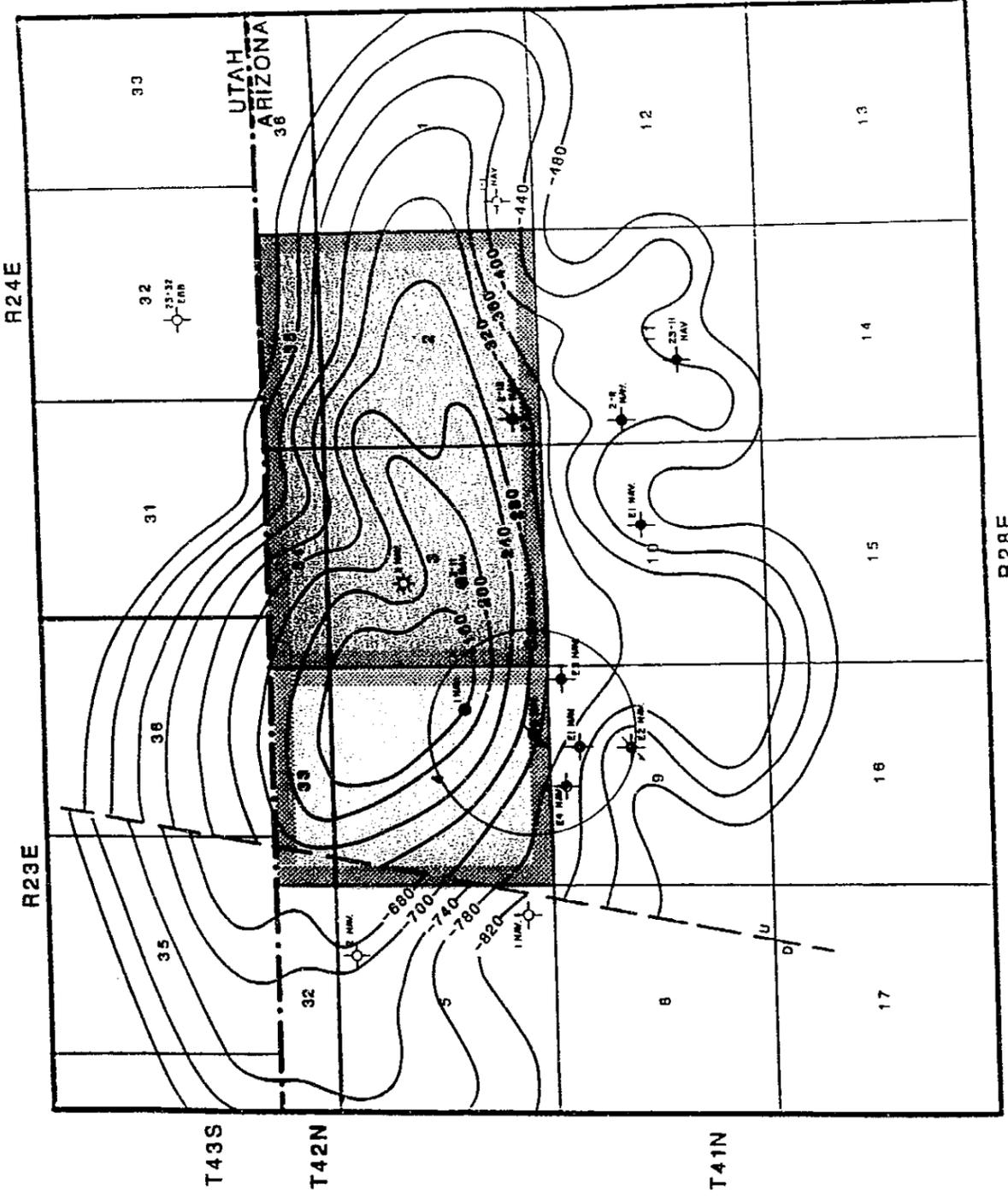
6.) Injection Fluid: All water produced by Merrion Oil and Gas in the area that has water quality equivalent to or better than the Akah Formation. (Analysis of Akah water is attached; TDS = 71,461 mg/l).

7.) Operator: Merrion Oil & Gas Corp.
P. O. Box 840
Farmington, NM 87499

8.) Injection Fluid Analysis: Fluid analyses from the two producing intervals (the Desert Creek/Ismay and the Leadville) are attached. Water analyses are very similar to Akah. Geiger counter and biological activity analyses are being analyzed and will be reported at a later date.

9.) Stimulation: The Akah in the Navajo #3 was acidized with 1000 gal 28% MCA acid and 5000 gal 15% HCl. ^{when?}

10.) Protection of Fresh Water: The nearest fresh water zone is the Coconino Formation at a depth of 1950'. The ± 3000' of strata between the Coconino and the Akah should protect the fresh water interval from fluid migration.



MERRION
 NOO-14-20-803-413
 NOO-14-20-803-226
 * ALL OTHER LEASES ARE
 OPEN INDIAN ACREAGE

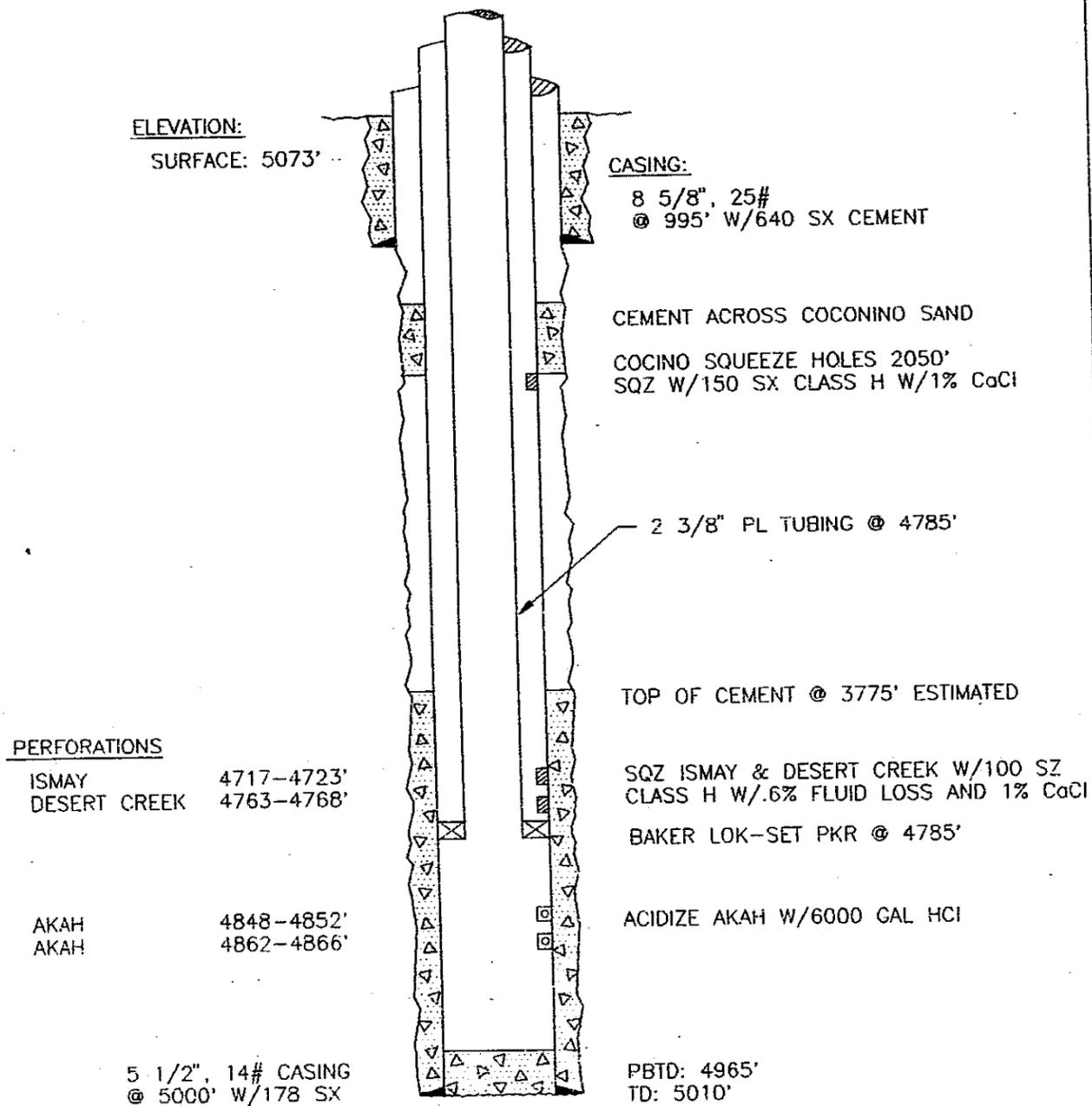
MERRION
 OIL & GAS CORP
 1111 North Garden
 Lubbock, New Mexico 87411
 EAST BOUNDARY BUTTE
 NAVAJO #3
 AREA OF INFLUENCE

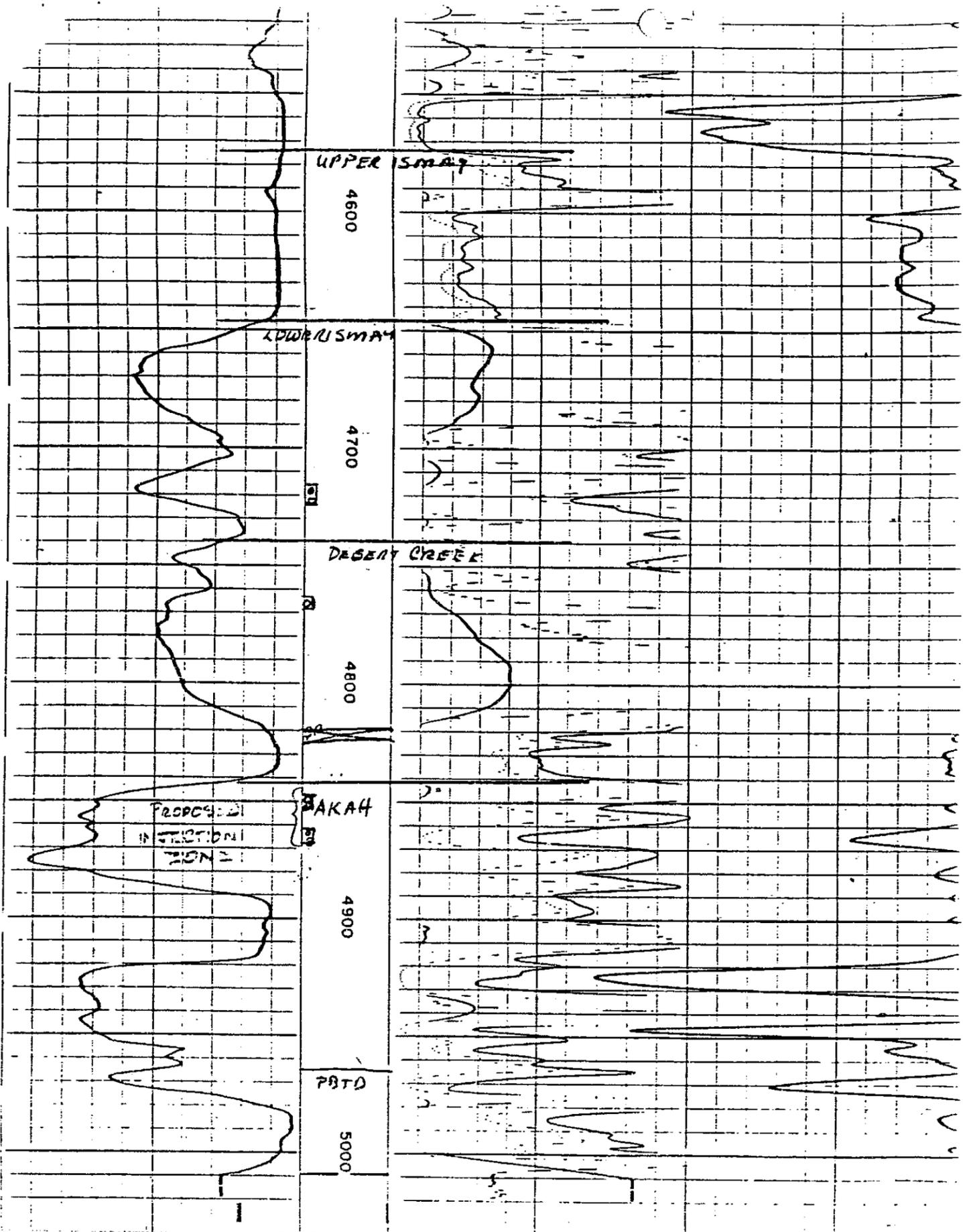
MERRION OIL AND GAS CORP.
WELLBORE SCHEMATIC

NAVAJO NO. 3

SECTION 4, T41N, R28E
APACHE COUNTY, ARIZONA

ENG: G.F. SHARPE DRFT: M.E.G.
DATE: 6-17-91





Chemical Consultants

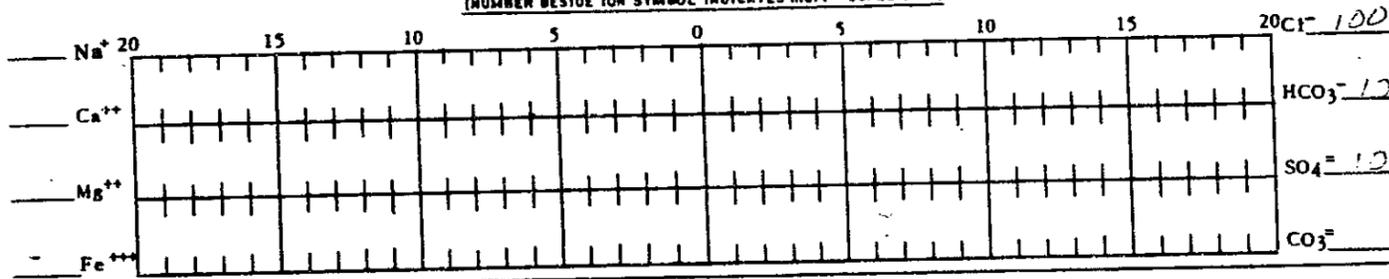
All Types Oil Field Chemicals and Services
P.O. Box 421
Farmington, New Mexico 87401

515

WATER ANALYSIS TEST REPORT

COMPANY MERRION OIL & GAS						SHEET NUMBER
FIELD						DATE 1-12-83
LEASE OR UNIT				WELL(S) NAME OR NO. AKAH	WATER SOURCE (FORMATION)	
DEPTH, FT.	BHT, F	SAMPLE SOURCE	TEMP, F	WATER, BBL/DAY	OIL, BBL/DAY	GAS, MMCF/DAY
TYPE OF OIL		API GRAVITY 0	TYPE OF WATER <input type="checkbox"/> PRODUCED WATER <input type="checkbox"/> INJECTION WATER OTHER _____			

WATER ANALYSIS PATTERN (NUMBER BESIDE ION SYMBOL INDICATES mg/l * SCALE UNIT)



DISSOLVED SOLIDS

CATIONS

	me/l *	mg/l *
Total Hardness	15.2	760.
Sodium, Na ⁺ (calc.)	1,187.	27,300.
Calcium, Ca ⁺⁺	9.6	192.
Magnesium, Mg ⁺⁺	5.6	68.
Iron (Total), Fe ⁺⁺⁺	04.	.8

ANIONS

	me/l *	mg/l *
Chloride, Cl ⁻	1,170.	41,500.
Sulfate, SO ₄ ⁼	5.0	241.
Carbonate, CO ₃ ⁼	0	0
Bicarbonate, HCO ₃ ⁻	27.2	1659.
Hydroxyl, OH ⁻	0	0
Sulfid, S ⁼		
Phosphate - Meta, PO ₃ ⁼		
Phosphate - Ortho, PO ₄ ⁼		

DISSOLVED GASES

Hydrogen Sulfide, H ₂ S	_____	mg/l *
Carbon Dioxide, CO ₂	_____	mg/l *
Oxygen, O ₂	_____	mg/l *

PHYSICAL PROPERTIES

pH	6.46	
Eh (Redox Potential)	_____	MV
Specific Gravity	_____	
Turbidity, JTU Units	_____	
Total Dissolved Solids (Calc.)	71,461	mg/l *
Stability Index @ _____ F	_____	
CaSO ₄ Solubility @ _____ F	_____	mg/l *
Max. CaSO ₄ Possible (Calc.)	_____	mg/l *
Max. BaSO ₄ Possible (Calc.)	_____	mg/l *
Residual Hydrocarbons	_____	ppm (Vol/Vol)

SUSPENDED SOLIDS (QUALITATIVE)

Iron Sulfide Iron Oxide Calcium Carbonate Acid Insoluble

REMARKS AND RECOMMENDATIONS:

* NOTE: me/l and mg/l are commonly used interchangeably for ppm and mg/l respectively. Where ppm and mg/l are used, corrections should be made for specific gravity.

ENGINEER MIKE JONES	DIST. NO.	ADDRESS BOX 421 FARMINGTON, N.M.	OFFICE PHONE 327-7775	HOME PHONE
------------------------	-----------	-------------------------------------	--------------------------	------------



ANALYSIS NO. 52-65-91

FIELD RECEIPT NO. _____

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company <u>Merrion Oil + Gas</u>		Sample No.	Date Sampled <u>06-03-91</u>	
Field	Legal Description <u>53 T41N R28E</u>	County or Parish <u>Apache</u>	State <u>Arizona</u>	
Lease or Unit <u>Navajo</u>	Well <u>3-11</u>	Depth <u>1640-1660</u>	Formation <u>Mississippi + Leadville</u>	Water. B/D
Type of Water (Produced, Supply, etc.)	Sampling Point		Sampled By	

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	<u>16975</u>	<u>738.03</u>
Calcium, Ca	<u>5331</u>	<u>266.00</u>
Magnesium, Mg	<u>778</u>	<u>64.00</u>
Barium, Ba		
Potassium, K	<u>670</u>	<u>17.14</u>

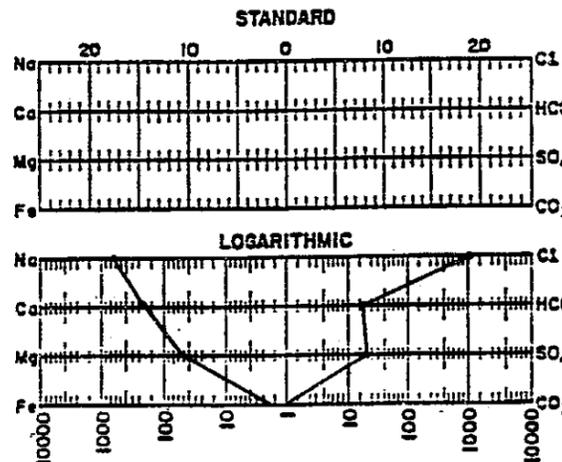
OTHER PROPERTIES

pH	<u>6.48</u>
Specific Gravity, 60/60 F.	<u>1.041</u>
Resistivity (ohm-meters) <u>70 F.</u>	<u>.13</u>
Total Hardness	<u>16500</u>

ANIONS

Chloride, Cl	<u>36780</u>	<u>1037.52</u>
Sulfate, SO ₄	<u>1200</u>	<u>24.98</u>
Carbonate, CO ₃	<u>0</u>	<u>0</u>
Bicarbonate, HCO ₃	<u>1383</u>	<u>22.67</u>
Hydroxide, OH	<u>0</u>	<u>0</u>

WATER PATTERNS — me/l



Total Dissolved Solids (calc.)	<u>63117</u>
Iron, Fe (total)	<u>150 ppm</u>
Sulfide, as H ₂ S	<u>neg</u>

REMARKS & RECOMMENDATIONS:

ANALYST: hee

PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA
 FARMINGTON, N.M.
 BRIAN AULT-District Engineer
 1(505) 327-6222

ANALYSIS NO. 52-64-91

FIELD RECEIPT NO. _____

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company <u>Merrion Oil + Gas</u>		Sample No.	Date Sampled <u>06-03-91</u>	
Field	Legal Description <u>53 T4IN R28E</u>	County or Parish <u>Apache</u>	State <u>Arizona</u>	
Lease or Unit <u>Navajo</u>	Well <u>#2</u>	Depth	Formation <u>Parradox</u>	Water, B/D
Type of Water (Produced, Supply, etc.)	Sampling Point <u>Desert Creek Ismp</u>	Sampled By		

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	<u>22783</u>	<u>990.57</u>
Calcium, Ca	<u>1242</u>	<u>62.00</u>
Magnesium, Mg	<u>1458</u>	<u>120.00</u>
Barium, Ba		
Potassium, K	<u>390</u>	<u>9.97</u>

ANIONS

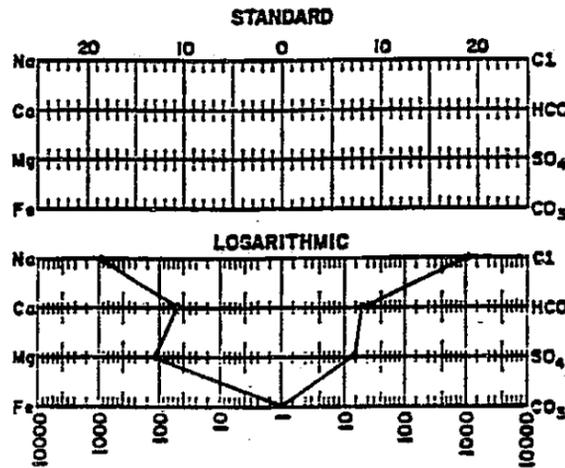
Chloride, Cl	<u>40356</u>	<u>1138.39</u>
Sulfate, SO ₄	<u>920</u>	<u>19.15</u>
Carbonate, CO ₃	<u>0</u>	<u>0</u>
Bicarbonate, HCO ₃	<u>1525</u>	<u>25.00</u>
Hydroxide, OH	<u>0</u>	<u>0</u>

Total Dissolved Solids (calc.) 68674Iron, Fe (total) 0 ppm
Sulfide, as H₂S pos.

OTHER PROPERTIES

pH	<u>6.98</u>
Specific Gravity, 60/60 F.	<u>1.044</u>
Resistivity (ohm-meters) <u>70</u> F.	<u>.11</u>
Total Hardness	<u>9100</u>

WATER PATTERNS — me/l



REMARKS & RECOMMENDATIONS:

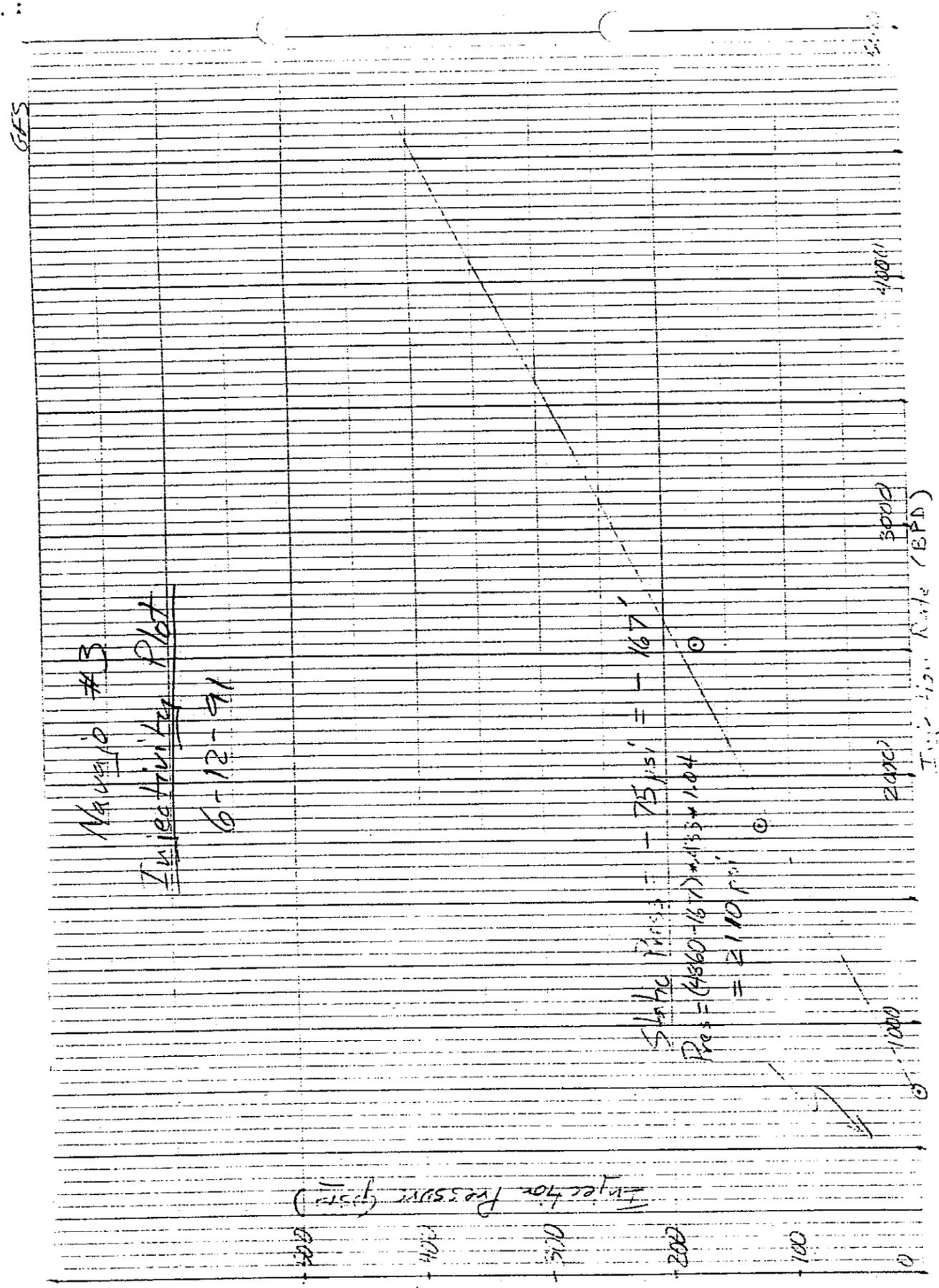
ANALYST: Lee

PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA
 FARMINGTON, N.M.
 BRIAN AULT-District Engineer
 1(505) 327-6222

46 0780

READ BY THE INCHES IN THE
VERTICAL DIRECTION



FAX 505-326-5900

MERRION OIL & GAS CORPORATION

610 REILLY AVE. • P. O. BOX 840
FARMINGTON, NEW MEXICO 87409

515
PH. 505-327-9801

June 27, 1991

Mr. Dan Brennan
Arizona Oil & Gas Conservation Commission
5150 N. 16th Street, Suite B-141
Phoenix, Arizona 85016-3803

Re: Additional Information
Revised Permit Application
Navajo #3 Salt Water Disposal Well
Section 4, T41N, R28E
Apache County, Arizona

Please find attached the following information regarding our revised permit application for water disposal in the Navajo #3:

- 1.) Routine water analysis from zone 5540'-5666' in the Navajo 3-11 well. This analysis was submitted previously, but it was incorrectly marked 1640'-1666' in the depth column.
- 2.) A water analysis from zone 5540'-5564' in the Navajo 3-11 with a bacterial analysis showing a very low sulfate reducing bacterial count.
- 3.) A statement that water from zone 5540'-5564' contains no radioactive material based on a geiger counter test.

Please let me know if any additional information is required.

Sincerely,


George F. Sharpe

GFS/lls:hearltr

cc: Steve S. Dunn/J. Greg Merrion
Well File

EXHIBIT 6



ANALYSIS NO. 52-65-91

FIELD RECEIPT NO.

Permit # 515

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company Merrion Oil & Gas		Sample No.	Date Sampled 06-03-91	
Field	Legal Description 53 THIN R28E	County or Parish Apache	State Arizona	
Lease or Unit Navajo	Well 3-11	Depth 2540-5666	Formation Mississippi	Water, B/D
Type of Water (Produced, Supply, etc.)	Sampling Point Leadville	Sampled By		

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	16975	738.03
Calcium, Ca	5331	266.00
Magnesium, Mg	778	64.00
Barium, Ba		
Potassium, K	670	17.14

ANIONS

Chloride, Cl	36780	1037.52
Sulfate, SO ₄	1200	24.98
Carbonate, CO ₃	0	0
Bicarbonate, HCO ₃	1383	22.67
Hydroxide, OH	0	0

Total Dissolved Solids (calc.) 63117

Iron, Fe (total) 150 ppm
Sulfide, as H₂S neg

REMARKS & RECOMMENDATIONS:

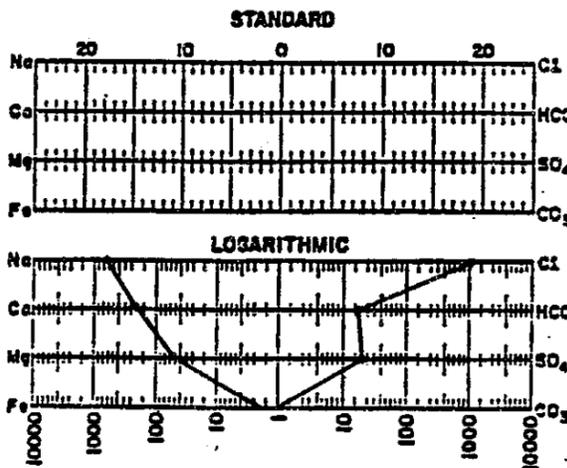
PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA
FARMINGTON, N.M.
BRIAN AULT-District Engineer
1(505) 327-6222

OTHER PROPERTIES

pH	6.48
Specific Gravity, 60/60 F.	1.041
Resistivity (ohm-meters) 70 F.	.13
Total Hardness	16500

WATER PATTERNS — me/l



ANALYST: Lee

EXHIBIT 7



ANALYSIS NO. 52-73-9

FIELD RECEIPT NO. _____

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company Merrion Oil + Gas		Sample No.	Date Sampled 06-11-91	
Field	Legal Description Sec 3 T41N R8W	County or Parish Apache	State Arizona	
Lease or Unit Eastboundary Butte	Well NAYG10 # 3-11	Depth 590-550'	Formation Leadville	Water, B/D
Type of Water (Produced, Supply, etc.) Produced	Sampling Point Separator	Sampled By		

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc.)	<u>1999</u>	<u>869.54</u>
Calcium, Ca	<u>520</u>	<u>262.00</u>
Magnesium, Mg	<u>130</u>	<u>93.00</u>
Barium, Ba	<u>—</u>	<u>—</u>
Potassium, K	<u>817</u>	<u>20.90</u>

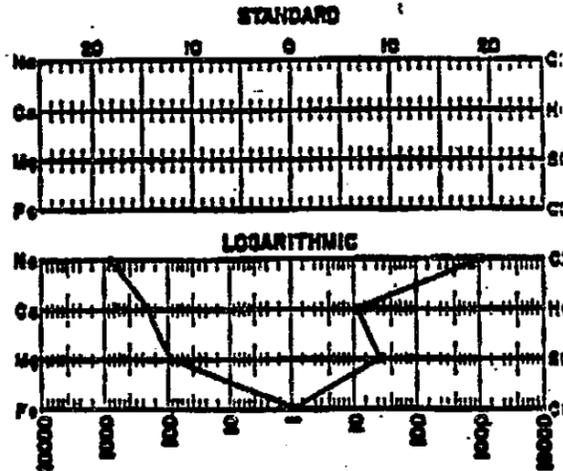
OTHER PROPERTIES

pH	<u>6.45</u>
Specific Gravity, 60/60 F.	<u>1.048</u>
Resistivity (ohm-meters) <u>74 F.</u>	<u>—</u>
Total Hardness	<u>17750</u>

ANIONS

Chloride, Cl	<u>4241</u>	<u>1197.21</u>
Sulfate, SO ₄	<u>1660</u>	<u>34.56</u>
Carbonate, CO ₃	<u>0</u>	<u>0</u>
Bicarbonate, HCO ₃	<u>834</u>	<u>13.67</u>
Hydroxide, OH	<u>0</u>	<u>0</u>

WATER PATTERNS -- mg/l



Total Dissolved Solids (calc.)

72131

Iron, Fe (total)

0

Sulfide, as H₂S

029

REMARKS & RECOMMENDATIONS:

Sulfate-reducing bacteria:
Approximately 10² SRB cells/ml. Please note that the low SRB number was below the accuracy of the test kit.

ANALYST: Lee

PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA
FARMINGTON, N.M.
BRIAN AULT-District Engineer
1(505) 327-6222

EXHIBIT 8

Geiger Counter Test

Produced water from the Navajo 3-11 Leadville zone (perfs 5540'-5564') was tested on 6-21-91 with a Geiger counter. There was no measurable radio activity.

Carl Merilatt
Witness

Carl Merilatt
Signature

6-26-91
Date

FAX 505-326-5900

PH. 505-327-9801

MERRION OIL & GAS CORPORATION

610 REILLY AVE. • P. O. BOX 840
FARMINGTON, NEW MEXICO 87499

June 17, 1991

Mr. Dan Brennan
Arizona Oil & Gas Conservation Commission
5150 N. 16th Street, Suite B-141
Phoenix, Arizona 85016-3803

Re: Revised Permit Application
Navajo #3 Salt Water Disposal Well
Section 4, T41N, R28E
Apache County, Arizona

Attached is a revised permit application for water disposal into the Navajo #3. We are currently injection water from the Desert Creek and Ismay formations. We are requesting the permit be revised to allow the injection of water from any production interval as long as the produced water is of equivalent or better quality than the Akah disposal zone.

Please let me know if any additional information is required.

Sincerely,


George F. Sharpe

GFS/lls

cc: Steve S. Dunn/J. Greg Merrion
Well File

Form 3100-2
(November 1983)
(Formerly 0-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Expires August 31, 1985

LEASE DESIGNATION AND SERIAL
14-20-603-413

IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo Tribe

UNIT AGREEMENT NAME

FARM OR LEASE NAME
Navajo

WELL NO.
#3 Permit # 515

FIELD AND POOL, OR WILDCAT
East Boundary Butte

SEC., T., R., M., OR BLK. AND
SURVEY OR AREA
Sec 4, T41N, R28E

COUNTY OR PARISH
Apache

STATE
AZ

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" for such proposals.)

AZ OIL & GAS
CONSERVATION COMMISSION

1. OIL WELL GAS WELL OTHER Disposal Well

2. NAME OF OPERATOR
Merrion Oil & Gas Corporation

3. ADDRESS OF OPERATOR
P. O. Box 840, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
330' PSL & 1650' FEL

14. PERMIT NO. 15. ELEVATIONS (Show whether OF, BT, GL, etc.)
5410' GL

MAR 21 1991

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input checked="" type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Include 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.)*

2-5-91 to 2-14-91: Repaired tubing leak and ran a successful mechanical integrity test (MIT) on the subject well. See attached workover report for details. Also, attached is a copy of Western's chart recording of the MIT.

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

SIGNED T. Greg Merrion TITLE Engineer DATE 3/19/91

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

- cc: 1 EPA, CA
- 1 State of AZ
- 6 BLM, Fmg
- 1 Well File

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1201, 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.

AZ OIL & GAS
CONSERVATION COMMISSION

MAR 21 1991

NAVAJO NO. 3, SALT WATER DISPOSAL WELL

February 5, 1991 Day No. 1

Summary: MIRU Flint. Pressure tested csg. POH w/ tbg and pkr.

Detail: MIRU Flint Well Service. RU equipment to pump into csg for leak inj rate and pressure. Loaded csg w/ approx 20 bbls water and pressured up to 400 psig. Tbg head packing leaking. Pulled slips, installed BOPs. Pressure tested csg to 600 psig, held solid for 15 minutes. Released pressure. Tbg plugged w/ iron sulfide. Unset pkr. POH w/ tbg. First 2 jts completely plugged, 2nd & 3rd jts partially open. Laid down 4 plugged jts. SWI. SDON.

February 6, 1991 Day No. 2

Summary: Located suspected csg leak between 3842' & 3858' KB.

Detail: TIH w/ rebuilt Baker Lok-set pkr on 2-3/8" plastic lined tbg. Reverse circulated to clean csg and tbg, losing approx. 1 BPM to perfs. Set pkr @ 4792' KB. Tested csg to 500 psig. Leaked off to zero in one minute. POH looking for csg leak. Found possible leak between 3842' and 3858' KB. Pressured up to 500 psig. Leaked off to zero in 1 to 1.5 minutes. POH w/ Lok-set pkr. SDON.

February 7, 1991 Day No. 3

Summary: All csg good to 500 psi. Found tbg leak.

Detail: TIH w/ Model "C" Bridge Plug and fullbore pkr. Set BP and loaded the hole w/ water. Set fullbore pkr above plug and tested to 2000 psig. Leaked off. Found 1/2" hole in tbg. Retested tbg and csg. All csg held 500 psig. All tbg tested to 2,000 psig. POH w/ fullbore and BP. TIH w/ Lok-set pkr. Could not get it to set. SWI. SDON.

February 8, 1991 Day No. 4

Summary: Filled annulus with inhibited pkr fluid. Pressure tested csg to 500 psig for 1 hr, held good. RDMO.

Detail: Reset Lok-set pkr. Pressure tested csg to 500 psig for 1 hr, held solid. Released pkr. Reset and tested again, ok. Unset pkr. Pumped 100 bbls pkr fluid down csg. Reset pkr. NU wellhead. Pressure tested again to 500 psi for 1 hr, held good. RDMO.

Note: Replaced 2-7/8" slips and packing @ the surface w/ new 2-3/8" slips and packing.

NAVAJO NO. 3, SALT WATER DISPOSAL WELL

February 8, 1991 Day No. 4 CONTINUED

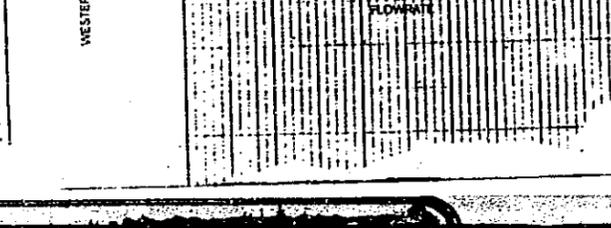
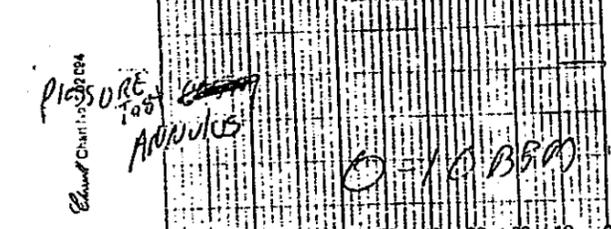
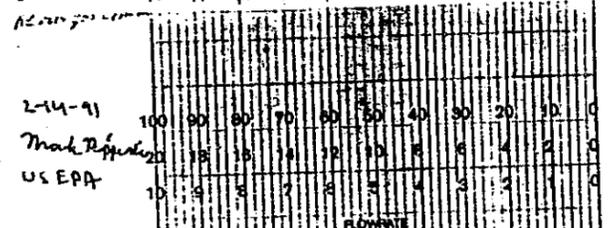
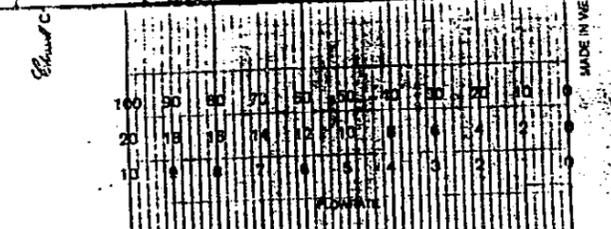
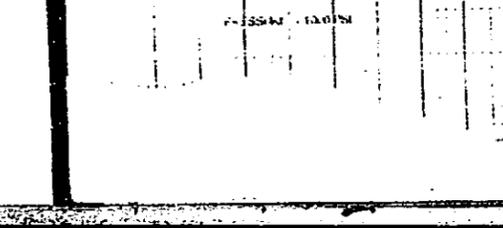
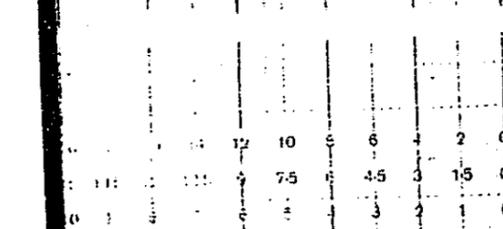
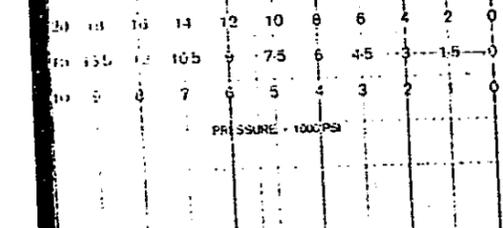
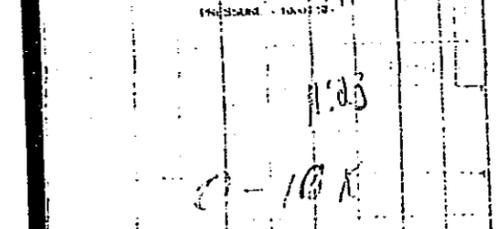
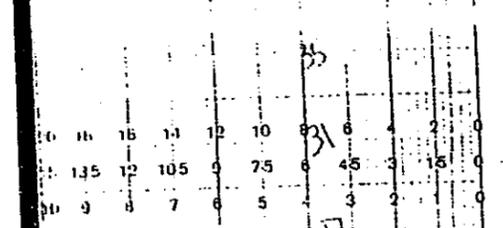
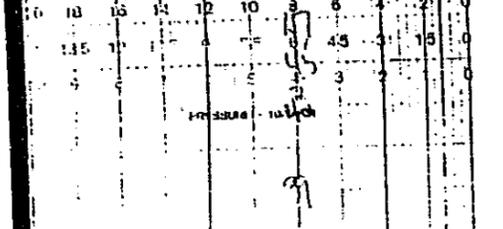
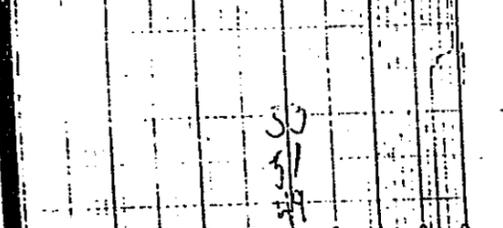
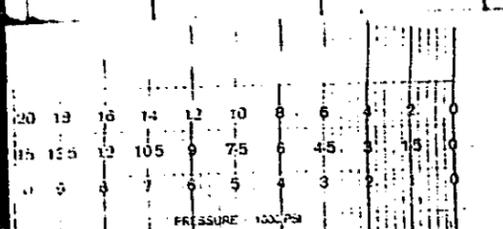
String run 2-8-91:

2-3/8" plastic lined Lok-set pkr	4.0'
2-3/8" Buttress x 2-3/8" EUE changeover	4.4'
66 jts 2-3/8" Buttress tbg (plastic lined)	2054.28'
88 jts 2-3/8" EUE tbg (plastic lined)	<u>2718.38'</u>
Total String	4785.46'

February 14, 1991 Day 1 of 1

Summary: EPA and Arizona State witnessed good mechanical integrity test of tubing-casing annulus.

Detail: RU Western Co. Pressure tested csg w/ one Bbl H₂O w/ packer fluid. Pressure tested to 600 psig, in 30 min. pressure 540 psig. Test accepted by Steven Rauzi of Arizona State Oil Commission and Mark Ripperda, EPA representative from San Francisco. Released pressure. SWI. Put Navajo No. 1 back on production. Navajo No. 3 taking water on vacuum.



Standard C

- 30 min.

WESTERN CO. OF NORTH AMERICA
FT. WORTH, TEXAS

W. J. ...
2-14-91
S. L. ...
...

2-14-91
Mark ...
USE EPA

Pressure
ANNULUS

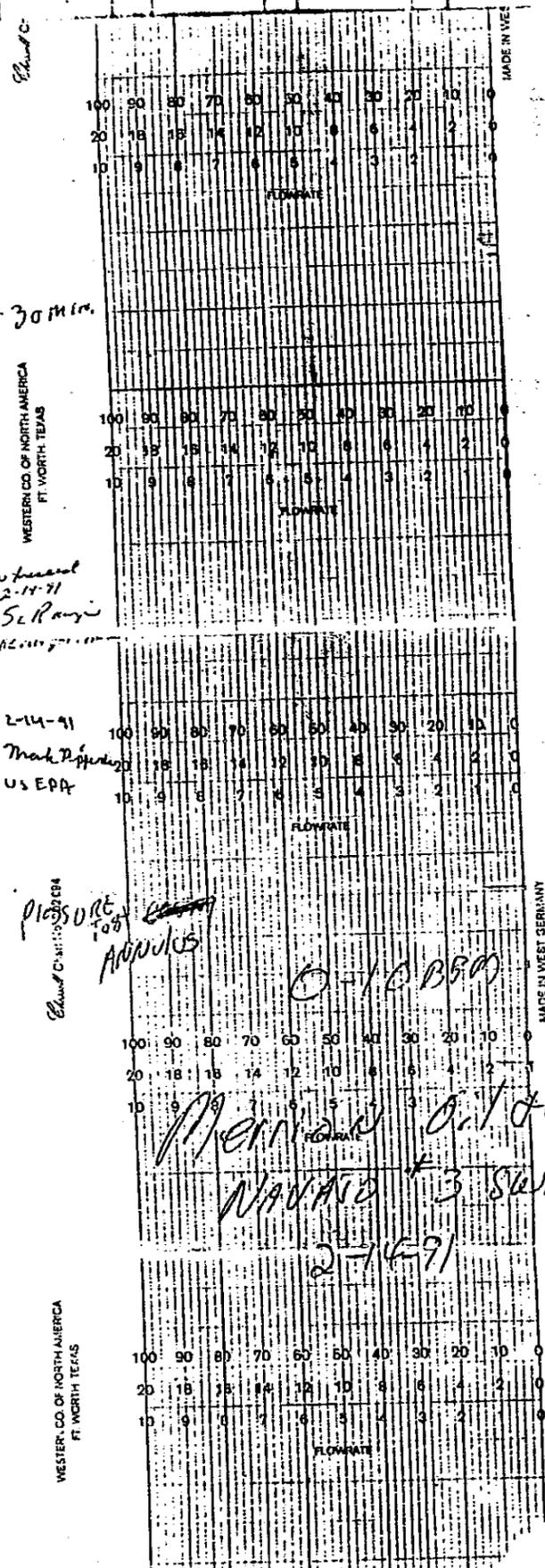
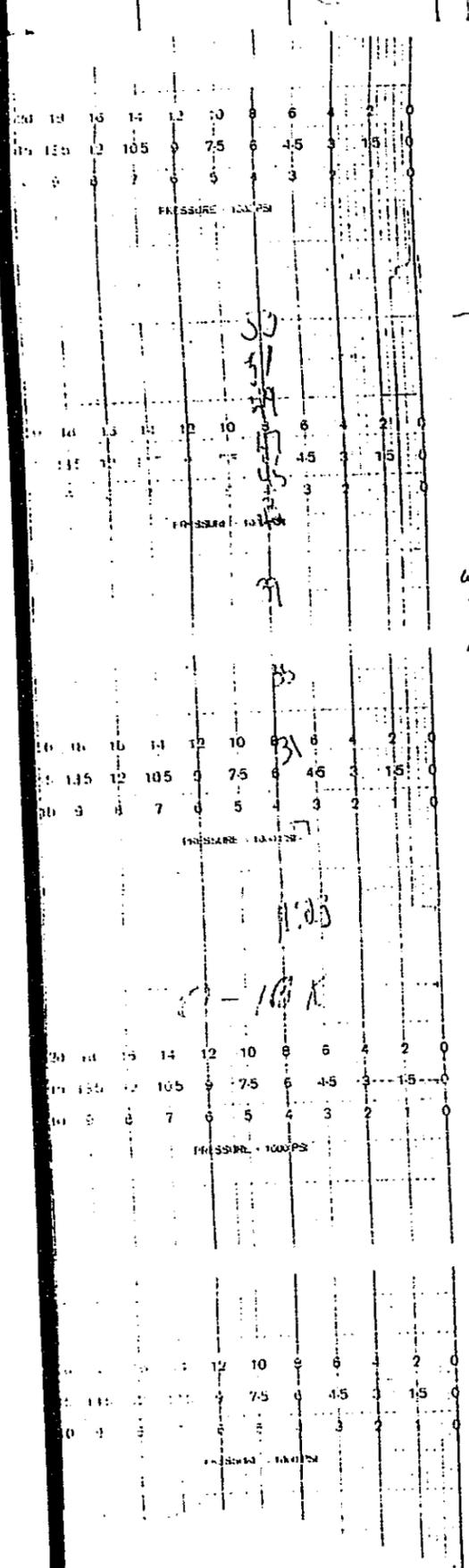
0-10 BSM
Merrill O. / Gas
NAKASE #3 SWD
2-14-91

WESTERN CO. OF NORTH AMERICA
FT. WORTH, TEXAS

MADE IN W.G.

MADE IN WEST GERMANY





MADE IN WEST GERMANY

DEWITT, TEXAS

Oil and Gas Conservation Commission
STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

REPORT ON PROPOSED OPERATIONS

T. Greg Merrion
Merrion Oil & Gas Corporation
P. O. Box 840 _____, ARIZONA
Farmington, NM 87499

Your _____ proposal to repair _____ well Navajo No. 3
A.P.I. No. _____, Section 4, T. 41N, R. 28F, G&SR D. & M.
E. Boundary Butte field, _____ area, _____ pool,
_____ County, dated 9/5/80

has been approved, subject to the following conditions:

- NOTIFY the Commission at least 24 hours prior to commencement of operations.
- NOTIFY the Commission at least 24 hours prior to setting or cementing of casing to allow the Commission to send a representative to witness the operations.
- OTHER: Maximum injection pressure is 300 psi.

Approved by [Signature]
Permit No. 575

Date 9/14/80

A copy of this report and the proposal must be posted at the well site prior to commencing operations.
Records for work done under this permit are due within 30 days after the work has been completed or the operations have been suspended.

Form 3100-3
(November 1983)
Formerly 9-331)

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

Expires August 31, 1985

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—" for such proposals.)		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-413
1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Disposal Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribe
2. NAME OF OPERATOR Merrion Oil & Gas Corporation		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P. O. Box 840, Farmington, NM 87499		8. FARM OR LEASE NAME Navajo
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 330' PSL & 1650' FEL		9. WELL NO. 3
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT East Boundry Butte
15. ELEVATIONS (Show whether of, to, or, etc.) 5410' GL		11. SEC., T., R., M., OR BLK. AND SURVEY OR ADMA Sec 4, T41N, R28E
		12. COUNTY OR PARISH Apache
		13. STATE AZ

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PCLL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANE <input type="checkbox"/>	(Other) _____	
(Other) _____	Workover <input checked="" type="checkbox"/>	(NOTE: Report results of multiple completion on Well Completion or Recorepletion Report and Log form.)	

17. 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.)

Merrion Oil & Gas Corporation requests approval to perform the following work on the subject well:

- 1) MIRU workover rig. ND wellhead, NU BOPs.
- 2) POH w/ 2-3/8" plastic coated tubing and packer.
- 3) RIH w/ RBP, retrieving head, packer and tubing.

Isolate suspected casing leak.

- 4) Squeeze casing leak.
- 5) Drill out cement and pressure test casing.
- 6) RIH w/ packer and tubing, set packer, fill backside w/ inhibited water and test to 300 psi for 30 minutes.
- 7) Return well to injection and RDMO.

NOTE: This work is being performed as a result of a failed mechanical integrity test run on June 19, 1990.

**AZ OIL & GAS
CONSERVATION COMMISSION**

SEP 13 1990

18. I hereby certify that the foregoing is true and correct
SIGNED T. Greg Merrion TITLE Engineer DATE 9-5-90
(This space for Federal or State office use)

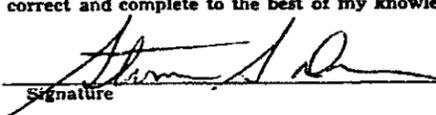
APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

cc: 1 Well File
6 BLM, Fmg
State of AZ
1 EPA CA

As Permit # 515

*See Instructions on Reverse Side

APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

Operator J. Gregory Merrion & Robert L. Bayless		Address P. O. Box 1017, Farmington, New Mexico 8740	
Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo Tribal 14-20-603-413	Well No. 3	Field East Boundary Butte	County Apache
Location 330' FSL and 1650' FEL, Sec. 4, T41N, R28E			
CASING AND TUBING DATA			
Name of string	Size	Length	Cement Data
Surface Casing	8-5/8"	995	640 sx. (circ. to surface)
Intermediate			
Long String	5-1/2"	5000'	178 sx. (top @ 3775' estimated)
Name, Model and Depth of Tubing Packer			
Tubing	2-3/8"	4800'	Baker Model 'D' Drillable @ 4800'.
Name of Top and Bottom of Injection Zone Akah 4848 - 66'			
Is Injection through Tubing, Casing or Annulus? Plastic lined tubing	Perforations or Open Hole? Perforation	Is this a new well Drilled for Disposal? No	
List all Cement Squeeze Operations, Giving Interval and Number Sacks Cement			
Is Injection Zone Productive of Oil or Gas in This Field? Yes	Depth of Deepest Fresh Water Zone Coconino - 1950'	Depth of Shallowest Productive Zone 4714' - Ismay	
Anticipated Daily Injection Volume (bbls.)	Minimum 500	Maximum 2500	Open or Closed System? closed
Is Injection to be by Gravity or Pressure? As necessary	Approx. Pressure (Psi) As necessary	Source of Water to be Injected Paradox (Pennsylvania)	
Are there any other Salt Water Disposal Wells using this same Zone in this Field?	Yes or No No	If so name one such well below	
Name of Operator of Disposal Well in same zone	Lease Name	Well No.	
Is this well so cased and completed that water can enter no other formation than the above set out injection zone?	Yes or No Yes	Have notices of this application been mailed or given to all operators within 1/2 mile of this injection well?	Yes or No Yes
List names and addresses of all operators within one-half (1/2) mile of this injection well: Merrion and Bayless			
(as above)			
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Steve S. Dunn of the Merrion Oil & Gas Corp. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.			
INSTRUCTIONS: 1. Attach a complete full-scale electrical log of this well, if available. Indicate on electrical log, or by other evidence, the base of fresh water zones in this field. 2. Attach waivers from all operators within one-half (1/2) mile of injection well, or copies of letters notifying such operators of this application. Also attach waiver from surface owners of land on which the disposal well is located, or copy of letter from operator making this application notifying such surface owners of this application and requesting waivers. 3. Should all necessary waivers not accompany application, the State of Arizona Oil & Gas Conservation Commission shall hold such application for a period of ten (10) days from date of receipt. If, after said ten (10) day period, no protest or request for a hearing is received, the application will then be processed.		Signature  Date 6/15/82	
Date approved 7-26-82 STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION By R.G. Yana		STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Application To Dispose of Salt Water By Injection Into a Porous Formation File Two Copies	
Form No. 15			

Permit No. **515**

SWP

1. Name of Operator J. Gregory Trion and Robert L. Bayless
 2. OIL WELL GAS WELL OTHER (Specify) Convert to salt water disposal
 3. Well Name Navajo No. 3
 Location 330' FSL and 1650' FFL
 Sec 4 Twp 41N Rge 28E County Apache Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease _____
 5. Field or Pool Name East Boundary Butte

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

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:				
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	(OTHER)	<input type="checkbox"/>	ABANDONMENT	<input type="checkbox"/>
(OTHER)	<input checked="" type="checkbox"/>	<u>Recomplete for SWD</u>	<input checked="" type="checkbox"/>				

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

7. 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.)

Will set bridge plug @ 4800'. Will squeeze perforations 4717 - 4723' (Ismay), 4763 - 4768' (Desert Creek) w/60 sx cement. Will drill out and pressure test squeeze across perfs. Will perforate 5-1/2" casing 50' below Coconino @ 1935' and place cement across coconino to protect fresh water and squeeze. Will drill out and pressure test squeeze.

Will pull bridge plug @ 4800' and run 2-3/8" plastic lined tubing w/Baker Model 'D' Drillable Packer and set @ 4800'. Load backside w/bactericide. Will commence injection into existing Akah perfs @ 4848 - 4866'. Tubing and casing pressure will be monitored.

(This well is intended to replace the Navajo E-2 injection well.)

(Coconino Top 1935', Bottom 2000'.)

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

Signed [Signature] Title Engineer Date 6/15/82

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Sundry Notices and Reports On Wells
 File Two Copies
 Form No. 25

Permit No. 515

GAS-OIL RATIO TEST REPORTS

Filed under GAS-OIL RATIO TESTS REPORTS, EAST BOUNDARY BUTTE FIELD,
in cabinet in office of Enforcement Director

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPL
(Other instructions
verse side)

Form approved.
Budget Bureau No. 42-R1424.

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" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-413

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo Tribe

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
East Boundary Butte

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 4, T41N, R28E

12. COUNTY OR PARISH 13. STATE
Apache Arizona

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
J. Gregory Merrion and Robert L. Bayless

3. ADDRESS OF OPERATOR
P.O. Box 507, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

330' FSL and 1650' FEL

14. PERMIT NO.
Arizona #515

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5410' KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input type="checkbox"/>	Test Well <input checked="" type="checkbox"/>		

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

17. 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.)*

Well is making excessive water. Intend to test zones separately.

Moved in Flint Rig on November 13, 1976. Pulled rods and tubing. Ran tubing with Baker lok-set packer and set at 4808. Ran rods and pump.

Will conduct extended test of Akah perforations 4848-52 and 4862-66.

RECEIVED

NOV 22 1976

O & G CONS. COMM.

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

SIGNER J. Gregory Merrion

TITLE Operator

DATE Nov. 18, 1976

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

*See Instructions on Reverse Side

**OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL OR GAS FROM LEASE**

Federal, State or Indian Lease Number, or lessor's name if fee lease 14-30-603-412	Field East Boundary Butte	Reservoir
Survey or Sec-Twp-Rge 4-41N-28E	County Apache	State Arizona
Operator J. Gregory Merrion and Robert L. Bayless		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street P.O. Box 1541	City Farmington	State New Mexico 87401
Above named operator authorizes (name of transporter) The Permian Corporation		
Transporter's street address P.O. Box 1183	City Houston	State Texas 77001
Field address Petroleum Plaza Farmington, New Mexico 87401 Oil, condensate, gas well gas, casinghead gas		
To transport	100 % of the	Oil from said lease.
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer	% transported	Product transported
El Paso Natural Gas Company	100	Natural Gas
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change.		
Change of purchaser September 28, 1973		

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Co-owner of the Merrion & Bayless (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date March 11, 1974

J. Gregory Merrion
Signature

Date approved: 3-14-74

By: [Signature]
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

Permit No. 5515

RECEIVED
MARCH 13 1974
O & G CON. COMM.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Operator's Certificate of Compliance & Authorization to
Transport Oil or Gas from Lease
File Two Copies
Form No. 5

**OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL OR GAS FROM LEASE**

Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-603-413	Field East Boundary Butte	Reservoir
Survey or Sec-Twp-Rge Sec. 4, T41N, R28E	County Apache	State Arizona
Operator Merrion & Bayless		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street P.O. Box 1541	City Farmington,	State New Mexico
Above named operator authorizes (name of transporter) El Paso Natural Gas Company		
Transporter's street address P.O. Box 1492	City El Paso	State Texas 79999
Field address P.O. Box 990 Farmington, New Mexico 87401		
Oil, condensate, gas well gas, casinghead gas		
To transport	100	% of the Casinghead gas from said lease.
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer Four Corners Pipeline	% transported 100	Product transported Crude oil
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change. Change of operator effective August 1, 1970.		

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Owner of the Merrion & Bayless (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date July 27, 1970
Signature *R. L. Bayless*

Date approved: 7-31-70
By: *John Banville*
Permit No. 515



STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Operator's Certificate of Compliance & Authorization to
Transport Oil or Gas from Lease
File Two Copies
Form No. 8

Form 9-331
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE
(Other instructions
verse side)

Form approved.
Budget Bureau No. 42-R1424.

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" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Humble Oil & Refining Company

3. ADDRESS OF OPERATOR
P. O. Box 120, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
SE SW SE (330' FSL & 1650' FRL) of Section 4

14. PERMIT NO.
Arizona No. 515

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5,410' KB

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-413

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME
Navajo-Tribe-of-Indians

8. FARM OR LEASE NAME
Navajo Tribe of Indians

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
Boundary Butte, East

11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA
Sec. 4-41E-28E - GASNM

12. COUNTY OR PARISH
Apache

13. STATE
Arizona

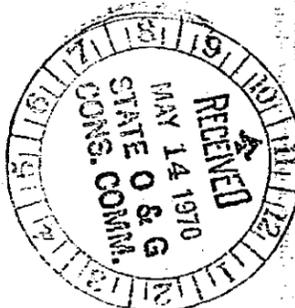
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Supplemental Well History <input checked="" type="checkbox"/>	

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

17. 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.)

Extensive testing has been conducted since our report of 4-7-70. On 4-23-70 well was tested at rate of 50 BO, 168 BW and 1,000 MCFDPD through 28/64" choke. GOR - 20,000.



cc: 2 - Arizona Oil & Gas Conservation Commission
1 - Minerals Supervisor - Navajo Tribe

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

SIGNED [Signature] TITLE Dist. Supt. DATE 5-11-70

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

14

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

New Well Work-Over Deepen Plug Back Same Reservoir Different Reservoir Oil Gas Dry

DESCRIPTION OF WELL AND LEASE

Operator Humble Oil & Refining Company		Address P. O. Box 120, Denver, Colorado 80201	
Federal, State or Indian Lease Number or name of lessor if fee lease Navajo Tribe of Indians - 14-20-603-413		Well Number 3	Field & Reservoir Boundary Butte, East - Paradox
Location SE SW SE (330' FSL & 1650' FEL) of Sec. 4		County Apache	
Sec. TWP-Range or Block & Survey Sec. 4-41N-28E - G&SRM			
Date spudded	Date total depth reached	Date completed, ready to produce	Elevation (DF, RKB, RT or Gr.) KB - 5410 feet
SEE ATTACHED SUNDRY NOTICE FOR DETAILS			
Total depth	P.F.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for completion.
Producing interval (s) for this completion		Rotary tools used (interval)	Cable tools used (in)
Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed
Type of electrical or other logs run (check logs filed with the commission)			Date filed

CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)					
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Amt. pulled

TUBING RECORD

LINER RECORD

Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval

INITIAL PRODUCTION

Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)				
Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)
Tubing pressure	Casing pressure	Cal'ed rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio
Disposition of gas (state whether vented, used for fuel or sold):						

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Dist. Supt. of the Humble Oil & Refining Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

12-8-70
Date

Signature *[Signature]* Roy Dorrough

RECEIVED

DEC 14 1970

O & G CONS. COMM.

Permit No. 515

Form No. 4

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Well Completion or Recompletion Report and Well Log

File One Copy

B.

Comp

2

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

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" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Humble Oil & Refining Company

3. ADDRESS OF OPERATOR
P. O. Box 120, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
SE SW SE (330' FSL & 1650' FEL) of Section 4

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-413

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME
-

8. FARM OR LEASE NAME
Navajo Tribe of Indians

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
Boundary Butte, East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 4-41N-28E - G&SRM

12. COUNTY OR PARISH
Apache

13. STATE
Arizona

14. PERMIT NO.
Arizona #515

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5410' KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) CORRECTED SUPPL. WELL HISTORY XX	

(Note: Report results of multiple completion or well completion or recompletion report and log form.)

17. 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.)

THIS REPORT IS TO SUPPLEMENT AND CORRECT OUR REPORTS OF 3-3-70; 3-5-70; 4-7-70, AND IS A COMPLETE SUMMARY OF WORK DONE FROM 1-25-70 THROUGH 4-23-70.

1-25-70: With bridge plug set at 4820', pumped 24 hrs., rec. 55 BO, 144 BW (upper perms only, 4717-23' & 4763-68').

1-26-70: Pushed bridge plug from 4820' to 4900'. Now producing from all perforations, 4717-23', 4763-68', 4848-52' and 4862-66'. Testing.

2-4-70: Pumped 24 hrs., rec. 72 BO, 245 BW from all perforations. Testing.

3-6-70: Pumped 24 hrs., rec. 61 BO, 216 BW, 209 MCF. GOR 3420. Testing.

3-18-70: Pulled rods and tubing with retrievable bridge plug. Perforated with Dresser Atlas 4" golden jet, 2 holes per foot, 4669-82'. Reran tubing with retrievable bridge plug. Set plug at 4700'.

3-19-70: Had no pressure on tubing or casing. Swabbed tubing. Flowed gas, no fluid.

3-20-70: Killed well with water, pushed bridge plug down to 4830'. Placed well on pump with tubing bottomed at 4747'. All perforations (4669-82'; 4717-23'; 4763-68'; 4848-52' and 4862-66') open to well bore. Testing.

4-4-70: Pumped 24 hrs., rec. 38 BO, 264 BW. TP 380#, CP 630#. Testing.

4-5-70: Pumped 24 hrs., rec. 31 BO, 264 BW. TP 330#, CP 600#. Testing.

4-23-70: Pumped 24 hrs., rec. 50 BO, 168 BW, 1000 MCF. GOR 20,000. TP 480#, CP 520#, 28/64" choke. Testing complete. Will continue to produce from all perforations.

cc: 2 - Arizona Oil & Gas Conservation Commission.
1 - Minerals Supervisor - Navajo Tribe.

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

SIGNED J. Roy Donrough TITLE Dist. Supt. DATE 12-8-70

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED
DEC 14 1970

Form 9-311
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved
Budget Bureau No. 42-R1424.

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" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-413
2. NAME OF OPERATOR Hubile Oil & Refining Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo
3. ADDRESS OF OPERATOR P. O. Box 120, Denver, Colorado 80201		7. UNIT AGREEMENT NAME -
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface SE SW SE (330' FSL & 1650' FEL) of Section 4		8. FARM OR LEASE NAME Navajo Tribe of Indians
14. PERMIT NO. Arizona No. 515		9. WELL NO. 3
15. ELEVATIONS (Show whether OF, RT, OR, etc.) 5,410' KB		10. FIELD AND POOL, OR WILDCAT Boundary Butte, East
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 4-41N-23E - GACRM
		12. COUNTY OR PARISH Apache
		13. STATE Arizona

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Supplemental Well History</u> <input checked="" type="checkbox"/>	

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

17. 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.)

Perforated with 2 holes per foot, 4,669-82'. We now plan to do extensive gas, oil and water testing to determine nature of well. Results will be reported on completion of testing.

RECEIVED
NOV 18 1970
O & G CONSV. COMM.

cc: 2 - Arizona Oil & Gas Conservation Commission
1 - Minerals Supervisor - Navajo Tribe

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

SIGNED: _____ TITLE: Dist. Supt. DATE: 1-7-70

(This space for Federal or State check use)

APPROVED BY: _____ TITLE: _____ DATE: _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

515

Form 9-331
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved
Budget Bureau No. 42-R1424

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" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Humble Oil & Refining Company

3. ADDRESS OF OPERATOR
P. O. Box 120, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface
SE SW SE (330' FSL & 1650' FEL) of Section 4

14. PERMIT NO.
Arizona No. 515

15. ELEVATIONS (Show whether DT, RT, OR, etc.)
5,410' KB

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-413-

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME
-

8. FARM OR LEASE NAME
Navajo Tribe of Indians

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
Boundary Butte, East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 4-41N-20E - GASFM

12. COUNTY OR PARISH
Apache

13. STATE
Arizona

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	(Other)	<input type="checkbox"/>
(Other) Additional Perforations	<input checked="" type="checkbox"/>		
FULL OR ALTER CASING	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
CHANGE PLANS	<input type="checkbox"/>		

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

17. 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.)

This well is currently producing 70 BO and 168 BWPD from Paradox perforations at 4717-23', 4763-68', 4848-52' and 4062-66'. It is proposed to perforate an additional Paradox interval (4669-82'), which will be produced with the other Paradox perforations. Your approval is requested.

New

RECEIVED

MAR 9 1970

G. GEOLOGICAL SURVEY

RECEIVED

NOV 18 1970

O & G CONS. COM. DIV.

cc: 2 - Arizona Oil & Gas Conservation Commission
1 - Minerals Supervisor - Navajo Tribe

SIGNED [Signature] TITLE Dist. Supt. DATE 3-5-70

APPROVED BY [Signature] TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

MAR 10 1970

P. T. McGRATH
DISTRICT ENGINEER

P. T. McGrath

*See Instructions on Reverse Side

515

Form 9-331
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-413

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME
-

8. FARM OR LEASE NAME
Navajo Tribe of Indians

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
Boundary Butte, East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 4-41N-20E - G&RM

12. COUNTY OR PARISH
Apache

13. STATE
Arizona

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" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Humble Oil & Refining Company

3. ADDRESS OF OPERATOR
P. O. Box 120, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
SE SW SE (330' FSL & 1650' FEL) of Section 4

14. PERMIT NO.
Arizona #515

15. ELEVATIONS (Show whether DF, NT, OR, etc.)
5,410' KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Supplemental Well History <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion or Well Completion or Recompletion Report and Log form.)	

17. 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.)

This well was completed producing from perforations 4717-23' and 4763-68' with a bridge plug set at 4820'. We have now pushed the bridge plug to 4900' and tested all perforations including the above and those at 4848-52' and 4862-66'. Tested at rate of 70 BO and 168 BHPD. Production prior to lowering the bridge plug was 55 BO and 144 BHPD. Test complete 2-16-70. Final Completion.

cc: 2 - Arizona Oil & Gas Conservation Commission
1 - Minerals Supervisor - Navajo Tribe

18. I hereby certify that the foregoing is true and correct
SIGNED J. Roy Dorough TITLE Dist. Supt. DATE 3-3-70
(This space for Federal or State office use)

APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY: _____

RECEIVED
DEC 14 1970
O & G CONS. COMM.

*See Instructions on Reverse Side

515

HUMBLE OIL & REFINING COMPANY

NAVAJO TRIBE OF INDIANS #3
COMPLETION SUMMARY

Perforated 4848-52' & 4862-66' with 2 SPF, swabbed dry. Acidized with 1000 gallons of Mud Acid, swabbed 5 BO & 31 BW in 24 hours. Acidized with 5000 gallons of Regular Acid, swabbed 338 BW - 10% oil in 11 hours. Set Cast Iron Bridge Plug at 4820'.

Perforated 4763-68' with 2 SPF, swabbed dry. Acidized with 1000 gallons of MCA, swabbed 22 to 32 BW per hour, 5 to 10% oil. Set retrievable Bridge Plug at 4750'.

Perforated 4717-23' with 2 SPF, swabbed dry. Acidized with 1000 gallons of MCA, swabbed 3 to 8 BW per hour with 15% oil.

Drilled out Cast Iron Bridge Plug at 4820'. Ran temperature surveys and found no indication of communication between perforations. Set retrievable Bridge Plug at 4820'. Ran 2 1/2" tubing with perforated nipple 4800-03'. Ran rods and pump, set pumping unit and started pump testing on 10-20-69. At beginning of testing period made 79 BO, 338 BW and small amount of gas.

Well completed 11-30-69 pumping 72 BO, 172 BW and 179 MCFGPD - GOR 2487.



WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

New Well Work-Over Deepen Plug Back Same Reservoir Different Reservoir Oil Gas Dry

DESCRIPTION OF WELL AND LEASE

Operator: Humble Oil & Refining Company Address: P. O. Box 120, Denver, Colorado 80201

Federal, State or Indian Lease Number or name of lessor if fee lease: Navajo Tribe of Indians - 14-20-603-413 Well Number: 3 Field & Reservoir: Boundary Butte, East - Paradox

Location: SE SW SE (330' FSL & 1650' FEL) of Sec. 4 County: Apache

Sec. TWP-Range or Block & Survey: Section 4-41N-28E - G&SRM

Date spudded: 8-27-69 Date total depth reached: 9-10-69 Date completed, ready to produce: 11-30-69 Elevation (DF, RKB, RT or Gr.): 5410' RKB Elevation of c. hd. flange: 5400'

Total depth: 5010' P.B.T.D.: 4965' Single, dual or triple completion?: Single If this is a dual or triple completion, furnish separate report for each completion.

Producing interval (s) for this completion: 4717-23' & 4763-68' - See attached summary. Rotary tools used (interval): 0-5010' Cable tools used (interval): None

Was this well directionally drilled?: No Was directional survey made?: No Was copy of directional survey filed?: - Date filed: -

Type of electrical or other logs run (check logs filed with the commission): IES & Sidewall Neutron Porosity - Furnished you on 10-20-69. Date filed: 10-20-69

CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)						
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Surface	12-1/4"	8-5/8"	24#	995'	640	None
Production	7-7/8"	5-1/2"	14#	5000'	178 sx plus	None
12# Gilsoline per sx.						

TUBING RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
2-1/2" in.	4803 ft.	- ft.	- in.	- ft.	- ft.	-	-

PERFORATION RECORD

Number per ft.	Size & type	Depth Interval	Am't. & kind of material used	Depth Interval
2	4" Hyperjet	4848-52' & 4862-66'	1000 Mud & 5000 reg.	4848-52' & 4862-66'
2	4" Hyperjet	4717-23' & 4763-68'	1000 MCA Each Zone	4717-23' & 4763-68'

LINER RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

INITIAL PRODUCTION

Date of first production: 10-20-69 Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): Pump

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
11-23-69	24	-	72 bbls.	179 MCF	172 bbls.	36.5 API (Corr)

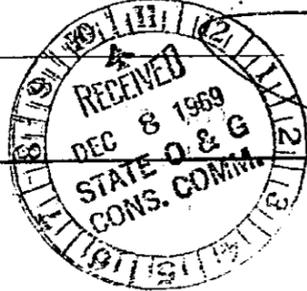
Tubing pressure	Casing pressure	Cal'ed rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio
130	130		72 bbls.	179 MCF	172 bbls.	2487

Disposition of gas (state whether vented, used for fuel or sold): Lease fuel & vented.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Dist. Supt. of the Humble Oil & Refining Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date: 12-5-69

Signature: *J. Roy Dorrrough*
J. Roy Dorrrough



Permit No. 515

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Well Completion or Recompletion Report and Well Log
Form No. 4 File One Copy

Comp

13

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Ismay	4573'	4644'	
Lower A2	4644'	4737'	
Desert Creek	4737'	4839'	
Akah	4839'	5010' TD	
NO CORES CUT			
NO DRILL STEM TESTS TAKEN			

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

November 6, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

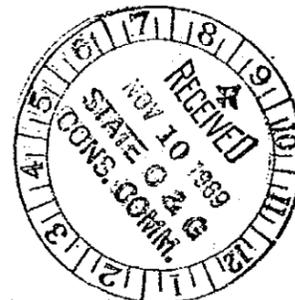
Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for SEE BELOW, 1969.

Pump testing with the following recoveries:

<u>DATE</u>	<u>OIL</u>	<u>WATER</u>
10-22-69	68	338
10-23-69	79	338
10-24-69	75	252
10-25-69	45	310
10-26-69	36	304
10-27-69	60	279
10-28-69	56	228
10-29-69	80	232
10-30-69	80	224
10-31-69	69	268
11-1-69	65	270
11-2-69	77	252
11-3-69	85	244
11-4-69	82	228

44



515



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

October 16, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for 10-11 thru 10-15, 1969.

^{5010'}
TD-~~5610'~~, PBTD 4965'. Shut In.



- 10-16-69 - TD 5010', PBTD 4965', shut in.
- 10-17-69 - Moved in rig. Preparing to set bridge plug and run tubing and rods.
- 10-18-69 - No report.
- 10-19-69 - No report.
- 10-20-69 - No report.
- 10-21-69 - Ran tubing and rods. Set retrievable bridge plug at 4820 and perforated tubing nipple 4800-03'. Put on pump. First 18 hours recovered 86 BO, 345 BW, very small amount of gas, TSTM.

Please change TD on reports of 10-3-69 through 10-15-69 to read 5010'. Was shown in error as 5610'.

Since this well will be tested for a while before completion we are sending the Electric Logs under separate cover this date.



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORRUGH
SUPERINTENDENT

October 13, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for SEE BELOW, 1969.

10-7-69
5010' ~~5610'~~ TD, PBD 4965'. Pulled tubing, packer and
bridge plug. Drilled out CI bridge plug at
4820' and drove to 4949'. Ran Schlumberger bond
log and SD for night.

10-8-69
5010' ~~5610'~~ TD, PBD 4965'. Ran Schlumberger temperature
survey. Ran tubing with packer and bridge plug
with tailpipe with temperature bulb in tailpipe.
Set temperature bulb 4848-52', bridge plug 4844',
[packer 4750']. Pumped 205 bbls. cold water in
tubing at 2-3 BPM. Pressure ranged from zero to
700# max. No indication of communication with
annulus above packer (no air bubbles). Waited
30 mins. after water in tubing. Pulled tubing,
packer, bridge plug, and temperature bulb. Ran
Schlumberger temperature survey again, ran Schlumberger
bond log again. SD for night. Moving off rig.

10-9-69
5010' ~~5610'~~ TD, PBD 4965'. SI.

10-10-69
4V 5010' ~~5610'~~ TD, PBD 4965'. SI.





HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. H. DORROUGH
SUPERINTENDENT

September 6, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for SEE BELOW, 1969.

10-2-69

Swabbed 5 hrs. as follows:

- 1st hr. - 15 bbls. fluid, 12% oil
- 2nd hr. - 10 bbls. fluid, 12% oil
- 3rd hr. - 4 bbls. fluid, 12% oil
- 4th hr. - 5 bbls. fluid, 12% oil
- 5th hr. - 5 bbls. fluid, 15% oil

Making very little gas, swabbing from 4100'.
This AM had 350# pressure on tubing. Closed in
well and moved rig to emergency job.

10-3-69

5010' ~~5610'~~ TD. PBTD 4965'. SI.

10-4-69: 5010' TD, PBTD 4965'. SI.

10-5-69: SI.

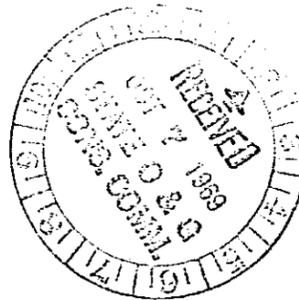
10-6-69: Moving in workover rig.

Following is a corrected report for October 2, 1969:

Swabbed as follows:

- 1st hr. - 2 BW, 250' free oil
- 2nd hr. - 8 bbls. fluid, 15% oil
- 3rd hr. - 5 bbls. fluid, 15% oil
- 4th hr. - 5 bbls. fluid, 15% oil
- 5th hr. - 4 bbls. fluid, 15% oil
- 6th hr. - 3 bbls. fluid, 15% oil
- 7th hr. - 4 bbls. fluid, 15% oil
- 8th hr. - 3 bbls. fluid, 15% oil
- 9th hr. - 3 bbls. fluid, 15% oil
- 10th hr. - 3 bbls. fluid, 15% oil

Making very little gas, swabbing from 4100'.
This AM had 350# pressure on tubing. Closed in
well and moved rig to emergency job.





HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for September 30, 1969.

5010' TD. PBTD 4965'. Swabbed 3 hrs. from perfs
4763-68' w/recovery as follows:

- 1st hr. - 40 bbls. fluid, 10% oil
- 2nd hr. - 28 bbls. fluid, 10% oil
- 3rd hr. - 24 bbls. fluid, 10% oil

Grindout 88% water, 2% BS, 10% oil. Gravity 37.4
at 60°. Pulled tubing and packer. Reran tubing
with retrievable bridge plug. Set bridge plug at
4750'. Pulled tubing and perforated with
Schlumberger hyperjet 4717-23', 2 holes/ft.
SD for night. Now running packer and tubing.

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for October 1, 1969.

5010' TD. PBTD 4965'. Ran tubing with packer
set at 4707'. Swabbed natural 2 hrs., swabbed
tubing dry. Well made no fluid. Pumped in
1000 gals. Halliburton MCA. Max. press. 1100#,
min. vacuum. Rate of injection 4 to 2 BPM.
Swabbed 5 hrs. as follows:

- 1st hr. - 32 BW
- 2nd hr. - 15 BW, FL 3900'
- 3rd hr. - 4 BW, some gas, FL 4100'
- 4th hr. - 3 BW, trace of oil, some gas, FL 4100'
- 5th hr. - 4 BW, trace of oil, some gas, FL 4100'

Total 58 bbls. swabbed out of tubing (had total of
52 bbls. acid & load water to recover). This AM
had 180# pressure on tubing. FL 2300'. On first
swab pull rec. 250' free oil.



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for SEE BELOW, 1969.

5010' TD, PBT 4965'.

9-27-69: Ran temperature log and production data
log. Pumped in 75 bbls. fresh cold water. Ran
spinner packer, set between perfs to determine
which perfs fluid was coming out of and also to
verify location of perfs.

9-28-69: Set cast iron bridge plug at 4820'.
Perforated 2 holes per foot (4763-68'). Tested well
natural, no fluid. Pumped 1000 gals. Halliburton
MCA into perfs. Max. press. 2400#, min. 1700#,
pumping at 4 BPM. Well immediately went on
vacuum. Swabbed tubing, found fluid at 800'.
Swabbed 2½ hrs., rec. 77 bbls. water, trace of oil.
TP this AM 100#.

9-29-69: Reset packer at 4785'. Swabbed tubing
dry, packer does not leak. Released packer and
reset at 4755'. Swabbed as follows with fluid
standing at 2000':

- 1st hr. - 32 bbls. fluid, trace of oil
- 2nd hr. - 22 bbls. fluid, 5% oil
- 3rd hr. - 28 bbls. fluid, 5% oil
- 4th hr. - 24 bbls. fluid, 5% oil
- 5th hr. - 27 bbls. fluid, 5% oil
- 6th hr. - 26 bbls. fluid, 10% oil

Changed tanks. Had total of 160 bbls. fluid in
tank, drew off 139 bbls. water, left 21 bbls. oil
in tank.

- 7th hr. - 28 bbls. fluid, 10% oil
 - 8th hr. - 24 bbls. fluid, 10% oil.
- TP this AM 275#, fluid standing at 1200'.



42

28

515



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

September 23, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for see below, 1969.

9-20-69: TP 275#. Fluid was found 2000' from surface.
Swabbed 9 hours for 270 BW - last 3 hours 21BW/Hr.
with 5% oil - gas increasing.

9-21-69: TP 360#. Fluid found at 1500' from surface. Swabbed
11 hours for 338 BW with 10% oil - gas increasing.

9-22-69: Well SI.

42 9-23-69: Well SI. Moved off completion rig temporarily.

9-24-69: Well SI.

44 9-25-69: Well SI.

9-26-69: Well SI.



515



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

September 18, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for See Below, 1969.

9-17-69: Moved in completion rig. Picked up 2-7/8" tubing. Swabbed
water out of 5 1/2" casing to 2000' from surface. Ran Correlation
log. Perforated with 4" hyperjet casing gun 4848-52' & 4862-66'
with 2 SPF. Ran 2-7/8" tubing with 5 1/2" retrievable bridge plug
and retrievematic packer. Set BP at 4949', packer at 4840'.
Swabbed tubing dry, no fluid. Tested 1 hr. natural. Pumped
into formation thru tubing 1000 gals. mud acid. After 500 gals.
acid in tubing, dropped 10 nylon balls. Initial pressure 500#,
800# when acid on formation, 500# when balls hit perforations,
increased to 1000#, broke back to 500#. Initial SIP zero. On
vacuum. Maximum injection rate 5 BPM. Swabbed tubing dry.
Recovered 30 BW, small amount of black fluid, TSTM. No gas.
Shut down for night. This AM 60# pressure on tubing, bled off.
Found fluid at 1800' from surface. Pulled swab from 3000' and
recovered approximately 300' of green oil from tubing, rest
acid water. All water used was formation produced water.

9-18-69: 5010' TD. PBTD 4965'. Swabbed 5 bbls oil, 31 bbls. water in
last 24 hours. This AM tubing pressure 110#, fluid level 1500'
from surface. Preparing to acidize.

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for September 19, 1969.

Started acidizing perfs at 8 AM with 5000 gals. regular acid,
flushed with 28 BW. Injection rate 5 BPM, max. press. 900#,
avg. inj. press. 700#. Pressure dropped to zero immediately
on shut in. Acid job complete 10 AM. Swabbed 7 hours for a
total of 166 bbls. water, acid and emulsion, no oil or gas.
Shut in for night. Tubing pressure this AM 70#, fluid level
2000' from surface.



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

September 15, 1969

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

POST OFFICE BOX 120
TELEPHONE 534-1251

Mr. J. R. Scurlock
Oil and Gas Conservation Commission
State of Arizona
Room 302, 1624 West Adams
Phoenix, Arizona 85007

Dear Sir:

Following is the information that you requested in our telephone conversation on September 9, 1969, on Humble's No. 1 Navajo Tribe of Indians, East Boundary Butte Field, SE SW SE, Section 4-41N-28E, Apache County, Arizona,

40

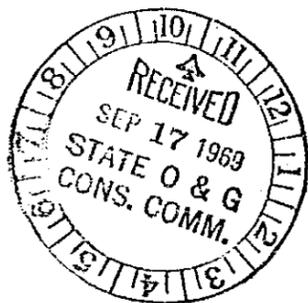
Total depth - 5010'
Surface Casing - 8-5/8" set at 995'
Ground Elevation - 5400'; Kelly Bushing Elevation - 5410'
Coconino 1952'
Organ Rock 2334'
Cedar Mesa 2919'
Hermosa 3914'
Ismay Member 4573'
Desert Creek Member 4737'
Akah Member 4839'

Very truly yours,

Donald N. Collins

Donald N. Collins

DNC:mg



515



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

September 16, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for See Below, 1969.

- 9-12-69: 5,010' TD. Set 5½" 14# K-55 casing at 5,000'.
Cemented with 178 sacks 50-50 Pozmix cement plus
2% gel with 12½# of gilsonite per sack plus 6%
salt. Had good circulation. Final pressure 900#.
Job complete and rig released 9-11-69.
- 9-13-69: Ran temperature survey.
- 9-14-69: Ran bond log.
- 9-15-69: Moving in completion rig.
- 9-16-69: 5,010' TD. 4,965' PSTD. Preparing to perforate.



September 11, 1969

Samples from the Humble, #3 Navajo Tribal
SE SW SE Sec. 4-41N-28E
Apache Co. Arizona

have been delivered to the cut.

4²

Ja. H. ...
FOUR CORNERS SAMPLE





HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

September 9, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for September 9, 1969.

4 ✓ 5,000' TD. Circulating for logs. Lost 150 bbls. mud
in last 24 hours.

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for September 10, 1969.



4 ✓ 5,010' TD. Conditioning hole to log. Strapped pipe at
5,000'. Attempted to run log, hit bridge at 1,491'. Went
in hole with drill pipe, knocked out bridge. Attempted to
run log, hit bridge at 4,697'. Tripped in hole with drill
pipe, circulated to 5,000' and conditioned mud. Tripped
out. Attempted to log, log went to 4,723'. Tripped back
in hole, drilled 10' of new hole and conditioned mud. Lost
25 bbls. mud over last 24 hr. period.

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for September 11, 1969.

4 ✓ 5,010' TD. Conditioning hole to run 5 1/2" casing. Ran
induction electrical and sidewall neutron porosity/
caliper logs.



3515



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORROUGH
SUPERINTENDENT

POST OFFICE BOX 120
TELEPHONE 534-1251



Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Gentlemen:

Summarized below find the daily drilling activities of our Navajo
Tribe of Indians #3 for August 29, 1969.

42 TD 1621'. WOC on surface casing. Ran 30 joints 8-5/8" OD K-55
casing, 983', set at 995'. Cemented with 640 sacks - cement
circulated OK.

8-30-69: 2500', sand and shale, drilling. Tested
casing to 1000#, held OK.

8-31-69: 2946', sand and shale, trip.

9-1-69: 3365', sand and shale, drilling.

9-2-69: 3730', shale, drilling.

9-3-69: 3977', shale, lime and anhydrite, drilling.

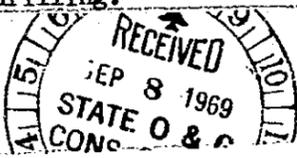
9-4-69: 4200', lime and shale, drilling.

9-5-69: 4330', lime and shale, drilling.

9-6-69: 4,474', shale, drilling.

9-7-69: 4,639', lime and shale, drilling. Had drilling break
4,660-84' - lost 150 bbls. mud gradually. Started
losing mud at about 4,665' and continued losing to
4,684', then had full returns.

9-8-69: 4,808', lime and shale, drilling. Have lost a total
of 275 bbls. mud. Lost 50 bbls. on the evening tour
and 75 bbls. on the morning tour - had drilling break
at 4,755'.



SUNDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Humble Oil & Refining Company, P. O. Box 120, Denver, Colorado 80201
 2. OIL WELL GAS WELL OTHER (Specify) _____
 3. Well Name Navajo Tribe of Indians - Well #3
 Location 330' FSL & 1650' FEL of Section 4
 Sec. 4 Twp. 41N Rgc. 28E County Apache, Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-603-413

5. Field or Pool Name Boundary Butte, East

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <u>Spud and Contractor</u>	ABANDONMENT <input type="checkbox"/>
(OTHER) _____			<input checked="" type="checkbox"/>

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

7. 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.)

4 Contractor selected to drill this well is as follows:

Mesa Drillers
 P. O. Box 108
 Lubbock, Texas 79408

Well was spudded at 4:00 AM on 8-27-69.



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

Signed J. Roy Dorrrough Title Dist. Supt. Date 8-27-69

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Sundry Notices and Reports On Wells
 File Two Copies
 Form No. 25

Permit No. 515
37

XEROX
J. Lambert
8-28

August 20, 1969

8:30 a.m.

Memo to Mr. Bannister

Memo from J. Lambert

Roy Dorrough, Humble Oil, called this date. He discussed spudding of a well in Section 4. A legal location would be the SW/4 SE/4 with the dedication the W/2 SE/4. He spoke of the drilling site as being 330' FSL and 1980' FEL. We discussed the fact that Humble's #1 Navajo well, Permit #28, was a gas well producing in Section 4 with a 640-acre dedication. The present producing interval for this well is 4596' to 4647' per report dated 5-14-69---Hermosa formation according to their Form 20 dated 7-24-69.

I told him that an oil well would be permitted with an objective depth other than this producing zone. They are concerned about the drainage from the area by AAA/s proposed well in the NW/4 NE/4 of Section 9 and Globe's #E4 well in the NE/4 NW/4 of Section 9.

He indicated that Humble would take the matter under advisement and seek a permit if they decide that they must protect their interest from drainage by the two Globe wells and the proposed AAA well.

~~SECRET~~

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL ~~RE-ENTER~~

RE-ENTER OLD WELL

Humble Oil & Refining Company
NAME OF COMPANY OR OPERATOR

P. O. Box 120, Denver, Colorado 80201
Address City State

Will advise when contractor is selected.
Drilling Contractor

Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor Navajo Tribe of Indians - 14-20-603-413	Well number 3	Elevation (ground) 5,400' Ungraded Ground
--	-------------------------	---

Nearest distance from proposed location to property or lease line: 330' feet	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: 1777 feet
--	---

Number of acres in lease: 640	Number of wells on lease, including this well, completed in or drilling to this reservoir: * See Remarks
---	--

If lease, purchased with one or more wells drilled, from whom purchased:	Name	Address
--	------	---------

Well location (give footage from section lines) 330' FSL & 1650' FEL of Sec. 4	Section—township—range or block and survey Sec. 4-41N-28E - G&SRM	Dedication (Comply with Rule 105) 80 Acres - W/2 SE/4
--	---	---

Field and reservoir (if wildcat, so state) Boundary Butte, Ease - Paradox	County Apache
---	-------------------------

Distance, in miles, and direction from nearest town or post office
Approximately 40 miles West of Shiprock, New Mexico

Proposed depth: 5,200'	Rotary or cable tools Rotary	Approx. date work will start 9-1-69
----------------------------------	--	---

Bond Status On File	Organization Report On file <input checked="" type="checkbox"/> Or attached	Filing Fee of \$25.00 Attached <input checked="" type="checkbox"/>
----------------------------	--	---

Remarks:
*** Proposed to drill to 5,200' to test porosities in the lower portion of the Paradox Formation which are not currently producing from the other well on this lease.**

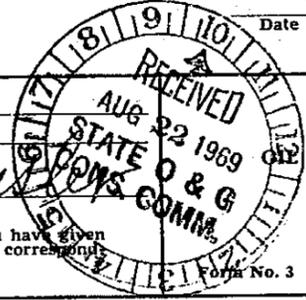
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the **Dist. Supt.** of the **Humble Oil & Refining Company** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature *J. Roy Dorrrough*
Date **8-21-69**

Permit Number: **515**
Approval Date: **8-25-69**
Approved By: *John J. ...*

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Application to Drill or Re-enter
File Two Copies

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.



38

Company HUMBLE OIL & REFINING CO.

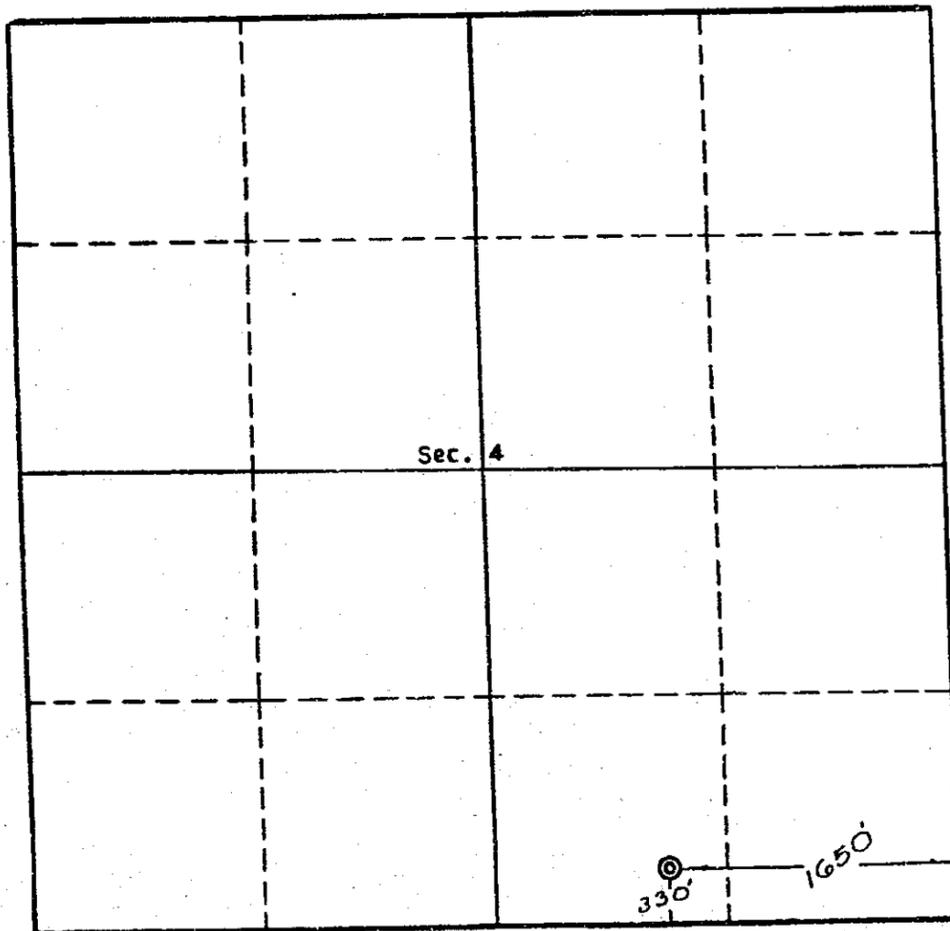
Well Name & No. Navajo Tribe of Indians #3

Location 330 feet from the South line and 1650 feet from the East line.

Sec. 4, T. 41 N., R. 28 E., G. & S. R. M., County Apache, Arizona

Ground Elevation 5400

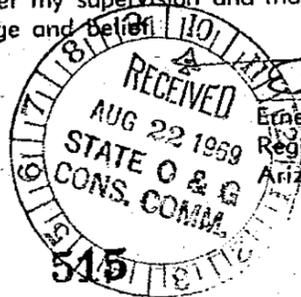
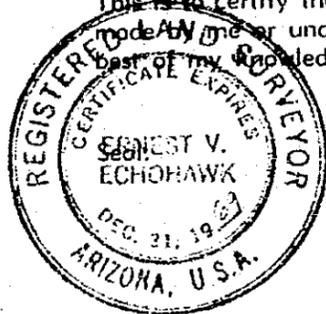
J.R.D.	RECEIVED PRODUCTION DEPT. AUG 21 1969 DENVER DISTRICT	R.D.W.
J.F.R.		F.E.D.
J.R.C.		J.W.H.
M.E.F.		W.S.L.
M.G.		HOLD
M.D.S.		FILE



Scale, 1 inch = 1,000 feet

Surveyed August 19, 1969

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.



Ernest V. Echohawk
Ernest V. Echohawk
Registered Land Surveyor
Arizona Registration No. 2311



PERMIT TO DRILL

This constitutes the permission and authority from the
OIL AND GAS CONSERVATION COMMISSION,
STATE OF ARIZONA,

To: HUMBLE OIL & REFINING COMPANY
(OPERATOR)

to drill a well to be known as

HUMBLE #3 NAVAJO (413)
(WELL NAME)

located 330' FSL - 1650' FSL

Section 4 Township 41N Range 28E, Apache County, Arizona.

The W/2 SE/4 of said
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 25th day of AUGUST, 19 69.

OIL AND GAS CONSERVATION COMMISSION

By John J. Finnisler
EXECUTIVE SECRETARY

PERMIT N^o 515

RECEIPT NO. 9597
API NO. 02-001-20115

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill
FORM NO. 27

SAMPLES ARE REQUIRED

CERTIFIED
P 08J 445 227
MAIL

file #515

MERRION OIL & GAS CORPORATION
P.O. BOX 840
FARMINGTON, NEW MEXICO 87499

TO MR. STEVE RAUZI
ARIZONA GEOLOGIC SURVEY
845 N. PARK AVE.
SUITE 100
TUCSON, AZ 85719

FIRST CLASS MAIL

A

ARIZONA GEOLOGIC SURVEY
CONSERVATION COMMISSION
NOV 13 1992

NOV 13 1992
3 6

FAX 505-326-5900

MERRION OIL & GAS CORPORATION

610 REILLY AVE. • P. O. Box 840
FARMINGTON, NEW MEXICO 87499

PH. 505-327-9801

November 16, 1992

Mr. Clarence Tenley
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

**Re: Underground Injection Control Permit Application
Navajo #3, Apache County, Arizona**

Dear Mr. Tenley:

Attached is an application for a UIC permit for the Navajo #3 well. This well is an existing injection well.

Please call me with any questions or comments.

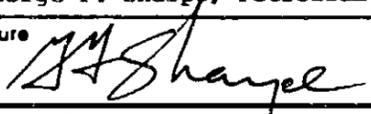
Sincerely,



George Sharpe

GFS/so

cc: Ms. Sadie Hoskie, Navajo EPA, Window Rock, AZ
Mr. Chavez Nez, Utah Land Office
Ms. Alyce Rouwalk, BIA, Shiprock Agency
Mr. Steve Rauzi, Arizona OCD, Tucson, AZ
Mr. Ken Townsend, BLM, Farmington, NM

Form 4 UIC	 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY UNDERGROUND INJECTION CONTROL PERMIT APPLICATION (Collected under the authority of the Safe Drinking Water Act, Sections 1421, 1422, 40 CFR 144)	I. EPA ID NUMBER	
		T/A	C
READ ATTACHED INSTRUCTIONS BEFORE STARTING FOR OFFICIAL USE ONLY			
Application approved		Date Received	
mo	day	year	mo day year
Permit/Well Number		Comments	
II. FACILITY NAME AND ADDRESS		III. OWNER/OPERATOR AND ADDRESS	
Facility Name East Boundary Butte #3 Navajo Tribal		Owner/Operator Name Merrion Oil & Gas	
Street Address Section, 4, 41N, 28E		Street Address 610 Reilly Ave.	
City	State	ZIP Code	City
Apache County	AZ		Farmington
			State
			NM
			ZIP Code
			87401
IV. OWNERSHIP STATUS (Mark 'x')		V. SIC CODES	
<input type="checkbox"/> A. Federal <input type="checkbox"/> B. State <input type="checkbox"/> C. Private		Class II D	
<input type="checkbox"/> D. Public <input checked="" type="checkbox"/> E. Other (Explain) Navajo Indian Mineral Ownership			
VI. WELL STATUS (Mark 'x')			
<input checked="" type="checkbox"/> A. Operating		<input type="checkbox"/> B. Modification/Conversion <input type="checkbox"/> C. Proposed	
Date Started mo day year 1 83		In Use As Is	
VII. TYPE OF PERMIT REQUESTED (Mark 'x' and specify if required)			
<input checked="" type="checkbox"/> A. Individual <input type="checkbox"/> B. Area		Number of Existing wells: 1 Number of Proposed wells:	
		Name(s) of field(s) or project(s): East Boundary Butte	
VIII. CLASS AND TYPE OF WELL (see reverse)			
A. Class(es) (enter code(s))	B. Type(s) (enter code(s))	C. If class is "other" or type is code "x," explain	D. Number of wells per type (if area permit)
II	D		
IX. LOCATION OF WELL(S) OR APPROXIMATE CENTER OF FIELD OR PROJECT			X. INDIAN LANDS (Mark 'x')
C. A. Latitude B. Longitude Township and Range			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Deg Min Sec 36 59 33	Deg Min Sec 109 20 42	Twp Range Sec 1/4 Sec Feet from Line Feet from Line 41N28E 4 SE 330 S 1650 E	
XI. ATTACHMENTS			
(Complete the following questions on a separate sheet(s) and number accordingly; see instructions) FOR CLASSES I, II, III (and other classes) complete and submit on separate sheet(s) Attachments A — U (pp 2-6) as appropriate. Attach maps where required. List attachments by letter which are applicable and are included with your application:			
XII. CERTIFICATION			
I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)			
A. Name and Title (Type or Print)		B. Phone No. (Area Code and No.)	
George F. Sharpe, Petroleum Engineer		(505) 327-9801	
C. Signature		D. Date Signed	
		11/92 11-16-92	

**UNDERGROUND INJECTION CONTROL
PERMIT APPLICATION**

Attachments To Form 4

- A. Area of Review - An area of review of a fixed 1/4 mile radius was used.
- B. Not applicable for existing well.
- C. Not applicable for existing well.
- D. Not applicable for existing well.
- E. USDW's - Navajo sandstone. Top - surface, bottom - 300'.
- F. Not applicable for existing well.
- G. Injection and Confining Zones - See attached log which shows zones:

<u>Zone</u>	<u>Name</u>	<u>Description</u>	<u>Depth</u>	<u>Gross Thick</u>	<u>Frac Pressure</u>
Upper	Chimney Rock	Shale	4,820'	24'	4,816 psi
Injection	Akah	Limestone	4,844'	34'	3,150 psi
Lower	Akah-Shale	Shale	4,878'	38'	4,878 psi

H. Operating Data -

- 1-a. Average rate = 300 BPD
- 1-b. Maximum rate = 5,000 BPD or as needed
- 2-a. Average injection pressure = 0 psi (vacuum)
- 2-b. Maximum injection pressure = 970 psi (0.2 psi/ft)
3. Inhibited packer fluid on annulus
4. N/A
5. Produced fluid from the Paradox formation and the Leadville formation from wells in the East Boundary Butte area will be injected into the subject well (analyses attached).

- I. Not applicable for existing well.

J. Not applicable for existing well.

K. Injection Procedures - The well currently takes water on a vacuum from a surge tank on location. As produced volumes increase, plans are to install a pump.

L. Not applicable for existing well.

M. Construction Details - See schematic.

N. Not applicable for existing well.

O. Plans for Well Failures - The well will be shut-in if annulus pressure indicates a tubing leak or if a mechanical integrity test indicates problems until the problems can be rectified.

P. Monitoring Program - The injection rate and annular pressure are checked on a weekly basis. A UIC mechanical integrity test will be conducted once every 5 years. Attached is a sundry showing the results of the last MIT test run on 2-14-91.

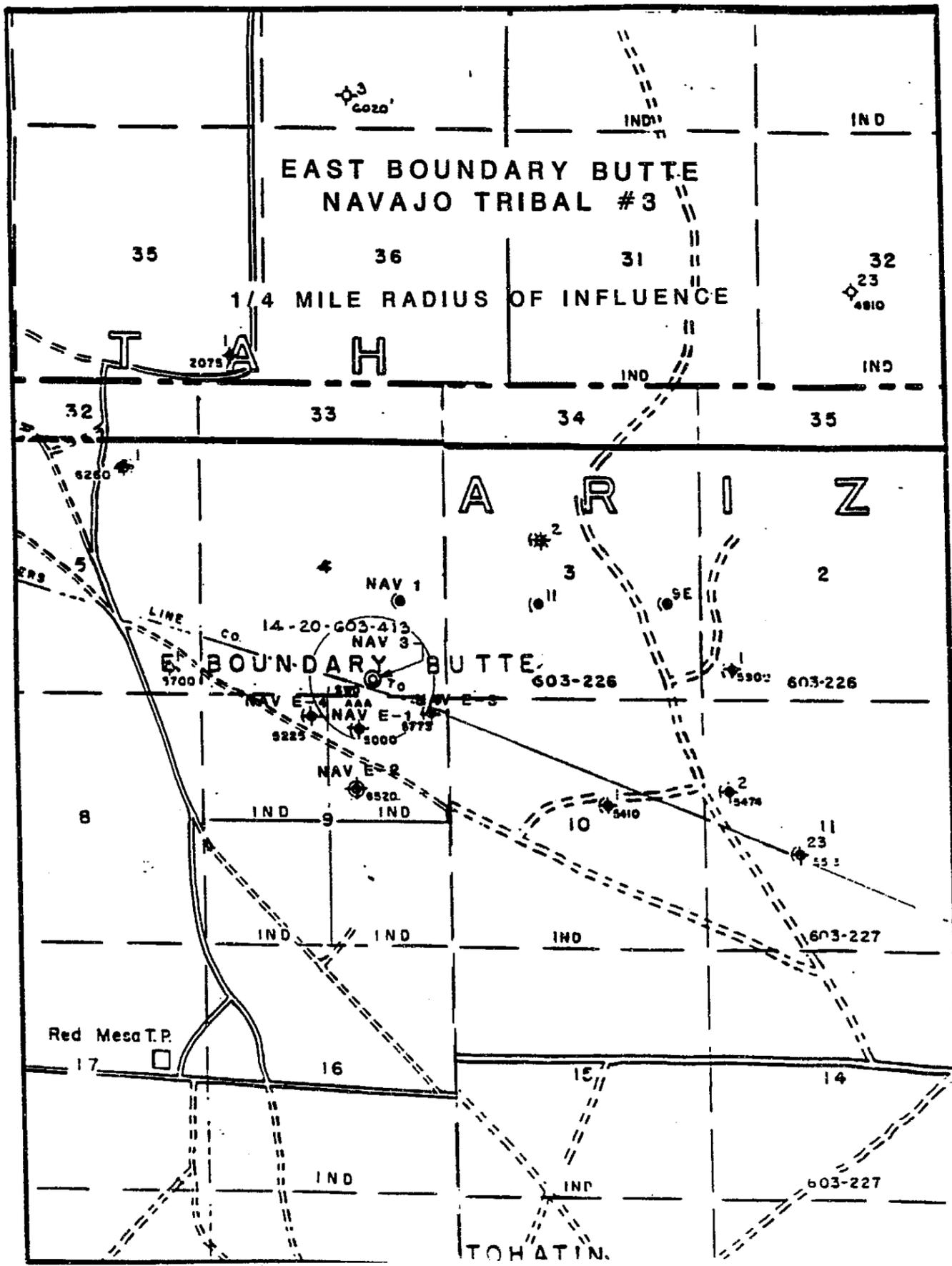
Q. Plugging and Abandonment Plan - See attached form.

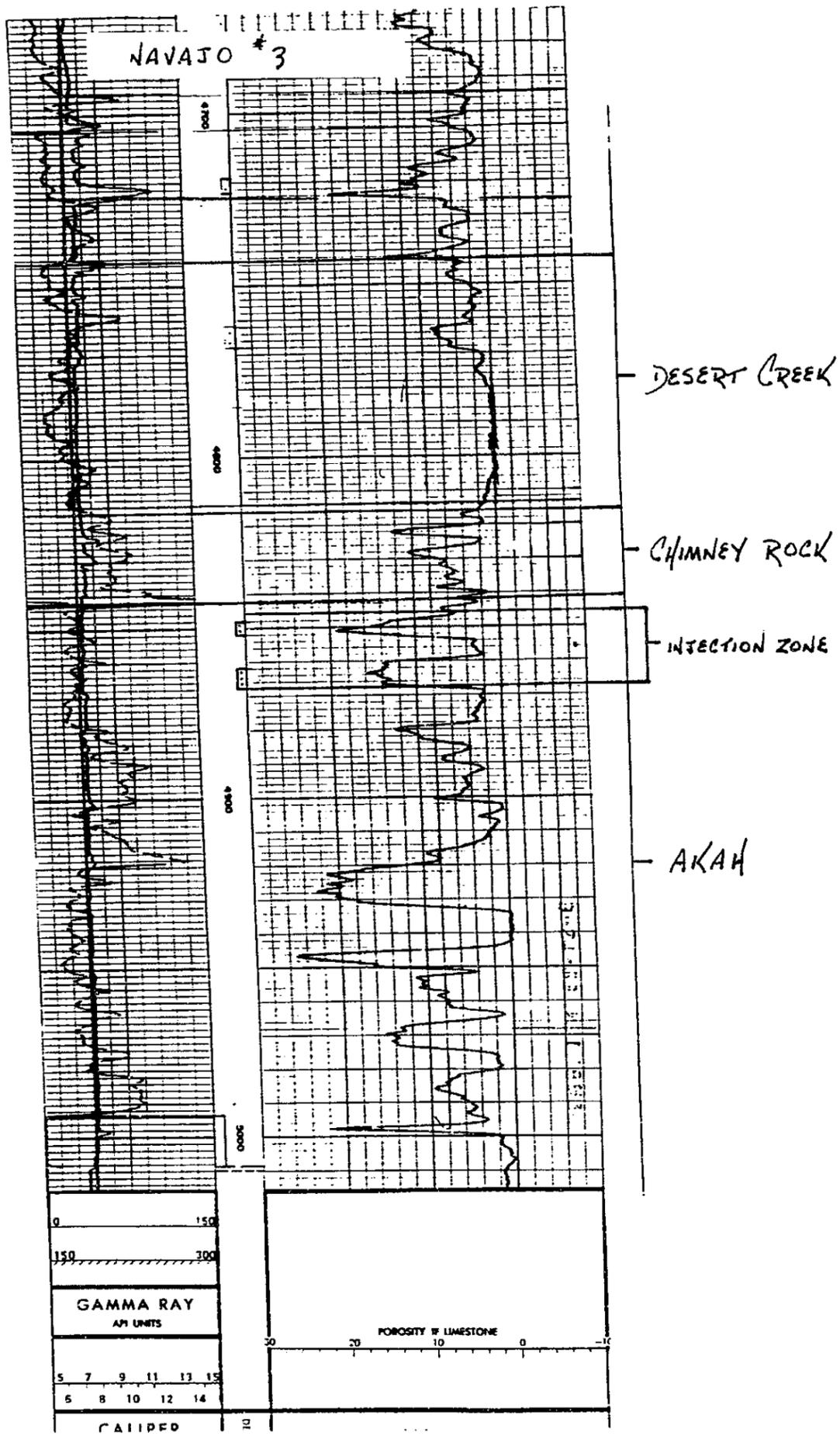
R. Necessary Resources - A copy of our nationwide plugging bond is attached.

S. Aquifer Exemptions - N/A

T. Existing EPA Permits - N/A

U. Description of Business - Merrion Oil and Gas is an independent oil producer and operates the East Boundary Butte Field. The Navajo #3 is being used to dispose of water from production operations.







ANALYSIS NO. 52-64-91

FIELD RECEIPT NO. _____

FORM 45-1

API WATER ANALYSIS REPORT FORM

Company <u>Morrison Oil + Gas</u>		Sample No.	Date Sampled <u>06-03-91</u>	
Field	Legal Description <u>S3 THIN R28E</u>	County or Parish <u>Apache</u>	State <u>Arizona</u>	
Lense or Unit <u>Navajo</u>	Well <u>#2</u>	Depth	Formation <u>Parradox</u>	Water, B/D
Type of Water (Produced, Supply, etc.)		Sampling Point <u>(Desert Creek / Ism)</u>	Sampled By	

DISSOLVED SOLIDS

IONS	mg/l	me/l
Sodium, Na (calc.)	<u>22783</u>	<u>990.57</u>
Calcium, Ca	<u>1242</u>	<u>62.00</u>
Magnesium, Mg	<u>1458</u>	<u>120.00</u>
Barium, Ba		
Potassium, K	<u>390</u>	<u>9.97</u>

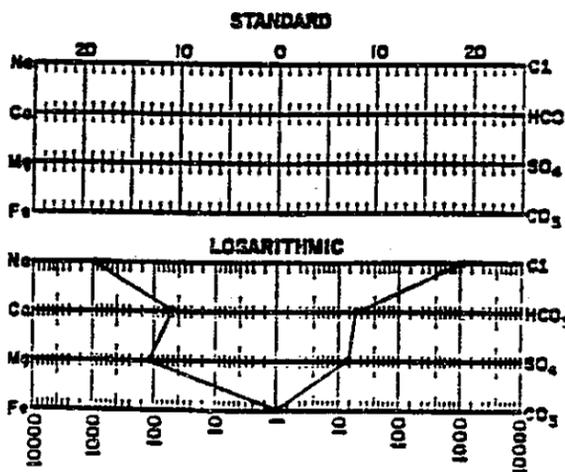
OTHER PROPERTIES

pH	<u>6.98</u>
Specific Gravity, 60/60 F.	<u>1.044</u>
Resistivity (ohm-meters) <u>70</u> F.	<u>.11</u>
Total Hardness	<u>9100</u>

ANIONS

Chloride, Cl	<u>40356</u>	<u>1138.39</u>
Sulfate, SO ₄	<u>930</u>	<u>19.15</u>
Carbonate, CO ₃	<u>0</u>	<u>0</u>
Bicarbonate, HCO ₃	<u>1525</u>	<u>25.00</u>
Hydroxide, OH	<u>0</u>	<u>0</u>

WATER PATTERNS — me/l



Total Dissolved Solids (calc.)

68674

Iron, Fe (total)

0 ppm

Sulfide, as H₂S

POS.

REMARKS & RECOMMENDATIONS:

ANALYST: Lee

PLEASE REFER ANY QUESTIONS TO:

WESTERN CO. OF NORTH AMERICA
 WINSTON-SALEM, N.C.
 GLEN AULT—District Engineer
 (704) 327-6222

EXHIBIT 6



ANALYSIS NO. 52-65-91

FIELD RECEIPT NO. _____

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company <u>Mernon Oil + Gas</u>		Sample No.	Date Sampled <u>06-03-91</u>	
Field	Legal Description <u>53 THIN RABE</u>	County or Parish <u>Apache</u>	State <u>Arizona</u>	
Lease or Unit <u>Navajo</u>	Well <u>3-11</u>	Depth <u>2540-3660</u>	Formation <u>Mississippi + Leadville</u>	Water, B/D
Type of Water (Produced, Supply, etc.)	Sampling Point	Sampled By		

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	<u>16975</u>	<u>738.03</u>
Calcium, Ca	<u>5331</u>	<u>266.00</u>
Magnesium, Mg	<u>778</u>	<u>64.00</u>
Barium, Ba		
Potassium, K	<u>670</u>	<u>17.14</u>

ANIONS

	mg/l	me/l
Chloride, Cl	<u>36780</u>	<u>1037.52</u>
Sulfate, SO ₄	<u>1200</u>	<u>24.98</u>
Carbonate, CO ₃	<u>0</u>	<u>0</u>
Bicarbonate, HCO ₃	<u>1383</u>	<u>22.67</u>
Hydroxide, OH	<u>0</u>	<u>0</u>

Total Dissolved Solids (calc.) 63117

Iron, Fe (total) 150 ppm
Sulfide as H₂S neg

REMARKS & RECOMMENDATIONS:

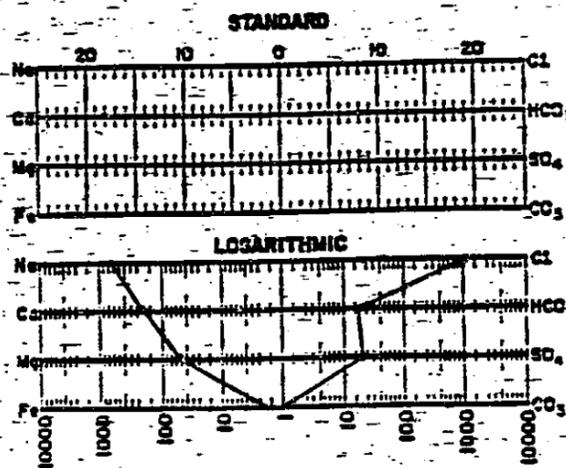
PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA
ARMINGTON, N.M.
ERIAN-AULT-District Engineer
(505) 327-6222

OTHER PROPERTIES

pH	<u>6.48</u>
Specific Gravity, 60/60 F.	<u>1.041</u>
Resistivity (ohm-meters) <u>70 F.</u>	<u>.13</u>
Total Hardness	<u>16500</u>

WATER PATTERNS — me/l



ANALYST: Ahep

EXHIBIT 7



ANALYSIS NO. 52-73-91

FIELD RECEIPT NO. _____

API FORM 42-1

API WATER ANALYSIS REPORT FORM

Company	Merron Oil & Gas		Sample No.	Date Sampled	
Field	Legal Description		County or Parish	State	
Lease or Unit	Well	Depth	Formation	Water B/D	
Type of Water (Produced, Supply, etc.)	Sampling Point		Sampled By		

Field: Sec. 3-741N R8W County or Parish: Apache State: Arizona
 Lease or Unit: Footbundry Butte Well: Navajo # 3-11 Depth: 5410-5564 Formation: Leadville Water B/D: _____
 Type of Water (Produced, Supply, etc.): Produced Sampling Point: Separator Sampled By: _____

DISSOLVED SOLIDS

CATIONS

	mg/l	meq/l
Sodium, Na (calc.)	19999	869.54
Calcium, Ca	5250	262.00
Magnesium, Mg	1130	95.00
Barium, Ba	—	—
Potassium, K	817	20.96

ANIONS

	mg/l	meq/l
Chloride, Cl	4244	1197.21
Sulfate, SO ₄	1660	34.56
Carbonate, CO ₃	0	0
Bicarbonate, HCO ₃	834	15.67
Hydroxide, OH	0	0

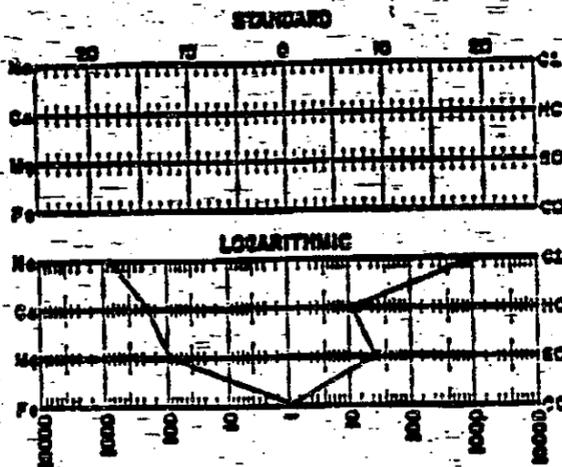
Total Dissolved Solids (calc.) 7213

Iron, Fe (total) 0
Sulfide, as H₂S neg

OTHER PROPERTIES

pH	6.45
Specific Gravity, 60/60 F.	1.048
Resistivity (ohm-meters) 74 F.	11
Total Hardness	17750

WATER PATTERNS — meq/l



REMARKS & RECOMMENDATIONS:

Sulfate-reducing bacteria:
Approximately 10² SRB cells/ml. Please note that the low SRB number was below the accuracy of the test kit.

ANALYST: Lee

PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA
FARMINGTON, N.M.
BRIAN AULT—District Engineer
1(505) 327-6222

EXHIBIT 8

Geiger Counter Test

Produced water from the Navajo 3-11 Leadville zone (perms 5540'-5564') was tested on 6-21-91 with a Geiger counter. There was no measurable radio activity.

Carl Merilatt
Witness

Carl Merilatt
Signature

6-26-91
Date

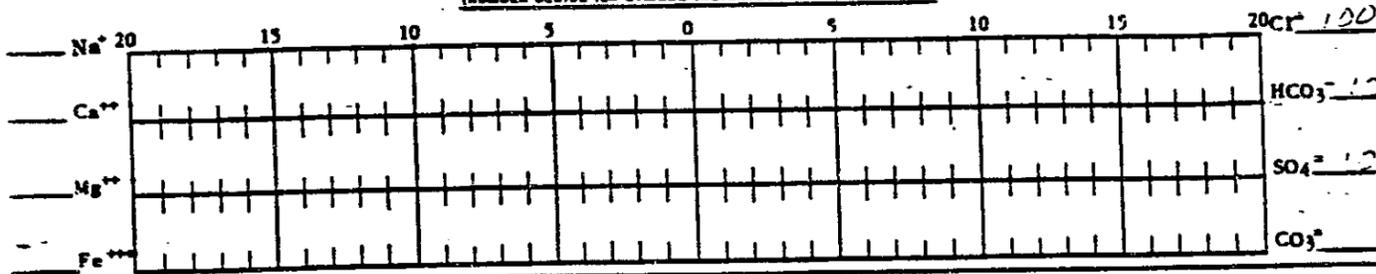
Chemical Consultants

All Types Oil Field Chemicals and Services
P.O. Box 421
Farmington, New Mexico 87401

WATER ANALYSIS TEST REPORT

INJECTION ZONE						SHEET NUMBER
MERRION OIL & GAS						DATE 1-12-83
FIELD				COUNTY OR PARISH	STATE	
LEASE OR UNIT			WELL(S) NAME OR NO. AKAH	WATER SOURCE (FORMATION)		
DEPTH, FT.	BHT, F	SAMPLE SOURCE	TEMP. F	WATER, BBL/DAY	OIL, BBL/DAY	GAS, MMCF/DAY
TYPE OF OIL		API GRAVITY 0	TYPE OF WATER <input type="checkbox"/> PRODUCED WATER <input type="checkbox"/> INJECTION WATER OTHER			

WATER ANALYSIS PATTERN (NUMBER BESIDE ION SYMBOL INDICATES mg/l * SCALE UNIT)



DISSOLVED SOLIDS

CATIONS	me/l *	mg/l *
Total Hardness	15.2	760.
Sodium, Na ⁺ (calc.)	1,187.	27,300.
Calcium, Ca ⁺⁺	9.6	192.
Magnesium, Mg ⁺⁺	5.6	68.
Iron (Total), Fe ⁺⁺⁺	04.	.8
ANIONS	me/l *	mg/l *
Chloride, Cl ⁻	1,170.	41,500.
Sulfate, SO ₄ ⁻	5.0	241.
Carbonate, CO ₃ ⁻	0	0
Bicarbonate, HCO ₃ ⁻	27.2	1659.
Hydroxyl, OH ⁻	0	0
Sulfide, S ⁻		
Phosphate-Meta, PO ₃ ⁻		
Phosphate-Ortho, PO ₄ ⁻		

DISSOLVED GASES

Hydrogen Sulfide, H ₂ S	mg/l *
Carbon Dioxide, CO ₂	mg/l *
Oxygen, O ₂	mg/l *

PHYSICAL PROPERTIES

pH	6.46
Eh (Redox Potential)	MV
Specific Gravity	
Turbidity, JTU Units	
Total Dissolved Solids (Calc.)	71,461 mg/l *
Stability Index	@ F
CaSO ₄ Solubility	@ F mg/l *
Max. CaSO ₄ Possible (Calc.)	mg/l *
Max. BaSO ₄ Possible (Calc.)	mg/l *
Residual Hydrocarbons	ppm (Vol/Vol)

SUSPENDED SOLIDS (QUALITATIVE)

Iron Sulfide Iron Oxide Calcium Carbonate Acid Insoluble

REMARKS AND RECOMMENDATIONS:

* NOTE: me/l and mg/l are commonly used interchangeably for ppm and ppm respectively. Where ppm and ppm are used, corrections should be made for specific gravity.

ENGINEER

MIKE JONES

DIST. NO.

ADDRESS

BOX 421 FARMINGTON, N.M.

OFFICE PHONE

327-7775

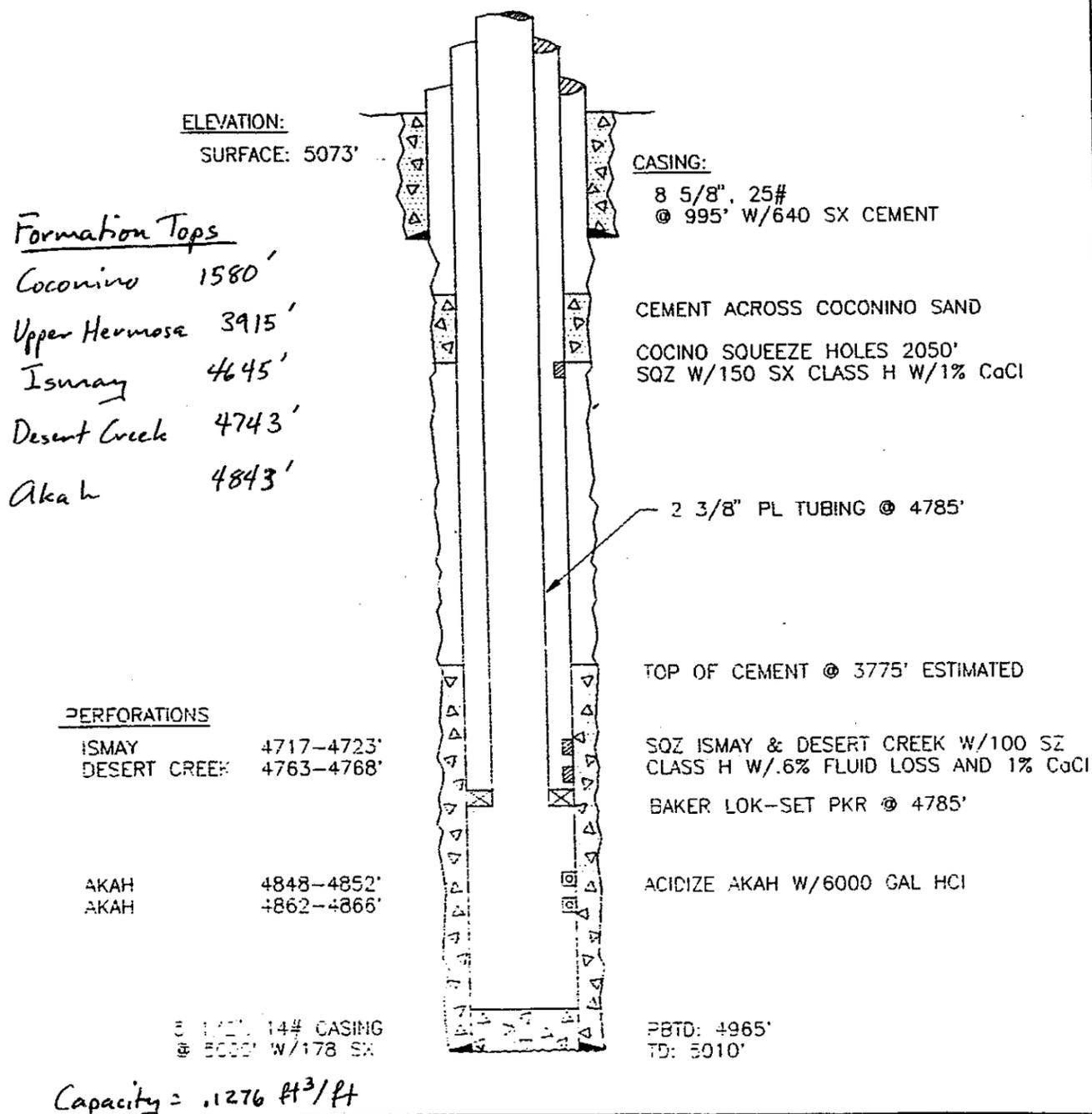
HOME PHONE

MERRION OIL AND GAS CORP.
WELLBORE SCHEMATIC

NAVAJO NO. 3

SECTION 4, T41N, R28E
APACHE COUNTY, ARIZONA

ENG: G.F. SHARPE DRFT: M.E.G.
DATE: 6-17-91



WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

New Well Work-Over Deepen Plug Back Same Reservoir Different Reservoir Oil Gas Dry

DESCRIPTION OF WELL AND LEASE

Operator: **Humble Oil & Refining Company** Address: **P. O. Box 120, Denver, Colorado 80201**

Federal, State or Indian Lease Number or name of lessor if fee lease: **Navajo Tribe of Indians - 14-20-603-413** Well Number: **3** Field & Reservoir: **Boundary Butte, East - Paradox**

Location: **SE SW SE (330' FSL & 1650' FEL) of Sec. 4** County: **Apache**

Sec. TWP-Range or Block & Survey: **Section 4-41N-28E - G&SPM**

Date spudded: **8-27-69** Date total depth reached: **9-10-69** Date completed, ready to produce: **11-30-69** Elevation (DP, RKB, RT or Gr.): **5410' RKB** Elevation of casing hd. Range: **5400** feet

Total depth: **5010'** P.R.T.D.: **4965'** Single, dual or triple completion?: **Single** If this is a dual or triple completion, furnish separate report for each completion.

Producing interval (s) for this completion: **4717-23' & 4763-68' - See attached summary.** Rotary tools used (Interval): **0-5010'** Cable tools used (Interval): **None**

Was this well directionally drilled? **No** Was directional survey made? **No** Was copy of directional survey filed? **-** Date filed: **-**

Type of electrical or other logs run (check logs filed with the commission): **IES & Sidewall Neutron Porosity - Furnished you on 10-20-69.** Date filed: **10-20-69**

CASING RECORD

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Surface	12-1/4"	8 5/8"	24 1/2	995'	640	None
Production	7-7/8"	5-1/2"	14 1/2	5000'	178 Sx plus	None
12 1/2 Gilsomite per sk.						

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
2-1/2" in.	4803 ft.	- ft.	- in.	- ft.	- ft.	-	-

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval
2	4" Hyperjet	4848-52' & 4862-66'	1000 Mud & 5000 reg.	4848-52' & 4862-66'
2	4" Hyperjet	4717-23' & 4763-68'	1000 MCA Each Zone	4717-23' & 4763-68'

INITIAL PRODUCTION

Date of first production: **10-20-69** Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): **Pump**

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
11-23-69	24	-	72 bbls.	179 MCF	172 bbls.	36.5 API (Corr)

Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio
130	130		72 bbls.	179 MCF	172 bbls.	2487

Disposition of gas (state whether vented, used for fuel or sold): **Lease fuel & vented.**

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the **Dist. Supt.** of the **Humble Oil & Refining Company** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date: **12-5-69** Signature: **J. Roy Dorrrough**

Form 3100-1
(November 1983)
(Former 70-531)

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL
14-20-603-413

6. IF INDIAN ALLOTTEE OR TRIBE NAME
Navajo Tribe

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo

9. WELL NO.
#3

10. FIELD AND POOL, OR WILDCAT
East Boundary Butte

11. SEC., T., R., M. OR B.L. AND SURVEY OR AREA

Sec 4, T41N, R28E

12. COUNTY OR PARISH 13. STATE
Apache AZ

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL GAS WELL OTHER Disposal Well 91 MAR 20 PM 1:59

2. NAME OF OPERATOR
Merrion Oil & Gas Corporation 019 FARMINGTON, N.M.

3. ADDRESS OF OPERATOR
P. O. Box 840, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
AT SURFACE
330' PSL & 1650' FEL

14. PERMIT NO. 15. ELEVATIONS (Show whether OF, ST, CR, ETC.)
5410' GL

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FILL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input checked="" type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANT <input type="checkbox"/>	(Other) <input type="checkbox"/>	

17. 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.)

2-5-91 to 2-14-91: Repaired tubing leak and ran a successful mechanical integrity test (MIT) on the subject well. See attached workover report for details. Also, attached is a copy of Western's chart recording of the MIT.

18. I hereby certify that the foregoing is true and correct
SIGNED T. Greg Merrion TITLE Engineer ACCEPTED FOR RECORD
DATE APR 17 1991

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL IF ANY: _____
cc: 1 EPA, (CERCLA/RCRA RESOURCE AREA)
1 State of AZ JMK
6 BLM, Fwy
1 Well File

*See instructions on Reverse Side

NAVAJO NO. 3, SALT WATER DISPOSAL WELL

February 5, 1991 Day No. 1

Summary: MIRU Flint. Pressure tested csg. POH w/ tbg and pkr.

Detail: MIRU Flint Well Service. RU equipment to pump into csg for leak inj rate and pressure. Loaded csg w/ approx 20 bbls water and pressured up to 400 psig. Tbg head packing leaking. Pulled slips, installed BOPs. Pressure tested csg to 600 psig, held solid for 15 minutes. Released pressure. Tbg plugged w/ iron sulfide. Unset pkr. POH w/ tbg. First 2 jts completely plugged, 2nd & 3rd jts partially open. Laid down 4 plugged jts. SWI. SDON.

February 6, 1991 Day No. 2

Summary: Located suspected csg leak between 3842' & 3858' KB.

Detail: TIH w/ rebuilt Baker Lok-set pkr on 2-3/8" plastic lined tbg. Reverse circulated to clean csg and tbg, losing approx. 1 BPM to perfs. Set pkr @ 4792' KB. Tested csg to 500 psig. Leaked off to zero in one minute. POH looking for csg leak. Found possible leak between 3842' and 3858' KB. Pressured up to 500 psig. Leaked off to zero in 1 to 1.5 minutes. POH w/ Lok-set pkr. SDON.

February 7, 1991 Day No. 3

Summary: All csg good to 500 psi. Found tbg leak.

Detail: TIH w/ Model "C" Bridge Plug and fullbore pkr. Set BP and loaded the hole w/ water. Set fullbore pkr above plug and tested to 2000 psig. Leaked off. Found 1/2" hole in tbg. Retested tbg and csg. All csg held 500 psig. All tbg tested to 2,000 psig. POH w/ fullbore and BP. TIH w/ Lok-set pkr. Could not get it to set. SWI. SDON.

February 8, 1991 Day No. 4

Summary: Filled annulus with inhibited pkr fluid. Pressure tested csg to 500 psig for 1 hr, held good. RDMO.

Detail: Reset Lok-set pkr. Pressure tested csg to 500 psig for 1 hr, held solid. Released pkr. Reset and tested again, ok. Unset pkr. Pumped 100 bbls pkr fluid down csg. Reset pkr. NU wellhead. Pressure tested again to 500 psi for 1 hr, held good. RDMO.

Note: Replaced 2-7/8" slips and packing @ the surface w/ new 2-3/8" slips and packing.

NAVAJO NO. 3, SALT WATER DISPOSAL WELL

February 8, 1991 Day No. 4 CONTINUED

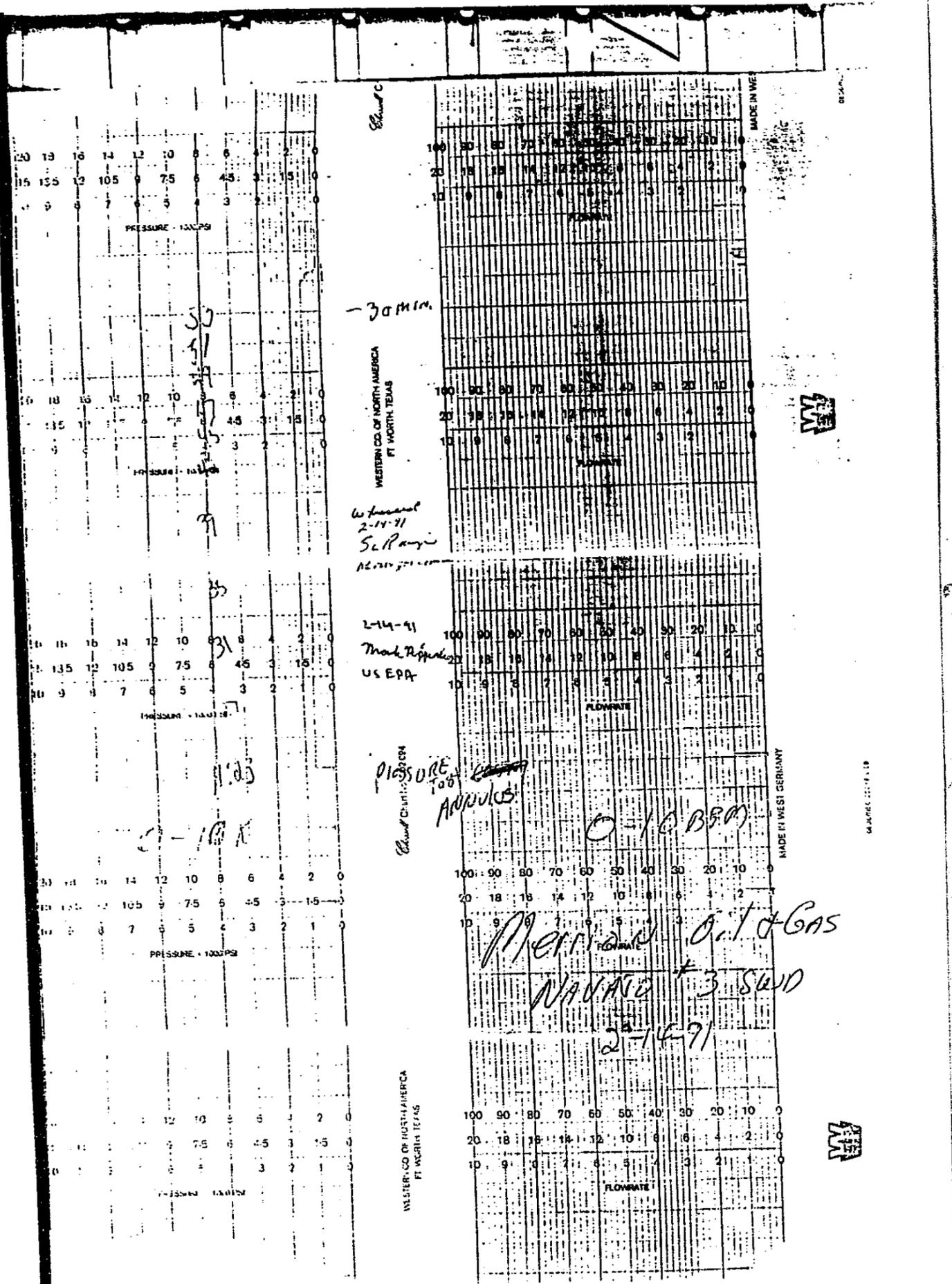
String run 2-8-91:

2-3/8" plastic lined Lok-set pkr	4.0'
2-3/8" Buttress x 2-3/8" EUE changeover	4.4'
66 jts 2-3/8" Buttress tbg (plastic lined)	2054.28'
88 jts 2-3/8" EUE tbg (plastic lined)	<u>2718.38'</u>
Total String	4785.46'

February 14, 1991 Day 1 of 1

Summary: EPA and Arizona State witnessed good mechanical integrity test of tubing-casing annulus.

Detail: RU Western Co. Pressure tested csg w/ one Bbl H₂O w/ packer fluid. Pressure tested to 600 psig, in 30 min. pressure 540 psig. Test accepted by Steven Rauzi of Arizona State Oil Commission and Mark Ripperda, EPA representative from San Francisco. Released pressure. SWI. Put Navajo No. 1 back on production. Navajo No. 3 taking water on vacuum.



150 13 16 14 12 10 8 6 4 2 0
 115 155 12 105 9 7.5 6 4.5 3 1.5 0
 0 0 7 6 5 4 3 2 1 0

PRESSURE - 100 PSI

10 11 13 14 12 10 8 6 4 2 0
 115 11 105 9 7.5 6 4.5 3 1.5 0
 0 0 7 6 5 4 3 2 1 0

PRESSURE - 100 PSI

11 11 13 14 12 10 8 6 4 2 0
 115 135 12 105 9 7.5 6 4.5 3 1.5 0
 0 0 7 6 5 4 3 2 1 0

PRESSURE - 100 PSI

11 11 13 14 12 10 8 6 4 2 0
 115 135 12 105 9 7.5 6 4.5 3 1.5 0
 0 0 7 6 5 4 3 2 1 0

PRESSURE - 100 PSI

11 11 13 14 12 10 8 6 4 2 0
 115 135 12 105 9 7.5 6 4.5 3 1.5 0
 0 0 7 6 5 4 3 2 1 0

PRESSURE - 100 PSI

- 30 min.

WESTERN CO. OF NORTH AMERICA
 FT. WORTH, TEXAS

2-14-91
 S. R. Perry

2-14-91
 Mark R. Perry
 US EPA

PRESSURE
 100
 ANNUALS

0-10 BSM

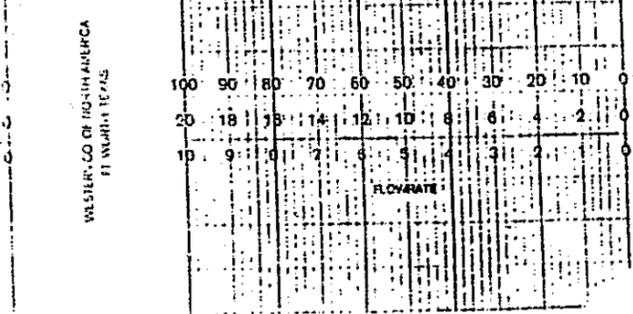
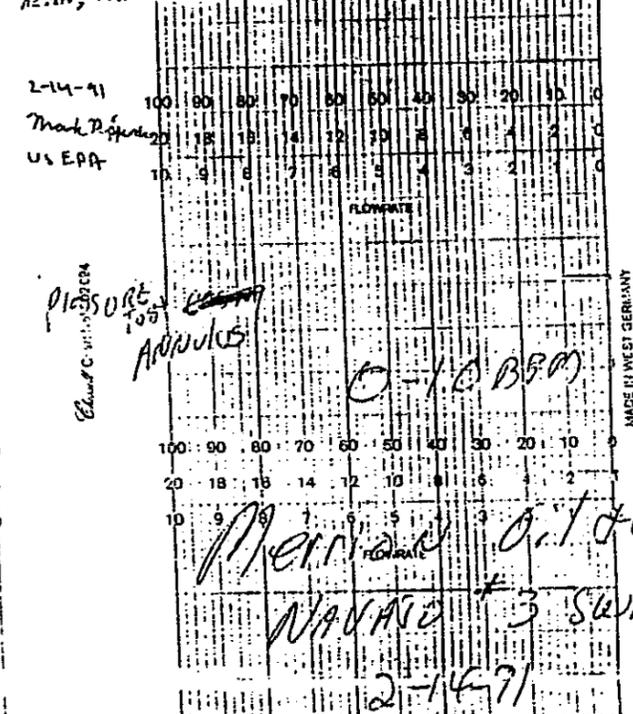
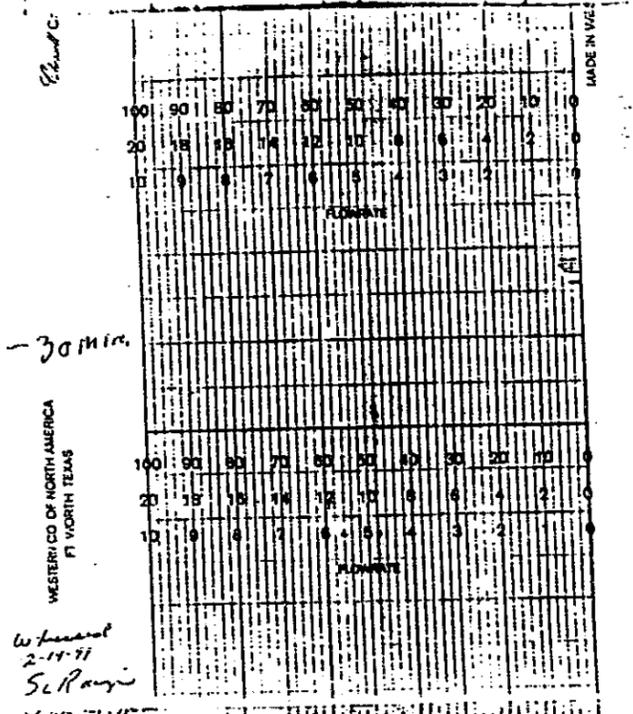
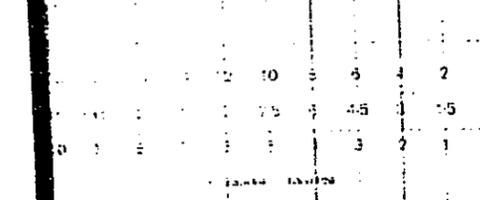
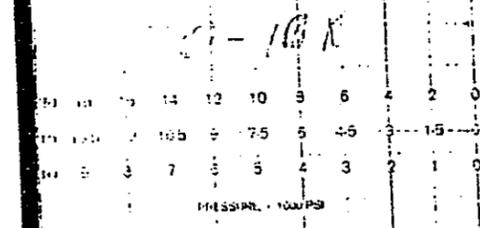
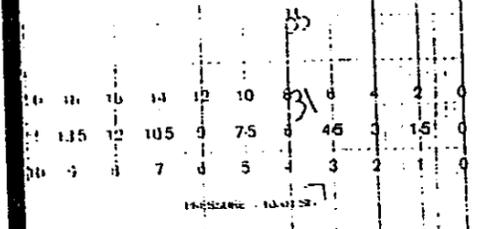
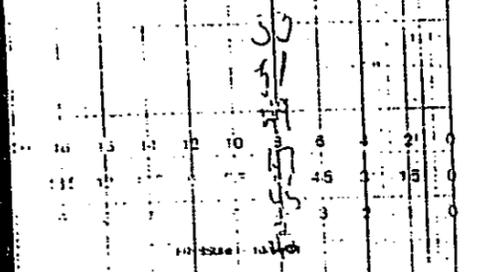
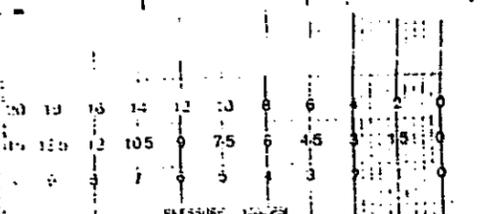
MERITAN OIL & GAS
 NAVARO #3 SWD
 2-14-91

WESTERN CO. OF NORTH AMERICA
 FT. WORTH, TEXAS

MADE IN WEST GERMANY

MADE IN WEST GERMANY





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460



PLUGGING AND ABANDONMENT PLAN

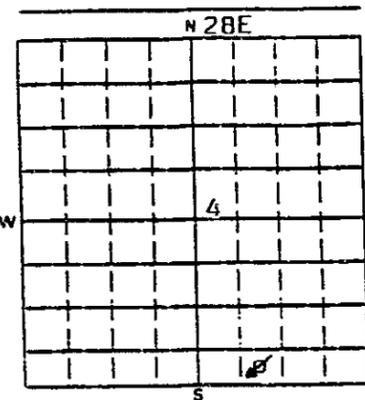
NAME AND ADDRESS OF FACILITY

East Boundary Butte
#3 Navajo Tribal

NAME AND ADDRESS OF OWNER/OPERATOR

Merrion Oil & Gas
610 Reilly Ave, Farmington, NM 87401

LOCATE WELL AND OUTLINE UNIT ON
SECTION PLAT - 640 ACRES



STATE

COUNTY

PERMIT NUMBER

AZ Apache

SURFACE LOCATION DESCRIPTION

SE 1/4 OF SW 1/4 OF SE 1/4 SECTION 4 TOWNSHIP 41N RANGE 28E

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location 330 ft. from (N/S) Line of quarter section
and 1650 ft. from (E/W) Line of quarter section

TYPE OF AUTHORIZATION

- Individual Permit
- Area Permit
- Rul.

Number of Wells 1 Injection

WELL ACTIVITY

- CLASS I
- CLASS II
- Brine Disposal
- Enhanced Recovery
- Hydrocarbon Storage
- CLASS III

Lease Name

Well Number

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT(LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
8 5/8"	25#	995'	995'	12 1/4"
5 1/2"	14#	5000'	5000'	7 7/8"

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- The Balance Method
- The Dump Bailer Method
- The Two-Plug Method
- Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	5 1/2"	5 1/2"	5 1/2"	5 1/2"	5 1/2"	5 1/2-83/4"	
Depth to Bottom of Tubing or Drill Pipe (ft.)	4916'	3965'	1630'	1045'	50'	50'	
Sacks of Cement To Be Used (each plug)	50	25	25	25	6	9	
Slurry Volume To Be Pumped (cu. ft.)	57.5	28.9	28.9	28.9	6.9	10	
Calculated Top of Plug (ft.)	4465'	3739'	1403'	818'	0'	0'	
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (Lb./Gal.)	15.8	15.8	15.8	15.8	15.8	15.8	
Type Cement or Other Material (Class III)	G	G	G	G	G	G	

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (If any)

From	To	From	To
4717	4723 (Ismay)	These Perf's sqzd w/100sx H.w/.6% fluid.	
4763	4768 (Desert CK)	Loss & 1% cacl. & are behind packer.	
4848	4852 (Aka)	Injection zone	
4862	4866 (Aka)	Injection zone	

Estimated Cost to Plug Wells

\$15,000

CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

NAME AND OFFICIAL TITLE (Please type or print)

George F Sharpe
Petroleum Engineer

SIGNATURE

George F Sharpe

DATE SIGNED

11-12-92



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
WASHINGTON, D.C. 20240



IN REPLY REFER TO:

Real Estate
Code 220

Bond Information

Ms. Crystal Williams
Merrion Oil & Gas Corporation
P.O. Box 840
Farmington, New Mexico 87499

MAR 27 1991

Dear Ms. Williams:

Thank you for your letter informing us of the increase of bond coverage and change of principals concerning Nationwide Bond No. 40-S-23025-BCA (formerly 40-S-40023025 BCA).

Bond Increase Certificate: Increases the amount of bond coverage from \$50,000 to 150,000 for J. Gregory Merrion & R.L. Bayless.

Bond Change Endorsement: Changes the name of the principals from J. Gregory Merrion & R.L. Bayless to Robert L. Bayless, J. Gregory Merrion, Merrion Oil & Gas, Merrion Petroleum Corporation with the surety remaining the same, Aetna Casualty & Surety Company.

The Increase Certificate and the Change Endorsement are hereby approved as of the date of this correspondence and will be retained in the Bureau's Division of Real Estate Services, 1849 C Street, NW, MS: 4522-MIB, Washington, DC 20240. All Bureau area offices and the surety are being informed of this action.

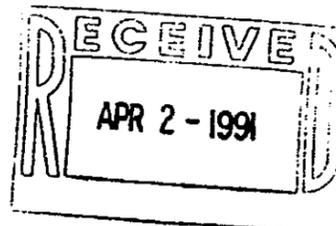
Enclosed are copies of the approved documents for your files. If we can be of any further assistance, please feel free to contact us.

Sincerely,

[Signature]
Director, Office of Trust and
Economic Development

Acting

Enclosures





INCREASE CERTIFICATE

THE AETNA CASUALTY AND SURETY COMPANY
Hartford, Connecticut 06115

DUPLICATE

Bond No. 40 S 23025 BCA Amount of Bond \$ 75,000.00
(40 S 40023025 BCA)
Principal J. Gregory Merrion & R.L. Bayless Hereby increased to \$ 150,000.00
Obligee United States of America

As of the 9th day of April, 19 83, the amount of the above described bond is increased from the sum of \$ 75,000.00---to the sum of \$ 150,000.00-- , but the liability of the Surety for any acts or defaults occurring before the effective date hereof shall in no event exceed the sum first named, and the aggregate liability for any and all acts and defaults, whenever committed, shall in no event exceed the sum last named, it being the intent hereof to preclude cumulative liability. This certificate, when signed by the Principal, shall become a part of the said bond.

Signed, sealed and dated this 5th day of April, 19 83

THE AETNA CASUALTY AND SURETY COMPANY

By Frances I. Mangold Attorney-in-Fact
Frances I. Mangold

I hereby consent to the above increase.

Witness my hand and seal this _____ day of _____, 19 ____

APPROVED:

MAR 27 1991, 1991

J. Gregory Merrion (Seal)
Principal

CTNA DIRECTOR, OFFICE OF TRUST AND ECONOMIC DEVELOPMENT
INSTRUCTIONS TO AGENTS - IMPORTANT

Do not deliver this certificate to the Obligee until it has been dated and signed by the Principal. One signed copy must be returned to the Surety.

The Holmes Organisation, Inc.
Insurance and Bonds

P.O. Box 35287 Tulsa, Oklahoma 74153
918-254-0471 FAX 918-252-4802



It is agreed that as of the effective date hereof the policy is amended as indicated by

1. Name of Insured Robert L. Bayless, J., Gregory Merrion, Merrion Oil & Gas, Merrion Petroleum Corporation
2. Insured's business address
3. Location of the premises
- Part occupied by Insured
4. Limit of Insurance under increased to \$
- Limit of Insurance under increased to \$
5. Limit of Insurance under decreased to \$
- Limit of Insurance under decreased to \$
6. Additional location and limits of insurance as shown below.
7. Rate per \$100 of Accounts Receivables \$
8. Accounts Receivable Minimum Policy Premium \$
9. Answer to item of the declarations amended as shown below.
10. Mercantile Open Stock, Coinsurance % ; \$ limit.
11.

This endorsement forms a part of the policy to which attached, effective on the inception date of the policy unless otherwise stated herein.

(The information below is required only when this endorsement is issued subsequent to preparation of policy.)

Endorsement effective 01-28-91	Policy No. 40S23025BCA	Endorsement No. 2
Named Insured Merrion Oil & Gas Corp.	(40S40023025BCA)	
Additional Premium \$	Return Premium \$	In Adv. \$
		1st Anniv. \$
		2nd Anniv. \$
		Total Document Premium \$ N/A

APPROVED:

MAR 27 1991 1991

CTING
DIRECTOR, OFFICE OF TRUST AND ECONOMIC DEVELOPMENT
Insert Company Name

AETNA CASUALTY & SURETY COMPANY
8023 EAST 63RD PLACE
TULSA, OK 74133

Countersigned by Gaylen Simmons Representative

Additional Premium Return Premium

18-657-N1 12-84

C-1. 66149A
PRINTED IN U.S.A.

I, the undersigned, Secretary of THE AETNA CASUALTY AND SURETY COMPANY, a stock corporation of the State of Connecticut, DO HEREBY CERTIFY that the foregoing and attached Power of Attorney and Certificate of Authority remains in full force and has not been revoked; and furthermore, that the Standing Resolutions of the Board of Directors, as set forth in the Certificate of Authority, are now in force.

Signed and Sealed at the Home Office of the Company, in the City of Hartford, State of Connecticut, Dated this 28th day of January 19 91



By John W. Welch
Secretary

Form 5-156
Oct. 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

NATIONWIDE OIL AND GAS LEASE BOND 40 S 23025 BCA

KNOW ALL MEN BY THESE PRESENTS, That we, J. GREGORY MERRION & R.L. BAYLESS

of Box 507, Farmington N.Mexico 87401

as principals, and THE ETNA CASUALTY AND SURETY COMPANY

of HARTFORD, CONNECTICUT, as surety, are held and firmly bound unto the United States of America in the sum of seventy-five thousand dollars (\$75,000), lawful money of the United States, for the payment of which, well and truly to be made, we bind ourselves and each of us, our and each of our heirs, successors, executors, administrators, and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 21st. day of December, 1975.

The condition of this obligation is such that whereas the said principals have heretofore or may hereafter enter into or otherwise acquire an interest in oil and gas mining leases and oil and gas prospecting permits of various dates and periods of duration covering lands or interests in lands held by the United States in trust for individual Indians, or tribes or bands of Indians, or subject to restrictions against alienation without the consent of the Secretary of the Interior or his authorized representative, which leases and permits have been or may hereafter be granted or approved by the Secretary of the Interior or his authorized representative, and the identification of which herein is expressly waived by both principals and surety hereto.

WHEREAS the principals and surety agree that the coverage of this bond shall extend to and include all extensions and renewals of leases and permits covered by this bond, such coverage to continue without any interruption due to the expiration of the term set forth therein.

WHEREAS the surety hereby waives any right to notice of any modification of any such lease or permit, or obligation thereunder whether effected by extension of time for performance, by commitment of such lease to unit, cooperative, or communitization agreement, by waiver, suspension, or change in rental, except an increase thereof, by minimum royalty payment, except an increase thereof, by compensatory royalty payment, or otherwise, this bond to remain in full force and effect notwithstanding.

WHEREAS the principals and surety agree that the neglect or forbearance of the obligee of any such lease or permit in enforcing the payment of any rental or royalty or the performance of any other covenant, condition, or agreement of any such lease or permit shall not in any way release the principals and surety, or either of them, from any liability under this bond; and

WHEREAS the principals and surety agree that in the event of any default under any such lease or permit, the obligee may prosecute any claim, suit, action, or other proceeding against the principals and surety, or either of them, without the necessity of joining the other.

Now, if the said principals herein shall faithfully carry out and observe all the obligations assumed in said leases and permits to which J. GREGORY MERRION & R.L. BAYLESS is now or may hereafter become a party, and shall observe all the laws of the United States and regula-

tions made, or which shall be made hereunder, for the government of trade and intercourse with Indian tribes, and all rules and regulations that have been or shall hereafter be lawfully prescribed by the Secretary of the Interior relative to said oil and gas mining leases and permits, and shall in all particulars comply with the provisions of said leases, permits, rules and regulations, then this obligation shall become null and void; otherwise, to remain in full force and effect.

The rate of premium charged on this bond is \$ 10.00; the total premium paid is \$ 750.00

Signed and sealed in the presence of—

WITNESSES*

Susan K. Underwood
P.O. Farmington, New Mexico

James M. Johnson
P.O. Farmington, NM

Susan K. Underwood
P.O. Farmington, New Mexico

James M. Johnson
P.O. Farmington, NM

Paterson
P.O. Tulsa Oklahoma

Mary Lee Klemmer
P.O. Tulsa Oklahoma

P.O.

P.O.

P.O.

as to [Signature] [SEAL]
J. GREGORY MERRION

as to [Signature] [SEAL]
R. L. BAYLESS

THE AETNA CASUALTY AND SURETY COMPANY
as to [Signature] [SEAL]
Julia A. Sanders, Attorney-in-Fact
6111 E. Skelly Dr., Tulsa, Okla. 74135

as to [Signature] [SEAL]

*Two witnesses to each signature.

DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
Washington 25, D. C.

Pursuant to delegation of authority in
10 BIAM 5.6 (F.R. 74-16125)

MAY 9 1977, 19

Approved:

[Signature]
Director, Office of Commissioner of Indian Affairs
Trust Responsibilities

WELL: #1 NAVAJO-E

**WELLBORE SCHEMATIC
MERRION OIL AND GAS CORP.**

ENG: DRFT:

DATE: 10/72

LOCATION: 200' N 1950' E 1/2, T 11 N R 28 E
APACHE COUNTY, ARIZONA

ARTIFICIAL LIFT:

PUMPING UNIT:
ENGINE:
SPM: SL: "
BH PUMP:
RODS:
TBC: " #/FT.
PUMP DEPTH:

ELEVATION

GL: 5100'
KB: 5412'

FORMATION TOPS:

CHINLE 235'	SHINLE 265'	PERMOSA 277'
STRMEL 10'	CHINLE 235'	ISMAY 4550'
NAVAJO 105'	DE WELLY 2065'	DESERT 2K-4721'
AVANZA 275'	ORBAN RAIN 2796'	AKAI 4740'
VALHALLA 235'	LOWER LUTED 2735'	TD 5000'

SQUEEZED PERFORATIONS:

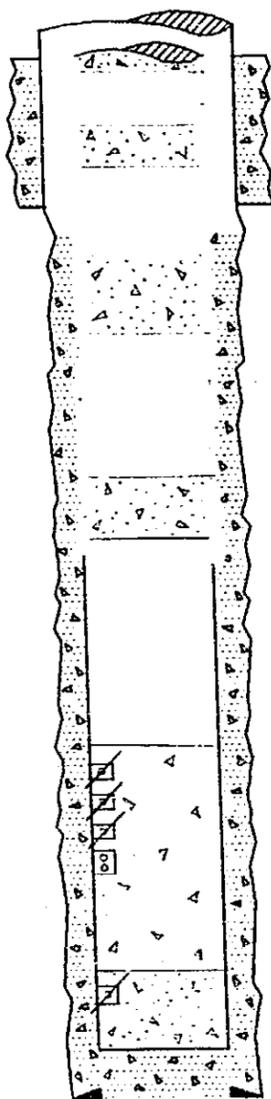
4722-17' 4732-67'

OPEN PERFORATIONS:

4722-17'

STIMULATION:

1000 GAL. 15% HCl



SURFACE CASING:

HOLE SIZE: 15" "
CSG SIZE: 10 3/4" .3275 #/FT.
DEPTH: 300'
CMT DETAILS: 150 SX

TOC:
BY:

PRODUCTION CASING:

HOLE SIZE: 8 3/4" "
CSG SIZE: 5 1/2" .145155 #/FT.
DEPTH: 5000'
CMT DETAILS: 900 SX
1ST STAGE:

2ND STAGE:

TOC: 10/72
BY: DRFT

5000' - 3100' = 1900'
15" 5000' - 3100' = 1900'
15" 5000' - 3100' = 1900'

DEPTHS

PBTD: 4700'
TD: 5300'

CAPACITIES: BBL/FT FT/BBL FT3/FT

TBC
CSG: .134
TBC/CSG ANNULUS: .1556

Handwritten notes and calculations at the bottom left of the page, including '1000 GAL. 15% HCl' and various depth-related figures.

Form 9-310
(Rev. 5-63)

3 USGS ~~2~~ 2 Ariz. 1 AAA 1 Nav. 1 File

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. CASEV. Other _____

2. NAME OF OPERATOR
AAA Fishing Tool Co., Inc.

3. ADDRESS OF OPERATOR
Box 234, Farmington, N. M. 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface
At top prod. interval reported below **700' fm 1950' fm**
At total depth

14. PERMIT NO. _____ DATE ISSUED _____

5. LEASE DESIGNATION AND SERIAL NO.
14-20-0603-597

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo E

9. WELL NO.
1

10. FIELD AND POOL OR WILDCAT
East Boundary Butte

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 9, T41N, R28E

12. COUNTY OR PARISH
Apache

13. STATE
Ariz.

15. DATE SPUNDED **10/10/69** 16. DATE T.D. REACHED **10/23/69** 17. DATE COMPL. (Ready to prod.) **11/10/69** 18. ELEVATIONS (OF, RES. BT, GR, ETC.)* **5400' Gr.**

20. TOTAL DEPTH, MD & TVD **5000'** 21. PLUG, BACK T.D., MD & TVD **4907'** 22. IF MULTIPLE COMPL., HOW MANY? **Single** 23. INTERVALS DRILLED BY ROTARY TOOLS **0-5000'** CABLE TOOLS _____

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Desert Creek 4721'

25. WAS DIRECTIONAL SURVEY MADE
Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN
Schlumberger Dual Induction, Lateralog & Density

27. WAS WELL CORRED
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10 3/4"	32.75#	300'	15"	150 SX.	---
5 1/2"	15.5# & 14	5000'	8 3/4"	200 SX.	---

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
		None			2 7/8"	4890'	---

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

INTERVAL	SIZE	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4732' - 36', 4744' - 48', 4763' - 67', 4782' - 98', AN 4940' - 44'		4940'-4944'	1500 gal. 15% HCl
		4732' - 4767'	1000 gal. 15% HCl

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
11/17/69	Pump	Producing					
DATE OF TEST	HOURS TESTED	CHOKS SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
11/20/69	24	---	---	175	TSTM	300	---
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	
0 ---	50	---	175	---	300	40°	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) **Vented** TEST WITNESSED BY **McClelland**

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *[Signature]* TITLE **Engineer** DATE **11/25/69**

* (See Instructions and Spaces for Additional Data on Reverse Side)

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved
Budget Bureau No. 42-R1424

6. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-597

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

Navajo

8. FARM OR LEASE NAME

Navajo

9. WELL NO.

Navajo E-1 511

10. FIELD AND POOL, OR WILDCAT

East Boundary Butte

11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA

Sec. 9, T4N, R18E

12. COUNTY OR PARISH 13. STATE

Apache Arizona

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" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Ari-Max Oil & Exploration, Inc.

3. ADDRESS OF OPERATOR
150 Petroleum Plaza, Farmington, N. Mex.

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface

700' FNL, 1950' FZL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, OR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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

17. 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.)

Plug as follows:

From PSTD to 4700'

From 3900' to 4000'

At free point 50' in stub

50' above stub

Plug 1900' to 2100'

50' plug 250' to 300'

30' surface plug with regular dry hole marker

Drilling mud between plugs (9.5#)

Restore surface

RECEIVED

SEP 13 1974

O & G CONS. COMM.

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

SIGNED

TITLE President

DATE 9/10/74

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

APPROVED

*See Instructions on Reverse Side

By

WELL: #3 NAVAJO-2

WELLBORE SCHEMATIC
MERRION OIL AND GAS CORP.

ENG: DRFT:

DATE: 10/92

LOCATION: 330 FNL 330 FEL SEC 7, T4N R28E
DELAWARE COUNTY, ARIZONA

ARTIFICIAL LIFT:
PUMPING UNIT:
ENGINE:
SPM: SL: "
BH PUMP:
RODS:
TBC: " #/FT.
PUMP DEPTH:

ELEVATION
GL: 5202'
KB: 5416'

FORMATION TOPS:

SHINLE - 222'
SILVARUMD - 1979'
DE BELLY - 2045'
LUTLER - 2380'
U. HERMOSEA - 2255'
ISMAY - 4572'
DESERT - 4676'
AKAH - 4774'
TD - 5173'

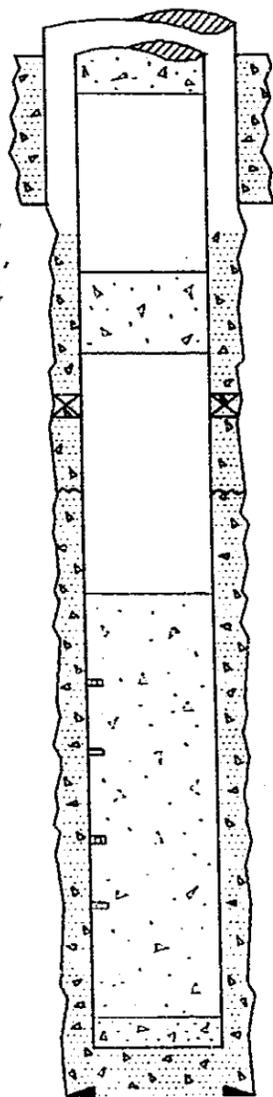
SQUEEZED PERFORATIONS:

OPEN PERFORATIONS:

4556-60' - 4210-13' - 4875-78'
5044-46'

STIMULATION:

4556-55'6' 1500 GAL. MWD ACID



SURFACE CASING:
HOLE SIZE: 13 3/4" "
CSG SIZE: 10 3/4" 22.75 #/FT.
DEPTH: 332'
CMT DETAILS: 225 CV

TOC:
BY:

PRODUCTION CASING:
HOLE SIZE: 7 7/8" "
CSG SIZE: 7" 20.23 #/FT.
DEPTH: 5173'
CMT DETAILS:
1ST STAGE: 250 CV

2ND STAGE: 200 CV
w/ CAGE TO 4520'

TOC: 4556-2357' + 2415-2621'
BY: J. M. J.

1st stage 250 CV w/ 115' casing
2nd stage 200 CV w/ 115' casing
1916' TD
1777-1716' 2357-2415' 2415-2621'

DEPTHS

PBTD: 5173'
TD: 5173'

CAPACITIES:	BBL/FT	FT/BBL	FT3/FT
TBC			
CSG:			
TBC/CSG ANNULUS			
150' 2 1/2" ANNULUS			

Form 9-310
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLIC. *
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. NAME OF WELL: **14-20-0603-597**

2. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

3. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. ESTVR. Other _____

4. NAME OF OPERATOR: **Globe Minerals, Inc.**

5. ADDRESS OF OPERATOR: **Box 234, Farmington, N. M. 87401**

6. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface
At top prod. interval reported below **350' fml 330' fel** *Permit 483*
At total depth

7. LEASE DESIGNATION AND SERIAL NO.: **14-20-0603-597**

8. IF INDIAN, ALLOTTEE OR TRIBE NAME: **Navajo**

9. UNIT AGREEMENT NAME: _____

10. FARM OR LEASE NAME: **Navajo E.**

11. WELL NO.: **3**

12. FIELD AND POOL, OR WILDCAT: **First Boundary Butte**

13. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: **Sec. 9, T41N, R28E**

14. PERMIT NO.: **483** DATE ISSUED: **2/7/69**

15. DATE SPUNDED: **5/17/69** 16. DATE T.D. REACHED: **6/2/69** 17. DATE COMPL. (Ready to prod.): **6/10/69** 18. ELEVATIONS (OF, RNB, RT, GR, ETC.)*: **5404' Gr.** 19. ELEV. CASINGHEAD: _____

20. TOTAL DEPTH, MD & TVD: **5173'** 21. PLUG, BACK T.D., MD & TVD: **5173'** 22. IF MULTIPLE COMPL., HOW MANY? **Single** 23. INTERVALS DRILLED BY: _____ ROTARY TOOLS: **0-5173'** CABLE TOOLS: _____

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: **Desert Creek 4755' to 5046'** 25. WAS DIRECTIONAL SURVEY MADE: **Yes**

26. TYPE ELECTRIC AND OTHER LOGS RUN: **Schlumberger Dual Induction Laterolog, Density & Neutron** 27. WAS WELL CORRED: **No**

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10 3/4"	32.75#	332'	13 3/4"	225 sx.	---
7"	28 & 23#	5173'	8 3/4"	250 first stage - 200 second stage at 2478'	---

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
		None		

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8"	4732'	

31. PERFORATION RECORD (Interval, size and number)

2 jets/ft. 4755'-50', 4810'-13', 4895'-98', 5044'-46'

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4755' to 5046'	1500 gal. mud acid

33. PRODUCTION

DATE FIRST PRODUCTION: **6/10/69** PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): **Swabbing** WELL STATUS (Producing or shut-in): **Producing**

DATE OF TEST	HOURS TESTED	CHOKED	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
5/10/69	5	---	---	120	Not measured	5	---

FLOW TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
0	450	---	576	---	24	38.8

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): **Vented** TEST WITNESSED BY: **MCCLELLAND McClelland**

35. LIST OF ATTACHMENTS: _____

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED: **Original signed by T. A. Dugan** TITLE: **Engineer** DATE: **6/11/69**

*(See Instructions and Spaces for Additional Data on Reverse Side)

2102

Form 9-221
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TR. CATE*
(Other instructions on re-
verse side)

Form approved
Budget Bureau No. 42-B1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-497A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo

9. WELL NO.

Navajo E-1

483

10. FIELD AND POOL, OR WILDCAT
East Boundary Butte

11. SEC. T. R. M., OR B.L. AND
SURVEY OR AREA

Sec. 9, T41N, R18E

12. COUNTY OR PARISH

Apache

13. STATE

Arizona

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—" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Ari-Max Oil & Exploration, Inc.

3. ADDRESS OF OPERATOR
150 Petroleum Plaza, Farmington, N. Mex.

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
330' PNL, 330' PNL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, ST, CR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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

17. 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 perti-
nent to this work.)*

Squeeze perforations & cement
plug 5050TD to 4500'
plug 2000' to 2100'
surface 0-50' with regular dry hole marker
Drilling mud between plugs (9.5#)
Restore surface

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

SIGNED

[Signature]

TITLE President

DATE 9/10/74

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

APPROVED

By

[Signature]

*See Instructions on Reverse Side

Date

9-13-74

WELL: # - NIVA 50 - 2

**WELLBORE SCHEMATIC
MERRION OIL AND GAS CORP.**

ENG: DRFT:

DATE: 10/72

LOCATION: 530' N. 9310' W. 22.1' T. 14 N. R. 2 E
APACHE COUNTY, ARIZONA

ARTIFICIAL LIFT:

PUMPING UNIT:
ENGINE:
SPM: SL: "
BH PUMP:
RODS:
TBG: " #/FT.
PUMP DEPTH:

ELEVATION

GL: 5047'
KB: 5000'

FORMATION TOPS:

CONTOUR - 5100' DEBERT TREE - 1100'
DEBERT TREE - 5170'
PLAN - 5100'
HERMOSA - 5210'
ICMA - 5250'

SQUEEZED PERFORATIONS:

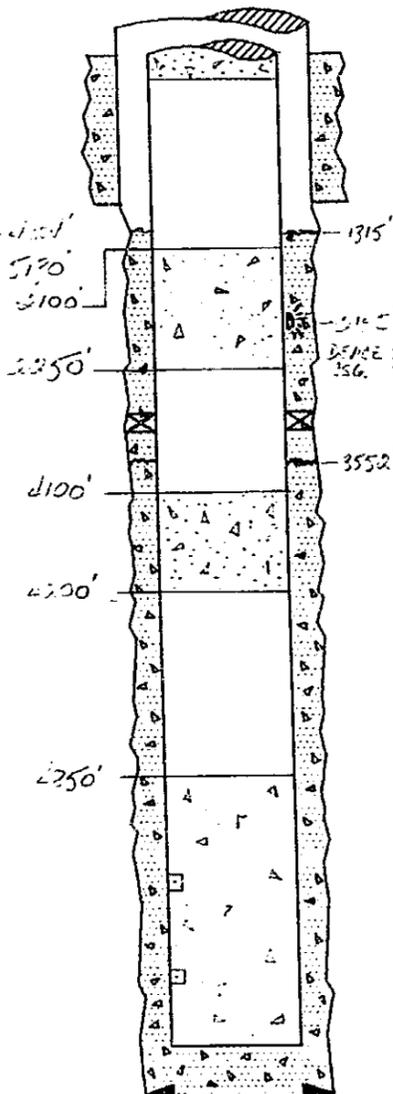
OPEN PERFORATIONS:

5158' - 5162' (PLUGGED)
5131' - 5135'

STIMULATION:

1500 GALS MUD ACID

PLUG TO 5135'
PLUG TO 5100'
PLUG TO 5100' - 5135' - 5100'
CONTOUR - 5100' W/DIM
CONTOUR - 5100' W/DIM



SURFACE CASING:

HOLE SIZE: 1 1/2" "
CSG SIZE: 2 3/4" #/FT.
DEPTH: 333'
CMT DETAILS: 17' 2"

TOC: 5102'
BY: PERFORATION

PRODUCTION CASING:

HOLE SIZE: 5/8" "
CSG SIZE: 1 1/4" #/FT.
DEPTH: 5102'
CMT DETAILS:

1ST STAGE: 1000 GALS MUD ACID
1500 GALS MUD ACID

2ND STAGE: 2000 GALS MUD ACID
1500 GALS MUD ACID

1ST STAGE: 1000 GALS MUD ACID
1500 GALS MUD ACID
2ND STAGE: 2000 GALS MUD ACID
1500 GALS MUD ACID
TOC: 5102'
BY: PERFORATION

DEPTHS

PBTD: 5170'
TD: 5135'

CAPACITIES:	BBL/FT	FT/BBL	FT3/FT
CSG			17.7
TBG/CSG ANNULUS			17.7
1 1/2" HOLE ANNULUS			17.7

3 USGS 2 Ariz. 1 Nav. 1 Globe 1 File

Form 5-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R365.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

2. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP EN PLUG BACK DIFF. SERV. Other _____

2. NAME OF OPERATOR
Globe Minerals, Inc.

3. ADDRESS OF OPERATOR
Box 234, Farmington, N. M. 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface
At top prod. interval reported below **420' fnl 2310' fwi**
At total depth

5. LEASE DESIGNATION AND SERIAL NO.
14-20-0603-597 A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME
Navajo E

8. FARM OR LEASE NAME
Navajo E

9. WELL NO.
4

10. FIELD AND POOL, OR WILDCAT
East Boundary Butte

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 9, T41N, R28E

12. COUNTY OR PARISH
Apache

13. STATE
Ariz.

14. PERMIT NO. **509** DATE ISSUED **7/18/69**

15. DATE SPUNDED **7/22/69** 16. DATE T.D. REACHED **8/6/69** 17. DATE COMPL. (Ready to prod.) **8/14/69** 18. ELEVATIONS (OF. RKB, RT, OR, ETC.)* **5546' Gr.** 19. ELEV. CASINGHEAD **5548'**

20. TOTAL DEPTH, MD & TVD **5225'** 21. PLUG. BACK T.D., MD & TVD **5170'** 22. IF MULTIPLE COMPL., "NEW START" **Single** 23. INTERVALS DRILLED BY **Surface to T.D. None**

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
4958' - 62', & 5131' - 35'

25. WAS DIRECTIONAL SURVEY MADE
Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN
Schlumberger Dual Induction, Lateralog, Density & Sidewall Neutron

27. WAS WELL CORED
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24#	339'	12 1/2"	175 sx.	---
5 1/2"	14#	5208'	7 7/8"	250 & 200 sx.	---

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)
		None		

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8"	5005'	4873'

31. PERFORATION RECORD (Interval, size and number)
4958' - 4962' & 5131' - 5135'

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4958' - 5135'	1500 gal. mud acid

33. PRODUCTION

DATE FIRST PRODUCTION **8/12/69** PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) **Flow & Swab** WELL STATUS (Producing or shut-in) **Producing**

DATE OF TEST	HOURS TESTED	CHOKED SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8/14/69	11 hrs.	3/4"	---	341	---	18	---

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
50	---	---	744	---	36	---

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
Vented

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED Thomas A. Ryan TITLE Engineer

TEST WITNESSED BY DAGOW DATE 8/20/69

*(See Instructions and Spaces for Additional Data on Reverse Side)

Form 9-331
(May 1968)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRI-CATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-597A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

Navajo

8. FARM OR LEASE NAME

Navajo

9. WELL NO.

Navajo E-4 (509)

10. FIELD AND POOL, OR WILDCAT

East Boundary Butte

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 9, T41N, R28E

12. COUNTY OR PARISH

Apache

13. STATE

Arizona

14. PERMIT NO.

509 Arizona

15. ELEVATIONS (Show whether DF, ST, OR, etc.)

5546' GL

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON*

SHOOTING OR ACIDIZING

ABANDONMENT*

REPAIR WELL

CHANGE PLANS

(Other)

(Other)

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

17. 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.)

Plug TD to 4850'

Plug 4200' to 4100'

Set plug in DeChelly 2250' to 2100'

Surface plug 50' with regular dry hole marker.

In place 9.5% drilling mud between plugs.

Restore surface.

RECEIVED

SEP 13 1974

O & G CONS. COMM.

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

SIGNED

[Signature]

TITLE

President

DATE 9/10/74

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED

By

[Signature]

*See Instructions on Reverse Side

509

9-12-74

Is your **RETURN ADDRESS**
completed on the reverse side?

Thank you for using
Return Receipt Service.

Fold at line over top of envelope to the
right of the return address.

EAST BOUNDARY BUTTE FIELD

Operator: Elm Ridge Resources, Inc.

Bond Company*: Indian lands, evidence of bond posted with BIA

Underwriters Indemnity Co. \$150,000 BIA Nationwide Bond No. B05973

Date approved: 8/01/96

*** Pursuant to commission motion of October 31, 1997, no bond required with State of Arizona upon evidence of bond posted with the BIA.**

Permits covered by this bond posted with the BIA:

022

028

490

515 ✓

905



Jane Dee Hull
Governor

State of Arizona
Arizona Geological Survey
416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

February 6, 2001

Ms. Kay Buchanan
Elm Ridge Resources, Inc.
12225 Greenville Ave, Suite 950
Dallas TX 75243-9362

Dear Ms. Buchanan:

This will acknowledge receipt of evidence of Elm Ridge Resources' bonding with the U.S. Department of the Interior, Bureau of Indian Affairs, completed Organization Report (Form 1), and updated Operator's Certificate of Compliance and Authorization to Transport Oil or Gas from Lease (Form 8).

I have enclosed copies of the approved Form 8 for your files.

Sincerely,

Steven L. Rauzi
Oil & Gas Administrator

Enclosures

**OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL OR GAS FROM LEASE**

Federal, State, or Indian Lease Number, or lessor's name if fee lease	Field San Juan	Reservoir San Juan
Survey or Sec-Twp-Rge 2, 3 & 4 T41N R28E	County Apache	State Arizona
Operator Elm Ridge Resources, Inc.		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street 12225 Greenville Ave #950	City Dallas	State Texas 75243-9362
Above named operator authorizes (name of transporter) Giant Industries Attn: Wanda		
Transporter's street address P. O. Box 12999	City Scottsdale	State AZ 85267
Field Address		
Oil, condensate, gas well gas, casinghead gas		
To transport	100 % of the	Oil from said lease
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer Western Gas Resources	% transported 100	Product transported
12200 North Pecos Street #230		
Denver, CO. 80234-3439		
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change.		
Change of Operator: From Central Resources, Inc. to Elm Ridge Resources, Inc.		

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

CERTIFICATE: I the undersigned, under the penalty of perjury, state that I am the President of the Elm Ridge Resources, Inc. (company), and that I am authorized by said company to make this report; that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date 1-08-01 Signature [Signature]

Date approved: 2-5-01

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: Steven L. Rainz

Permit No. 22,28,515,490

Mail two copies of completed form to:
Oil & Gas Program Administrator
Arizona Geological Survey
416 W. Congress #100
Tucson, AZ 85701-1315

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Operator's Certificate of Compliance & Authorization to
Transport Oil or Gas from Lease
File Two Copies

Form No. 8

Form 4-166
5-5438

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

BOND NO. B05973

NATIONWIDE OIL AND GAS LEASE BOND

KNOW ALL MEN BY THESE PRESENTS, That we, Elm Ridge Resources, Inc., Elm Ridge
Exploration Company of 4925 Greenville Ave., #1305, Dallas, TX 75206-4021

as principal, and Underwriters Indemnity Company
of 8 Greenway Plaza, #400, Houston, TX 77046, as suret, are held and firmly bound unto the
United States of America in the sum of one hundred fifty thousand dollars (\$150,000), lawful money of the
United States, for the payment of which, well and truly to be made, we bind ourselves and each of us, our
and each of our heirs, successors, executors, administrators, and assigns, jointly and severally, firmly by
these presents.

Sealed with our seals and dated this 10th day of June, 1996.

The condition of this obligation is such that whereas the said principal has heretofore or may hereafter enter into or otherwise acquire an interest in oil and gas mining leases and oil and gas prospecting permits of various dates and periods of duration covering lands or interests in lands held by the United States in trust for individual Indians, or tribes or bands of Indians, or subject to restrictions against alienation without the consent of the Secretary of the Interior or his authorized representative, which leases and permits have been or may hereafter be granted or approved by the Secretary of the Interior or his authorized representative, and the identification of which herein is expressly waived by both principal and suret hereto.

WHEREAS the principal and suret agree that the coverage of this bond shall extend to and include all extensions and renewals of leases and permits covered by this bond, such coverage to continue without any interruption due to the expiration of the term set forth therein.

WHEREAS the suret hereby waives any right to notice of any modification of any such lease or permit, or obligation thereunder whether effected by extension of time for performance, by commitment of such lease to unit, cooperative, or communitization agreement, by waiver, suspension, or change in rental, except an increase thereof, by minimum royalty payment, except an increase thereof, by compensatory royalty payment, or otherwise, this bond to remain in full force and effect notwithstanding.

WHEREAS the principal and suret agree that the neglect or forbearance of the obligee of any such lease or permit in enforcing the payment of any rental or royalty or the performance of any other covenant, condition, or agreement of any such lease or permit shall not in any way release the principal and suret or either of them, from any liability under this bond; and

WHEREAS the principal and suret agree that in the event of any default under any such lease or permit, the obligee may prosecute any claim, suit, action, or other proceeding against the principal and suret, or either of them, without the necessity of joining the other.

Now, if the said principal herein shall faithfully carry out and observe all the obligations assumed in said leases and permits to which Elm Ridge Resources, Inc., Elm Ridge Exploration Company is now or may hereafter become a party, and shall observe all the laws of the United States and regula-

tions made, or which shall be made, thereunder, for the government of trade and intercourse with Indian tribes, and all rules and regulations that have been or shall hereafter be lawfully prescribed by the Secretary of the Interior relative to said oil and gas mining leases and permits, and shall in all particulars comply with the provisions of said leases, permits, rules and regulations, then this obligation shall become null and void; otherwise, to remain in full force and effect.

The rate of premium charged on this bond is \$.....; the total premium paid is \$.....

Signed and sealed in the presence of—

WITNESSES*

BY: Kay Buchanan
4925 Greenville Ave., #1305
P.O. Dallas, Texas 75206

BY: Boni Morik
4925 Greenville Ave., #1305
P.O. Dallas, Texas 75206

BY: Nancy Cox
8 Greenway Plaza, Suite 400
P.O. Houston, TX 77046

BY: Sue Moor
8 Greenway Plaza, Suite 400
P.O. Houston, TX 77046

P.O.
.....

P.O.
.....

P.O.
.....

P.O.
.....

Elm Ridge Resources, Inc.
Elm Ridge Exploration Company

as to BY: [Signature] [SEAL]

Underwriters Indemnity Company

as to BY: [Signature] [SEAL]
Roy C. Die, Attorney-in-Fact

as to [SEAL]

as to [SEAL]

*Two witnesses to each signature.

DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
Washington 25, D. C.

AUG 1 1996

Approved:

Approved pursuant to authority delegated
at 200 DM 2.5(C), dated 11-4-83.

[Signature]
ACTING Director, Office of Trust Responsibilities

ORGANIZATION REPORT

Full Name of the Company, Organization, or Individual
Elm Ridge Resources, Inc.

Mailing Address and Phone Number
12225 Greenville Avenue #950, Dallas, Texas 75243-9362 (971) 889-2100

Plan of Organization (State whether organization is a corporation joint stock association, firm or partnership, or individual
Corporation

Purpose of Organization (State type of business in which engaged)
Oil and Gas Industry

If a reorganization, give name and address of previous organization

If a foreign corporation give (1) State where incorporated Texas	(2) Name and mailing address of state agent C T Corporation System 3225 North Central Avenue Phoenix, AZ 85012	(3) Date of permit to do business in state 11/15/00
Principal Officers or Partners (if partnership) NAME James M. Clark, Jr.	TITLE President	MAILING ADDRESS 12225 Greenville Ave #950 Dallas, TX 75243-9362

DIRECTORS NAME	MAILING ADDRESS
James M. Clark, Jr., President	12225 Greenville Ave #950, Dallas, Tx 75243

CERTIFICATE I, the undersigned, under the penalty of perjury state that I am the President of the Elm Ridge Resources, Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature

1/8/01

Date

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Organization Report
 File One Copy
 Form No. 1

Mail completed form to
 Oil and Gas Program Administrator
 Arizona Geological Survey
 416 W Congress., #100
 Tucson, AZ 85701



February 2, 2001

State of Arizona
Attn: Steve Rauzi
416 West Congress Suite 100
Tucson, Arizona 85701

Dear Mr. Rauzi:

Pursuant to our recent telephone conversation, enclosed please find the Organization Report with the address of state agent changed. Also, the principal officer has been added. As far as the Operator's Certificate of Compliance and Authorization, we have completed the form for the transport percentage, added the gas gatherer and indicated that this certificate was for a change of operator.

We apologize for any inconvenience and should you have any questions, please feel free to call.

Sincerely,

Kay Buchanan
Kay Buchanan

CDB/kb

Enclosures



January 25, 2001

State of Arizona
Oil & Gas Conservation Commission
Attn: Steve Rauzi
416 West Congress, Suite 100
Tucson, Arizona 85701

Dear Mr. Rauzi:

Enclosed please find the Organization Report, Operator's Certificate of Compliance and Authorization to Transport Oil and Gas, and a copy of the Nationwide Oil and Gas Lease Bond.

Should you desire further information, please advise me.

Sincerely,

Kay Buchanan
Kay Buchanan

ext. 103

CDB/kb

Enclosures

Form 3100-5
(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

5. Lease Designation and Serial No.

N00c-14-20-603-413

6. If Indian, Allotee or Tribe Name

Navajo Tribal

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Navajo #3

(515)

9. API Well No.

02-001-20115

10. Field and Pool, or Exploratory Area

East Boundary Butte

11. County or Parish, State

Apache County, AZ

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other SWD

2. Name of Operator

Elm Ridge Resources, Inc.

Doug Endsley

3. Address and Telephone No.

312 W. LaPlata Street, Farmington, New Mexico (505) 326-7099

4. Location of Well (Footage, T, R, M, or Survey Description)

330' FSL & 1650' FEL (SW SE) Sec. 4-T41N-R28E

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Surface Casing/Cementing
	<input checked="" type="checkbox"/> Other: CHANGE OF OPERATOR
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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 markets and zones pertinent to this work.)*

Please be advised that effective October 1, 2000, Elm Ridge Resources, Inc. assumed operatorship of the above referenced well. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Elm Ridge Resources, Inc. under their statewide bond, BLM Bond No. B05706. They will be responsible for compliance under the lease terms and conditions for that portion of the lease associated with this notice.

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

Signed:

Doug Endsley

Title: Operations Manager

Date: September 29, 2000

(This space for Federal or State office use)

Approved by:

Title:

Date:

Conditions of approval, if any:

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.



Jane Dee Hull
Governor

State of Arizona
Arizona Geological Survey

416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

December 1, 1997

Ms. Trina M. Duran
Central Resources, Inc.
2600 Mellon Center
1775 Sherman Street
Denver, CO 80203-4313

Re: Central Resources, Inc.
\$25,000 Oil Drilling Blanket Bond #91372
Frontier Insurance Company

Dear Ms. Duran:

This will acknowledge receipt of evidence of Central Resources' bonding with the BIA for operations on Indian leases in the State of Arizona.

In light of Central Resources' bonding with the BIA, this letter constitutes written permission by the Oil and Gas Conservation Commission of the State of Arizona to terminate liability under the referenced bond.

Let me know if we may be of further assistance.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Program Administrator

515

CENTRAL
RESOURCES, INC.

November 10, 1997

515
Mr. Steven L. Rauzi
State of Arizona
Arizona Geological Survey
416 W. Congress, Suite 100
Tucson, Arizona 85701

Dear Mr. Rauzi:

Per our conversation of November 7th, please find copies of Central Resources, Inc. \$150,000 Nationwide BIA Bond and \$150,000 BIA Navajo Tribe Bond. These bonds provide coverage for the wells that Central Resources operates in Arizona on Indian leases.

Based upon the enclosed bonds, please release Central's bond #91372 to the State of Arizona for \$25,000.

Thank you for your assistance.

Regards,

Trina M. Duran

Trina M. Duran
Executive Assistant

Enclosures



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

June 9, 1997

file 515

Ms. Crystal Williams
Merrion Oil & Gas
610 Reilly Ave.
Farmington NM 87401

Re: Blanket Performance Bond No. 01-0130-00972-74-1
United States Fidelity and Guaranty
Amount \$25,000

Dear Ms. Williams:

Our records show that Central Resources has posted a blanket bond for its operations at the East Boundary Butte Field, Arizona, and that Merrion Oil and Gas has no current drilling or plugging obligations in the State of Arizona.

As a result, this letter will serve as written permission of the Oil and Gas Conservation Commission of the State of Arizona to cancel the referenced bond.

Sincerely,

Steven L. Rauzi
Oil & Gas Administrator

enclosure: copy of referenced bond



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

June 9, 1997

file 515

Ms. Kris Fox
Aon Risk Services, Inc.
4100 E. Mississippi Ave. #1500
Denver, CO 80222

Re: Central Resources, Inc. as Principal
\$25,000 Blanket Performance Bond Serial No. 91372
Frontier Insurance Company

Dear Ms. Fox:

This will acknowledge receipt and acceptance of the referenced blanket performance bond. I have enclosed a copy of the approved bond, effective June 9, 1997, for all wells operated by Central Resources in the State of Arizona.

Please advise if I may be of further assistance.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosure

c Irene Martinez, Central Resources

AON

Aon Risk Services

June 6, 1997

file 515

Steven L. Rauzi
Oil & Gas Program Admin.
Arizona Geological Survey
416 W. Congress, Suite 100
Tucson, AZ 85701

Re: Bond number 91372

Dear Mr. Rauzi,

Enclosed please find the above referenced bond for Central Resources, Inc.

Please send written confirmation that this bond has been accepted by Arizona Geological Survey.

Please give me a call if you need anything or if I can be of further assistance.

Sincerely,

Kris Fox

Kris Fox
Technical Assistant
Bond Department



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

February 18, 1997

Ms. Irene Martinez
Central Resources, Inc.
1775 Sherman, Suite 2600
Denver, CO 80203-4313

file 515

Dear Ms. Martinez:

An approved duplicate original *Operator's Certificate of Compliance and Authorization to Transport Oil or Gas from Lease* is enclosed for Navajo leases NOOC-14-20-603-226 (permits 28 and 515) and NOOC-14-20-603-413 (permits 22 and 490) at the East Boundary Butte Field, Arizona.

Please advise if I may be of further assistance.

Sincerely,

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures

**OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL OR GAS FROM LEASE**

Federal, State, or Indian Lease Number, or lessor's name if fee lease <u>Navajo NOOC-14-20-603-413</u>	Field <u>East Boundary Butte</u>	Reservoir <u>Paradox</u>
Survey or Sec-Twp-Rge <u>Sec 4-T41N-R28E</u>	County <u>Apache</u>	State <u>AZ</u>
Operator <u>Central Resources, Inc.</u>		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street <u>1775 Sherman St., #2600</u>	City <u>Denver</u>	State <u>CO 80203</u>
Above named operator authorizes (name of transporter) <u>Giant Refining Company</u>		
Transporter's street address <u>P.O. Box 12999</u>	City <u>Scottsdale</u>	State <u>AZ 85267</u>
Field Address <u>Red Mesa, Arizona</u>		
Oil, condensate, gas well gas, casinghead gas		
To transport	<u>100</u> % of the	<u>Oil</u> from said lease
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer	% transported	Product transported
<u>Western Gas Resources</u>	<u>100</u>	<u>Gas</u>
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change. <u>Change of Owner/Operator</u>		

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Engineering Technician of the Central Resources, Inc. (company), and that I am authorized by said company to make this report; that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

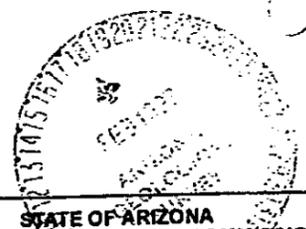
Date February 14, 1997

Steve Martey
Signature

Date approved: 2-18-97

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: Steven L. Rainey

Permit No. 28,515



Send two copies of completed form to:
Oil & Gas Program Administrator
Arizona Geological Survey
416 W. Congress #100
Tucson AZ 85701-1315

**STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION**
Operator's Certificate of Compliance & Authorization to
Transport Oil or Gas from Lease
File Two Copies

Form No. 8

ORGANIZATION REPORT

Full Name of the Company, Organization, or Individual

CENTRAL RESOURCES, INC.

Mailing Address and Phone Number

1775 Sherman Street, Suite 2600, Denver, Colorado 80203-4313

Plan of Organization (State whether organization is a corporation, joint stock association, firm or partnership, or individual)

Corporation

Purpose of Organization (State type of business in which engaged)

Oil and Gas

If a reorganization, give name and address of previous organization

If a foreign corporation, give (1) State where incorporated	(2) Name and mailing address of state agent	(3) Date of permit to do business in state
Colorado	CT Corporation 3225 N. Central Avenue Phoenix, Arizona 85012	Applied for <u>1/31/97</u>
Principal Officers or Partners (if partnership) NAME	TITLE	MAILING ADDRESS
Paul J. Zecchi	President & CEO	1775 Sherman Street #2600 Denver, Colorado 80203-4313
Scotty A. Smith	Sr. Vice President	1775 Sherman Street #2600 Denver, Colorado 80203-4313
Catherine I. Eakle	Vice President & Secretary	1775 Sherman Street Denver, Colorado 80203-4313
Ray Hornsby	Vice President & Treasurer	1775 Sherman Street Denver, Colorado 80203-4313
Gary Davis	Vice President	1775 Sherman Street Denver, Colorado 80203-4313

DIRECTORS NAME	MAILING ADDRESS
Paul J. Zecchi	1775 Sherman Street, #2600, Denver, CO 80203-431

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Assistant Secretary of the CENTRAL RESOURCES, INC. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Jeannette H. Feigt
Signature Jeannette H. Feigt

February 14, 1997

Date

file 515



Mail completed form to:
Oil and Gas Program Administrator
Arizona Geological Survey
416 W. Congress, #100
Tucson, AZ 85701

STATE OF ARIZONA

OIL & GAS CONSERVATION COMMISSION

Organization Report
File One Copy

Form No. 1



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

February 11, 1997

Mr. Paul J. Zecchi, President
Central Resources, Inc.
1775 Sherman, Suite 2600
Denver, CO 80203-4313

file 515

Dear Mr. Zecchi:

We recently received the attached notice that Central Resources purchased the East Boundary Butte Field in Arizona from Merrion Oil and Gas. As a result of that purchase, I am writing to advise you that this office provides administrative and staff support to the Arizona Oil and Gas Conservation Commission.

In order that our records be accurate and current, in accordance with Arizona Statutes and rules, please fill out and submit the enclosed *certificate of compliance* and *organization report* forms to this office as soon as possible. R12-7-183 and R12-7-194 require the operator to submit these forms within 10 days of any change in ownership, etc.

Also for your file and use are blank copies of our *monthly producer's report* and *water disposal report* forms, and a copy of our oil and gas rules. These blank forms may be copied or generated digitally as needed.

We welcome Central Resources to Arizona and hope your venture here is a profitable one. Please let me know if you have any questions about the enclosed forms or rules or if I may be of any further assistance.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures

Distribution: 0+2 (Arizona OGD); 1-Navajo Tribe; 1-Fil

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator MERRION OIL & GAS CORPORATION
2. Oil Well GAS Well OTHER (Specify) SWD
3. Well Name NAVAJO No. 3
Location 330' fsl & 1650' fel (sw se)
Sec. 4 Twp. 41N Rge. 28E County Apache Arizona.
4. Federal, State or Indian Lease Number, or lessee's name if fee lease Indian - Navajo Tribe
NOOC-14-20-603-413
5. Field or Pool Name East Boundary Butte

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <u>Change of Operator</u> <input checked="" type="checkbox"/>	ABANDONMENT <input type="checkbox"/>

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

7. 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.)

Effective 1/01/97 new owner of the above well is:

CENTRAL Resources, Inc.
2600 Mellon Center
1775 Sherman Street
Denver, Colorado 80203-4313
Phone No.: (303) 830-0100



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

Steven S. Dunn Title Drig & Prod Manager Date 1/16/97

Permit No. 515

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Sundry Notices and Reports On Wells
File Two Copies
Form No. 28

API NUMBERS FOR MERRION OPERATED WELLS

August 23, 1996

Page 1

PERMI	TWP	RGE	SE	LOCAT	OPERATOR	LEASE & NO	COMPL	ST	ELEV	TD	COUNTY	API NUMBER
518	41N	28E	11	SW NW	Merrion (Consolid)	2-11 Navajo	69/11	OP	5486 KB	5057	APACHE	02-001-20117
514	41N	28E	03	SW SW	Merrion (Consolid)	3-03 Navajo	94/08	OP	5395 KB	4855	APACHE	02-001-20114
490	41N	28E	03	NE SW	Merrion (Consolid)	3-11 Navajo	69/05	OS	5343 KB	5708	APACHE	02-001-20095
28	41N	28E	04	NE SE	Merrion (Humble)	1 Navajo	55/11	O	5375 KB	6382	APACHE	02-001-05199
58	41N	28E	10	SW NE	Merrion (Humble)	1 Navajo-E	58/10	OP	5500 KB	5410	APACHE	02-001-05191
444	41N	28E	09	SW NE	Merrion (Humble)	2 Navajo-E	67/12	PW	5537 KB	6520	APACHE	02-001-20067
→ 515	41N	28E	04	SW SE	Merrion (Humble)	3 Navajo	69/11	OW	5410 KB	5010	APACHE	02-001-20115 ←
22	41N	28E	03	SE NW	Merrion (Shell)	2 Navajo	54/12	O	5307 KB	6339	APACHE	02-001-05200
69	41N	28E	11	NE SW	Merrion (Shell)	23-11 Navajo	59/05	OP	5437 KB	5513	APACHE	02-001-05190
32	41N	28E	22	SW NW	Merrion(Franco-Wst)	1 Navajo	56/08	GP	5446 KB	5902	APACHE	02-001-05173

TOTALS: TOTAL_DEPT 56,696

Printed 10 of the 1,082 records.
 PRIMARY SORT FIELD: OPERATOR
 SELECTION CRITERIA:
 (OPERATOR="MERRION")

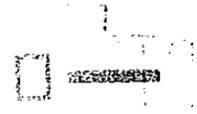
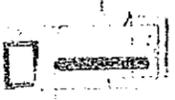
Fax to : Connie Dinning, Merrion O&G
 505-326-5900

From: Steven L. Rauzi, Arizona Geol. Survey

Re: API # for Merrion wells @
 East Boundary Butte, AZ

OIL & GAS CONSERVATION COMMISSION
STATE OF ARIZONA
3110 N. 18th AVE., SUITE 180
PHOENIX, ARIZONA 85015





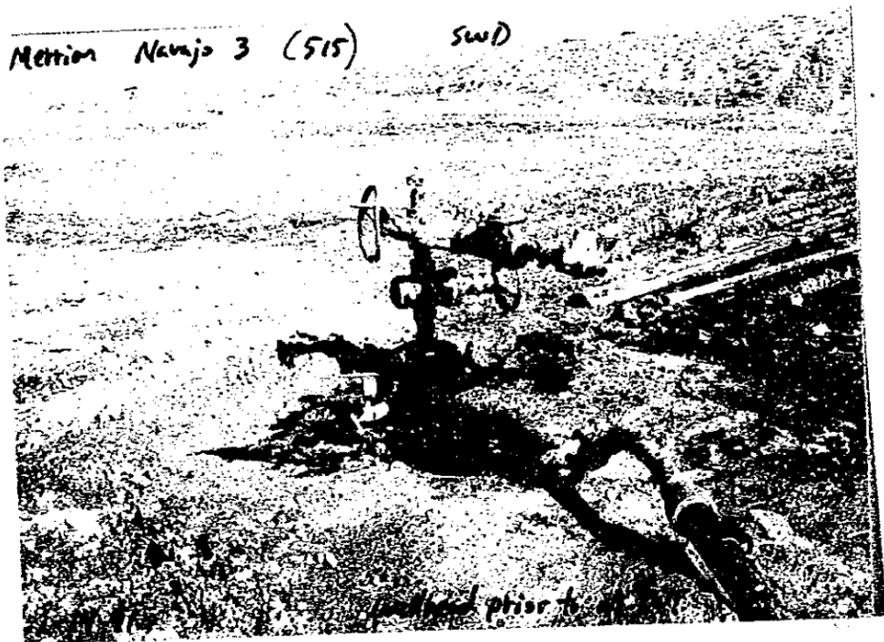
56 Ranzi





Photo by S.L. Rauzi

Mettion Namjo 3 (515) SWD

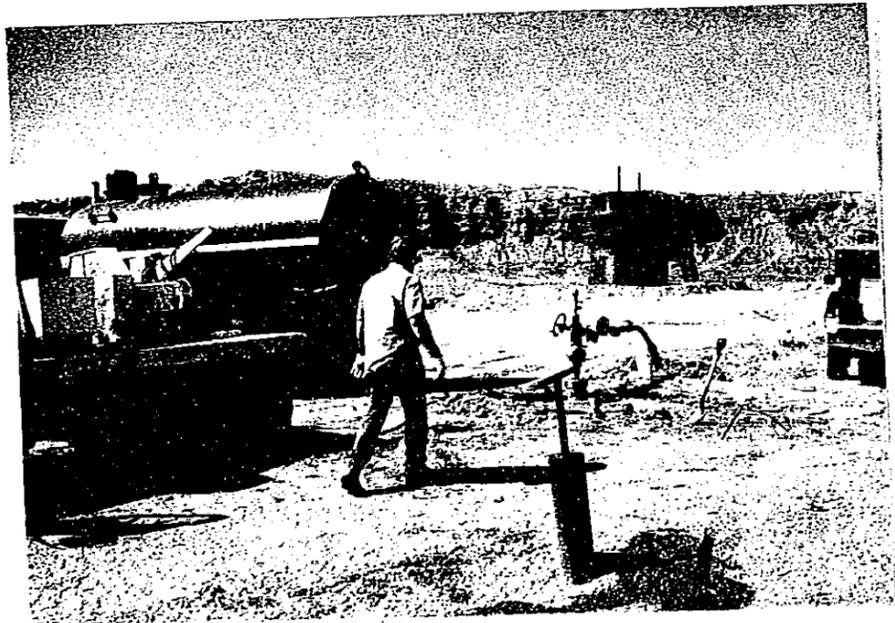


... prior to

Photo by S.L. Rausi



Permit #515
Working on Mechanical Integrity
Test June 1990
Failed Test



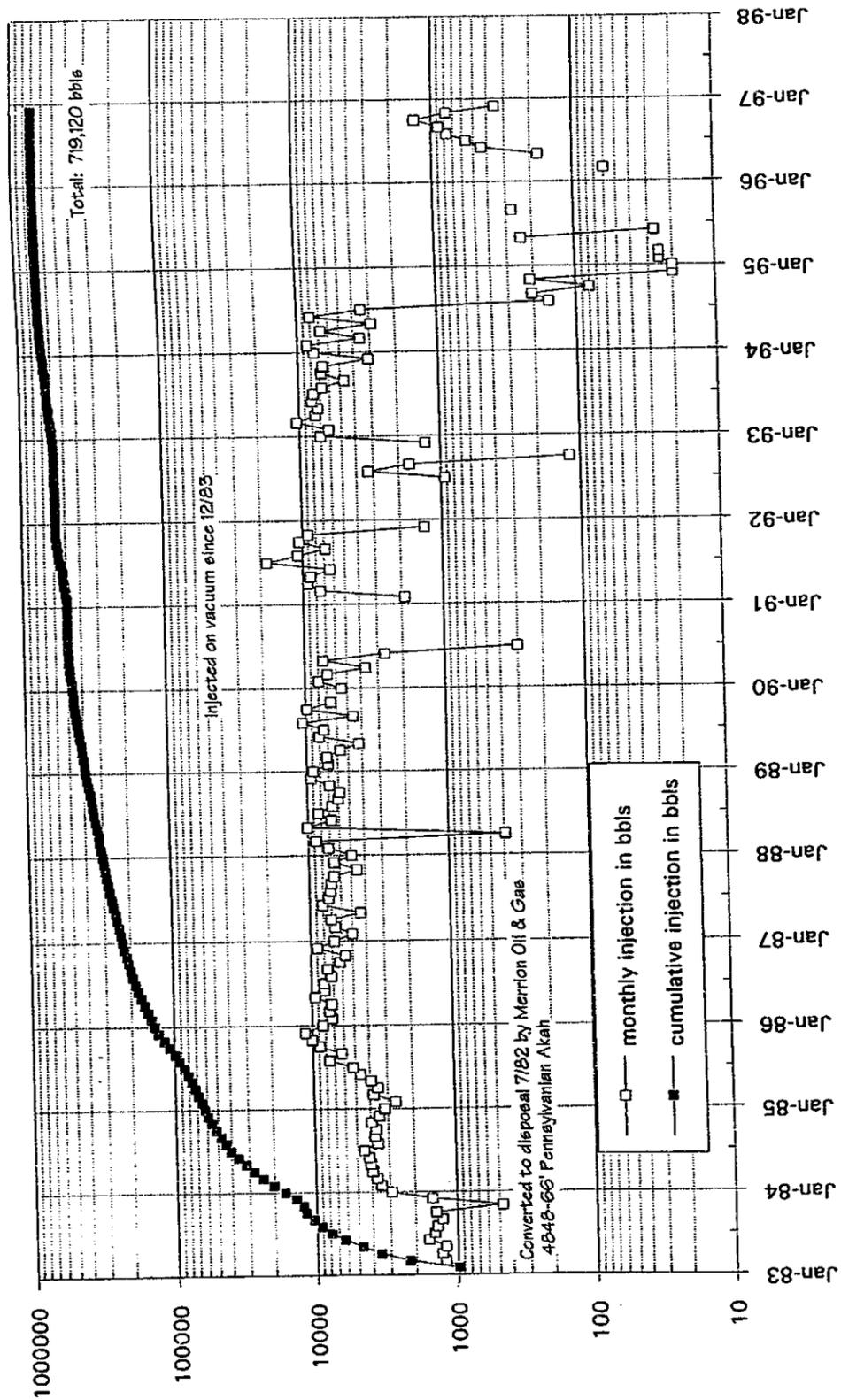
Beginning MIT on Permit #515
Merrimack Oil Injection Well
June, 1990
Well failed test



Permit #515

Jack Butler

WATER DISPOSAL AT 3 NAVAJO (515), EAST BOUNDARY BUTTE FIELD, ARIZONA: 2/83 -- 12/96
sw se 4-41n-28e, Apache County



MONTHLY WATER DISPOSAL AT 3 NAVAJO (515), EAST BOUNDARY BUTTE FIELD, ARIZONA
(per SLR audit of producer's monthly injection reports (2/83 -- 3/96))

DATE	inj bbls	ave psi	cum bbls	comments
Jan-83				Merrion Oil & Gas Corp. #3 Navajo (515)
Feb-83	985	200	985	1st injection 2/83
Mar-83	1230	200	2215	4848'-4866' Penn. Akah
Apr-83	1285	200	3500	Replaced inj. well 2 Navajo-E (444)
May-83	1217	200	4717	
Jun-83	1603	200	6320	
Jul-83	1452	200	7772	
Aug-83	1387		9159	
Sep-83	1280		10439	
Oct-83	1420		11859	
Nov-83	470	200	12329	
Dec-83	1500		13829	
Jan-84	2900		16729	
Feb-84	3430		20159	
Mar-84	3650		23809	
Apr-84	3920		27729	
May-84	4020		31749	
Jun-84	4130		35879	forgot 4130 bbls, rptd cum 4130 bbls low
Jul-84	4460		40339	
Aug-84	3565		43904	
Sep-84	3710		47614	
Oct-84	3650		51264	
Nov-84	3920		55184	
Dec-84	3460		58644	cum on rpt cont. 4130 bbls low
Jan-85	3180		61824	
Feb-85	2650		64474	
Mar-85	3760		68234	
Apr-85	3500		71734	
May-85	3900		75634	
Jun-85	4600		80234	
Jul-85	5200		85434	
Aug-85	7572		93006	
Sep-85	6200		99206	
Oct-85	8868		108074	
Nov-85	10060		118134	
Dec-85	11238		129372	cum on report cont. 4130 bbls low
Jan-86	8306		137678	
Feb-86	7192		144870	
Mar-86	7462		152332	added 30 bbls high, rptd cum 4100 bbls low
Apr-86	7170		159502	
May-86	9375		168877	
Jun-86	8018		176895	
Jul-86	8079		184974	
Aug-86	7135		192109	
Sep-86	7563		199672	
Oct-86	6212		205884	

MONTHLY WATER DISPOSAL AT 3 NAVAJO (515), EAST BOUNDARY BUTTE FIELD, ARIZONA
(per SLR audit of producer's monthly injection reports (2/83 -- 3/96))

DATE	inj bbls	ave psi	cum bbls	comments
Nov-86	5654		211538	
Dec-86	8947		220485	added 90 bbls low, rptd cum 4190 bbls low
Jan-87	6720		227205	
Feb-87	5029		232234	
Mar-87	6625		238859	
Apr-87	7033		245892	
May-87	4332		250224	
Jun-87	8078		258302	
Jul-87	7287		265589	
Aug-87	7049		272638	
Sep-87	6935		279573	
Oct-87	6654		286227	
Nov-87	4514		290741	
Dec-87	6601		297342	cum on rpt cont. 4190 bbls low
Jan-88	4915		302257	
Feb-88	7133		309390	
Mar-88	8742		318132	
Apr-88	390		318522	
May-88	10031		328553	
Jun-88	6765		335318	
Jul-88	8325		343643	
Aug-88	6646		350289	
Sep-88	6003		356292	
Oct-88	5824		362116	
Nov-88	6841		368957	
Dec-88	9320		378277	cum on rpt cont. 4190 bbls low
Jan-89	8926		387203	
Feb-89	6992		394195	
Mar-89	7121		401316	
Apr-89	5673		406989	
May-89	4205		411194	
Jun-89	7984		419178	
Jul-89	7421		426599	
Aug-89	10521		437120	
Sep-89	4546		441666	
Oct-89	9732		451398	
Nov-89	6582		457980	
Dec-89			457980	cum on rpt cont. 4190 bbls low
Jan-90	5489		463469	
Feb-90	7954		471423	
Mar-90	6840		478263	added 6840 twice, rptd cum 2650 bbls high
Apr-90	3670		481933	
May-90	7312		489245	
Jun-90	2666		491911	
Jul-90	300		492211	
Aug-90			492211	

MONTHLY WATER DISPOSAL AT 3 NAVAJO (515), EAST BOUNDARY BUTTE FIELD, ARIZONA
(per SLR audit of producer's monthly injection reports (2/83 -- 3/96))

DATE	inj bbls	ave psi	cum bbls	comments
Sep-90			492211	
Oct-90			492211	
Nov-90			492211	
Dec-90			492211	cum on rpt cont. 2650 bbls high
Jan-91			492211	
Feb-91	1886		494097	
Mar-91	7466		501563	
Apr-91	9128		510691	
May-91	8803		519494	
Jun-91	6338		525832	
Jul-91	18008		543840	
Aug-91	10785		554625	
Sep-91	6834		561459	
Oct-91	10492		571951	
Nov-91	8969		580920	
Dec-91	1346		582266	cum on rpt cont. 2650 bbls high
Jan-92			582266	
Feb-92			582266	
Mar-92			582266	
Apr-92			582266	
May-92			582266	
Jun-92			582266	
Jul-92	935		583201	
Aug-92	3279		586480	
Sep-92	1674		588154	
Oct-92	119		588273	
Nov-92			588273	
Dec-92	1280		589553	cum on rpt cont. 2650 bbls high
Jan-93	7017		596570	
Feb-93	6169		602739	
Mar-93	10384		613123	
Apr-93	7610		620733	
May-93	7302		628035	
Jun-93	7988		636023	
Jul-93	7788		643811	added 200 bbls high, rptd cum 2850 bbls high
Aug-93	6739		650550	
Sep-93	4677		655227	
Oct-93	6782		662009	
Nov-93	6620		668629	
Dec-93	3110		671739	cum on rpt cont. 2850 bbls high
Jan-94	7620		679359	
Feb-94	8462		687821	
Mar-94	3552		691373	
Apr-94	6725		698098	
May-94	2951		701049	
Jun-94	7973		709022	

MONTHLY WATER DISPOSAL AT 3 NAVAJO (515), EAST BOUNDARY BUTTE FIELD, ARIZONA
(per SLR audit of producer's monthly injection reports (2/83 -- 3/96))

Jul-94	3456	712478				
Aug-94	156	712634				
Sep-94	205	712839				
Oct-94	80	712919				
Nov-94	210	713129				
Dec-94	20	713149	cum on rpt cont. 2850 bbls high			
Jan-95	20	713169				
Feb-95	25	713194				
Mar-95	25	713219				
Apr-95		713219				
May-95	239	713458				
Jun-95	27	713485				
Jul-95		713485				
Aug-95		713485				
Sep-95	273	713758	cum on rpt cont. 2850 bbls high			
Oct-95		713758				
Nov-95		713758	advise T. Greg of rpt			
Dec-95		713758				
Jan-96		713758	cum on rpt adjusted to 713,758			
Feb-96		713758				
Mar-96	60	713818				
Apr-96						
May-96						
Jun-96						
Jul-96						
Aug-96						
Sep-96						
Oct-96						
Nov-96						
Dec-96						
Jan-97						



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

November 4, 1995

Mr. T. Greg Merrion, President
Merrion Oil & Gas Corporation
P. O. Box 840
Farmington, New Mexico 87499

file 515

Dear Mr. Merrion:

I updated my injection records today and noted a discrepancy in the cumulative water injected in your Navajo #3 water-disposal well. Based on my record, the cumulative injection figure on your submitted reports is carrying a surplus of 2,850 barrels.

A printout of my record and the pertinent injection reports are enclosed for your review. If you agree my record is correct, please note an adjustment of -2,850 barrels to the cumulative total on a future injection report, otherwise please let me know where my record is in error after November 27, as I will be out of the office until then. Thank you.

Sincerely,

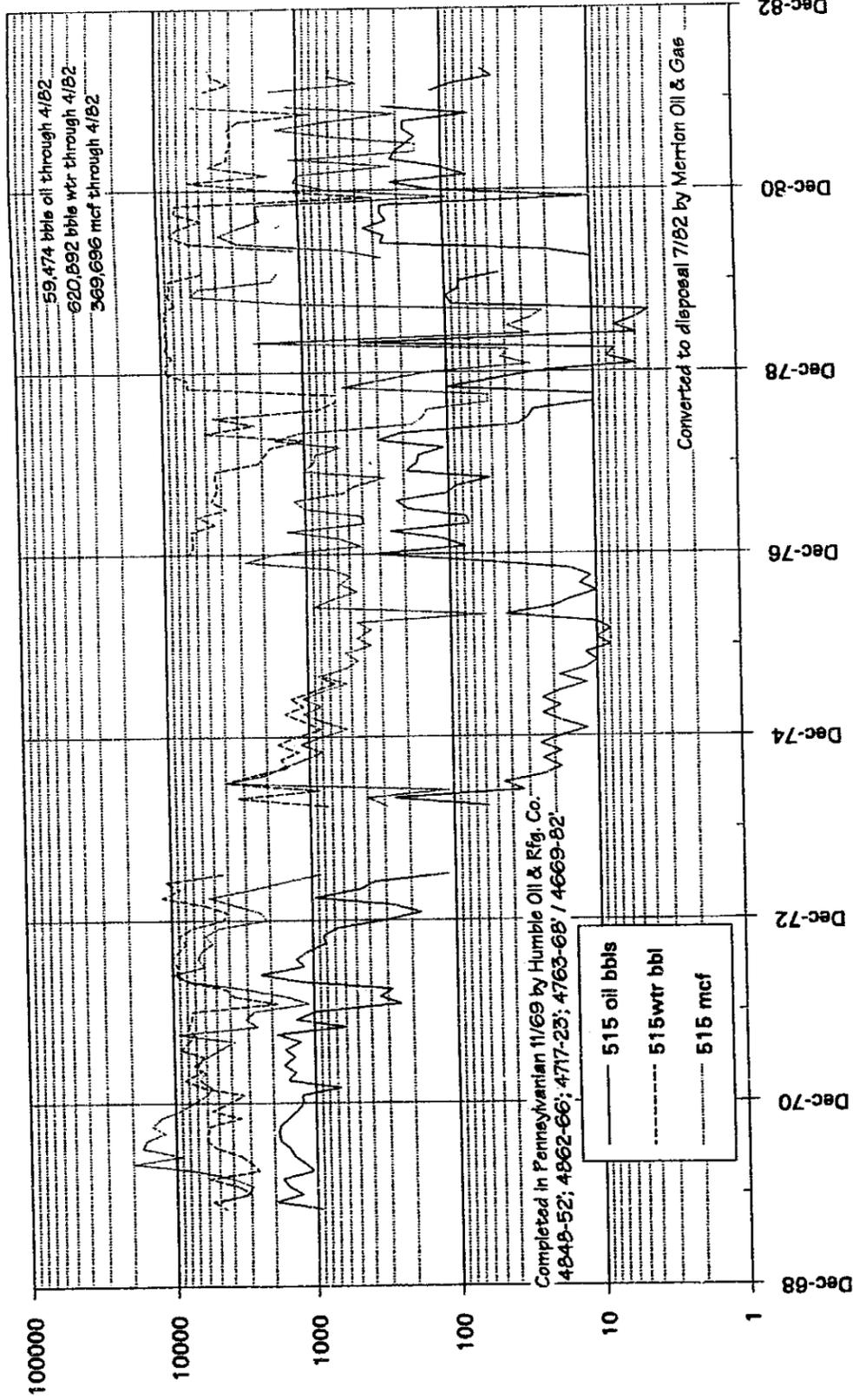
Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures

MONTHLY PRODUCTION AT 3 NAVAJO (515), ARIZONA: OCT 1969 - APR 1982

sw ss 4-41n-28e, East Boundary Butte Field, Apache County





Fife Symington
Governor

State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795



Larry D. Fellows
Director and State Geologist

January 25, 1993

Mr. George F. Sharpe
Merrion Oil & Gas Corporation
P. O. Box 840
Farmington, New Mexico 87499

Re: Your request for a temporary permit to transport water

Dear George:

The Oil and Gas Conservation Commission's Order 61 amended your disposal-well permit for the Navajo 3 well (State Permit 515) and provides approval to dispose of Pennsylvanian or Mississippian water from any well operated by Merrion Oil and Gas Company in the East Boundary Butte Field.

A temporary permit to transport water from an individual well is not required from this office. However, the source of the injected water (each individual well contributing water to the disposal well) must be listed on the Commission's *Report of Injection Project* (Form 14).

The Commission has no jurisdiction over right-of-way applications.

Sincerely,

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosure: Copy of sundry notice dated 1/18/93



State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795

Larry D. Fellows
Director and State Geologist

August 14, 1991

Mr. George F. Sharpe
Merrion Oil & Gas Corp.
P. O. Box 840
Farmington, NM 87499

Dear George:

Enclosed is a copy of your approved Application to Dispose of Salt Water By Injection, Form 15. I forgot to include this with Commission Order No. 61.

Sincerely,

Steve

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures



State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795

Larry D. Fellows
Director and State Geologist

August 12, 1991

Mr. George F. Sharpe
Merrion Oil & Gas Corp.
P. O. Box 840
Farmington, NM 87499

RE: Commission Order No. 61

Dear George:

Enclosed is a copy of Commission Order No. 61 which amends your permit for the disposal well in the East Boundary Butte Field, Apache County, Arizona.

Your \$50.00 deposit check is also enclosed.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures



State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795

Larry D. Fellows
Director and State Geologist

**BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF ARIZONA**

In the matter of the Hearing called
by the Oil and Gas Conservation
Commission of the State of Arizona
for the purpose of considering:

CASE NO. 68
ORDER NO. 61

The application of Merrion Oil and Gas
Corporation for amendments to its permit
for a disposal well in SWSE Sec 4, T41N-
R28E, G&SRB&M, Apache Co., Arizona

ORDER OF THE COMMISSION

This cause was considered at a public hearing, duly
noticed and conducted in accordance with A.R.S. 27-516.B, on
June 28, 1991, at 10:00 A.M., at Phoenix, Arizona, by the OIL
AND GAS CONSERVATION COMMISSION OF THE STATE OF ARIZONA,
hereinafter referred to as the Commission.

The COMMISSION, a quorum being present, having
considered the facts presented and being fully advised in the
premises, finds as follows:

FINDINGS:

- (1) THAT the Commission has jurisdiction of the subject
matter thereof, pursuant to ARS 27-515 and 27-516.A.20.
- (2) THAT adequate geological and engineering data has
been presented to the commission to conclude that the
Pennsylvanian formation in the subject area has sufficient
porosity and permeability and low enough formation pressure,
to accept large volumes of injected water.
- (3) THAT water in the Pennsylvanian formation contains
naturally occurring hydrocarbons and is not a possible source
of drinking water and that water produced with hydrocarbons
from the underlying Mississippian formation will not
contaminate a possible source of drinking water by being
injected into the Pennsylvanian.

Merrion Oil & Gas Corporation, Order No. 61
Page - 2 -

THEREFORE THE COMMISSION ORDERS:

(1) THAT the application of Merrion Oil and Gas Corp. for amendments to its permit for a disposal well in SWSE Sec. 4, T41N-R28W be approved.

(2) THAT the source of water to be injected shall be limited to Merrion Oil and Gas operated wells in the vicinity of the East Boundary Butte field.

OIL AND GAS CONSERVATION COMMISSION

By Jan C. Wilt
Jan C. Wilt, Chairman
Date August 9, 1991

Attest:

Steven L. Rauzi
Steven L. Rauzi
Oil & Gas Program Administrator
DATE 8-9-91



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

July 8, 1991

Mr. George F. Sharpe
Merrion Oil & Gas Corp.
P. O. Box 840
Farmington, NM 87499

Dear Mr. Sharpe:

Enclosed is a copy of the bill from the court reporter for his work at the meeting of the Commission at which the hearing on your application for amendments to the permit for your injection well was held.

Please send your check to us and we will forward it to the court reporter.

As of this date we have not received your check for the newspaper ad. When we have received both these checks, we will issue the official order authorizing the changes in the injection well permit and return your original \$50.00 check.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Prgm Admr

Enclosures



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

EMERGENCY ORDER No.1-91

The application of Merrion Oil and Gas Corporation for permission to inject water produced from the Mississippian formation into the Pennsylvanian Akah zone in its disposal well in SWSE Sec 4, T41N-R28E, G&SRB&M, Apache Co., Arizona.

ORDER OF THE COMMISSION:

This cause was considered by the commissioners in telephone conversations on June 10, 1991. Four commissioners approved the request. Commissioner Warne could not be reached.

The COMMISSION, having considered the facts presented and being fully advised in the premises, finds as follows:

FINDINGS:

- 1.) That the Commission has jurisdiction of the subject matter thereof, pursuant to ARS 27-515 and 27-516.A.20.
- 2.) That an emergency does exist. That Merrion Oil and Gas Corp. 3-11 Navajo in Sec. 3, T41N-R28E is being recompleted and after having been perforated is flowing large amounts of oil, gas, and water.
- 3.) That the Pennsylvanian Akah zone is already being used to dispose of water produced from the Pennsylvanian and is not a possible source of drinking water and that water produced with hydrocarbons from the underlying Mississippian formation will not contaminate a possible source of drinking water by being injected into the Pennsylvanian.

THEREFORE THE COMMISSION ORDERS:

- 1.) That the application of Merrion Oil and Gas Corp. for temporary authorization to inject water produced from the Mississippian formation into its disposal well in SWSE Sec. 4, T41N-R28W be approved.
- 2.) That this order expire after a term of 30 days.

OIL AND GAS CONSERVATION COMMISSION

By Jan C. Wilt
Jan C. Wilt, Chairman

Date June 12, 1991

Attest:
Daniel J. Brennan
Daniel J. Brennan
Executive Director

DATE 6/14/91



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

June 14, 1991

**NOTICE OF COMBINED PUBLIC MEETING
AND POSSIBLE EXECUTIVE SESSION**

Pursuant to A.R.S. 38-431.02 notice is hereby given to the members of the Oil and Gas Conservation Commission and to the general public that the Oil and Gas Conservation Commission will hold a meeting open to the public on June 28, 1991 at 10:00 A.M. at 5150 N 16th Street, Suite B-141, Phoenix, Arizona 85016. As indicated in the agenda, the Oil and Gas Conservation Commission may vote to go into executive session which will not be open to the public to discuss certain matters.

The agenda for the meeting is as follows:

1. Call to order.
2. Hearing on application of Merrion Oil and Gas Corp. for amendment to conditions of operation of an injection well, Sec. 4, T41N-R28E, Apache Co.
3. Status of Oil and Gas Commission Office and staff.
4. Report of Executive Director
5. Report of Program Manager
6. Call to the public.
7. Announcements
8. Adjournment

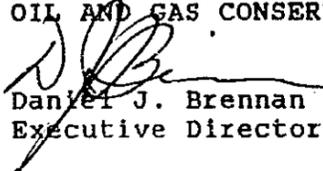
The Oil and Gas Conservation Commission may vote to go into executive session (pursuant to A.R.S. 38-431.A.3) which will not be open to the public to consult with its attorney and receive legal advice with respect to any regular agenda item listed on this agenda.

A copy of the agenda background material provided to Commission members (with the exception of material relating to possible executive sessions) is available for public inspection at the Commission's office, 5150 N. 6th St., Suite B-141, Phoenix, Arizona 85016.

The public will be afforded an opportunity to comment on any item on the agenda; however, at the beginning of the meeting, the Commission may vote to set a time limit on individual comments.

DATED THIS 14th day of June, 1991.

OIL AND GAS CONSERVATION COMMISSION


Daniel J. Brennan
Executive Director



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

June 14, 1991

**NOTICE OF COMBINED PUBLIC MEETING
AND POSSIBLE EXECUTIVE SESSION**

Pursuant to A.R.S. 38-431.02 notice is hereby given to the members of the Oil and Gas Conservation Commission and to the general public that the Oil and Gas Conservation Commission will hold a meeting open to the public on June 28, 1991 at 10:00 A.M. at 5150 N 16th Street, Suite B-141, Phoenix, Arizona 85016. As indicated in the agenda, the Oil and Gas Conservation Commission may vote to go into executive session which will not be open to the public to discuss certain matters.

The agenda for the meeting is as follows:

1. Call to order.
2. Hearing on application of Merrion Oil and Gas Corp. for amendment to conditions of operation of an injection well, Sec. 4, T41N-R28E, Apache Co.
3. Status of Oil and Gas Commission Office and staff.
4. Report of Executive Director
5. Report of Program Manager
6. Call to the public.
7. Announcements
8. Adjournment

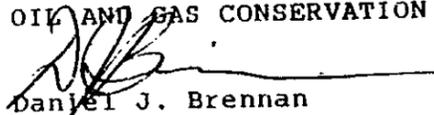
The Oil and Gas Conservation Commission may vote to go into executive session (pursuant to A.R.S. 38-431.A.3) which will not be open to the public to consult with its attorney and receive legal advice with respect to any regular agenda item listed on this agenda.

A copy of the agenda background material provided to Commission members (with the exception of material relating to possible executive sessions) is available for public inspection at the Commission's office, 5150 N. 6th St., Suite B-141, Phoenix, Arizona 85016.

The public will be afforded an opportunity to comment on any item on the agenda; however, at the beginning of the meeting, the Commission may vote to set a time limit on individual comments.

DATED THIS 14th day of June, 1991.

OIL AND GAS CONSERVATION COMMISSION


Daniel J. Brennan
Executive Director

**IF YOU ARE NOT GOING TO BE
ABLE TO ATTEND THIS MEETING
PLEASE NOTIFY THE OFFICE
AS SOON AS POSSIBLE**

FAX 505-326-5900

PH. 505-327-9801

MERRION OIL & GAS CORPORATION

610 REILLY AVE. • P. O. BOX 840
FARMINGTON, NEW MEXICO 87499

Mr. Dan Brennon
Arizona Oil & Gas Conservation Commission
3110 N. 19th Ave., Suite 190
Phoenix, AZ 85015

June 4, 1991

Re: Request for Hearing

Dear Dan:

Merrion Oil & Gas requests a hearing to amend our water disposal permit for the Navajo 3 well in the East Boundary Butte Field, Apache County, Arizona.

We would like to change the permit so that we can inject water into the Navajo 3 from any well we operate as long as the quality of the injected water is the same or better than that of the formation water.

Enclosed is \$50 to cover the permit processing fees. We would like to schedule the hearing for either June 21 or June 28, 1991.

Please let us know when you have a firm hearing date scheduled.

Sincerely,

T. Greg Merrion

T. Greg Merrion
Executive Vice President

TGM/so

MERRION OIL & GAS CORPORATION P.O. BOX 840 FARMINGTON, NEW MEXICO 87499	95-54 1027	THE FIRST NATIONAL BANK P.O. BOX 540 FARMINGTON, NEW MEXICO 87499	No. 150502
PAY THE SUM OF	THE \$4950.00 DOLLARS	DATE 6-4-91	
TO THE ORDER OF	ARIZONA OIL AND GAS CONSERVATION COMM.	AMOUNT \$ 50.00	
			<i>T. Greg Merrion</i>
⑈ 150502⑈ ⑆ 102200546⑆ 01 610 2650⑈			

February 18, 1991

MEMORANDUM TO FILE

FROM: Steven L. Rauzi *Steven L. Rauzi*
Oil & Gas Specialist

SUBJECT: SWD Mechanical Integrity Test
Merrion Oil Navajo 3, Permit No. 515

On Thursday, February 14, 1991, I witnessed the above referenced mechanical integrity test.

The annulus of the subject well was pressured to 600 psi and shut in. The well held within 5% of this pressure for 30 minutes. The mechanical integrity test was successful.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

cc

515

DEC 12 1990

In reply
refer to W-6-2

CERTIFIED MAIL P 347 509 603
RETURN RECEIPT REQUESTED

Mr. T. Greg Merrion
Merrion Oil and Gas Corporation
P.O. Box 840
Farmington, NM 87499

Dear Mr. Merrion:

We have received your letter to Harry Seraydarian dated November 26, 1990, regarding the Navajo No. 3 salt water disposal well in East Boundary Butte Field. We approve the proposed workover plan.

Please notify Mark Ripperda of my staff at (415) 744-1836 of the date the operations will commence. This will facilitate his making arrangements for witnessing the well workover and the mechanical integrity test.

Sincerely,

Mark Z... for

Lester Kaufman, Chief
Underground Injection Control Section

cc: Louise Linkin, Director
Navajo Environmental Protection Administration

Ron Fellows, Area Manager
Bureau of Land Management

✓ Dr. Daniel J. Brennan, Executive Director
Arizona Oil and Gas Conservation Commission

Walt Mills, Area Director
Bureau of Indian Affairs



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

NOV 9 1990

In reply
refer to W-6-2

CERTIFIED MAIL P 918 447 703
RETURN RECEIPT REQUESTED

Mr. T. Greg Merrion
Merrion Oil and Gas Corporation
P.O. Box 840
Farmington, NM 87499

Dear Mr. Merrion:

We have received your Sundry Notice of Workover Plans for the Navajo No. 3 salt water disposal well in East Boundary Butte Field. Our comments are as follows:

- (1) Item 6 of the workover prognosis should be changed to: RIH with packer and tubing, set packer, fill backside with inhibited water and test to 300 psi for 30 minutes, demonstrating no more than 10% pressure drop to achieve a successful MIT.
- (2) The annular pressure test to establish mechanical integrity should be recorded by a chart recorder or other device which provides a record of the test results. This recording should be signed by the witnesses and copies submitted to EPA, Region 9; the Navajo EPA; Bureau of Land Management (BLM); Bureau of Indian Affairs (BIA); and Arizona Oil and Gas Conservation Commission.
- (3) 40 CFR §144.28, Item (g)(2)(iv)(C), requires you to "... notify the Regional Administrator at least 30 days prior to any required mechanical integrity test." In Region 9, this responsibility has been delegated to the Director of the Water Management Division. Any letters in response to this requirement should be sent by certified mail and addressed to Harry Seraydarian, Director, Water Management Division, attn: W-6-2. I would also appreciate your notifying George Robin of my staff at (415) 744-1843.
- (4) Please be reminded that, in addition to EPA requirements, you must also comply with BLM, BIA, and Navajo Tribal requirements and gain any necessary approvals.

515

Please incorporate these comments into your workover plan and resubmit for our approval. If you have any questions, feel free to contact me or George Robin.

Sincerely,



Lester Kaufman, Chief
Underground Injection Control Section

cc: Louise Linkin, Director
Navajo Environmental Protection Administration

Ron Fellows, Area Manager
Bureau of Land Management

✓ Dr. Daniel J. Brennan, Executive Director
Arizona Oil and Gas Conservation Commission

Walt Mills, Area Director
Bureau of Indian Affairs



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

September 6, 1990

Mr. T. Greg Merrion
Merrion Oil and Gas Corporation
P. O. Box 840
Farmington, NM 84799

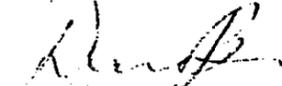
Dear T. Greg:

We have received your Monthly Producers Report and Report of Injection Project for the month of July 1990. The reports show production of 300 barrels of water on the lease and injection of 300 barrels of water during the month into your Navajo 14-20-603-413 lease (East Boundary Butte).

Your injection well failed its Mechanical Integrity Test on June 19, 1990, and your representative was informed that the well could not be used for injection until it was satisfactorily repaired.

I do understand that you have indicated an intention to repair this well, but in the meantime, it should not be used for disposal of produced water.

Very truly yours,


Daniel J. Brennan
Executive Director

#515



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

September 5, 1990

T. Greg Merrion, Production Engineer
Merrion Oil & Gas Corporation
P. O. Box 840
Farmington, NM 87499

P/N 22, 28, 49, 51, 515

RE: R12-7-183, Certificate of compliance and authorization to transport

Dear Mr. Merrion:

I noticed from your production report that you have changed the transporter of oil from the East Boundary Butte field in Arizona effective June 1990.

Please be advised that this change requires you to file a new "certificate of compliance and authorization to transport oil or gas from lease". I have enclosed a copy of the pertinent rule (R12-7-183) and two copies of form 8 for your use.

We appreciate your cooperation in this matter.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Specialist

Enclosures

PN 515
Memo to File

I witnessed the Mechanical Integrity Test
M Merrin #3 No. 10, SWSE Sec 4, T41N-R28E
on June 19, 1970.

The well failed the test. The Merrin representative
who I believe was C. Carl Meilatt, duly foreman was
informed that the well could no longer be used, must be
shut in for repairs or plugged and abandoned.

Daniel J. Brennan

FAX 505-326-5900

MERRION OIL & GAS CORPORATION

610 REILLY AVE. • P. O. Box 840
FARMINGTON, NEW MEXICO 87499

PH. 505-327-9801

**AZ OIL & GAS
CONSERVATION COMMISSION**

MAY 11 1990

May 8, 1990

Oil & Gas Conservation Commission
State of Arizona
5150 N. 16th St., Suite B-141
Phoenix, AZ 85016

Re: Mechanical Integrity Test
Navajo No. 3 Disposal Well
SWSE Sec. 4, T41N, R28E
Apache Co., AZ

Dear Gentlemen:

Per your request in your letter of April 2, 1990, the following is our plans for conducting a mechanical integrity test on the subject well:

1. Shut well in.
2. Pressure test 2-3/8" - 5-1/2" annulus to 300 psig and hold for 30 minutes.
3. If pressure holds, return well to injection. If pressure does not hold, a workover rig will move in, determine source of leak, and repair.

Merrion Oil & Gas will notify you in the near future of the date of this test so that you can provide a witness.

Sincerely,

T. Greg Merrion

T. Greg Merrion
Production Engineer

TGM:ks



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

515

April 2, 1990

To: All Operators of Wells for the Injection of Oil Field-Produced Waters in Arizona

Our records indicate that Merrion Oil & Gas operates the following injection well:

Merrion Oil #3 Navajo SW SE Sec. 4-T41N-R28E

As you know, oil field injection wells have been the subject of federal legislation and have come under the regulatory authority of EPA. State programs must meet certain EPA requirements. Recently the General Accounting Office issued a report, Drinking Water - Safeguards Are Not Preventing Contamination From Injected Oil and Gas Waters, at the request of the House Environment, Energy, and Natural Resources Subcommittee of the House Committee on Government Operations.

The report showed that states have not been as diligent as desirable in making sure that injection wells are not causing contamination. Arizona has been developing a program to achieve state primacy for the wells and needs to be in compliance with EPA criteria to achieve that goal.

As you are probably aware, EPA requires a Mechanical Integrity Test of every injection well every 5 years. This is also a requirement of Arizona Rules. Our records do not show a record of a mechanical integrity test on the above well in the past 5 years. If you have conducted the test, please send a copy of the report by May 1, 1990.

If you have not conducted the test you may not be in compliance with EPA rules and you are not in compliance with Arizona Rule 12-7-179, and you should schedule one soon. Prior to testing, send a copy of your Testing Plan to the Commission for approval. We are also required to witness the test, so we must be notified ahead of time. Please send your plan by May 1, 1990.

Thank you for your cooperation.

Very truly yours,

Daniel J. Brennan
Executive Director

MERRION OIL & GAS CORPORATION

610 REILLY AVE. • P. O. Box 840
FARMINGTON, NEW MEXICO 87499

RECEIVED PH. 505-327-9801

NOV 24 1986

O & G CONS. COMM.

November 20, 1986

Arizona Oil & Gas Conservation Commission
3110 N. 19th Avenue, Suite 190
Phoenix, Arizona 85007

Attention: Rudy Ybarra

Re: Well Status
East Boundary Butte
Apache Co., Arizona

Dear Mr. Ybarra:

Enclosed please find the "Notice of Intent to" and "Subsequent Report of" sundry notices for the plugging and abandonment of the Navajo 23-11 and the Navajo 2-11. Both wells are located in Section 11, T41N, R28E in Apache Co., Arizona.

The following is a list of the status of the wells which Merrion Oil and Gas operates in the East Boundary Butte Field, Apache Co., Arizona:

LEASE	WELL NAME	STATUS
14-20-603-226	Navajo No. 2 ^{D/W} 22 ✓	SI Gas Well
	Navajo No. 2-13 451	P & A
	Navajo No. 3-3 514	SI
	Navajo No. 3-11 450	SI
14-20-603-227	Navajo No. 2-11 518 ✓	P & A
	Navajo No. 23-11 67 ✓	P & A
14-20-603-412	Navajo No. E-1 575 ✓	P & A
14-20-603-413	Navajo No. 128	Pumping Oil Well
	Navajo No. 3513 ✓	Salt Water Disposal

also 2 Navajo

If you need any additional information, please advise.

Respectfully yours,

MERRION OIL & GAS CORPORATION

T. Gregory Merrion

T. Gregory Merrion, Production Engineer

TGM/am

Enc.

June 22, 1982

Merrion Oil & Gas Corp.
P.O. Box 1017
Farmington, NM 87401

Attention: Mr. Pat Hagarty

Re: Proposed Water Disposal Well No. 3 Navajo, P/N 515
East Boundary Butte Field

Dear Pat:

This letter follows our telephone conversation today regarding your company's application to convert referenced well to waste-water disposal.

As I stated in our conversation, before we can act on your proposal, we will need the following data:

1. Water analysis of the Akah Formation produced waters
2. Structural contour map on top of the Akah Formation or overlying Desert Creek
3. Cross section cutting through proposed water-disposal well
4. Brief narrative on your water treatment prior to disposal

Also, enclosed is a copy of the August 1, 1980, letter of which we received no response.

If you have any questions, please call.

Sincerely,

R. A. Ybarra
Enforcement Director

RAY/os
Enc. *Q. 444*

8

RECEIVED

NOV 23 1981

O & G CONS. COMM.

AKS
RAY ✓
OS

NOTICE

Effective October 1, 1981 the operating entity known as Merrion and Bayless will cease to exist. Operations will thereafter be carried on as Merrion Oil & Gas Corporation. Offices will continue at 205 Petroleum Center Bldg. Farmington, New Mexico. The new mailing address will be P.O. Box 1017, Farmington, New Mexico. The phone number remains (505) 325-5093.

515 (also 22, 28, 58)

February 5, 1976

Mr. J. Gregory Merrion
Merrion & Bayless
P. O. Box 1541
Petroleum Club Plaza
Farmington, NM 87401

RE: U. S. Fidelity & Guaranty Company
Surety Bond #01-0130-972-74

Dear Greg:

Back on October 23, 1974, you requested your surety, USF&G, to notify you of their acceptance of the wells that you had recently taken over from Consolidated Oil & Gas. A check of our files indicates that USF&G never responded to your request.

We have received a request for cancellation of a bond that technically still covers some wells that you as operator have also covered under the above referenced bond. Before, we can comply with the request for the release of this bond, we must have a written statement from USF&G assuming bonding responsibilities of these wells.

Will you please have USF&G write this Commission agreeing to assume bonding responsibilities for all the wells that you operate in this state. The reason that this acknowledgement from USF&G is necessary is because this blanket bond states, "any and all oil and gas wells drilled within the state of Arizona". Our opinion is that legally USF&G could claim that only wells actually drilled by you were covered under Bond #01-0130-972-74.

We will appreciate your cooperation in this matter.

Sincerely,

W. E. Allen, Director
Enforcement Section

WEA/sl

575

June 25, 1975

Mr. J. Gregory Merrion
Merrion & Bayless
P. O. Box 1541
Farmington, New Mexico 87401

RE: Humble Oil Navajo #1 Sec 4-T41N-R28E Apache Co., File #28	Humble Navajo #E-1 Sec 10-T41N-28E Apache Co., File #58	Humble #e Navajo Sec 4-T41N-R28E Apache Co., File #515
---	---	--

Dear Greg:

On April 7, 1975, we sent you a reminder that the semi-annual GOR tests on the above referenced wells were due. As of this date, we have not received these reports.

Greg, if taking these semi-annual GOR tests are an undue burden on your people, write me a letter stating your reasons for not wishing to continue taking these tests and I will endeavor to have your wells exempt from semi-annual testing.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/sl

April 7, 1975

Mr. J. Gregory Marrion
Merrion & Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Oil Navajo #1 Humble Navajo #E-1 Humble #3 Navajo
 Sec 4-T41N-R28E Sec 10-T41N-R28E Sec 4-T41N-R28E
 Apache Co., File #28 Apache Co., File #58 Apache Co., File #515

Dear Mr. Marrion:

This is just a reminder that the March Gas-Oil-Ratio Tests on the above referenced wells are due this month.

Also please note the attached address change effective April 15, 1975.

Very truly yours,

Mrs. Rhama Brandt
Secretary to W. E. Allen
Director, Enforcement Section

/rlb

Enc.



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

February 7, 1975

Mr. Robert L. Bayless
Petroleum Club Plaza Building
P. O. Box 1541
Farmington, New Mexico 87401

Re: East Boundary Butte Commingling

We fully concur with Mr. G. R. Daniel's letter of December 26, granting permission to commingle at the surface of production in the Dineh-bi-Keyah Field. As you have mentioned, it will be necessary to meter the produced gas at each well and monthly production tests will be adequate to determine the oil production from each lease.

You mentioned that your plans are to convert the Consolidated No. 3-11 well, Permit No. 490, into a water disposal well. It will be necessary that you receive permission from this Commission prior to this conversion.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

Robert L. Bayless

PETROLEUM CLUB PLAZA BUILDING
P. O. BOX 1541
FARMINGTON, NEW MEXICO 87401

February 4, 1975

State of Arizona
Oil and Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

ATTENTION: Mr. W. E. Allen
Director

Re: East Boundary Butte Commingling

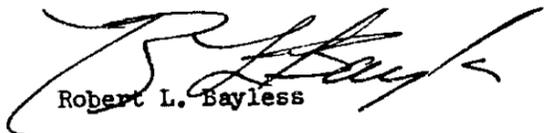
Dear Bill:

Enclosed please find a copy of our letter of October 21, 1974 requesting approval from the United States Geological Survey to commingle production from four Navajo leases and the reasoning behind the request. Also enclosed is a copy of the United States Geological Survey reply approving this request subject to approval by your Commission.

Please consider this a request to commingle the oil and gas produced as set forth in the letter of October 21, 1974.

Yours truly,

MERRION & BAYLESS


Robert L. Bayless

RLB/su

Enclosures: Letter to U.S.G.S. dated October 21, 1974
Letter from U.S.G.S. dated December 26, 1974

RECEIVED
FEB 05 1975
O & G CON. COMM.

October 21, 1974

United States Geological Survey
P.O. Box 959
Farmington, New Mexico 87401

ATTENTION: Mr. Phil McGrath

Re: Request for Permission to Co-
mingle Production from Four
Navajo Leases, East Boundary
Butte Field, Apache County, Arizona.

Gentlemen:

We have heretofore operated the Navajo (14-20-603-413) and Navajo E (14-20-603-412) leases in Apache County, Arizona with production going to parallel tank batteries at a location in the SW/4 of the NW/4 Section 10, T41N, R28E.

We have recently acquired the Consolidated Oil & Gas properties on Navajo leases 14-20-603-226 and 14-20-603-227.

With five wells currently producible, there is a necessity for four tank batteries; each with a great amount of equipment.

Operating costs in this field have been extremely high due to:

1. The necessity to lift large quantities of water to produce either gas or oil.
2. Water disposal expense.
3. Scale and corrosion of flow lines and heater treaters.
4. High gathering and compression costs of natural gas produced.

The continued production from the field depends upon streamlining the operation and getting a better price for the gas. We have negotiated a better gas price and provided we can get FPC approval, we would like to re-vamp the flow line, compressor and tank battery facilities as per the attached plat.

RECEIVED

FEB 06 1975

O & G CONS. COMM.



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

December 26, 1974

Mr. J. Gregory Merrion
P. O. Box 507
Farmington, New Mexico 87401

*Approval to
Comingle EBB*

Dear Mr. Merrion:

Your letter of October 21, 1974 requests approval to commingle production on leases 14-20-603-412, -413, -226, and -227 located in secs. 1, 2, 3, 4, 10, 11, 12, 13, 14, 15 and 16, T. 41 N., R. 28 E., East Boundary Butte field, Apache County, Arizona.

As set forth in your request, the expense of operating the field does not justify the duplication of equipment and its maintenance. One tank battery would be located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 41 N., R. 28 E., and one compressor set in the SW $\frac{1}{4}$ sec. 2. One oil-gas separator would be set at each well where gas would be metered separately and oil volumes would be allocated back to each well based on monthly tests of each well. The working interest and royalty interest on the four leases are identical.

The method of commingling production is hereby approved subject to like approval by the Arizona Oil and Gas Commission. Any change in this system must receive prior approval from this office. Form 9-361-A, "Lessee's Monthly Report of Sales and Royalty", must show all computations used in oil production allocated to each well.

You are requested to notify the Farmington office when the installation has been completed so that a field inspection can be made.

Sincerely yours,

G. R. DANIELS
Acting Area Oil and Gas Supervisor

December 16, 1974

Mr. J. Gregory Merrion
Merrion & Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Oil Navajo #1 Humble Navajo #E-1 Humble #3 Navajo
 NE/SE Sec 4-T41N-R28E SW/NE Sec 10-41N-28E SW/SE Sec 4-41N-28E
 Apache County, File #28 Apache County, File #58 Apache Co., File #515

Dear Mr. Merrion:

Please refer to our letter of November 4, 1974, where we requested that your office submit the Gas-Oil Ratio Test that was due in September.

As of this date we have not received a reply from you. Please submit this report as soon as possible.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rib

Enc.

November 7, 1974

Mr. Gordon Woods
Woods Insurance Company
115 East Main Street
Farmington, New Mexico 87401

Dear Mr. Woods:

Merrion & Bayless have furnished this Commission with a blanket bond, No. 010130-972-74 in the amount of \$25,000 which covers their oil and gas operations within the State of Arizona. Mr. Merrion has requested that this Commission authorize the cancellation of the four \$5,000 single well bonds that had previously covered their operations within the state.

This letter is your authority to cancel the above mentioned single well bonds, copies of which are enclosed.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

cc Merrion & Bayless

Encs.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS

Bond Serial No. _____

That we: Robert L. Bayless and J. Gregory Merrion

of the County of San Juan in the State of New Mexico

as principal, and United States Fidelity and Guaranty Company

of Baltimore, Maryland

AUTHORIZED TO DO BUSINESS WITHIN the State of Arizona.

as surety, are held and firmly bound unto the State of Arizona and the Oil and Gas Conservation Commission, hereinafter referred to as the "Commission", in the penal sum of Five thousand and No/100- - - - - (\$5,000.00) lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The conditions of this obligation are that, whereas the above bounden principal proposes to drill a well or wells for oil, gas or stratigraphic purposes in and upon the following described land situated within the State, to-wit:
Humble #3 Navajo (413) - SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 4, Twp. 41 N., R 28 E., Apache County, Arizona
File #515

(May be used as blanket bond or for single well)

NOW, THEREFORE, if the above bounden principal shall comply with all the provisions of the Laws of this State and the rules, regulations and orders of the Commission, especially with reference to the requirements of A.R.S. §27-516, providing for the proper drilling, casing and plugging of said well or wells, and filing with the Oil and Gas Conservation Commission all notices and records required by said Commission, then in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, this obligation is void; otherwise it shall remain in full force and effect.

Whenever the principal shall be, and declared by the Oil and Gas Conservation Commission in violation of the Laws of this State and the rules, regulations and orders of the Commission, the surety shall promptly:

1. Remedy the violation by its own efforts, or
2. Obtain a bid or bids for submission to the Commission to remedy the violation, and upon determination by the Commission and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the Commission, and make available as work progresses sufficient funds to pay the cost of remedying the violation; but not exceeding, including other costs and damages for which the surety may be liable hereunder, the amount set forth in the first paragraph hereof.

Liability under this bond may not be terminated without written permission of this Commission.

WITNESS our hands and seals, this 14th day of August, 1970

DATE
11-7-74
CANCELED

Robert L. Bayless
J. Gregory Merrion
Principal

WITNESS our hands and seals this 14th day of August, 1970

UNITED STATES FIDELITY AND GUARANTY COMPANY
Surety
By: Barbara G. Powers
Attorney-in-fact

Countersigned: W. W. Bidart
Surety, Resident Arizona Agent
If issued in a state other than Arizona)

(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by Agent, power of attorney or other evidence of authority must accompany the bond.)

Approved Date: 9/2/70
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: John Pannister

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Bond
File Two Copies
Form No. 2

Form No. 515



COPY OF RESOLUTION

That Whereas, it is necessary for the effectual transaction of business that this Company appoint agents and attorneys with power and authority to act for it and in its name in States other than Maryland, and in the Territories of the United States and in the Provinces of the Dominion of Canada and in the Colony of Newfoundland.

Therefore, be it Resolved, that this Company do, and it hereby does, authorize and empower its President or either of its Vice-Presidents in conjunction with its Secretary or one of its Assistant Secretaries, under its corporate seal, to appoint any person or persons as attorney or attorneys-in-fact, or agent or agents of said Company, in its name and as its act, to execute and deliver any and all contracts guaranteeing the fidelity of persons holding positions of public or private trust, guaranteeing the performances of contracts other than insurance policies and executing or guaranteeing bonds and undertakings, required or permitted in all actions or proceedings, or by law allowed, and

Also, in its name and as its attorney or attorneys-in-fact, or agent or agents to execute and guarantee the conditions of any and all bonds, recognizances, obligations, stipulations, undertakings or anything in the nature of either of the same, which are or may by law, municipal or otherwise, or by any Statute of the United States or of any State or Territory of the United States or of the Provinces of the Dominion of Canada or of the Colony of Newfoundland, or by the rules, regulations, orders, customs, practice or discretion of any board, body, organization, office or officer, local, municipal or otherwise, be allowed, required or permitted to be executed, made, taken, given, tendered, accepted, filed or recorded for the security or protection of, by or for any person or persons, corporation, body, office, interest, municipality or other association or organization whatsoever, in any and all capacities whatsoever, conditioned for the doing or not doing of anything or any conditions which may be provided for in any such bond, recognizance, obligation, stipulation, or undertaking, or anything in the nature of either of the same.

I, **David L. Royer**, an Assistant Secretary of the UNITED STATES FIDELITY AND GUARANTY COMPANY, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney given by said Company to

Gordon G. Woods and/or H. C. Dickinson

of **Farmington, New Mexico**, authorizing and empowering **them** to sign bonds as therein set forth, which power of attorney has never been revoked and is still in full force and effect.

And I do further certify that said Power of Attorney was given in pursuance of a resolution adopted at a regular meeting of the Board of Directors of said Company, duly called and held at the office of the Company in the City of Baltimore, on the 11th day of July, 1910, at which meeting a quorum of the Board of Directors was present, and that the foregoing is a true and correct copy of said resolution, and the whole thereof as recorded in the minutes of said meeting.

In Testimony Whereof, I have hereunto set my hand and the seal of the UNITED STATES FIDELITY AND GUARANTY COMPANY on **August 14, 1970**
(Date)


Assistant Secretary.

OFF. 328-0181
REV. 327-6094

J. GREGORY MERRION
PETROLEUM ENGINEER
P. O. BOX 507
FARMINGTON, NEW MEXICO 87401

October 31, 1974

State of Arizona
Oil & Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

ATTENTION: Mr. W. E. Allen
Director

Re: Blanket Arizona Bond

Dear Bill:

Enclosed please find original and one copy of a statewide bond covering all of our wells in Arizona.

We would appreciate your advising USFWS through their agent, Woods Insurance Company, 115 East Main Street, Farmington, New Mexico, of the release of our existing one well bonds.

Yours very truly,

MERRION BY BAILEY

J. Gregory Merrion
J. GREGORY MERRION

JGM/su

Enclosures: Statewide Bond - 2

RECEIVED

NOV 4 1974

O & G CONS. COMM.

November 4, 1974

Mr. J. Gregory Merrion
Merrion & Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Oil Navajo #1
NE/SE Sec 4-T41N-R28E
Apache County
File #28

Humble Navajo #E-1
SW/NE Sec 10-T41N-R28E
Apache County
File #58

Humble #3 Navajo (413)
SW/SE Sec 4-T41N-R28E
Apache County
File #515

Dear Mr. Merrion:

The Gas-Oil Ratio Test that is due on the above referenced wells for September of 1974 has not been received. Please submit the results of the test on Form 5 as quickly as possible.

Very truly yours,

R. L. Brandt
Secretary to W. E. Allen
Director, Enforcement Section

/rlb

Enc.



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

June 25, 1974

Mr. Robert L. Bayless
Merrion & Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Oil Navajo #E-1
SW/NE Sec 10-T41N-R28E
Apache County
Permit No. 58

Humble Oil #3 Navajo
SW/SE Sec 4-T41N-R28E
Apache County
Permit No. 515

Dear Mr. Bayless:

As of this date we have not received your semi-annual Gas-Oil Ratio Test on the above referenced wells. These tests were due in March.

Will you please submit this report as soon as possible.

Very truly yours,

Mrs. Rhema Brandt
Secretary to W. E. Allen
Director, Enforcement Section

/rlb



OFFICE OF
Oil and Gas Conservation Commission

STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

June 25, 1974

Mr. Robert L. Bayless
Merrion & Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Oil Navajo #E-1
SW/NE Sec 10-T41N-R28E
Apache County
Permit No. 58

Humble Oil #3 Navajo
SW/SE Sec 4-T41N-R28E
Apache County
Permit No. 515

Dear Mr. Bayless:

As of this date we have not received your semi-annual Gas-Oil Ratio Test on the above referenced wells. These tests were due in March.

Will you please submit this report as soon as possible.

Very truly yours,

Mrs. Rhema Brandt
Secretary to W. E. Allen
Director, Enforcement Section

/rlb



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

October 15, 1973

Mr. Robert L. Bayless
Merrion & Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Oil Navajo #E-1
SW/NE Sec 10-T41N-R28E
Apache County
Permit No. 58

Humble Oil #3 Navajo (413)
SW/SE Sec 4-T41N-R28E
Apache County
Permit No. 515

Dear Mr. Bayless:

As of this date we have not received your semi-annual Gas-Oil Ratio Test on the above referenced wells. These tests were due in September.

Will you please submit this report as soon as possible.

Very truly yours,

W. E. Allen, Director
Enforcement Section

Mrs. Rhema Brandt
Secretary to W. E. Allen

/rlb

Encs.



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

September 18, 1973

Mr. J. Gregory Merrion
Merrion & Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Dear Mr. Merrion:

Will you please supply this Commission with any information that you might have regarding the recoverable reserves in the East Boundary Butte Field for your Humble Navajo #1 (28), Humble Navajo #E-1 (58), and Humble Navajo #3 (515)?

This information will be considered confidential if you so desire.

Thank you for your cooperation.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

May 22, 1973

Mr. Robert L. Bayless
P. O. Box 507
Farmington, New Mexico 87401

Re: Humble Navajo #E-1
SW/NE Sec 10-T41N-R28E
Apache County
Permit No. 58

Humble #3 Navajo (413)
SW/SE Sec 4T41N-R28E
Apache County
Permit No. 515

Dear Mr. Bayless:

The Gas-Oil Ratio Test that is due on the above referenced wells for March of 1973 has not been received. Please submit the results of the test on Form 5 as quickly as possible.

Very truly yours,

W. E. Allen, Director
Enforcement Section

/rlb

December 27, 1972

Mr. Robert L. Bayless
P. O. Box 507
Farmington, New Mexico 87401

Re: Humble Navajo #E-1
SW/NE Section 10-T41N-R28E
Apache County
Permit No. 58

Humble #3 Navajo (413)
SW/SE Section 4-T41N-R28E
Apache County
Permit No. 515

Dear Mr. Bayless:

The Gas-Oil Ratio Test that is due on the above referenced wells for September of 1972 has not been received. Please submit the results of the test on Form 5 as quickly as possible.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7TH AVE.

PHOENIX, ARIZONA 85013

PHONE: (602) 271-5161

May 9, 1972

Mr. Robert L. Bayless
Petroleum Club Plaza Building
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Navajo #E-1
SW/NE Section 10-T41N-R28E
Apache County
Our File #58

Humble #3 Navajo (413)
SW/SE Section 4-T41N-R28E
Apache County
Our File #515

Dear Mr. Bayless:

The Gas-Oil Ratio Test that is due on the above referenced wells for March of 1972 has not been received. Please submit the results of the test on Form 5 as quickly as possible.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

WR

ROBERT L. BAYLESS
PETROLEUM CLUB PLAZA BUILDING
P. O. BOX 1541
FARMINGTON, NEW MEXICO 87401

November 29, 1971

Oil and Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Attn: W. E. Allen

Re: Humble Navajo #1
Humble Navajo #E-1
Humble #3 Navajo

Dear Sir:

In order for your request of November 22 concerning the Gas-Oil Ratio Tests to be filed with your office we will need some of the necessary forms before we can file the tests. Please send them to the above address as soon as possible.

Yours truly,

Robert L. Bayless
Robert L. Bayless

RLB/eah

RECEIVED
DEC 01 1971
O & G CONS. COMM.

28, 58, 515

November 22, 1971

Mr. Robert L. Bayless
Petroleum Club Plaza Building
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Navajo #1
NE/SE Section-4-T41N-R28E
Apache County
Our File #28

Humble Navajo #E-1
SW/NE Section-10T41N-R28E
Apache County
Our File #58

Humble #3 Navajo (413)
SW/SE Section-4-T41N-R28E
Apache County
Our File #58

Dear Mr. Bayless:

The Gas-Oil Ratio Test that is due on the above referenced wells for September of 1971 has not been received. Please submit the results of the test on Form 5 as quickly as possible.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

December 31, 1970

Mr. Robert L. Bayless
Petroleum Club Plaza Building
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Navajo #1	Humble Navajo #T-1
NE/4 SE/4 Sec. 4-T41N-R28E	SE/4 NE/4 Sec. 10-T41N-R28E
Apache County	Apache County
Our File #28	Our File #58

Humble #3 Navajo (413)
SW/4 SE/4 Sec. 4-T41N-R28E
Apache County
Our File #515

Dear Mr. Bayless:

Your letter of December 28, 1970, has been received; and, we are curious concerning your explanation of Production Reports. We assume that you keep records of your daily production and runs. If you do keep these records, your Monthly Producers Report, Form 16, could be prepared from information available to you from your own records.

We realize that there may at times be a slight discrepancy between the total production that you submit from your own records and the corrected production as submitted by your transporter. This difference should be small.

We are striving to be able to circulate our combined monthly production report as quickly after the first of the following month as possible. For this reason, if at all possible, we need information from the producers to be received in this office on or before the 15th of each month.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA:jd

ROBERT L. BAYLESS
PETROLEUM CLUB PLAZA BUILDING
P. O. BOX 1541
FARMINGTON, NEW MEXICO 87401

RECEIVED
DEC 31 1970
O & G CONS. COMM.

December 28, 1970

Oil and Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Re: Humble Navajo #1
Apache County
Your File #28

Humble Navajo #1-E
Apache County
Your File #58

Humble #3 Navajo (413)
Apache County
Your file #515

Gentlemen:

We have your letter of December 24 regarding reports of wells we operate in Arizona. Unfortunately we do not receive the information needed to submit these reports until around the 22nd of each month from the crude oil purchaser. We then report to Arizona as quick as possible. Please advise if you have other questions.

Yours very truly,


Robert L. Bayless

RLB/eah



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7th AVE.
PHOENIX, AZ. 85013
Phoenix, Arizona 85007

PHONE: 271-5161

December 24, 1970

Mr. Robert L. Bayless
Merrion and Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Navajo #1
NE/4 SE/4 Section 4-T41N-R28E
Apache County
Our File #28

Humble Navajo #1-E
SW/4 NE/4 Sec. 10-T41N-R28E
Apache County
Our File #58

Humble #3 Navajo (413)
SW/4 SE/4 Section 4-T41N-R28E
Apache County
Our File #515

Dear Mr. Bayless:

As of this date we have not received your Production Report on the subject wells. Will you please submit this report immediately and in the future we would appreciate receiving your Production Reports as well as all other routine reports by the 15th of the following month.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA:jd



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

DENVER DISTRICT

December 9, 1970

POST OFFICE BOX 120

WPA

Oil & Gas Conservation Commission
State of Arizona
Attn: Mr. W. E. Allen
4515 North 7th Avenue
Phoenix, Arizona 85013

Dear Mr. Allen:

Re: Humble #3 Navajo (413)
SW/4 SE/4 Sec. 4-T41N-R28E
Apache County - Your File #515

In reply to your letter of November 13, 1970 pertaining to the above referenced well, we have found in our records and obtained from other sources, information as shown on the attached notice dated 12-8-70.

Also attached is a Form 4 with as much information shown as could be fitted in each specific block from the information which we have on hand. The notice dated 12-8-70 is much more detailed as to work performed and results achieved. Our files were turned over to Merrion & Bayless, Farmington, New Mexico, to whom we sold this property.

In addition to the above, please note copies of reports submitted during the period the work was in progress which you indicate you do not have in your files.

We sincerely hope this will complete your files, but if we can be of any further help, please do not hesitate to call on us.

Sincerely,


J. Roy Dorrough

Attachments

RECEIVED

DEC 14 1970

O & G CONS. COMM.



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7th AVE.
PHOENIX, AZ. 85013
Phoenix, Arizona 85007

PHONE: 271-5161

November 24, 1970

Mr. Robert L. Bayless
Merrion and Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: (AAA Fishing Tool) #E-2 Humble Navajo
SW/4 NE/4 Section 9-T41N-R28E
Apache County
Our File #444

Dear Mr. Bayless:

It has come to our attention that when you supplied the Oil and Gas Conservation Commission with bonds on your acquired wells: the Navajo #1, the Navajo E-1, and the Navajo #3 from Humble Oil and Refining Company that you failed to furnish a bond for the #E-2 Navajo that was also acquired from Humble and is presently being used as a water injection well. Will you please furnish the Commission with an additional bond in the amount of \$5,000 to cover this well.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd

cc: Humble Oil & Refining Company

Enc.

November 24, 1970

Mr. Robert L. Bayless
Merrion and Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Navajo #1
NE/4 SE/4 Sec. 4-T41N-R28E
Apache County
Our File #28

Humble Navajo #1-E
SW/4 NE/4 Sec. 10-T41N-R28E
Apache County
Our File #58

Humble #3 Navajo (413)
SW/4 SE/4 Sec. 4-T41N-R28E
Apache County
Our File #515

Dear Mr. Bayless:

As of this date we have not received your Production Report on the above three wells.

Will you please forward this report to this office immediately and in the future arrange to submit your Monthly Producers Report, Form 16, to this office by the tenth (10th) of the following month.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd

November 18, 1970

Memo from John Bannister
Executive Secretary

Memo to Humble #3 Navajo (413)
SW/4 SE/4 Section 4-T41N-R28E
Apache County
Our File #515

Consolidated (Shell) Navajo Tribal #2
SE/4 NW/4 Section 3-T41N-R28E
Apache County
Our File #22

Dave Smink, Consolidated, called this morning and advised that he had received a PI card on the Humble Navajo #3 well. The card indicated, and apparently this has been confirmed by BLM records held by Phil McGrath, that the Humble perforations between 4669' and 4682' were temporary for testing purposes only and were not intended as permanent features.

I advised Mr. Smink that we had requested current information on the status of this well from both Humble and Merrion and Bayless; and, as soon as we have up to date information, we will contact him.

I also advised Mr. Smink that insofar as our records currently reveal, there is no violation by the Humble well. I told him that if a "situation" does exist as revealed by later additional information filed with the Commission, a solution could be to call a meeting between interested parties and the Commission in Denver; and, if this were not satisfactorily concluded, that Consolidated could, of course, at any time request a Commission hearing.

November 18, 1970

Mr. David E. Smink
Consolidated Oil & Gas
1860 Lincoln Street
Suite 1300
Denver, Colorado 80203

Re: Humble #3 Navajo (413)
SW/4 SE/4 Section 4-T41N-R26E
Apache County
Our File #515

Dear Dave:

I am forwarding to you for your information copies of a supplemental well history just received by the Commission. As I explained in our conversation today, we are going to Tucson for a hearing. We will pursue this information and contact you at the first of the week.

Sincerely,

John Bannister
Executive Secretary

JB:jd
Enc.

cc: file 22

ROBERT L. BAYLESS

PETROLEUM CLUB PLAZA BUILDING

P. O. BOX 1541

FARMINGTON, NEW MEXICO 87401

November 16, 1970

Oil and Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85007

Attn: W. E. Allen
Director, Enforcement Section

Re: Humble #3 Navajo
Your File #515

Gentlemen:

Enclosed please find United States Geological Survey reports as
per your request of November 13.

Yours very truly,


Robert L. Bayless

RLBeah

ENCL. U.S.G.S. Reports

RECEIVED
NOV 18 1970
O & G CONS. COM. 1

November 13, 1970

Mr. J. Roy Dorrrough
Humble Oil & Refining Company
P. O. Box 120
Denver, Colorado 80201

Re: Humble #3 Navajo (413)
SW/4 SE/4 Sec. 4-T41N-R28E
Apache County
Our File #515
(currently owned by Merrion & Bayless)

Dear Mr. Dorrrough:

It has come to our attention that in the spring of this year the referenced well was recompleted, other perforations opened, and perhaps other work performed.

Our files contain no information of work of any nature being performed on this well since your original Completion Report was submitted December 5, 1969. In all probability the information that would have been submitted by your office, if this well has been recompleted, has been lost.

Please forward us any information that you have pertaining to the referenced well's recompletion; and, if the well has been recompleted, please file a revised form #4, Well Completion or Recompletion Report.

We are aware that you are no longer the operators of this well; but, I would think that you still retain copies of all work done in your file.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.

cc. Merrion & Bayless

October 23, 1970

Mr. Robert L. Bayless
Merrion & Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Navajo #1-E	Humble #3 Navajo (413)
SW/4 NE/4 Section 10-T41N-R28E	SW/4 SE/4 Section 4-T41N-R29E
Apache County	Apache County
Our File #58	Our File #515

Dear Mr. Bayless:

As of this date we have not received your semi-annual Gas-Oil Ratio Test on the above referenced wells. These tests were due in September.

Please refer to the Rules and Regulations of the Oil and Gas Conservation Commission of the State of Arizona under Rule 301-A for information on the above requested requirements.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.

September 3, 1970

Mr. Robert L. Bayless
Petroleum Club Plaza Building
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble #3 Navajo (413)
SW/4 SE/4 Sec. 4-T41N R28E
Apache County
Our File #515

Dear Mr. Bayless:

We have received the performance bonds on the Humble Navajo E-1, the #3 Navajo, and the #1 Navajo.

We notice that the bond for Humble #3 Navajo indicates the legal description to be the SW/4 SE/4 Section 4, Township 41 north, Range 29 east, Apache County, Arizona. The correct legal description for this well is SW/4 SE/4 Section 4, Township 41 north, Range 28 east, Apache County, Arizona. We are returning our copy of this bond in order that you may cause the correct description to be inserted. We would appreciate having this bond returned as quickly as possible.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.

ROBERT L. BAYLESS

PETROLEUM CLUB PLAZA BUILDING

P. O. BOX 1541

FARMINGTON, NEW MEXICO 87401

August 31, 1970

Oil and Gas Conservation Commission
State of Arizona
Room 202
1624 West Adams
Phoenix, Arizona 85007

Gentlemen:

Enclosed please find Performance Bonds on Humble Navajo #1-E,
Humble #3 Navajo, and Humble Oil & Refining Navajo #1.

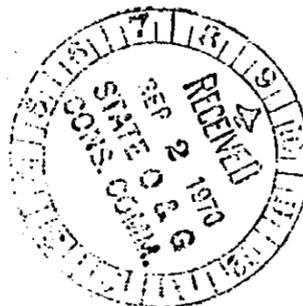
Yours very truly,

MERRION & BAYLESS


Robert L. Bayless

RLB/eah

ENLC.



July 29, 1970

Mr. Robert L. Bayless
Merrion and Bayless
P. O. Box 1541
Farmington, New Mexico 87401

Re: Humble Oil & Refining Navajo #1 Humble Navajo #1-E
NE/4 SE/4 Sec. 4-T41N-R28E SW/4 NE/4 Sec. 10
Apache County T41N-R28E
Our File #28 Apache County
Our File #58

Humble #3 Navajo (413)
SW/4 SE/4 Sec. 4-T41N-R28E
Apache County
Our File #515

Dear Mr. Bayless:

This is to advise you that a copy of your bond with the Navajo Tribe will not satisfy our requirements. Before we can release Humble from their bonding operations on the wells you have purchased in the East Boundary Butte Field, you will need to furnish the Commission with a bond of \$5,000 on each well or a blanket bond of \$25,000. This blanket bond will cover your present and future operations in the State of Arizona.

We are enclosing six copies of Form 2, Performance Bond. If you bond each individual well, we will require one copy of this form for each well. Should you decide on the blanket bond, one copy will be sufficient for all wells.

Page 2
Mr. Robert L. Bayless
July 23, 1970

Please forward all copies of this form to our office for approval. One copy will be returned for your files. Your cooperation is appreciated.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.

ROBERT L. BAYLESS

PETROLEUM CLUB PLAZA BUILDING

P. O. BOX 1541

FARMINGTON, NEW MEXICO 87401

July 27, 1970

Oil and Gas Conservation Commission
State of Arizona
Room 202
1624 West Adams
Phoenix, Arizona 85007

Gentlemen:

Enclosed please find Organization Report to cover our operations in Arizona. Effective August 1, 1970 we have acquired Humble Oil and Refining Company's East Boundary Butte field and will operate as J. Gregory Merrion and Robert L. Bayless, individuals.

We have our Bond with the Navajo Tribe ready to file upon receipt of the Conveyances from Humble. Please advise if a copy of this will be acceptable for your bonding requirements.

Thank you,

MERRION & BAYLESS

Robert L. Bayless
Robert L. Bayless

RLB/eah
ENCL. Organization Report



July 8, 1970

Merrion & Bayless
Petroleum Club Plaza Building
P.O. Box 1541
Farmington, New Mexico 87401

Re: Humble Oil & Refining Navajo #1 Humble Navajo #1-E
NE/4 SE/4 Sec. 4-T41N-R28E SW/4 NE/4 Sec. 10-T41N-R28E
Apache County Apache County
Our File #28 Our File #58

Humble #3 Navajo (413)
SW/4 SE/4 Sec. 4-T41N-R28E
Apache County
Our File #515

Attention: Mr. James M. Johnson, Office Manager

Gentlemen:

Thank you for your letter advising the Commission of your purchase from Humble Oil & Refining Company of the two leases in the East Boundary Butte Field.

Enclosed is a copy of the Rules and Regulations established by the Oil and Gas Commission of the State of Arizona. You will find these rules similar to the rules under which you operate in New Mexico. Also enclosed are a supply of the forms which will be required to report your activities to this office.

We will need Form #1, Organization Report, completed and sent in as quickly as possible. As you know, every well in Arizona is drilled and produced under bond, see Rule 101, Page 6, of Rules

Page 2
Merrion & Bayless
July 8, 1970

and Regulations. Before we can release Humble from the bond covering the wells on the subject leases, it will be necessary that you furnish the Commission a bond in the amount of \$5,000 on each well or a blanket bond of \$25,000 which will cover your present or any future operations within the State.

After you have had an opportunity to look over the Rules and Regulations and also the forms that we require, and you have any questions, please let us know.

Every member of the Oil and Gas Commission extends a hearty welcome to you and your company in entering Arizona and wish you success in your operations.

You may expect our fullest cooperation.

Very truly yours,

W. E. Allen
Director of Enforcement Section

WEA:jd
Enc.

ROBERT L. BAYLESS

PETROLEUM CLUB PLAZA BUILDING
P. O. BOX 1541
FARMINGTON, NEW MEXICO 87401

July 6, 1970

Director
Arizona Oil & Gas Conservation Commission
1624 West Adams, Room 202
Phoenix, Arizona 85007

Dear Sir:

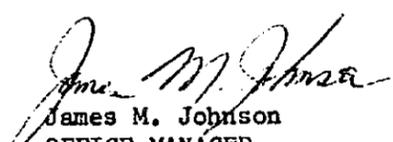
We recently purchased two producing leases from the Humble Oil & Refining Company located in East Boundary Butte Field and are to assume operations effective August 1, 1970.

We need to have a copy of the Arizona Oil & Gas Conservation Commission rules and regulations and in addition need a supply of any forms that might be required. Would you please send the above mentioned items to Box 1541, Farmington, New Mexico 87401.

Any additional information or suggestions that you provide will be greatly appreciated.

Yours very truly,

MERRION & BAYLESS


James M. Johnson
OFFICE MANAGER

JMJ/jmj



Xchlene

August 25, 1969

Mr. J. Roy Dorrough
Humble Oil & Refining Company
P. O. Box 120
Denver, Colorado 80201

Re: Humble #3 Navajo (413)
T41N, R28E, G & SRM
Sec. 4: SW/4 SE/4
Apache County
Permit #515

Dear Mr. Dorrough:

Enclosed is the approved Application for Permit to Drill, our receipt No. 9597, a copy of the plat, and our Permit To Drill No. 515.

Also enclosed are miscellaneous instruction sheets pertaining to samples and reports required by this office.

The most recent Organization Report we have in our files for your company is dated 3-22-67. If there have been no changes or corrections since this Report was submitted, so state and we will update your last Report. If there have been changes or corrections, please submit a new Organization Report on the enclosed form.

Yours truly,

John Bannister
Executive Secretary

jf
Enc.

515

FORM NO. 173-0063

HUMBLE OIL & REFINING COMPANY

CENTRAL DIVISION SPECIAL ACCOUNT NO. 00

SETTLEMENT OF ACCOUNT

THE ATTACHED CHECK IS IN FULL PAYMENT FOR THE ITEMS SHOWN BELOW AND CONSTITUTES RECEIPT.
IF CORRECT, DETACH STATEMENT FOR YOUR RECORDS.

DESCRIPTION

Drilling Permit for Navajo Tribe of Indians #3, SE SW SE of Section 10, T1N, R10E, S1E, Apache County, Arizona.



PERFORMANCE BOND Annual Premium \$500
KNOW ALL MEN BY THESE PRESENTS

Bond Serial No. 91372

That we: CENTRAL RESOURCES, INC.
of the County of _____ in the State of Colorado
as principal, and FRONTIER INSURANCE COMPANY
of Rock Hill, New York

as surety, are held and firmly bound unto the State of Arizona and the Oil and Gas Conservation Commission, hereinafter referred to as the "Commission", in the penal sum of Twenty Five Thousand and no/100 (\$25,000.00) lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The conditions of this obligation are that, whereas the above bounden principal proposes to drill a well or wells for oil, gas or stratigraphic purposes in and upon the following described land situated within the State, to-wit:

Blanket Bond

(May be used as blanket bond or for single well)

NOW, THEREFORE, if the above bounden principal shall comply with all the provisions of the Laws of this State and the rules, regulations and orders of the Commission, especially with reference to the requirements of A.R.S. § 27-818, providing for the proper drilling, casing and plugging of said well or wells, and filing with the Oil and Gas Conservation Commission all notices and records required by said Commission, then in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, this obligation is void; otherwise it shall remain in full force and effect.

Whenever the principal shall be, and declared by the Oil and Gas Conservation Commission in violation of the Laws of this State and the rules, regulations and orders of the Commission, the surety shall promptly:

1. Remedy the violation by its own efforts, or
2. Obtain a bid or bids for submission to the Commission to remedy the violation, and upon determination by the Commission and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the Commission, and make available as work progresses sufficient funds to pay the cost of remedying the violation; but not exceeding, including other costs and damages for which the surety may be liable hereunder, the amount set forth in the first paragraph hereof.

Liability under this bond may not be terminated without written permission of this Commission.

WITNESS our hands and seals, this 9th day of May, 1997.

CENTRAL RESOURCES, INC.

Arthur J. Cable
Printed

WITNESS our hands and seals, this 9th day of May, 1997.

FRONTIER INSURANCE COMPANY

Tina E. Switzer
Tina E. Switzer, Attorney-in-Fact

(Surety, Resident Arizona Agent
If issued in a state other than Arizona)

(If the principal is a corporation, the bond should be executed by its duly authorized officer, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved Date 6-9-97
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: SLPain

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Bond
Five Two Copies
Form No. 2

Permit No. _____

file 515



POWER OF ATTORNEY

Know All Men By These Presents: That FRONTIER INSURANCE COMPANY, a New York Corporation, having its principal office in Rock Hill, New York, pursuant to the following resolution, adopted by the Board of Directors of the Corporation on the 4th day of November, 1985:

"RESOLVED, that the Chairman of the Board, the President, or any Vice President be, and hereby is, authorized to appoint Attorneys-in-Fact to represent and act for and on behalf of the Company to execute bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, and to attach thereto the corporate seal of the Company, in the transaction of its surety business;

"RESOLVED, that the signatures and attestations of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company when so affixed with respect to any bond, undertaking, recognizance or other contract of indemnity or writing obligatory in the nature thereof;

"RESOLVED, that any such Attorney-in-Fact delivering a secretarial certification that the foregoing resolutions still be in effect may insert in such certification the date thereof, said date to be not later than the date of delivery thereof by such Attorney-in-Fact."

This Power of Attorney is signed and sealed in facsimile under and by the authority of the above Resolution.
DOES HEREBY MAKE, CONSTITUTE AND APPOINT: **ALTUS E. WILDER, III** **TINA E. SWITZER**

of **OKLAHOMA CITY** in the State of **OKLAHOMA**
its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred in its name, place and stead to sign, execute, acknowledge and deliver in its behalf, and as its act and deed, without power of redelegation, as follows:

Bonds guaranteeing the fidelity of persons holding places of public or private trust; guaranteeing the performance of contracts other than insurance policies; and executing or guaranteeing bonds and undertakings required or permitted in all actions or proceedings or by law allowed; IN AN AMOUNT NOT TO EXCEED THREE MILLION FIVE HUNDRED THOUSAND (\$3,500,000.00) DOLLARS; and to bind FRONTIER INSURANCE COMPANY thereby as fully and to the same extent as if such bond or undertaking was signed by the duly authorized officers of FRONTIER INSURANCE COMPANY, and all the acts of said Attorney(s)-in-Fact pursuant to the authority herein given are hereby ratified and confirmed.

In Witness Whereof, FRONTIER INSURANCE COMPANY of Rock Hill, New York, has caused this Power of Attorney to be signed by its President and its Corporate seal to be affixed this **16th** day of **February**, 19 **96**

FRONTIER INSURANCE COMPANY



BY: *Walter A. Rhulen*
WALTER A. RHULEN, President

State of New York
County of Sullivan ss.:

On this **16th** day of **February**, 19 **96**, before the subscriber, a Notary Public of the State of New York in and for the County of Sullivan, duly commissioned and qualified, came WALTER A. RHULEN of FRONTIER INSURANCE COMPANY to me personally known to be the individual and officer described herein, and who executed the preceding instrument, and acknowledged the execution of the same, and being by me duly sworn, deposed and said, that he is the officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of the Company, and the Corporate Seal and signature as an officer were duly affixed and subscribed to the said instrument by the authority and direction of the Corporation, and that the resolution of the Company, referred to in the preceding instrument, is now in force.

In Testimony Whereof, I have hereunto set my hand, and affixed my official seal at Rock Hill, New York, the day and year above written.



Christine I. Lane
CHRISTINE I. LANE
Notary Public State of New York
Sullivan County Clerk's No. 1996
Commission Expires May 2, 1998

CERTIFICATION

I, JOSEPH P. LOUGHLIN, Secretary of FRONTIER INSURANCE COMPANY of Rock Hill, New York, do hereby certify that the foregoing Resolution adopted by the Board of Directors of this Corporation and the Powers of Attorney issued pursuant thereto, are true and correct, and that both the Resolution and the Powers of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the facsimile seal of the corporation this **9th** day of

May, 19 **97**



Joseph P. Loughlin
JOSEPH P. LOUGHLIN, Secretary.