

CONFIDENTIAL  
Release Date 11/17/71

P-W

TRUMBLE #3 - Navajo - 00 440  
TENE 3636N-29E Apache County

sl

COUNTY Apache AREA Dineh bi Keyah LEASE NO. Nav 14-20-0603-8812  
 WELL NAME ~~Kerr Mc Gee 1-1-73~~ Mt. States Petroleum (5-1-94)  
Humble #3- Navajo-88

LOCATION SE NE SEC 36 TWP 36N RANGE 29E FOOTAGE 2070 FNL 550 FEL  
 ELEV 8342' GR 8334 KB SPUD DATE 12-9-67 STATUS Oil TOTAL DEPTH 3875  
 COMP. DATE 4-22-68 DEPTH 3869 CED

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY	DRILLED BY CABLE TOOL	PRODUCTIVE RESERVOIR	INITIAL PRODUCTION
16"	37'	95 SKS	NA	<input checked="" type="checkbox"/>			
9 5/8"	696'	650 SKS				<u>150BPD/225 MCF</u>	
7"	3875'	150 SKS					

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Chinle	528'		x	Tops info from Am Strat log.
Moss Back	954'			
Monitor Butte	1045'			
Basal Triassic	1311'			
DeChelly	1444'			
Organ Rock	2027'			
Hermosa	3125'			
Molas	3813'			
Redwall	3831'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG	Am Strat
IE, Borehole Comp. Sonic, GR	3695-3775	3695-3775 Still open to 3780' CED	SAMPLE DESCRP. <input checked="" type="checkbox"/>	SAMPLE NO. <u>1440 *</u>
			CORE ANALYSIS	DSTs <input checked="" type="checkbox"/>
			Tucson 2515B	
REMARKS	EFFECTIVE 1-1-73 OPERATIONS TRANSFERRED FROM HUMBLE OIL TO KERR-MCGEE. Rework on 8-7-69 112 BPPD, 39 BWP		APP. TO PLUG	PLUGGING REP.
			COMP. REPORT <input checked="" type="checkbox"/>	

WATER WELL ACCEPTED BY \_\_\_\_\_  
 BOND CO. Firemen's Ins. Co. BIA BOND BOND NO. BND 188 98 10-528  
 BOND AMT. \$ 25,000. CANCELLED 12/1/97 DATE \_\_\_\_\_ ORGANIZATION REPORT 6-27-69  
 FILING RECEIPT 9529 LOC. PLAT  WELL BOOK  PLAT BOOK   
 API NO. 02-001-20066 DATE ISSUED 11-27-67 DEDICATION NE/4 Case 25, Order 21

PERMIT NUMBER 443

(over)

**DRILL STEM TEST**

NO.	FROM	TO	RESULTS
1	3687	3712	weak blow thruout test. No gas to surface. no oil Rec. 100' gas cut mud. ISIP 440, IFP 132, FFP 132, FSIP 615,HP1832

**CORE RECORD**

NO.	FROM	TO	RECOVERY	REMARKS

**REMEDIAL HISTORY**

DATE STARTED - COMPLETED	WORK PERFORMED	NEW PERFORATIONS

**ADDITIONAL INFORMATION**

**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 <b>Kerr-McGee Corporation</b>		Address <b>P. O. Box 250, Amarillo, Texas 79105</b>	
Federal, State or Indian Lease Number or name of lessor if fee lease <b>14-20-0603-8812 Navajo</b>		Well Number <b>3</b>	Field & Reservoir <b>Dineh-bi-Keyah Lower Hermosa</b>
Location <b>2,070' FNL and 550' FEL of</b>		County <b>Apache</b>	
Sec. TWP-Range or Block & Survey <b>Section 36, T36N, R29E</b>			
Date spudded <b>12-9-67</b>	Date total depth reached <b>1-4-68</b>	Date completed, ready to produce <b>4-22-68</b>	Elevation (DF, RKB, RT or Gr.) <b>8,334' KB feet</b>
Elevation of casing hd. flange <b>8,324 feet</b>			
Total depth <b>3,875</b>	P.B.T.D. <b>3,832</b>	Single, dual or triple completion? <b>single</b>	If this is a dual or triple completion, furnish separate report for each completion.
Producing interval (s) for this completion <b>3,695' - 3,775'</b>		Rotary tools used (interval) <b>0-3,875'</b>	Cable tools used (interval) <b>None</b>
Was this well directionally drilled? <b>No</b>	Was directional survey made? <b>No</b>	Was copy of directional survey filed? <b>No</b>	Date filed <b>4-18-68</b>
Type of electrical or other logs run (check logs filed with the commission) <b>IES &amp; Gamma Ray-Sonic</b>			Date filed <b>4-18-68</b>

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
Conductor	20"	16"	--	37'	95	None
Surface	13 3/4"	9 5/8"	32	696'	650	None
Production	8 3/4"	7"	20	3,875'	150	None

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
3 1/2 in.	3,809 ft.	None ft.	in.	None ft.	ft.		

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Am't. & kind of material used	Depth Interval
2	Jet	3,695'-3,775'	80,000 gals lease crude 80,000# 10/20 sand	3,695'-3,775'

INITIAL PRODUCTION

Date of first production <b>1-31-68</b>		Producing method (Indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:) <b>Pumping</b>				
Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
				MCF	bbls.	* API (Corr)
<b>WELL DID NOT PUMP AFTER WORKOVER</b>						
Tubing pressure	Casing pressure	Cal'ated rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio
			bbls.	MCF	bbls.	

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...Prod...Supt.....of the  
**Kerr-McGee Corporation**.....(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 **October 29, 1973**

Signature

*J. J. Breeden*  
**J. J. Breeden**

RECEIVED

Permit No.

443

O & G CLASS. COMM.

Form No. 4

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

File **One** Copy

**2**

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*

\* 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.

Form No. 4

**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 <b>14-20-0603-8812</b>		Field <b>Dineh-BI-Keyah</b>	Reservoir <b>Hermosa</b>
Survey or Sec-Twp-Rge <b>Sec 25, 26, 35, 36 T36N-R-99E</b>		County <b>Apache</b>	State <b>AZ</b>
Operator <b>Mountain States Petroleum Corp.</b>			
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:			
Street <b>P O Bx 1936</b>	City <b>Roswell,</b>	State <b>New Mexico 88202</b>	
Above named operator authorizes (name of transporter)			
<del>Giant Industries</del> Transporter's street address <b>P O Bx 12999</b>		City <b>Scottsdale,</b>	State <b>AZ</b>
Field address <b>P O Bx 256 (Bloomfield Hwy) Farmington, N M 87499</b>			
Oil, condensate, gas well gas, casinghead gas			
To transport	<b>100%</b> of the	<b>oil</b>	from said lease.
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:			
Name of gatherer	% transported	Product transported	
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.			
<b>Change of Oper.</b>			

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 Secretary of the Mountain States Petro. 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.

Date Aug. 11, 1995

*Ruby Wickersham*  
Signature

Date approved: AUG 16 1995

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

By: Steven L. Rainey

Permit No. 443

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 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.  
14-20-0603-8812

6. If Indian, Allottee or Tribe Name  
Navajo

7. If Unit or CA, Agreement Designation  
P/N 443

8. Well Name and No.  
Navajo Tract 88 #3

9. API Well No.  
02-001-20066

10. Field and Pool, or Exploratory Area  
Dineh-Bi-Keyah

11. County or Parish, State  
Apache Co., AZ

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
Kerr-McGee Corporation

3. Address and Telephone No.  
U. S. Onshore Region, P. O. Box 25861, Oklahoma City, OK 73125  
405/270-6023

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
2070' FNL & 550' FEL  
Sec. 36, T36N, R29E

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"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other TA	<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.)\*

The temporary abandonment approval for the subject well expired 12-31-92. Kerr-McGee requests a one year extension to 12-31-93. Kerr-McGee is currently preparing a sales brochure to sell this well and other wells in the field.

APPROVED  
By: SLR  
Date: 2/17/93



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

Signed: D. Bunn Title: Regulatory Specialist Date: 2-15-93  
(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

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

Federal, State or Indian Lease Number, or lessor's name if fee lease <b>14-20-0603-8812 Navajo 88</b>	Field <b>Dineh-Bi-Keyah</b>	Reservoir <b>Hermosa</b>
Survey or Sec-Twp-Rge <b>S 25 - T 36 N - R 30 E</b>	County <b>Apache</b>	State <b>Arizona</b>
Operator <b>Kerr-McGee Corporation</b>		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street <b>P. O. Box 250</b>	City <b>Amarillo</b>	State <b>Texas, 79189</b>
Above named operator authorizes (name of transporter) <b>Gary-Williams Energy</b>		
Transporter's street address <b>370 17th St., Suite 5300</b>	City <b>Denver</b>	State <b>Colorado, 80202</b>
Field address <b>P. O. Box 159, Bloomfield, NM 87413</b>		
Oil, condensate, gas well gas, casinghead gas		
To transport	<b>100 % of the Oil</b>	from said lease.
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer	% transported	Product transported
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.		

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 Area Manager of the Kerr-McGee Corporation (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.

8/18/92 Date H. H. Rice Signature H. H. Rice

Date approved: 8-21-92

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

Permit No. \_\_\_\_\_

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 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. 14-20-0603-8812
2. Name of Operator Kerr-McGee Corporation	6. If Indian, Allottee or Tribe Name Navajo
3. Address and Telephone No. U.S. Onshore Region, P. O. Box 25861, Oklahoma City, OK 73125 405/270-6023	7. If Unit or CA, Agreement Designation 443
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2070' FNL & 550' FEL Sec. 36, T36N, R29E	8. Well Name and No. Navajo Tract 88 #3
	9. API Well No. 02-001-20066
	10. Field and Pool, or Exploratory Area Dineh-Bi-Keyah
	11. County or Parish, State Apache Co., AZ

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 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 <u>Mechanical Integrity</u> Test
	<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.)

See attached



14. I hereby certify that the foregoing is true and correct  
Signed [Signature] Title Regulatory Specialist Date 8-20-92  
(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

**NAVAJO 88-3**  
**Dineh-Bi-Keyah Field**

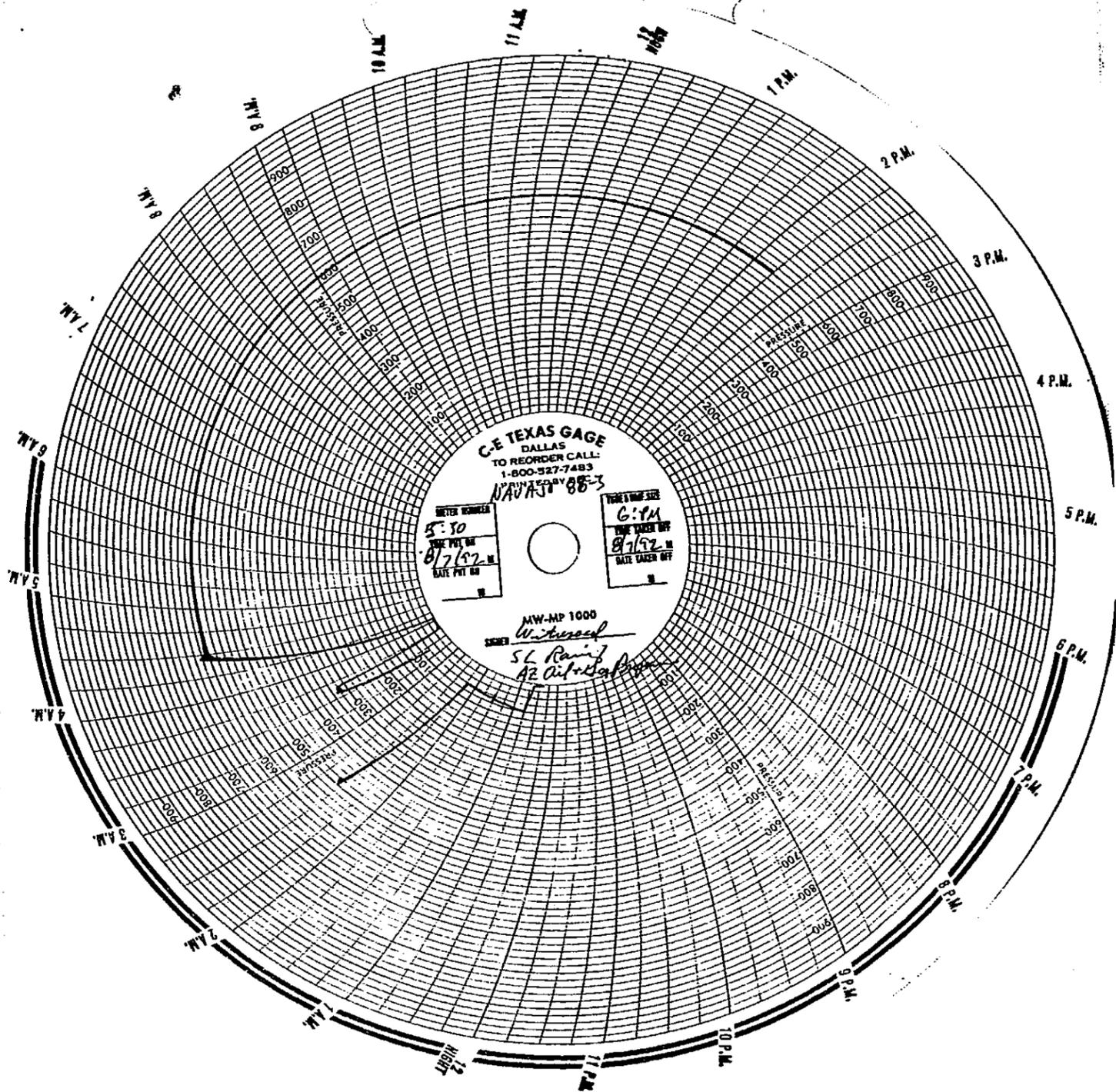
8/7/92      Mechanical Integrity Test  
MI crew, open well, ND wellhead. NU 8-5/8" spool w/single stage 3000# psi  
WP BOP. MI pump truck w/35 bbls of fresh water treated w/Tretolite xc-370  
bactericide chemical. Pumped & pressured 7" casing w/15 bbls of fresh water.  
Pressured up 7" casing to 600# psi on chart. Pressure held for 30 mins. Release  
pressure & RD pump truck, BOP. NU wellhead & MO.

**Note:**      Notified BLM 8/4/92 of Mechanical Integrity Test. BLM did not witness testing.

Steve Rauzi w/Arizona Oil & Gas Comm. was present to witness pressure testing.

Chart recording attached.

**SUPERVISOR:** Ray Benally



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.

14-20-0603-8812

6. If Indian, Allottee or Tribe Name

Navajo

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Navajo Tract 88 #3

9. API Well No.

02-001-20066

10. Field and Pool, or Exploratory Area

Dineh-Bi-Keyah

11. County or Parish, State

Apache Co., AZ

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

Kerr-McGee Corporation

3. Address and Telephone No.

405/270-6023

U.S. Onshore Region, P. O. Box 25861, Oklahoma City, OK 73125

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

2070' FNL & 550' FEL  
Sec. 36, T36N, R29E

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"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Renew TA status</u>	<input type="checkbox"/> Dispose Water
	<u>Do mechanical integrity test.</u>	

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.)

The temporarily abandoned status for the subject well expired December 31, 1991. Kerr-McGee would like to extend this for one year to December 31, 1992. Current plans are to use the well in the proposed Dineh-Bi-Keyah Waterflood Project.

The casing integrity of the well will be tested prior to July 1, 1992. It is being deferred due to the current adverse weather conditions.

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

Signed G. Bunas G. Bunas

Title Analyst II

Date 2-28-92

(This space for Federal or State office use)

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.

\*See Instruction on Reverse Side

PIN 443

Form 3160-5  
(November 1983)  
(Formerly 9-331)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 1004-9135  
Expires August 31, 1985

LEASE DESIGNATION AND SERIAL NO.

14-20-0603-8812

443

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo Tract 88

9. WELL NO.

3

10. FIELD AND POOL, OR WILDCAT

Dineh-Bi-Kawah

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

Section 36-36N-29E

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 different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)

1.  OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Kerr-McGee Corporation

3. ADDRESS OF OPERATOR  
U.S. Onshore, Box 25861, Oklahoma City, OK 73125

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

2070' FNL & 550' FEL

14. PERMIT NO.  
443

15. ELEVATIONS (Show whether OP, RT, GR, etc.)

15. 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.)\*

The above well is temporarily abandoned. Kerr-McGee had plans to permanently P & A  
this well but upon further evaluation it has been determined that this well may be  
utilized in a possible future waterflood project. We request approval to leave  
this well in its temporarily abandoned status.

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

SIGNED D. Bunas Bunas

TITLE Analyst II

DATE 10-14-86

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

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.

APPLICATION TO ABANDON AND PLUG

FIELD Dineh-Bi-Keyah  
 OPERATOR Kerr-McGee Corporation ADDRESS P.O. Box 250, Amarillo, Texas 79189  
 Federal, State, or Indian Lease Number or Lessor's Name if Fee Lease 14-20-0603-8812 WELL NO. 3  
 SURVEY G&SRM SECTION 36 - T36N - R29E COUNTY Apache  
 LOCATION 2070' FNL & 550' FEL

TYPE OF WELL Oil TOTAL DEPTH 3832' P.B.T.D.  
 (Oil, Gas or Dry Hole)  
 ALLOWABLE (If Assigned) \_\_\_\_\_  
 LAST PRODUCTION TEST OIL 2 (Bbls.) WATER 0 (Bbls.)  
 GAS \_\_\_\_\_ (MCF) DATE OF TEST 1-10-83  
 PRODUCING HORIZON Hermosa Intrusive Sill PRODUCING FROM 3725' TO 3770'

1. COMPLETE CASING RECORD  
9 5/8" 32# surface casing set @ 696'. Cemented w/650 sks cement.  
7" 20# production casing set @ 3875'. Cemented w/150 sks cement.

2. FULL DETAILS OF PROPOSED PLAN OF WORK
- 1) MI & RU pulling unit. NU 3000# BOP.
  - 2) TIH w/CIBP on tubing and set @ 3675'.
  - 3) MI & RU Halliburton. PU tbg. and place 25 sx cmt on top of CIBP. Load hole w/9.2# mud.
  - 4) MI & RU wireline. TIH w/4" csg gun and perforate 4 holes @ 2090'. TOOH w/csg. gun.
  - 5) Attempt to establish circulation down csg w/mud. If circulation can be established, TIH w/Halliburton EZ Drill SV cement retainer on tbg. Set retainer @ 1265'.
  - 6) Pressure test tubing to 1000 psi.

\* See reverse side for completion of procedure.  
 If well is to be abandoned, does proposed work conform with requirements of Rule 202? \_\_\_\_\_ If not, outline proposed procedure above.

DATE COMMENCING OPERATIONS May 1, 1984  
 NAME OF PERSON DOING WORK Halliburton Services ADDRESS Farmington, New Mexico 87401  
 CORRESPONDENCE SHOULD BE SENT TO Aaron Reyna *Aaron Reyna*  
 Name  
Engineering Assistant  
 Title  
P.O. Box 250 Amarillo, Texas 79189  
 Address  
April 9, 1984  
 Date

Date Approved 4/13/84  
 STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 By: R.A. Yaman

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Application to Abandon and Plug  
 File Two Copies  
 Form No. 9

Permit No. 443

- 7) Establish stable circulation w/mud, then pump 325 sks cement. Sting out of retainer leaving 2 sks cement on top. Flush w/approximately 11 bbls.
- 8) TOH w/tubing.
- 9) TIH w/4" csg. gun and perforate 4 holes @ 750'. TOH w/csg. gun.
- 10) Establish circulation down csg. w/9.2# mud, then pump 75 sks cement, balance plug to place top of plug @ 640' inside & outside 7" csg. WOC.
- 11) TIH w/tbg. & tag plug. TOH.
- 12) Spot a 15 sk. cement plug from 25' to 5' inside and outside 7" csg.
- 13) Weld casing cap and place abandonment sign.
- 14) Clean, level, and reseed location.

STATE OF ARIZONA

OIL AND GAS CONSERVATION COMMISSION

PERMIT 443

REPORT ON PROPOSED OPERATIONS

Kerr-McGee Corporation  
P. O. Box 250  
Amarillo, Texas 79189

Phoenix, ARIZONA  
April 13, 1984

Your proposal to abandon well No. 3 Navajo-88  
A.P.I. No. 02-001-20066, Section 36, T. 36N, R. 29E, GSR B. & M.,  
Dineh-bi-Keyah field, area, Hermosa pool,  
Apache County, dated 4/9/84, received 4/13/84 has been examined in conjunction with records  
filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Adequate blowout prevention equipment shall be installed, used and maintained during abandonment operations.
2. This Commission shall be notified:
  - a. To witness the placing of the zone plug at 3,675'.
  - b. To witness the shooting of holes in the 7" casing at 2,090' and 750'.
  - c. To witness the squeezing of cement through the holes.
  - d. To witness the placing of the surface plug.

BOND Blanket

A. K. DOSS, Executive Director

By R. A. Yanna  
Enforcement Director

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.

GAS-OIL RATIO TEST REPORTS

Filed under Oil-Gas Ratio Tests, Dineh-bi-Keyah Field  
in cabinet in office of Enforcement Director

443

SUNDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Kerr-McGee Corporation

2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_

3. Well Name Navajo Tract 88, Well No. 3

Location 2070' FNL and 550' FEL of

Sec. 36 Twp. 36 N Rge. 29 E County Apache Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo Lease 14-20-0603-8812

5. Field or Pool Name Dineh-Bi-Keyah Field

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>Supplemental Report</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.)

11-4-73 Pulled rods, pump, and tubing.

11-5-73 Ran tubing, pump, and rods. Started pumping well and well pumped up.

11-11-73 Well pumped 234 BO and 40 BW in 24 hours.

RECEIVED  
 NOV 21 1973  
 O & G CONS. COMM.

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

Signed C. J. Breeden Title Dist. Prod. Supt. Date 11-14-73

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

Permit No. 443

**SUNDRY NOTICES AND REPORTS ON WELLS**

1. Name of Operator Kerr-McGee Corporation  
 2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
 3. Well Name Navajo Tract 88 Well Number 3  
 Location 2,070' FNL and 550' FEL of  
 Sec. 36 Twp. 36N Rge. 29E County Apache, Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo Lease  
14-20-0603-8812  
 5. Field or Pool Name Dineh-bi-Keyah Field

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 checked="" 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>Reperforating</u>	ABANDONMENT <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.)

- 9-28-73 - Pulled rods, pump and tubing.
- 9-29-73 - Perforated from 3,695-3,775 with 2 HPF. Fractured well with 80,000 gallons of lease crude and 80,000# of 10/20 sand. Pressures: Maximum 1,500 PSI; Average 1,400 PSI; Instant shut down 300 PSI; on vacuum in 6 minutes. Maximum rate 82.8 BPM; Average 73 BPM.
- 9-30-73 - Cleaning out sand from 3,734' - 3,832' with sand pump.
- 10-1-73 - Sand came back into 3,730'. Cleaning out with sand pump.
- 10-2-73 - Cleaned out sand to 3,827'
- 10-3-73 - Ran 3½" OD tubing to 3,809'. Ran pump and rods.
- 10-4-73 - Fin spacing out pump. Well would not pump up.
- 10-5-73 - Pulled rods, pump and tubing.
- 10-6-73 - Sand pumping well. Found only 2' of fillup.
- 10-7-73 - Ran 3½" OD tubing to 3,809'.
- 10-8-73 - Ran rods and pump. Unable to get well to pump.
- 10-9-73 to 10-13-73 - Working with pump and testing pump and tubing. All checked alright but well will not pump.
- 10-25-73- Well will not pump. Attempting to pump well periodically.

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

Signed C. J. Breeden Title Dist. Prod. Supt. Date October 29, 1973  
 C. J. Breeden

RECEIVED

OCT 30 1973

Permit No. 443

O & G CONS. COMM.

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

1973  
SUNDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Kerr-McGee Corporation  
 2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
 3. Well Name Navajo Tract 88 Well Number 3  
 Location 2,070' FNL and 550' FEL from  
 Sec. 36 Twp. 36N Rge. 29E County Apache, Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo Tract 88  
14-20-0603-8812  
 5. Field or Pool Name Dineh-bi-Keyah

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 checked="" 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 checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) _____	ABANDONMENT <input 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.)

Pull rods, pump and tubing. Reperforate interval from 3,695' to 3,775' with 2 HPF. Fracture treat well with 80,000 gallons of lease crude and 80,000# of 10/20 sand. Run tubing, pump and rods. Resume pumping well.

Work to commence upon approval.

APPROVED

OIL & GAS CONSERVATION COMMISSION  
STATE OF ARIZONA

By [Signature]

Date 9-27-73

RECEIVED

SEP 27 1973

O & G CON. COMM.

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

Signed [Signature]  
C. J. Breeden

Title Dist. Prod. Supt. Date 9-25-73

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

Permit No. 443

Form 9-331  
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN THIS CASE\*  
(Other instructions on reverse side)

Form approved  
Budget Bureau No. 42-R1424

5. LEASE DESIGNATION AND SERIAL NO.  
**14-20-0603-8812**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**Navajo**

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
**Navajo Tract 88**

9. WELL NO.  
**3**

10. FIELD AND POOL, OR WILDCAT  
**Dineh-bi-Keyah**

11. SEC. T. R. M., OR BLK. AND SURVEY OR AREA  
**Sec. 36-36N-29E  
G&SM**

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  
**Kerr-McGee Corporation**

3. ADDRESS OF OPERATOR  
**P. O. Box 250, Amarillo, Texas 79105**

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

**SE NE (2070' FNL & 550' FEL) of Sec. 36**

14. PERMIT NO.  
**Arizona 443**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**8,334' 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) <b>Change in Operator</b> <input checked="" type="checkbox"/>	
(Other) <b>Change in Operator</b> <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.)\*

**Effective January 1, 1973, operation of this well was transferred from Humble Oil and Refining Company to Kerr-McGee Corporation.**

RECEIVED  
 JAN 16 1973  
 O & G CONS COMM.

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

SIGNED E. J. Breeden TITLE District Prod. Supt. DATE 1-4-73

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

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

**Navajo Tract 88**

Federal, State or Indian Lease Number. 14-20-0603-8812	Field Dineh-bi-Keyah	Reservoir Lower Hermosa (Intrusion)
Survey or Sec-Twp-Rge Sec 25, 26, 35, 36, T36N	County R29E Apache	State Arizona
Operator Kerr-McGee Corporation		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street P. O. Box 250	City Amarillo	State Texas 79105
Above named operator authorizes (name of transporter) Kerr-McGee Pipeline Corp.		
Transporter's street address Kerr-McGee Center	City Oklahoma City	State Oklahoma 73102
Field address P. O. Box 989, 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
None		

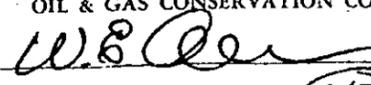
The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage 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 District Manager of the Kerr-McGee Corporation (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.

January 3, 1973  
Date

  
Signature

Date approved: 1-8-73  
STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

By: 

Permit No. 421-431-443  
Arizona - 2  
USGS - 2  
Tribe 1  
HCH - 1

RECEIVED

JAN 08 1973

O & G CONS. COM. 

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



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

December 28, 1972

Memo from W. E. Allen, Director  
Enforcement Section

Memo to Files:

Humble Oil & Ref.			
Navajo #138-1	Navajo #88-1	Navajo #88-2	Navajo #88-3
Permit No. 388	Permit No. 421	Permit No. 431	Permit No. 443

Joe Breeden, Kerr-McGee, called to advise that Kerr-McGee was taking over the operations of the subject wells as of January 1, 1973. They have purchased all of Humble's holdings within the Dineh Bi Keyah Field in Apache County.

Mr. Breeden was inquiring as to what the Commission would require as evidence that Kerr-McGee had assumed the operations of the Humble properties. I told him that we would need a letter from Humble or a copy of the instruments transferring ownership from Humble to Kerr-McGee. Since Kerr-McGee has a blanket bond covering all their operations within the State of Arizona, the bonding of the above wells will be no problem.

Form 9-311  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved  
Budget Bureau No. 42-R1421

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-0603-8812

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Navajo Tract 88

9. WELL NO.  
3

10. FIELD AND POOL, OR WILDCAT  
Dinch hi Keyah

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA  
Sec 36-36N-29E G&SRM

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 NE (2070' FNL & 550' FEL) of Section 36

14. PERMIT NO.  
Arizona 443

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
8334' 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 checked="" type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <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).\*

7-5-72 - Treated well with 2100 gallons 15% HCl and 1500 gallons aromatic solvent.  
Displaced with 75 bbls water.

7-6-72 to 7-10-72 - Recovering acid and solvent.

7-10-72 - Squeezed in 55 gallons H-35 scale inhibitor, 50# RD-153 polymer and 1 sack CaCl. Followed with 125 bbls water.

7-11-72 to 7-16-72 - Testing.

7-17-72 - Produced 45 BO and 20 BW in 24 hrs. - Job Complete.  
Production prior to job - 37 BO & 15 BW.

2cc - Arizona O&G Commission  
1cc - Minerals Supervisor - Navajo Tribe  
1cc - Midland

18. I hereby certify that the foregoing is true and correct  
SIGNED [Signature] TITLE District Superintendent DATE 7-19-72

(This space for Federal or State office use)  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

3 #443

\*See Instructions on Reverse Side

RECEIVED  
JUL 19 1972  
O & G

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.

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-0603-8812

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Navajo Tract 88

9. WELL NO.  
3

10. FIELD AND POOL, OR WILDCAT  
Dineh bi Keyah

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA  
Sec. 36-36N-29E G&SRM

**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 Co.

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 NE (2070' FNL, 550' FEL) Sec. 36

14. PERMIT NO.  
Arizona 443

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
8334' KB

12. COUNTY OR PARISH | 13. STATE  
Apache | 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 checked="" 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 (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.)\*

In an effort to increase production, we propose to treat well with 3600 gals. of acid and solvent, and squeeze formation with 55 gals. of organic phosphate to prevent scale deposition.

RECEIVED

JUN 26 1972

O & G CONS. COMM.

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

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

SIGNED J. Roy Dorrrough TITLE Dist. Supt. DATE June 21, 1972

(This space for Federal or State office use)

APPROVED BY W. C. [Signature] TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

Form 9-331  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate  
(Other instructions 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. 14-20-0603-8812
2. NAME OF OPERATOR Humble Oil and 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 NE (2070' FNL & 550' FEL) Section 36		8. FARM OR LEASE NAME Navajo Tract 88
14. PERMIT NO. Arizona #443	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 8334' KB	9. WELL NO. 3
		10. FIELD AND POOL, OR WILDCAT Dineh bi Keyah
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 36-36N-29E G&SRM
		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 checked="" 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 (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.)

5-18-71 - Pumped 800 gals. BJ 1-shot acid in annulus. Displaced to perfs with 125 bbls. produced water. Returned well to production for 48 hrs.  
 5-21-71 - Pumped in 55 gals. Baroid Surflo H-35 scale inhibitor plus 50# Baroid Surflo RD-153 polymer mixed in 20 barrels fresh water down annulus and displaced with 250 barrels produced water. SI overnight. Returned well to production.  
 Currently producing at rate of 50 BOPD.  
 Production prior to workover 45 BOPD.

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

RECEIVED  
 JUN 14 1971  
 O & G CONSV. COMM.

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

SIGNED [Signature] TITLE District Chief Engineer DATE 6-9-71

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions 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 Budget No. 42-81424

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-0603-8812

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

Navajo Tract S8

8. WELL NO.

3

9. FIELD AND POOL, OR WILDCAT

Sec. 36-36N-29E-G&SRM

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

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 page 17 below.)  
At surface  
SE NE (2070' FNL x 550' FEL) Section 36

14. PERMIT NO.  
Arizona #443

15. ELEVATIONS (Show whether DF, RT, CR, etc.)  
8334' 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"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	(Other)	<input type="checkbox"/>
(Other)	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
FULL OR ALTER CASING	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
ABANDON*	<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.)

We propose to treat this well with an 800-gallon solvent-acid wash to clean the formation face and to squeeze the formation with 500 gallons of scale inhibitor to maintain productivity.

RECEIVED

MAY 13 1971

O & G CONS. 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 J. Roy Dorrrough TITLE Dist. Supt. DATE May 10, 1971

(This space for Federal or State office use)

APPROVED BY W. S. Allen TITLE \_\_\_\_\_ DATE 5-12-71

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

SUNDRY 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 Tract 88 Well No. 3  
 Location 2070' FNL & 550' FEL  
 Sec. 36 Twp. 36N Rge. 29E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-0603-8812

5. Field or Pool Name Dineh bi Keyah

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"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>
SHOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(OTHER) <u>Permanent Installation of</u>	<input checked="" type="checkbox"/>	(OTHER) _____	<input type="checkbox"/>
<u>Vacuum Pump</u>			

(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.)

It is hereby requested that permission be granted for a permanent installation of a vacuum pump on the casing-tubing annulus of this well. A ninety day test was concluded in December 1970 and the data indicated only a minor change obtained in oil production, however now without the vacuum it is necessary to purchase LPG as fuel to run the engine on the pumping unit. With a partial vacuum on the annulus it is believed that sufficient natural gas can be obtained to run the engine.

cc: U.S.G.S. - Farmington  
 Minerals Supervisor - Navajo Tribe  
 Kerr McGee - Farmington

**APPROVED**  
 OIL & GAS CONSERVATION COMMISSION  
 STATE OF ARIZONA

By W. C. Allen

Date 3-26-71

RECEIVED

MAR 26 1971

O & G CONS. COMM.

I hereby certify that the foregoing is true and correct.

Signed John F. Richardson  
 John F. Richardson

Title Dist. Chief Engineer Date 3-24-71

Permit No. 443

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

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Humble Oil & Refining Company  
 2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
 3. Well Name Navajo Tract 88 Well No. 3  
 Location 2070' FNL & 550" FEL  
 Sec. 36 Twp. 36N Rge. 29E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-0603-8812  
 5. Field or Pool Name Dineh bi Keyah

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"/>
SUPPORT 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>Install Vacuum Pump</u>	<input checked="" type="checkbox"/>	ABANDONMENT	<input 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.)

The following is a tabulation of production tests following installation of a vacuum pump on the casing annulus at the above well. Approval of a 90 day test was granted per Mr. John Bannister's letter of June 11, 1970.

24 hour tests - B/D (Vacuum held: 3 to 4")

	Date	Oil	Water	Total Fluid	Date	Oil	Water	Total Fluid
(1)	8-24-70	40	20	60	10-2-70	81	43	124
(2)	8-26-70	-	-	-	10-3-70	63	50	113
	8-27-70	72	23	95	10-4-70	62	42	104
	8-28-70	66	25	91	10-11-70	60	40	100
	8-29-70	60	35	95	10-15-70	58	32	90
	9-12-70	61	20	81	11-9-70	43	25	68
	9-13-70	53	27	80	11-20-70	53	20	73
(3)	10-1-70	90	40	130	11-21-70	47	20	67

**RECEIVED**  
**DEC 16 1970**  
 O & G CONS. COMM.

- (1) - Prior to installing vacuum pump.
- (2) - Date installed.
- (3) - Well treated with 3,000 gallons acid and 1,000 gallons aromatic solvent on 10-1-70. The above tests indicate a stabilized increase of about 10 BOPD may have occurred. Humble will disconnect the vacuum pump the week of December 14, 1970 and observe production for an indefinite period. A Sundry Notice will be submitted if further testing with the vacuum pumped is planned.

cc: U. S. G. S. - Farmington  
 Minerals Supervisor - Navajo Tribe  
 Kerr McGee - Farmington

I hereby certify that the foregoing is true and correct.

Signature J. Roy Dorrrough Title Dist. Supt. Date 12-11-70

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

Permit No. 443

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

5. LEASE DESIGNATION AND SERIAL NO.  
**14-20-0603-8812**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**Navajo**

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**Navajo Tract 88**

9. WELL NO.

**3**

10. FIELD AND POOL, OR WILDCAT

**Dineh bi Keyah**

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

**Sec. 36-36N-29E G & SRM**

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 NE (2070' FWL & 550' FEL) of Section 36**

14. PERMIT NO.  
**Arizona #443**

15. ELEVATIONS (Show whether DF, RT, CR, etc.)  
**8,334' 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 checked="" 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 (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.)

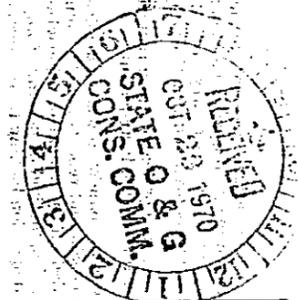
On 9-30-70 pumped 4,000 gallons inhibited BJ "one shot" acid (1,000 gals. aromatic solvent and 3,000 gallons 15% HCl acid) down annulus. Displaced to perforations with 132 bbls. produced water. Let acid soak 30 minutes and returned well to pump.

Produced back all load fluids. Shut well in.

10-7-70 pumped 55 gallons Baroid Surflov H-35 scale inhibitor and 50# Baroid Surflov RD-153 polymer mixed in 20 bbls. freshwater down annulus. Displaced with 250 bbls. water. Let well SI overnight.

Jobscomplete 10-8-70. 10-14-70 tested 58 BO, 32 BW in 2 1/2 hours.

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



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

SIGNED John R. Richardson TITLE District Chief Engineer DATE 10-26-70  
(This space for Federal or State office use)

APPROVED BY WRC TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

14 443

October 19, 1970

Memo from W. E. Allen

Memo to : Humble #3-88 Navajo  
SE/4 NE/4 Section 36-T36N-R29E  
Apache County  
Our File #443

On the afternoon of October 13, 1970, I meet with Mr. Harold Farris, Humble Oil & Refining Company, to inspect the recent oil spill that was occasioned by a rupture in the above well's flow line. (Humble estimates that approximately 90 barrels of oil were lost from this leak.) This rupture occurred at the west end of the tank battery serving this well and directly over a small ravine that follows a general northeasterly course for several miles. At a point below the tank battery there is a small amount of fresh water entering this ravine from a very small brook. Humble erected a dam across this small ravine at a point several miles from where the leak occurred and well beyond the point that had been reached by the escaped oil. Some of the escaped oil that had accumulated in small pools was picked up by tank truck. After picking up any and all oil that could be picked up by pump, Humble pumped several thousand barrels of water into this ravine at the point of the spill in order to wash the remaining oil down to the dam site. The oil was then skimmed off the water and returned to storage.

At the time I inspected the area there was no evidence of any oil spill except a very ~~small~~ slight rainbow of oil on the pond formed by the dam. Humble was going to leave the dam in place for a time to ~~make~~<sup>make</sup> certain all the escaped oil had been recovered.

September 17, 1970

Memo from W. E. Allen

Memo to Humble #3-88 Navajo  
SE/4 NE/4 Sec. 3-T36N-R29E  
Apache County  
Our File #443

Marvin Smith called regarding the above well. He was concerned whether they had received permission to use the vacuum pump on this well for 90 days from date operations were actually commenced or 90 days from the date permission was granted. Mr. Smith was informed that they could test this well for 90 days from date of installation which was August 26, 1970.

Form 9-331  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate  
(Other Instructions reverse side)

Form approved.  
Budget Bureau No. 42-B1424.

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 NE (2070' FRL & 550' FEL) of Sec. 36**

14. PERMIT NO.  
**Arizona No. 443**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**8,334' KB**

5. LEASE DESIGNATION AND SERIAL NO.  
**14-20-0603-8812**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**Navajo**

7. UNIT AGREEMENT NAME  
**-**

8. FARM OR LEASE NAME  
**Navajo Tract 88**

9. WELL NO.  
**3**

10. FIELD AND POOL, OR WILDCAT  
**Dineh bi Keyah**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
**Sec. 36-36N-29E - GASTM**

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:

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.)\*

We propose to treat this well with a 4,000 gallon Solvent-Acid job to clean the formation face and increase productivity and also squeeze with 55 gallons of scale inhibitor to maintain productivity and protect subsurface equipment.

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 9-15-70

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

CONDY NOTICES AND REPORTS ON WELLS

WA

1. Name of Operator Humble Oil & Refining Company  
 2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
 3. Well Name Navajo Tract 88 Well No. 3  
 Location 2070' FNL & 550' FEL  
 Sec. 36 Twp. 36N Rge. 29E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo 14-20-0603-8812  
 5. Field or Pool Name Dineh bi Keyah

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>Install Vacuum Pump</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.)

Installation of a 20" x 20" Figure 60<sup>h</sup>, Gaso Vertical Vacuum Pump was completed on 8-26-70. A 24 hour test on 8-24-70 produced 40 B0 & 20 BW with 5# back pressure.

Installed Vacuum Pump operating at 18 SPM, 17" stroke, 20" pump diameter and tested as follows:

8-27-70, 24 hours, 72 B0 & 23 BW with 3" vacuum.  
 8-28-70, 24 hours, 66 B0 & 25 BW with 3" vacuum.  
 8-29-70, 24 hours, 60 B0 & 35 BW with 3" vacuum.

More testing will be done and results reported prior to the end of the 90 day approval granted by the Commission.



cc: Kerr-McGee Corporation  
 215 Petroleum Center Building  
 Farmington, New Mexico

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

Signed J. Roy Borrough Title Dist. Supt. Date 9-11-70

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

Permit No. 443

CONDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Humble Oil & Refining Company  
 2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
 3. Well Name Navajo Tract 88 Well No. 3  
 Location 2070' FNL and 550' FEL  
 Sec. 36 Twp. 36N Rge. 29E County Apache, Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease \_\_\_\_\_  
Navajo 14-20-0603-8812

5. Field or Pool Name Dineh bi Keyah

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) _____	ABANDONMENT <input type="checkbox"/>
(OTHER) <u>Connect vacuum pump to casing annulus.</u>			

(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.)

It is proposed to test on a trial basis the effect on well productivity and ultimate recovery by holding a partial vacuum on the casing-tubing annulus. Formation pressure on the Navajo Tract 88 lease is currently low, estimated to be about 50 psi. In September 1969 a shut-in pressure of 92 psi was recorded at No. 2 well. Due to this low formation pressure production has been observed to be sensitive to variations in casing annulus back pressure. It is anticipated that oil recovery will be improved by use of vacuum pump.

A Gaso Fig. 604 walking beam-actuated pump with 14" dia piston and maximum 20" stroke will be employed. An attempt will be made to hold a steady intake vacuum pressure of about 7.5 psia which is 70% of atmospheric pressure at well site elevation. Maximum utilization of produced gas for lease operations will be followed.

A diagram of the wellbore and vacuum pump hookup is attached.

*Approved subject*  
 OIL & GAS CONSERVATION COMMISSION  
 STATE OF ARIZONA  
 1624 WEST ADAMS SUITE 202  
 TELEPHONE 277-3161  
 PHOENIX, ARIZONA 85007  
*John Fannister*  
 6-11-70

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 MAY 14 1970  
 PHOENIX, ARIZONA

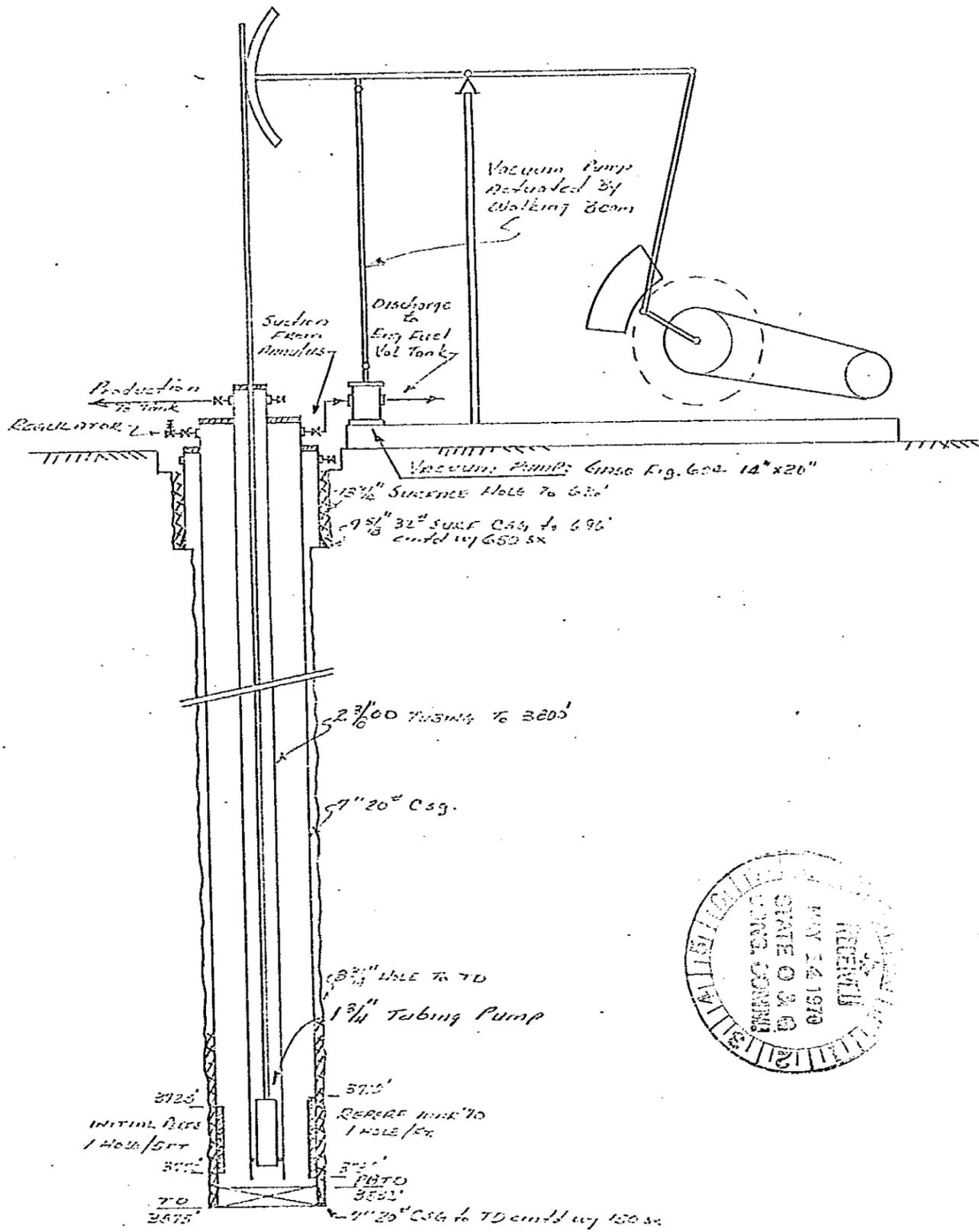
8. I hereby certify that the foregoing is true and correct.

Signed John Richardson Title Dist. Chief Engr. Date 5-13-70

cc: Kerr-McGee Corporation  
 215 Petroleum Center Bldg.  
 Farmington, New Mexico

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

Permit No. 443



HUMBLE OIL & REFINING Co.

SKETCH - WELL BORE AND VACUUM PUMP HOOK-UP

NAVAJO TRACT 88 - No. 3

2070' ENL & 550' FEL SEC 36-36N-29E

APACHE COUNTY, ARIZONA

37

FMS  
MAY 1970

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.

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. **14-20-0603-8812**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**Navajo**

7. UNIT AGREEMENT NAME  
**-**

8. FARM OR LEASE NAME  
**Navajo Tract 88**

9. WELL NO.  
**3**

10. FIELD AND POOL, OR WILDCAT  
**Dineh bi Keyah**

11. SEC., T. R., M., OR BLK. AND SURVEY OR AREA  
**Sec. 36-36N-29E - GASH**

12. COUNTY OR PARISH  
**Apache**

13. STATE  
**Arizona**

14. PERMIT NO. **Arizona No. 443**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**8,334' 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"/>	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) <b>Perforating</b>	<input checked="" type="checkbox"/>
(Other)	<input 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.)\*

Pulled rods and tubing. Sandpumped well. Perforated with Dresser Atlas Digun bullets from 3710-3780', 1 hole per foot. Ran tubing and rods. Put well back on pump. Tested at rate of 60 BO and 25 BWPD. Production prior to perforating was 53 BO and 32 BWPD.



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. Royborough TITLE Dist. Supt. DATE 5-12-70  
(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

Form 9-331  
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN THIS MANNER\*  
(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. <b>14-20-0603-8812</b>
2. NAME OF OPERATOR <b>Humble Oil &amp; Refining Company</b>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME <b>Navajo</b>
3. ADDRESS OF OPERATOR <b>P. O. Box 120, Denver, Colorado 80201</b>		7. UNIT AGREEMENT NAME <b>-</b>
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <b>SE NE (2070' FWL &amp; 550' FWL) of Section 36</b>		8. FARM OR LEASE NAME <b>Navajo Tract 88</b>
14. PERMIT NO. <b>Arizona No. 443</b>		9. WELL NO. <b>3</b>
15. ELEVATIONS (Show whether DF, RT, CR, etc.) <b>8,334' KB</b>		10. FIELD AND POOL, OR WILDCAT <b>Dineh bi Keyah</b>
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <b>Sec. 36-36N-29E - GASFM</b>
		12. COUNTY OR PARISH <b>Apache</b>
		13. STATE <b>Arizona</b>

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) <input checked="" type="checkbox"/>			
(Other) <b>Reperforate</b>					

(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.)

We propose to re-perforate the Igneous Intrusion 3710-80' with one shot per foot. During the initial completion this interval was perforated one shot every five feet. Your approval is requested.



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

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

SIGNED J. Roy Burroughs TITLE Dist. Supt. DATE 3-5-70

(This space for Federal or State office use)

APPROVED BY Johannes Ammerlaan TITLE OIL & GAS CONSERVATION COMMISSION STATE OF ARIZONA 1624 WEST ADAMS - SUITE 202 TELEPHONE: 271-5161 PHOENIX, ARIZONA, 85007 DATE 3-9-70

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

28

443

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. 14-20-001X 0603-8812
2. NAME OF OPERATOR Humble 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 NE (2070' FNL & 550' FEL) of Section 36		8. FARM OR LEASE NAME Navajo Tract 88
14. PERMIT NO. Arizona #443	15. ELEVATIONS (Show whether OF, BT, GR, etc.) 8,334' KB	9. WELL NO. 3
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT Dineh Bi Keyah
NOTICE OF INTENTION TO: TEST WATER SHUT-OFF <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> MULTIPLE COMPLETE <input type="checkbox"/> SHOOT OR ACIDIZE <input type="checkbox"/> ABANDON* <input type="checkbox"/> REPAIR WELL <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> (Other) <input type="checkbox"/>		11. SEC., T., R., W., OR BLK. AND SURVEY OR AREA Sec. 36-36N-29E G&SPM
		12. COUNTY OR PARISH Apache
		13. STATE Arizona

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.)

74 On August 7, 1969, pumped in 95 barrels of oil and checked pressure. At 2 BPM no pressure. Started 2500 gals. 15% acid, 2 BPM, followed immediately with 5000 gals. mud acid (3% HF-12% HCl). Followed immediately with 4500 gals. diesel oil mixed with 500 gals. Butyl Cellosolve. Flushed with 110 bbls. lease crude. Still no pressure. Immediately put well back on production. Recovered 180 bbls. acid water and 205 bbls. crude oil. Shut well in on August 14, 1969 and pumped in 75 bbls. crude oil mixed with 110 gals. Jetcote 58 scale inhibitor. Pumped in 75 bbls. more crude oil with 55 gals. of Enjay 7814 paraffin control chemical. Followed with 200 bbls. lease crude overflush. Placed on pump, recovered all load and tested at rate of 112 BO and 39 BWFB.

Job complete 8-22-69.

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 Derrough TITLE Dist. Supt. DATE 8-27-69

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



\*See Instructions 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.

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. <b>14-25-0543-8812</b>																				
2. NAME OF OPERATOR <b>Humble Oil &amp; Refining Company</b>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME <b>Navejo</b>																				
3. ADDRESS OF OPERATOR <b>P. O. Box 120, Denver, Colorado 80201</b>		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 <b>SE NE (2070' FWL &amp; 550' FFL) of Section 36</b>		8. FARM OR LEASE NAME <b>Navejo Tract</b>																				
14. PERMIT NO. <b>Arizona #443</b>	15. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>8,334' KB</b>	9. WELL NO.																				
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT <b>Dinehbi Keywell</b>																				
<table border="0"> <tr> <td colspan="2">NOTICE OF INTENTION TO:</td> <td colspan="2">SUBSEQUENT REPORT</td> </tr> <tr> <td>TEST WATER SHUT-OFF <input type="checkbox"/></td> <td>PULL OR ALTER CASING <input type="checkbox"/></td> <td>WATER SHUT-OFF <input type="checkbox"/></td> <td>REPAIRING WELL <input type="checkbox"/></td> </tr> <tr> <td>FRACTURE TREAT <input type="checkbox"/></td> <td>MULTIPLE COMPLETE <input type="checkbox"/></td> <td>FRACTURE TREATMENT <input type="checkbox"/></td> <td>ALTERING CASING <input type="checkbox"/></td> </tr> <tr> <td>SHOOT OR ACIDIZE <input checked="" type="checkbox"/></td> <td>ABANDON* <input type="checkbox"/></td> <td>SHOOTING OR ACIDIZING <input type="checkbox"/></td> <td>ABANDONMENT <input type="checkbox"/></td> </tr> <tr> <td>REPAIR WELL <input type="checkbox"/></td> <td>CHANGE PLANS <input type="checkbox"/></td> <td>(Other) _____</td> <td>(Other) _____</td> </tr> </table>		NOTICE OF INTENTION TO:		SUBSEQUENT REPORT		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 checked="" 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) _____	(Other) _____	11. SEC., T., R., & OR BLM. AND SURVEY OR AREA <b>Sec. 36 T. 25 N. R. 29 E. G. &amp; SRM</b>
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT																				
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 checked="" 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) _____	(Other) _____																			
		12. COUNTY OR PARISH <b>Apache Arizona</b>																				

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.)

We propose to perform an acid-surfactant treatment to remove well bore damage indicated by casing pressure build-up test, and to treat with inhibitors to prevent future scale and paraffin build-up.

This will be accomplished by the use of 2,500 gal. reg. 15% HCl, followed by 5,000 gal. mud acid, (3% HF-12% HCl), followed by 4,500 gal. diesel oil mixed with 500 gal. Butyl Cellosolve and flushed with 109 bbl. lease crude. After acid and flush is recovered, 110 gal. scale inhibitor and 55 gal. paraffin inhibitor mixed with 100 bbl. lease crude will be pumped in and flushed with 250 bbl. lease crude. Well will be left shut in for 24 hours and then placed back on production.



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

SIGNED J. Roy Dornough TITLE District Superintendent DATE May 17, 1969

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

29

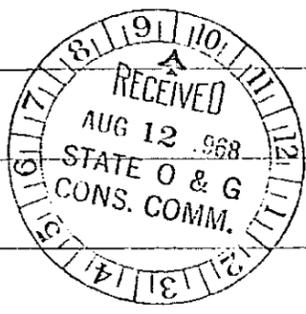
RESERVOIR PRESSURE REPORT

Operator: Humble Oil & Refining Company Address: P. O. Box 120, Denver, Colorado 80201 Date: 8-8-68

Field: Apache County: Apache Special: X Datum Plane: 4500' Gas Gravity: NA

Producing Formation: Pliocene Sill Oil Gradient: 0.340 Water Gradient: 0.435 Initial Completion: 0 General Survey: 0

Well Name	Pore Pressure	Oil Gas Ratio	Date Tested	Shut-In Pressure	Bomb Test Data		Sonic Instrument Test Data		Pressure At Datum					
					Test Depth	Oil Temp.	Observed Pressure	Prod. Test (Bbls per Day)		Liquid Level	Liquid Gradient	Wt. of Liquid Column	Wt. of Gas Column	Casing Pressure
Navejo Tract 88	431	2	7-12-68	0	44412	NA	280							242
	443	3	7-13-68	0	4584	NA	198							235



431

\* Designate type of report by "X".

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Dist. Supt. of the Humble Oil & Refining Company, and that I am authorized by said company to make this report; and 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: August 8, 1968

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Reservoir Pressure Report

Form No. 7

File One Copy

98

## 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: 14-20-0603-8812 - Navajo Tract 88 Well Number: 3 Field & Reservoir: Dineh bi Keyah - Hermosa

Location: SE NE (2070' FNL & 550' FEL) of Section 36 County: Apache

Sec. TWP-Range or Block & Survey: Section 36-36N-29E - G&SRM

Date spudded: 12-9-67 Date total depth reached: 1-4-68 Date completed, ready to produce: 4-22-68 Elevation (DF, RKB, RT or Gr.) feet: RKB 8,334 Elevation of casing hd. flange feet: 8,324

Total depth: 3,875' P.B.T.D.: 3,832' 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: 3,725-3,770' Rotary tools used (interval): Surface to 3,875' Cable tools used (interval): None

Was this well directionally drilled? No 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): IES & Gamma Ray - Sonic Date filed: 4-18-68

### 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
Conductor	20"	16"	-	37'	95	None
Surface	13-3/4"	9-5/8"	32#	696'	650	None
Production	8-3/4"	7"	20#	3,875'	150	None

### TUBING RECORD

### LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
3 1/2" in.	3,793 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
1 per 5'	4" Hyperjet	3,725 - 3,770'	1,000 gal. mud acid	3,725 - 3,770'
1 Per ft.		3710 - 3720	54,000 gal. crude & 55,000# Sand.	3,725-70

### INITIAL PRODUCTION

Date of first production: 1-31-68 - Initial Test Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): Flow initially - Now on pump - 1-3/4" x 54" Stroke x 14 SFM.

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
4-21-68	24	Open	150 bbls.	225 MCF	0 bbls.	41.5° API (Corr)

Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio
30#	40#		150 bbls.	225 MCF	0 bbls.	1,500 cu. ft./bbl.

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

Fuel and 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: 4-30-68

Signature: J. Roy Dorrrough

Permit No. 443

Form No. 1

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Well Completion or Recompletion Report and Well Log  
File One Copy

**DETAIL OF FORMATIONS PENETRATED**

Formation	Top	Bottom	Description*
Chuska & Chinle	Surface	1320	Loose sand, Red shale and silt.
Coconino	1320	2034	Sandstone & conglomerate.
Cutler	2034	3110	Red & orange shale, siltstone & fine sandstone.
Hermosa	3110	3300	Limestone, light grey, finely crystalline, cherty & shale, redish-brown.
Ismay	3300	3392	Limestone, buff to light grey, cherty, shaley at base.
Desert Creek	3392	3444	Limestone, white to light grey & shale, grey.
Akah	3444	3563	Limestone, dark grey & shale, green, waxy.
Black Shale	3563	3692	Shale, black.
Sill (Top)	3692	3782	
Sill (Base)	3782	3830	
Mississippian	3830	3875 TD	Limestone, white to buff, dense, oolitic.

DST #1: 3687-3712' - Weak blow throughout test. No gas to surface, no oil. Recovered 100' of gas cut mud. ISIP 440, IFP 132, FFP 132, FSIP 615 and HP 1832.

NO CORES CUT.

\* 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.

Form No. 4

RESERVOIR PRESSURE REPORT

Operator Humble Oil & Refining Company Address P. O. Box 120, Denver, Colorado 80201 Date 4-30-68  
 Field Dineh bi Keyah County Apache Gas Gravity \_\_\_\_\_  
 Producing Formation HERMOSA Oil Gradient \_\_\_\_\_ Initial Completion\* \_\_\_\_\_ General Survey\* \_\_\_\_\_ Datum Plane \_\_\_\_\_  
 Water Gradient \_\_\_\_\_ Special\* X Sonic Instrument Test Data \_\_\_\_\_

Well Name	Perforation	Oil (G)	Date Tested	Shut-In Tubing Pressure	Bomb Test Data		Prod. Test (Bbls per Day)		Sonic Instrument Test Data				Pressure At Datum	
					Test Depth	B.H. Temp.	Oil	Water	Liquid Level	Liquid Gradient	Wt. of Liquid Column	Wt. of Gas Column		Casing Pressure
Jo Tract 88 3-0603-8812	443	3 0	2-2-68	22	547	3750	96	610						610

CH

\* Designate type of report by "X".  
 CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Dist. Supt. of the Humble Oil & Refining Company, and that I am authorized by said company to make this report; and 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

4-30-68  
Date

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Reservoir Pressure Report  
 Form No. 7

88

POTENTIAL TEST AND REQUEST FOR ALLOWABLE OIL WELLS

DESIGNATE TYPE OF COMPLETION:

New Well  Work-over  Deepen  Plug Back  Same Reservoir  Different Reservoir

Other Reason For Filing:

Operator

Humble Oil & Refining Company

Address

P. O. Box 120, Denver, Colorado 80201

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or Lessor's Name if Fee Lease	Well Name	County
14-20-0603-8812	Navajo Tract 88 #3	Apache

Footage Location

2070' FNL & 550' FEL of Section 36

Sec. Twp. Rge.

Section 36-36N-29E - G&SRM

Date spudded	Date completed, ready to produce	Total depth	P.B.T.D.
12-9-67	4-22-68	3,875'	3,832'
Field and reservoir	Top of pay	Producing interval	
Dineh bi Keyah - Hermosa	3692-3782'	3692-3782'	

TEST DATA

Date of first production	Date of test	Length of test	Producing method (flow pump, gas lift)	Amount of load oil injected if any.
1-31-68	4-21-68	24 hrs.	Pump	1316 bbls.
Number of barrels of oil produced from completion or recompletion date to test date		If well is produced by pumping, give pump size, length of stroke and strokes per minute.		
		1-3/4" x 54" x 14 SPM		
Tubing pressure	Casing pressure	Choke size		
30#	40#	Open		
*Actual production during test:	Oil (bbls)	Water (bbls)	Gas (MCF)	
	150	0	225	

\*Production must actually equal or exceed wells daily allowable or test must be for full 24 hours

Gas-oil ratio	Oil gravity	* A.P.I. corrected	Name of transporter of oil
15 MCF/bbl.	41.5		Kerr-McGee Pipeline Co.
Number of acres attributed to this well	Number of producing wells in this reservoir on this lease, including this well	Single, dual or triple completion?	Daily allowable requested (bbls)
160	2	Single	Maximum

Plat showing acreage attached—plat should show leases, offset wells, distance from this well to the nearest well on the same lease completed in or drilling to the same reservoir, and the boundaries of drilling and producing, or proration, units attributed to this well and other wells on the same lease completed in or drilling to the same reservoir, the number of acres in each unit and the number of acres in the 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.

Date 4-30-68

Signature J. Roy Dorrough

Witnessed by: \_\_\_\_\_ Organization \_\_\_\_\_  
 \_\_\_\_\_ Signature \_\_\_\_\_  
 \_\_\_\_\_ Date \_\_\_\_\_

Permit No. 443

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION

Potential Test & Request for Allowable—Oil Wells

File One Copy

Form No. 6

**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	Reservoir
Navajo Tract 88 - 14-20-0603-8812	Dineh bi Keyah	Hermosa
Survey or Sec-Twp-Rge	County	State
Sec. 25 & 36-36N-29E - G&SRM	Apache	Arizona
Operator Humble Oil & Refining Company		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street	City	State
P. O. Box 120	Denver,	Colorado 80201
Above named operator authorizes (name of transporter) Kerr-McGee Pipeline Corporation		
Transporter's street address	City	State
Kerr-McGee Building	Oklahoma City	Oklahoma 73102
Field address P. O. Box 989, Farmington, New Mexico 87401		

Oil, condensate, gas well gas, casinghead gas

To transport 100 % of the \_\_\_\_\_ from said lease.

**OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:**

Name of gatherer	% transported	Product transported
None		

Our report dated 3-4-68 was partially in error. Please change your records as follows:

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.  
Permian Corporation ceased hauling oil from Navajo Tract 88 #2 as of 5:55 PM on 2-28-68, at which time the LACT on the lease went into operation. Permian continued to haul oil from Well #3 (As Humble Agent Only) to our Navajo Tract 138 battery, where it went into the pipeline, until the morning of 3-20-68. At that time all production from the Navajo Tract 88 started being run through the pipeline hooked to the Navajo Tract 88 battery.

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.

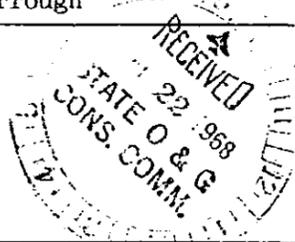
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Dist. Supt. of the Humble Oil & Refining Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein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

Date March 20, 1968  
Date \_\_\_\_\_  
Signature J. Roy Dorrrough

Date approved: 3-22-68  
STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
By: John Bannister  
Permit No. 421, 431, 443, 447

cc: Minerals Supervisor, Navajo Tribe  
U. S. Geological Survey - Farmington

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



47

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Form approved  
Budget Bureau No. 42-R256.6.

LAND OFFICE \_\_\_\_\_  
LEASE NUMBER 14-20-0603-8812  
UNIT \_\_\_\_\_

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Arizona County Apache Field Dineh bi Keyah  
The following is a correct report of operations and production (including drilling and producing wells) for the month of February, 1968,  
Agent's address P. O. Box 120 Company Humble Oil & Refining Company  
Denver, Colorado 80201 Signed COPY (Original Signed) J. ROY BORROUGH  
Phone 534-1251 Agent's title District Superintendent

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<b>NAVAJO TRACT 88</b>										
Sec. 25 SE SE	36N	29E	1	18	131					This production will not appear on the Oklahoma City Report for Well #2 & #3. Pump testing periodically.
Sec. 36 SE NE	36N	29E	3	13						Production will be reported by our Oklahoma City Office on same report as Well #2. Flow tested at rates from 34 to 364 BOPD & gas at estimated rate of 1100 MCFPD. Currently flowing and testing.
Sec. 25 SE NW	36N	29E	4	17						Perforated, acidized and fractured 4373-4420'. Recovered no oil and small amount of gas. Perforated, acidized and fractured 4286-4322'. Recovered no oil and small amount of gas.

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

NOTE.—There were See Above runs or sales of oil; \_\_\_\_\_ M cu. ft. of gas sold; \_\_\_\_\_ runs or sales of gasoline during the month. (Write "no" where applicable.)  
Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

Harold Farris - Humble - Phone 2-22-68

88-3 (#443)

flowing 200 BOPD - not completed  
making 1,000 MCF gas (non-flammable)  
paying trucking chgs of 32¢ per bbl  
" pipeline chg of 25¢ " "  
must keep cat (for trucks) 1800 per hr.

88-4 (#447)

will set bridge plug at 4360'  
perf. at 4286' to 4322' w 1 shot ea 2'  
1000 gal mud acid  
fracked 43,300 gal oil, 40,000 lbs sand  
swabbing 7 to 8 BOPD thru 3" tubing  
700 Bbls of oil (frack) to recover

88-1 (#421)

making 5 to 7 BOPD  
will shut-in and wait on orders

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Humble Oil & Refining Company  
 2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
 3. Well Name Navajo Tract 88 Well #3  
 Location SE NE (2070' FNL & 550' FEL) of Section 36  
 Sec. 36 Twp. 36N Rge. 29E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-0603-8812

5. Field or Pool Name Dineh bi Keyah

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 checked="" 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) _____	ABANDONMENT <input type="checkbox"/>
(OTHER) _____			

(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.)  
Drilled to TD of 3875', PBD 3839'. Ran DST #1 - 3687-3712' (See report of 1-4-68). Ran 122 jts of 7" OD 20# casing set at 3875' and cemented with 150 sacks Class C cement plus 6% gel. Perforated 2 holes at 3778', ran tubing and set packer at 3769'. Swabbed 3 hours, no recovery. Set CI bridge plug at 3730' and perforated 2 holes at 3698'. Ran tubing and set packer at 3689'. Swabbed 3 hours, recovered 6 barrels muddy water, show of oil & gas. Dumped in 150 gallons HF mud acid across perforations 3698', went in on vacuum. Swabbed, recovered acid and muddy water (water becoming progressively more muddy) with show of oil and some gas. Set cement retainer at 3679' and pumped 75 sacks cement in formation. Drilled cement and cleaned out to 3832'. Perforated 1 shot per 5' from 3725-3770'. Show of gas after perforating. Filled 7" casing annulus and outside 7" casing with water, stayed full. Swabbed down, recovered 7 bbls. clear water with trace of oil. Gas measured 194 MCFPD, with packer at 3710'. Moved packer to 3752', swabbed 5 hours and recovered 79 bbls. water, 4 bbls. oil, measured gas on both tubing and annulus, equal at 245 MCFPD, perforations in communication behind pipe. Moved packer to 3710', acidized all perforations with 1000 gallons mud acid with 10 ball sealers. AIR 6 BPM, complete job went in on vacuum. Swabbed back with from a trace of oil to 1 BO & 1 BW during last hour of a 4 hour swab period. SI over-night. SIP 540# after 14 hours. Swabbed 7 BO & 4 BW in 2 hours, gas measured 344 MCFPD. Fractured with 54,000 gallons lease crude and 55,000# sand. Found 80' of sand in hole, cleaned out to 3838'. Ran tubing and well flowed back load oil for 3 days. On 1-31-68 flowed back remaining load oil and 62 bbls. new oil, gas volume 2163 MCFPD. Flowing casing pressure 310#, tubing 100-150#. On 2-1-68 flowed 364 bbls. oil in 23 hours. Shut in for BHP buildup.

8. I hereby certify that the foregoing is true and correct.  
 Signed [Signature] Title \_\_\_\_\_ Date 2-7-68

Permit No 443

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

RECEIVED  
 FEB 8 1968  
 STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION

AS

REPORT OF ANALYSIS

F.S.- 11269 M.S. N-37540 ,H 3.42 OBS. PRES. 62.4 CAL. PRES. 60.7  
 STATE- ARIZONA COUNTY- APACHE  
 FIELD- DINEH BI KEYAH WELL NAME- NAVAJO TRACT 88-3  
 LOCATION- SEC. 36, T36N, R29E OWNER- HUMBLE OIL + REFINING CO.  
 DATE COMPLETED- 01-31-68 DATE SAMPLED- 01-31-68  
 SAMPLED BY- HIGHLAND  
 NAME OF PRODUCING FORMATION- SILL  
 DEPTH IN FEET- 3692 THICKNESS IN FEET- 90  
 SHUT IN WELLHEAD PRES., PSIG- 580 OPEN FLOW, MCF/D- 2163

CHECK OF DATA-  
 THE WELL DATA ARE ACCURATE, ....WITHOUT CORRECTION, ....AS CORRECTED ABOVE.

REMARKS-

ANALYSIS-

METHANE	30.2 %	NORMAL PENTANE	.5 %	OXYGEN	0.0 %
ETHANE	4.5 %	ISOPENTANE	.6 %	ARGON	.5 %
PROPANE	3.2 %	CYCLOPENTANE	.2 %	HYDROGEN	TRACES
NORMAL BUTANE	1.3 %	HEXANES PLUS	.4 %	H2S	0.0 %
ISOBUTANE	1.1 %	NITROGEN	53.8 %	CO2	TRACES
SPECIFIC GRAV	.891			HELIUM	<u>3.74%</u>
				TOTAL	100.0 %

CALCULATED GROSS BTU/CU FT, DRY AT 60 DEG F AND 30 IN. MERCURY- 625.

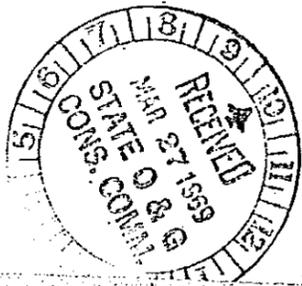
PERMISSION FOR RELEASE-  
 PERMISSION IS HEREBY GRANTED FOR THE BUREAU OF MINES TO RELEASE THE ABOVE  
 DATA, TOGETHER WITH SIMILAR DATA RELEASED BY OTHER OPERATORS AS PUBLIC  
 INFORMATION AND AS PARTS OF A SERIES OF PAPERS ON ANALYSES OF GASES FROM  
 VARIOUS FIELDS, STATES, OR REGIONS.

1-21-69

COMPANY Humble Oil & Refining Company

BY J. Roy Dorrrough  
 J. Roy Dorrrough

TITLE District Superintendent  
 Denver, Colorado



32

**SUNDY NOTICES AND REPORTS ON WELLS**

1. Name of Operator Humble Oil & Refining Company  
 2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
 3. Well Name Navajo Tract 88 #3  
 Location SE NE (2070' FNL & 550' FEL) of Section 36  
 Sec. 36 Twp. 36N Rge. 29E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo - 14-20-0603-8812

5. Field or Pool Name Dineh bi Keyah

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

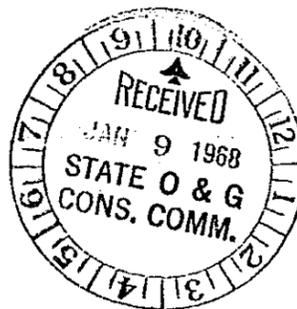
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input checked="" type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	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) _____	ABANDONMENT <input 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.)

Set 9-5/8" surface casing as reported on notice dated 12-12-67. Drilled 8-3/4" hole to 2750' and suspended operations on 12-18-67 due to bad weather. Operations were resumed on 12-26-67. Drilled to TD of 3875', now preparing to run casing. Drill Stem Test #1 was taken from 3687-3712'. Weak blow throughout test. No gas to surface, no oil. Recovered 100' of gas cut mud. ISIP 440, IFP 132, FFP 132, FSIP 615 and HP 1832. This covers operations through 1-5-68.

**CONFIDENTIAL**



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

Signed J. Roy Dorrough Title Dist. Supt. Date 1-5-68

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

Permit No. 443

From the Desk of

OIL & GAS CONSERVATION COMMISSION  
STATE OF ARIZONA  
1624 WEST ADAMS SUITE 202  
TELEPHONE 271-5161  
PHOENIX, ARIZONA 85007

JAMES R. SCURLOCK

Humble 3-88

DST #1

3687-3712

Date?

Open 10"

SI 60"

Op 120"

SI 120"

Wk blow; No Gas to Surface.

Rec 100' GCM. No oil.

Feb. produce  
3, 329 bbl  
Mar. produce  
3, 1929 bbl

913

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Form approved.  
Budget Bureau No. 42-R356.5.

LAND OFFICE  
LEASE NUMBER 14-20-0603-8012  
UNIT

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Arizona County Apache Field Dineh bi Keyah

The following is a correct report of operations and production (including drilling and producing wells) for the month of December, 1967,

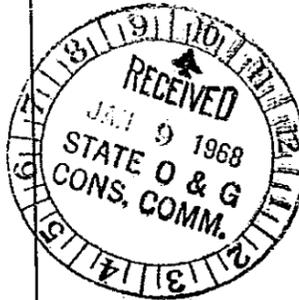
Agent's address P. O. Box 120 Company Humble Oil & Refining Company

Denver, Colorado 80201 Signed ORIGINAL JOHN R. CROUCH

Phone 534-1251 Agent's title Dist. Administrative Supr.

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<b>NAVAJO TRACT 88 - ARIZONA PERMIT #443</b>										
Sec. 36 SE NE	36N	29E	3	0						Spudded 12-9-67. See Sundry Notice dated 12-12-67 for Surface Casing. As of 1-1-68 Drilling at 3486'

CONFIDENTIAL



cc: 2 - Arizona Oil & Gas Conservation Commission  
1 - Mr. Henry P. Pohlmann, Minerals Supervisor, Navajo Tribe

NOTE.—There were 0 runs or sales of oil; 0 M cu. ft. of gas sold;  
0 runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

Shumble 88.7

Drilling 3486 (on 1-1-68)

spudded 12-9-67

Telephone 1-2-68

prep to DST

Telephone 1-2-68

Form 5-331  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
\*Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.  
**14-20-0603-8812**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**Navajo**

7. UNIT AGREEMENT NAME  
-

8. FARM OR LEASE NAME  
**Navajo Tract 88**

9. WELL NO.  
**3**

10. FIELD AND POOL, OR WILDCAT  
**Dineh bi Keyah**

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
**Sec. 36-36N-29E - G43FM**

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  
**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-NE (2070' FNL & 550' FEL) of Sec. 36**

14. PERMIT NO.  
**Arizona #443**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**8,342' Ungraded Ground**

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) <b>Spud &amp; Surface Casing</b> <input checked="" type="checkbox"/>	

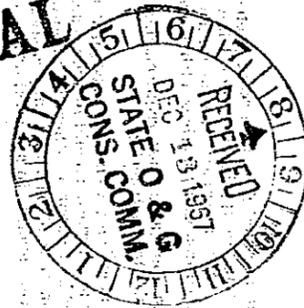
(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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.)

**Spudded 12-9-67. Set 16" conductor casing at 37' in a 20" hole and cemented with 95 sacks cement.**

**Drilled 13-3/4" hole to 696'. Set 9-5/8" OD 32# H-40 casing at 696' and cemented with 650 sacks regular neat cement with 2% CaCl. Had good returns. Job complete at 2 PM on 12-11-67.**

**CONFIDENTIAL**



cc: 2 - Arizona Oil & Gas Conservation Commission  
1 - Mr. Henry F. Pohlmann, Minerals Supervisor, Navajo Tribe.

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

SIGNED [Signature] TITLE **Dist. Chief Engineer** DATE **12-12-67**

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

**443**

\*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 <b>Navajo Tract 88 - 14-20-0603-8812</b>	Field <b>Dinch bi Keyah</b>	Reservoir <b>Hermosa</b>
Survey or Sec-Twp-Rge <b>Sec. 25-36N-29E - G&amp;SRM</b>	County <b>Apache</b>	State <b>Arizona</b>
Operator <b>Humble Oil &amp; Refining Company</b>		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street <b>P. O. Box 120</b>	City <b>Denver</b>	State <b>Colorado 80201</b>
Above named operator authorizes (name of transporter) <b>Kerr-McGee Pipe Line Corporation</b>		
Transporter's street address <b>Kerr-McGee Building</b>	City <b>Oklahoma City</b>	State <b>Oklahoma 73102</b>
Field address <b>P. O. Box 989, Farmington, New Mexico 87401</b>		
Oil, condensate, gas well gas, casinghead gas		
To transport	<b>100</b> % of the <b>Oil</b>	from said lease.

**OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:**

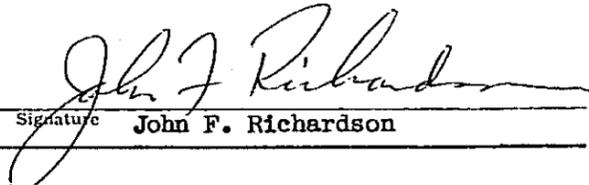
Name of gatherer	% transported	Product transported
<b>None</b>		

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 transporter from Permian Corp. to Kerr-McGee Pipeline Corp. Oil will be hauled by the Permian Corp. (As Humble Agent Only) from this lease to the Humble Navajo Tract 138 tank battery location where a pipeline connection is now available. This will be only a temporary situation until a pipeline can be laid from Navajo Tract 88 tank battery for a permanent pipeline hookup to the Kerr-McGee Pipeline.**

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 District Supervising Engineer 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 November 22, 1967

  
 Signature **John F. Richardson**

Date approved: 11-27-67

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

By: John Bannister  
 Permit No. 421 & 431

cc: Mr. Henry F. Pohlmann, Minerals Supr., Navajo Tribe

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Operator's Certificate of Compliance & Authorization  
Transport Oil or Gas from Lease

File Two Copies

Form No. 8

RECEIVED  
 NOV 24 1967  
 STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION

50

**APPLICATION FOR PERMIT TO DRILL OR RE-ENTER**

APPLICATION TO DRILL  RE-ENTER OLD WELL

**Humble Oil & Refining Company**

NAME OF COMPANY OR OPERATOR

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

Drilling Contractor  
Will notify when selected.

Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor <b>Navajo Tract 88 - 14-20-0603-8812</b>	Well number <b>3</b>	Elevation (ground) <b>8,342' Ungraded</b>
Nearest distance from proposed location to property or lease line: <b>550 feet</b>	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: <b>2730 feet</b>	
Number of acres in lease: <b>2560</b>	Number of wells on lease, including this well, completed in or drilling to this reservoir: <b>Three</b>	

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

**CONFIDENTIAL**

Well location (give footage from section lines) Sec. township—range or block and survey Dedication (Comply with Rule 105)  
**2070' FNL & 550' FEL Sec. 36-36N-29E - G&SRM 160 Acres - NE 1/4**

Field and reservoir (if wildcat, so state) County  
**Dineh bi Keyah - Hermosa Apache**

Distance, in miles, and direction from nearest town or post office  
**Appr. 40 miles SW of Shiprock, New Mexico**

Proposed depth: <b>4,050'</b>	Rotary or cable tools <b>Rotary</b>	Approx. date work will start <b>12-1-67</b>
Bond Status <b>ON FILE</b>	Organization Report On file <input checked="" type="checkbox"/> Or attached	Filing Fee of \$25.00 Attached <input type="checkbox"/> Check No.

Remarks: **Mud Program: 0-700' Native mud with sufficient properties to maintain hole for safe drilling. 700'-TD - Low solids water base.**  
**Testing: No cores or DST's anticipated.**  
**Logs: IES & Gamma Ray/Sonic with Caliper.**  
**Stimulation: Fracture treat if necessary.**

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.

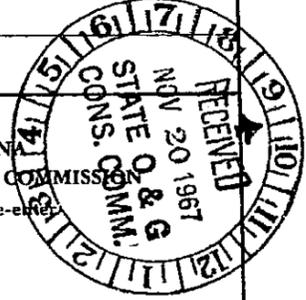
*[Signature]*  
Signature **J. Roy Dorrrough**

Date **11-15-67**

Permit Number: **443**  
Approval Date: **11-27-67**  
Approved By: *[Signature]* **John Bannister**

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

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



Form No. 3

SAPI-02-001-20066

(Complete Reverse Side)

1. Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
3. All distances shown on the plat must be from the outer boundaries of the Section.
4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES  NO
5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES  NO  If answer is "yes," Type of Consolidation \_\_\_\_\_
6. If the answer to question four is "no," list all the owners and their respective interests below:

Owner	Land Description
	<p style="text-align: center;"><b>CERTIFICATION</b></p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p>Name _____</p> <p>Position <u>J. Roy Dorrough</u></p> <p>Dist. Supt. _____</p> <p>Company _____</p> <p><u>Humble Oil &amp; Refining Co.</u></p> <p>Date _____</p> <p><u>11-15-67</u></p> <p>I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.</p> <p>Date Surveyed _____</p> <p><u>6-30-67</u></p> <p>Registered Professional Engineer and/or Land Surveyor</p> <p><u>Ernest V. Echohawk</u></p> <p>SEE ATTACHED PLAT</p> <p>Certificate No. _____</p> <p><u>2311</u></p>

**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
9-5/8"	32.30#	J-55	0	700'	700'	Circ. to surface. Sufficient to cover all pays.
7"	20#	J-55	0	4050'	4050'	

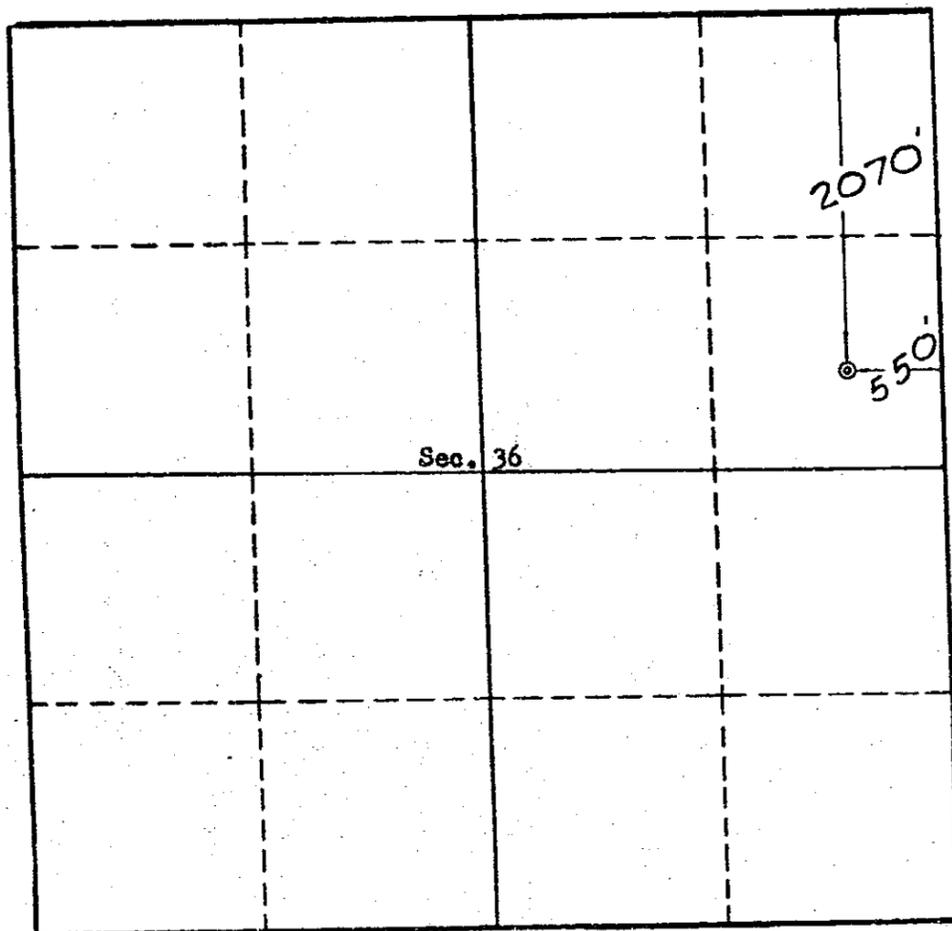
Company Humble Oil & Refining Company

Well Name & No. NAVAJO TRACT 88 #3

Location 2070 feet from the North line and 550 feet from the East line.

Sec. 36, T. 36 N., R. 29 E., G. & S. R. M., County Apache, Arizona

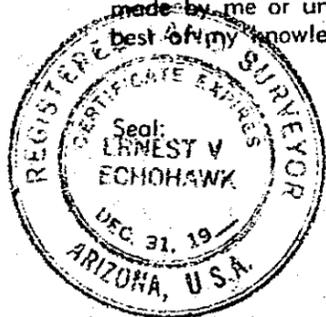
Ground Elevation 8342, ungraded.



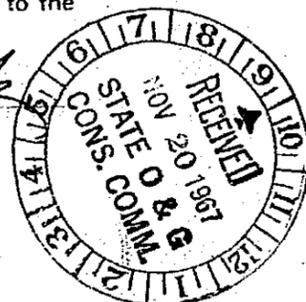
Scale, 1 inch = 1,000 feet

Surveyed June 30, 19 67

This is to certify that the above plot 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 OILS & REFINING COMPANY  
(OPERATOR)

to drill a well to be known as

HUMBLE #3-88 NAVAJO  
(WELL NAME)

located 2080' FNL and 550' FEL (SE/4NE/4)

Section 36 Township 36N Range 19E, Apache County, Arizona.

The NE/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 27 day of November, 1967.

OIL AND GAS CONSERVATION COMMISSION

By John Kammister  
EXECUTIVE SECRETARY

PERMIT No. 443

RECEIPT NO. 9529  
API # 02-001-20066

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

Forms Data Sheet Attached

**DINEH-BI-KEYAH FIELD**

**Operator:** Mountian States Petroleum Corporation

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

**Amount:** \$325,000\*

**Bond No.:** Letter of Credit Bond No. 315    **Date approved:** 5/27/94

\* 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:**

<u>377</u>	<u>445</u>
<u>384</u>	<u>446</u>
<u>385</u>	<u>484</u>
<u>386</u>	<u>506</u>
<u>388</u>	<u>618</u>
<u>389</u>	<u>691</u>
<u>390</u>	<u>692</u>
<u>396</u>	<u>693</u>
<u>416</u>	<u>695</u>
<u>417</u>	<u>696</u>
<u>419</u>	<u>719</u>
<u>421</u>	<u>720</u>
<u>422</u>	<u>721</u>
<u>431</u>	<u>722</u>
<u>443</u> ✓	<u>723</u>



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. Stacey Roberts  
Kerr-McGee Corporation -  
P.O. Box 25861  
Oklahoma City, OK 73125

443

Re: Kerr-McGee Corporation  
\$25,000 Oil Drilling Blanket Bond #2971100-2620  
Safeco Insurance Company of America

Dear Ms. Roberts:

Mountain States Petroleum has provided evidence of its bonding with the BIA for the Dineh-bi-Keyah Field in Arizona, and our records show that Kerr-McGee Corporation has no outstanding drilling or plugging obligations in Arizona.

As a result, this letter constitutes written permission by the Oil and Gas Conservation Commission to terminate liability under the referenced bond. A copy of the bond is enclosed for your information.

Please advise if we may be of further service.

Sincerely,

Steven L. Rauzi  
Oil & Gas Program Administrator

Enclosure

Operator KERR-McGEE CORPORATION  
Bond Company SAFECO INSURANCE COMPANY OF AMERICA Amount \$25,000  
Bond No. 2971100-2620 Date Approved FEBRUARY 18, 1994  
DATE

ACTIVE

Permits covered by this bond:

377	445
384	446
385	484
386	506
388	618
389	691
390	692
396	693
416	695
417	696
419	719
421	720
422	721
431	722
443	723



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

June 8, 1994

Ms. Judy Burkhart  
Mountain States Petroleum Corporation  
P. O. Box 1936  
Roswell, New Mexico 88201

Dear Ms. Burkhart:

This will acknowledge receipt of your letter of June 6, which included a change of operator form for each of the 31 Kerr-McGee Corporation wells at the Dineh-bi-Keyah Field sold to Mountain States Petroleum Corporation. Our records indicate that the Navajo #B-1 was plugged and abandoned by Kerr-McGee Corporation in October 1993.

Please note that our records indicate a different API number than the one you have recorded on your forms for the following wells:

<u>Well</u>	<u>API #</u>
Navajo 01	02-001-20001
Navajo 03X	02-001-20011
Navajo 04	02-001-20009
Navajo 10	02-001-20042
Navajo 14	02-001-20040
Navajo 15	02-001-20041

Sincerely,

Steven L. Rauzi  
Oil & Gas Program Administrator

UNITED STATES DEPARTMENT OF THE INTERIOR  
MINERALS MANAGEMENT SERVICE  
ROYALTY MANAGEMENT PROGRAM

### CHANGES TO REPORTER INFORMATION

#### OLD INFORMATION:

MMS OPERATOR CODE: X0217  
COMPANY NAME: KERR MCGEE CORPORATION

#### NEW INFORMATION:

MMS OPERATOR CODE: X0274  
COMPANY NAME: MOUNTAIN STATES PETROLEUM CORP.  
CONTACT NAME: RUBY WICKERSHAM  
STREET ADDRESS: 213 E. FOURTH  
CITY: ROSWELL  
STATE: NM ZIP CODE: 88201  
PHONE: 505 623-7184  
AREA CODE

#### COMPLETE IF APPLICABLE:

I AM NO LONGER AN OPERATOR OF INDIAN OR FEDERAL PROPERTIES.  
PLEASE REMOVE MY NAME FROM YOUR MAILING LIST.

COMPANY SOLD TO: \_\_\_\_\_ EFFECTIVE DATE: **AZ OIL & GAS CONSERVATION COMMISSION**  
LEASES / AGREEMENTS AFFECTED: **NAVAJO #88-3 (443)**  
**Dineh Bi Keyah Field - Apache County, Arizona** JUN 8 1994  
Lease #: 14-20-0603- 8812 API #: 020012006600S1

COMMENTS: This property was sold to Mountain States Petroleum Corp.  
and they became operator effective May 1, 1994.

SIGNATURE: *Judy Buckhart*  
DATE: 5/13/94

MAIL TO:  
MINERALS MANAGEMENT SERVICE  
ROYALTY MANAGEMENT PROGRAM  
P.O. BOX 25165 MS-3122  
DENVER, CO 80225

P. O. BOX 1936

505 623-7184

**MOUNTAIN STATES PETROLEUM CORPORATION**

213 EAST FOURTH STREET  
ROSWELL, NEW MEXICO  
88202

June 6, 1994

Arizona Geological Survey  
845 North Park Avenue, #100  
Tucson, Arizona, 85719

**AZ OIL & GAS  
CONSERVATION COMMISSION**

JUN 8 1994

Attention: Steven L. Rauzi,  
Oil & Gas Program Administrator

Re: Dineh-bi-Keyah Field  
Apache County, Arizona

Dear Sir;

In followup of our May 24, 1994, letter to you relative to the change of operator from Kerr McGee to Mountain States Petroleum Corporation for the captioned field; please find enclosed a copy of the notices sent to the Minerals Management Service.

We hope this will supply the information you requested and apologize for any inconvenience we may have caused. If you have any questions or are in need of anything further please contact the undersigned. Thank you.

Sincerely,

*Judy Burkhart*  
Judy Burkhart,  
Secretary

Enclosures

443

P. O. BOX 1936

505 623-7184

**MOUNTAIN STATES PETROLEUM CORPORATION**

213 EAST FOURTH STREET  
ROSWELL, NEW MEXICO  
88202

May 24, 1994

Arizona Geological Survey  
845 North Park Avenue, #100  
Tucson, Arizona 85719

Attention: Steven L. Rauzi,  
Oil & Gas Program Administrator

Re: Dineh-bi-Keyah Field  
Apache County, Arizona

Dear Sir;

Please be advised that effective May 1, 1994, Mountain States Petroleum Corporation replaced Kerr-McGee as Operator of the captioned field and it's respective wells.

Listed on the attached sheet are the well names and API #'s of each well in this field, including shut-in, producing, and abandoned wells.

Please change your records to reflect that Mountain States Petroleum Corporation, Post Office Box 1936, Roswell, New Mexico, 88202-1936, (505) 623-7184, is now the operator of these properties and as such will be filing all required monthly production reports.

If you have any questions or are in need of anything further in this matter please contact the undersigned. Thank you.

Sincerely,

*Judy Burkhardt*

Judy Burkhardt,  
Secretary

Attachment

CONSERVATION COMMISSION

MAY 31 1994

443

**MEMORANDUM TO FILE**

DATE: AUGUST 11, 1992

FROM: STEVEN L. RAUZI *SLR*

*2/W 443*

SUBJECT: MECHANICAL INTEGRITY TEST NAVAJO 88-3 AT DINEH-BI-KEYAH

ON 8-7-92 THIS WELL WAS PRESSURED UP TO 600 PSI FOR 30 MINUTES WITH NO DROP IN PRESSURE. THE WELL HAS GOOD MECHANICAL INTEGRITY.



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

March 5, 1992

Mr. G. Bunas, Analyst II  
Kerr-McGee Corporation  
US Onshore Region  
P. O. Box 25861  
Oklahoma City, Oklahoma 73125

Re: Mechanical Integrity tests at Dineh-bi-keyah field, Arizona  
Navajo 7, 9, 15, 16, 17, 24, 26, "B" 1 & 2, "C" 2, and "88" 1 & 3

Dear Mr. Bunas:

I acknowledge receipt of your sundry notices on the referenced wells. Let me take this opportunity to inform you that the Arizona Oil and Gas Conservation Commission has merged with the Arizona Geological Survey. Please note our new address and phone number in your files for future correspondence.

This office has no problem with your request to defer mechanical integrity testing on the referenced wells until late spring or early summer due to currently adverse weather conditions.

However, when you do schedule the actual dates, I hereby request at least 2 to 3 days advance notice to arrange for a representative from this office to travel to Dineh-bi-keyah to observe these tests.

Sincerely,

A handwritten signature in cursive script that reads "Steven L. Rauzi".

Steven L. Rauzi  
Oil and Gas Program Administrator



RECEIVED  
OCT 21 1986  
O & G CONS. COMM.

PLEASE REPLY TO:

EXPLORATION AND PRODUCTION DIVISION  
U. S. ONSHORE REGION  
P. O. BOX 25861  
OKLAHOMA CITY, OKLAHOMA 73125

PHONE  
405 848-9753

October 15, 1986

Bureau of Land Management  
Caller Service 4104  
Farmington, New Mexico 87499

<i>PIN 421</i>	<i>PIN 443</i>	<i>PIN 381</i>
RE: Navajo Tract 88 #1	Navajo Tract 88 #3	Navajo "B" #1
Dineh-Bi-Keyah Field	Dineh-Bi-Keyah Field	Dineh-Bi-Keyah Field
Apache County, AZ	Apache County, AZ	Apache County, AZ
Lease #14-20-0603-8812	Lease #14-20-0603-8812	Lease #14-20-0603-8889

Gentlemen:

As requested in your attached letter, enclosed are Sundry Notices for the above wells. Kerr-McGee requests that these wells remain in a temporarily abandoned status as they may be utilized in a possible future waterflood project.

If additional information is required, please advise.

Sincerely,

KERR-McGEE CORPORATION

*Gaylan Bunas*  
Gaylan Bunas  
Analyst II

*Joe D. Stein*  
Joe D. Stein  
Manager - Engineering  
Onshore - N.A.

xc: State of Arizona  
Oil & Gas Conservation Commission  
1645 West Jefferson, Suite 420  
Phoenix, Arizona 85007

I.Geddie/CFR  
WRF  
GB/CF

GGB047/rlw



United States Department of the Interior <sup>14-20-0603-8812 et al. (WC)</sup>

BUREAU OF LAND MANAGEMENT  
Caller Service 4104  
Farmington, New Mexico 87499

IN REPLY REFER TO:

3162.3-1.0 (016)

OCT 06 1986

REC'D

OCT 10 1986

SWD

~~HLA~~  
RAS  
JRH  
X-FILE/WR  
COP'S TO  
C.A. Baker  
Joe Steind

CERTIFIED--RETURN RECEIPT REQUESTED

Kerr McGee Corporation  
P.O. Box 250  
Amarillo, TX 79189

Gentlemen:

Reference is made to the following wells:

1. No. 1 Navajo Track 88, SE/4SE/4 sec. 25, T. 36 N., R. 29 E., Apache County, Arizona, lease 14-20-0603-8812.
2. No. 3 Navajo Track 88, SE/4NE/4 sec. 36, T. 36 N., R. 29 E., Apache County, Arizona, lease 14-20-0603-8812.
3. No. 1 Navajo "B", SE/4NW/4 sec. 5, T. 35 N., R. 30 E., Apache County, Arizona, lease 14-20-0603-8889.

These wells have been approved for plugging for over a year. If the wells have been plugged, you are required to submit your subsequent report of abandonment. If the wells have not been plugged, you are required to submit your plans of when these wells are to be plugged. Your reply must be filed on a Sundry Notice (Form 3160-5, six copies each).

Failure to submit the above within 15 days of receipt of this letter may result in an assessment for noncompliance pursuant to 43 CFR 3163.3.

You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

Sincerely,

for Ron Fellows  
Area Manager



**KERR-MCGEE CORPORATION**

4221 WEST TWENTY-FIRST AVENUE  
P. O. BOX 250 • AMARILLO, TEXAS 79189

RECEIVED *CRK*

APR 13 1984

D & G CONS. COMM.

April 9, 1984

OIL AND GAS DIVISION

PHONE

806 359-0351

State of Arizona  
Oil and Gas Conservation Commission  
1645 West Jefferson  
Suite 420  
Phoenix, Arizona 85007  
Attn: Rudy Ybarra

RE: Application to Abandon and Plug  
Kerr-McGee Corporation's Navajo  
88-3. Located in the Dineh-Bi-  
Keyah Field, Apache County,  
Arizona.

Mr. Ybarra:

Enclosed is Form 9, "Application to Abandon and Plug," for the Navajo  
88-3.

The Navajo 88-3 was completed in April, 1968 and had an initial poten-  
tial of 150 BOPD, 0 BWPD and 225 MCF. Since its initial completion, the  
well has produced approximately 177,000 BO.

Statewide Rule 201 (B) of the ACC's rules and regulations, state that  
before any work is commenced to plug and abandon any well below the fresh  
water level, the operator shall, prior to the beginning of plugging opera-  
tions, give written notice of their intention to abandon such a well.

In order to comply with Statewide Rule 201 (B), Kerr-McGee is sub-  
mitting Form 9, "Application to Abandon and Plug," for the Navajo 88-3.

Should any additional information be required, please contact me at  
this office.

Sincerely,

KERR-MCGEE CORPORATION

*Aaron Reyna*

Aaron Reyna  
Engineering Assistant

*Joe D. Stein*

Joe D. Stein  
District Engineer  
Southwest District - N.A.

AR/sh  
Enclosure

Humble No. 607386  
KM No. P689-73

LEASE No. 40678  
CONTRACT NO. 14-20-0603-8812

FORM 5-5429  
AUG. 1961

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

ASSIGNMENT OF MINING LEASE

WHEREAS, the Secretary of the Interior or his authorized representative has heretofore approved  
oil and gas mining lease, dated October 12, 1964,  
entered into by and between Chairman, Navajo Tribal Council, lessor,  
and Humble Oil & Refining Company, lessee,  
covering the following-described lands in the Navajo Tribal Indian Lands  
in the State of Arizona, County of Apache, to-wit:  
All of Sections 25, 26, 35 and 36, Township 36 North, Range 29 East,  
G&SRM, Apache County, Arizona, containing 2560.00 acres, more or less.

Now, THEREFORE, for and in consideration of TEN DOLLARS (\$10.00) and other good  
and valuable consideration, the receipt of which is hereby acknowl-  
edged, the said Humble Oil & Refining Company  
the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys  
all of its right, title, and interest in and to said lease,

subject to the approval of the Secretary of the Interior or his authorized representative to Kerr-McGee  
Corporation, Kerr-McGee Building, Oklahoma City, Oklahoma 73102  
December 31, 1972 at 11:59 p. m., E. S. T., upon  
Said assignment to be effective from date of approval hereby by the Secretary  
of the Interior or his authorized representative.

IN WITNESS WHEREOF, the said assignor has hereunto set its hand and seal, this 22  
day of December, 1972.

ATTEST:  
*J. F. P...*  
Assistant Secretary

HUMBLE OIL & REFINING COMPANY  
By: *G. J. ...*  
Vice President





OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

January 21, 1974

Ms. Kay Waller  
Petro-Well Libraries Inc.  
150 Security Life Building  
1616 Glenarm Place  
Denver, Colorado 80202

Re: November - January Current File Material

Dear Kay:

Enclosed you will find the following current material for November through January:

Completion Report on File #443 - Kerr-McGee Navajo No. 3

Completion Report on File #608 - American Fuels "B"  
Logs - Sidewall Neutron Porosity, Compensated Formation Density,  
Borehole Compensated Sonic and Dual Induction-Laterolog

Completion Report on File #609 - American Fuels "M"  
Logs - Cement Bond and Compensated Neutron-Formation Density

Completion Report on File #610 - American Fuels "C"  
Logs - Gamma Ray Neutron and Induction Electrolog

Completion Report on File #612 - American Fuels "O"  
Logs - Compensated Formation Density, Dual Induction-Laterolog  
and Sidewall Neutron Porosity

Completion Report on File #613 - American Fuel "E"  
Logs - Induction Electrolog and Gamma Ray-Neutron

Completion Report on File #615 - American Fuels "AC"  
Logs - Induction-Electric and Compensated Density

Kay, aren't you glad you're not in Montana this winter?

Very truly yours,

*Rhema Brandt*  
Rhema Brandt

/rlb

Encs.

WA

 **KERR-MCGEE CORPORATION**  
626 AMARILLO PETROLEUM BUILDING  
P. O. BOX 250 • AMARILLO, TEXAS 79105

November 5, 1973

PHONE  
806 376-7256

Oil and Gas Conservation Commission  
State of Arizona  
4515 North Seventh Avenue  
Phoenix, Arizona 85013

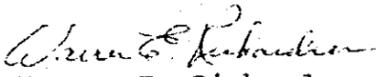
Attention: Mr. W. E. Allen  
Director

Dear Mr. Allen:

In regards to your letter of September 18, 1973, requesting reserve information for the Dineh-bi-Keyah Field and Pinta Dome Field, please be advised that I have referred your letter to our Oklahoma City office and have determined that due to company policy, we are unable to furnish the information at this time.

Yours truly,

KERR-MCGEE CORPORATION

  
Warren E. Richardson  
District Manager  
Southwestern District

WER/mm

RECEIVED

NOV 10 1973

O & G CON. COMM.

443



October 29, 1973

PHONE  
806 376-7256

Oil and Gas Conservation Department  
State of Arizona  
4515 North Seventh Avenue  
Phoenix, Arizona 85013

Gentlemen:

Enclosed are two (2) completed copies each of your Form No. 4 and Form No. 25 for the Kerr-McGee Corporation Navajo Tract 88 Well Number 3 in the Dineh-bi-Keyah Field, Apache County, Arizona. These forms cover the reperforating and fracture treatment of this well.

The reperforating and fracture treatment of this well were completed in the usual manner for a well in this field but the results have been nil. The bottom hole equipment has been checked and proven in working order, but to date we have not been able to pump one single barrel of oil from the well since the workover was completed. Periodic pumping of the well will be continued. If positive results are obtained, you will be notified.

Sincerely,

KERR-McGEE CORPORATION

C. J. Breeden  
District Production  
Superintendent

CJB/mm

Enclosures

RECEIVED

OCT 31 1973

O & G CONS. COMM.



**KERR-McGEE CORPORATION**

626 AMARILLO PETROLEUM BUILDING  
P. O. BOX 250 • AMARILLO, TEXAS 79105

PHONE  
806 376-7256

September 25, 1973

Oil and Gas Conservation Department  
State of Arizona  
4515 North Seventh Avenue  
Phoenix, Arizona 85013

Gentlemen:

Enclosed are two (2) completed copies of your Form 25 for the Kerr-McGee Corporation Navajo Tract Well Number 3 in the Dineh-bi-Keyah Field, Apache County, Arizona.

The original perforations in this well were from 3,725' to 3,770' with one (1) shot per five feet (5'). Later it was perforated from 3,710' to 3,780' with one (1) hole per foot, Kerr-McGee proposes to perforate the interval from 3,695' to 3,775' with two (2) holes per foot and fracture with 80,000 gallons of lease oil and 80,000# of 10/20 sand with a scale preventive in the treatment.

Quick approval will be appreciated as there is a pulling unit in this field now and we would like to do the above work with this pulling unit. A collect call to the undersigned or Mr. Warren Richardson at 806/376-7256 for approval of this job will be appreciated.

Sincerely yours,

KERR-McGEE CORPORATION

*C. J. Breeden*

C. J. Breeden  
District Production Superintendent

CJB/mm

Enclosures

RECEIVED

SEP 26 1973

O & G CONS. COMM.



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. Warren E. Richardson  
Kerr-McGee Corporation  
P. O. Box 250  
Amarillo, Texas 79105

Dear Mr. Richardson:

Will you please supply this Commission with any information that you might have regarding the recoverable reserves in the Dineh-Bi-Keyah Field and also in the Pinta Dome Field?

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



B. G. TAYLOR, VICE PRESIDENT  
OIL AND GAS PRODUCTION DIVISION

February 23, 1973

Arizona Oil & Gas Conservation  
Commission  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Attention Mr. John Bannister

As advised in our letter of January 2, 1973, we are enclosing for your file one xerox copy each of approved Assignment of Oil and Gas leases on Contract Nos. 14-20-0603-8812 and 14-20-0603-8879. The Bureau of Indian Affairs furnished us a carbon copy of each of these Assignments retaining the originals for their files.

*B. G. Taylor*

B. G. Taylor

BGT/bs

Enclosures

RECEIVED

MAR 02 1973

O & G CONS. COMM.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS  
Navajo Area Office  
Window Rock, Arizona 86515

IN REPLY REFER TO:  
ARPM/Minerals

February 20, 1973

Kerr-McGee Corporation  
Kerr-McGee Building  
Oklahoma City, Oklahoma 73102

Attention: B. G. Taylor

Dear Mr. Taylor:

Enclosed are your copies of Assignment of Oil and Gas  
leases on Contract Nos. 14-20-0603-8812 and 14-20-0603-  
8879 which are approved effective February 15, 1973.

We have retained the original copies for our files.

Sincerely yours,

*Thomas J. French*  
Realty Officer

Enclosures

RECEIVED

MAR 0 8 1973

O & G CONS. COMM.



OFFICE OF  
**Oil and Gas Conservation Commission**

STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

January 8, 1973

Mr. C. D. Williams  
District Manager  
Kerr-McGee Corporation  
P. O. Box 250  
Amarillo, Texas 79105

Re: Humble Oil & Refining Navajo Tract 88 and Tract 138  
Dineh-bi-Keyah Field, Apache County

Dear Mr. Williams:

In my telephone conversation with Mr. Breeden concerning the transferring of ownership on the above referenced leases from Humble to Kerr-McGee, we advised Mr. Breeden that we would need a copy of the instruments transferring ownership from Humble to Kerr-McGee or some other acceptable expression. Since talking with Mr. Breeden, we have notified him by letter dated January 2, 1973, that we would also need an affidavit from your bonding company accepting the responsibility of all the unplugged holes formerly belonging to Humble that your Company is now operating. We would appreciate this information as quickly as possible.

Attached are the approved copies of the Operator's Certificate of Compliance, Form 8.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb

Enc.

443



January 4, 1973

PHONE  
806 376-7256

Oil & Gas Conservation Commission  
State of Arizona  
4515 N. 7th Avenue  
Phoenix, Arizona 85013

Attention John Bannister,  
Executive Secretary

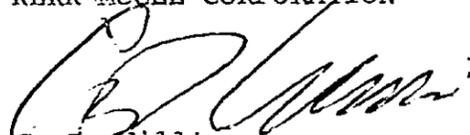
Dear Mr. Bannister:

As per the telephone conversation between Mr. Bill Allen with the Arizona Commission and Mr. Joe Breeden of Kerr-McGee's Amarillo office, Kerr-McGee Corporation took over operation of wells on Navajo Tract 138 and Navajo Tract 88, Dineh-bi-Keyah Field, Apache County, Arizona, from Humble Oil and Refining Company, effective January 1, 1973. Enclosed please find two copies of Form #8, Operator's Certificate of Compliance and Authorization to Transport Oil or Gas From Lease for Navajo Tract 138 and two copies for Navajo Tract 88.

Also enclosed for your files and records are two copies of U.S.G.S. Form 9-331, Sundry Notice and Reports on Wells, reporting the change in Operator for each of the wells on the two tracts. If additional information is needed at this time, please advise.

Yours very truly,

KERR-McGEE CORPORATION

  
C. D. Williams  
District Manager  
Southwestern District  
Production Department

mw

cc: Navajo Tribe  
Minerals Dept.

RECEIVED

JAN 08 1973

O & G CONS. COMM.

443



B. G. TAYLOR, VICE PRESIDENT  
OIL AND GAS PRODUCTION DIVISION

January 2, 1973

Arizona Oil & Gas Conservation  
Commission  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Attention Mr. John Bannister

This will confirm verbal advice by our Mr. C. J. Breeden to Mr. Bill Allen with the Arizona Oil & Gas Conservation Commission December 28, 1972, that Humble Oil & Refining Company has assigned to Kerr-McGee Corporation Lease #40678, Contract #14-20-0603-8812, covering Sections 25, 26, 35 and 36-T36N-R29E, Apache County, Arizona, and Lease #40915, Contract #14-20-0603-8876, covering Section 6-T35N-R30E, Apache County, Arizona, both being in the Navajo Tribal Indian Lands. Such Assignments effective 11:59 p.m., EST, December 31, 1972.

Fully executed copy of the Assignments will be furnished you when approved by the Bureau of Indian Affairs, Department of Interior. Necessary Arizona Oil & Gas Conservation Commission lease operating forms will be filed with you by our Amarillo, Texas office.

A handwritten signature in cursive script that reads 'B. G. Taylor'.

B. G. Taylor, Vice President  
Oil and Gas Production Division

BGT/bs

RECEIVED

JAN 03 1973

O & G CONS. COMM.

443

Arizona Oil & Gas  
Conservation Commission  
January 2, 1973  
Page -2-

cc: Kerr-McGee Pipeline Corporation  
Oklahoma City, Oklahoma

Mr. P. K. Hurlbut  
Navajo Tribe  
Window Rock, Arizona 86515

Humble Oil & Refining Company  
P. O. Box 1600  
Midland, Texas 79701

RECEIVED  
JAN 05 1973  
O & G CONS. COMM.



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA

4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

January 2, 1973

Mr. C. J. Breeden  
Kerr-McGee Corporation  
P. O. Box 250  
Amarillo, Texas 79105

Re: Humble Navajo #138-1  
SE/NW Sec 6-T35N-R30E  
Apache County  
Permit No. 388

Humble Navajo #88-1  
SE/SE Sec 25-T36N-R29E  
Apache County  
Permit No. 421

Humble Navajo #88-2  
SE/NE Sec 25-T36N-R29E  
Apache County  
Permit No. 431

Humble Navajo #88-3  
SE/NE Sec 36-T36N-R29E  
Apache County  
Permit No. 443

Dear Mr. Breeden:

Please have your bonding company issue a statement to this Commission that they are willing to accept the responsibility on the above referenced wells and any other holes that you may have acquired from Humble. This statement from the bonding company will need to name the wells and give the legal description. Your early attention to this matter will be appreciated.

Very truly yours,

  
W. E. Allen, Director  
Enforcement Section

WEA/r1b



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA

4515 NORTH 7TH AVE.

PHOENIX, ARIZONA 85013

PHONE: (602) 271-5161

January 25, 1972

Mr. J. Roy Dorrrough  
Humble Oil & Refining Co.  
Denver, Colorado 80201

Re: Humble #1 Navajo Tract #138      Humble #2, Navajo 88  
SE/NW Section 6-T35N-R30E      SE/NE Section 25-T36N-R29E  
Apache County      Apache County  
Our File #388      Our File #431

Humble #3-88 Navajo  
SE/NE Section 36-T36N-R29E  
Apache County  
Our File #443

Dear Mr. Dorrrough:

As of this date we have not received the Well Status Report and Gas Oil Ratio Test, Form 5, on the above referenced wells. This quarterly report is due January 20, 1972. Please arrange to forward these reports at your earliest convenience.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb

Enc.

November 25, 1970

Mr. J. Roy Dorrrough  
Humble Oil & Refining Company  
P. O. Box 120  
Denver, Colorado 80201

Re: Application to connect vacuum pump to Humble #3-88  
Navajo well located in the SE/4 NE/4 Section 3-T36N-  
R29E, Dineh bi Keyah Field, Apache County, Our File  
#443.

Dear Mr. Dorrrough:

Please refer to our letter dated September 14, 1970, on  
the above subject, a copy of which is enclosed.

On September 17, 1970, in response to a call from Mr.  
Marvin Smith you were granted verbal permission to test this  
well for ninety (90) days from date of installation which was  
August 26, 1970.

If you intend to make this a permanent installation on  
this well, will you comply with the request as stated in the  
attached letter. In any case, advise this Commission immediately  
of your intentions.

Very truly yours,

W. E. Allen  
Director, Enforcement Section

WEA:jd  
Enc.



# HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT  
DENVER DISTRICT  
J. R. BORROUGH  
SUPERINTENDENT

October 8, 1970

POST OFFICE BOX 120  
TELEPHONE 534-1251

Arizona Oil & Gas Conservation Commission  
4515 North 7th Avenue  
Phoenix, Arizona

TWS COPY FOR

United States Geological Survey  
Petroleum Club Plaza Building  
Farmington, New Mexico

Gentlemen:

Re: Oil Spill  
September 15, 1970  
Humble Oil & Refining Company  
Flow Line - Well No. 3 Near Tank Battery  
Navajo Tract 88  
SE $\frac{1}{4}$  Section 25-T36N-R29E  
Serial 14-20-0603-8812  
State Permit No. 443  
Dineh bi Keyah Field  
Apache County, Arizona

Reference is hereby made to our initial letter report of September 21, 1970, following verbal reports to your respective offices concerning the subject spill.

This report is to clarify the location of the origin of spill as set forth above and advise that the spill was cleaned up in the following manner:

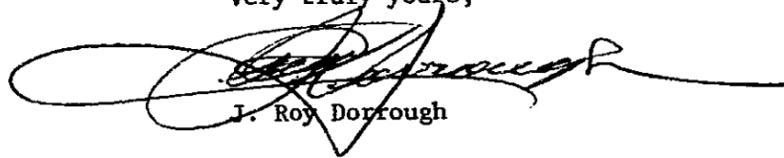
Fresh water was hauled and dumped down the narrow, steep ravine where the leak occurred to flush the oil from under rocks and from small pockets. This was done at frequent intervals along the ravine to a spot where an earthen dam was put across the channel of the ravine. Men with shovels worked up and down the area to bury small residual traces of oil that water did not wash down. Oil was picked up at the dam with a tank truck and disposed of. No burning was deemed necessary or advisable; and care was taken to keep vegetation on the steep slopes intact to avoid erosion.

Arizona Oil & Gas Conservation Commission  
United States Geological Survey  
Page 2  
October 8, 1970

We have inspected the area very thoroughly and believe that we have accomplished the proper cleanup. The earthen dam with a fence around the contained area will be left in place across the ravine and will be inspected frequently to see if any more oil accumulates. If no additional oil shows up in the next 30 days, we will remove the dam and fence and restore the terrain to its natural drainage.

In regard to the oil spill, as of October 1, 1970, we believe that the cleanup operations are completely finished and invite your inspection.

Very truly yours,



J. Roy Dorrrough

JRD:mg

cc: Mr. P. K. Hurlbut  
The Navajo Tribe  
Minerals Department  
P. O. Box 146  
Window Rock, Arizona

October 20, 1970

Mr. J. Roy Dorrrough  
Humble Oil & Refining Company  
P. O. Box 120  
Denver, Colorado 80201

Re: Humble #3-88 Navajo  
SE/4 NE/4 Section 36-T36N-R29E  
Apache County  
Our File #443

Dear Mr. Dorrrough:

On the afternoon of October 13, 1970 I meet with Mr. Harold Farris to inspect the area of the oil spill from the above well. The only evidence that there had ever been any oil spilled in this area was on a small pond created when Harold had the dam erected across the effected wash or stream. This evidence consisted of a very slight rainbow having a slightly muddy cast.

In the opinion of the writer, Mr. Farris has done a very commendable job of erasing any signs of oil spillage over the effected areas; and, in so far as this Commission is concerned, we are satisfied with the cleanup job accomplished by your company.

Very truly yours,

W. E. Allen  
Director, Enforcement Section

WEA:jd

cc: Mr. Harold Farris

P. S. Harold, I very much enjoyed renewing our acquaintanceship the other day and hope to be able to visit with you soon.

Next time I come up there I will try to make it earlier in order that you can at least leave your lease before dark.

Bill

September 23, 1970

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

Attention: Mr. J. Roy Dorrrough

Re: Humble #1 Navajo 88  
T36N, R29E, G&SRM  
Sec. 25: SE/4 SE/4  
Apache County  
Permit #421

Gentlemen:

This will acknowledge receipt of your letter of September 21 concerning the leak in the flow line from the Navajo Tract 88 battery in the Dineh bi Keyah Field, Arizona.

This Commission has been in telephone contact with both Mr. Farris and Mr. Dorrrough concerning clean up operations. The program as outlined by you meets with the requirements of this Commission. More specifically, this Commission authorizes you to burn off such isolated oil accumulations as you are unable to pick up with your tank truck.

Please be advised that we have discussed this problem with the State water and air pollution organizations and you need take no further action concerning these organizations.

This Commission will expect a full and detailed report at your earliest convenience upon completion of your clean up work as to what specific actions have been taken.

Should you have any questions or any problems, please advise us at once.

Yours truly,

John Bannister  
Executive Secretary

JB/vb



# HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT  
DENVER DISTRICT  
J. R. DORROUGH  
SUPERINTENDENT

September 21, 1970

POST OFFICE BOX 120  
TELEPHONE 534-1251

Arizona Oil & Gas Conservation Commission  
4515 North 7th Avenue  
Phoenix, Arizona

United States Geological Survey  
Petroleum Club Plaza Building  
Farmington, New Mexico

Gentlemen:

At 1:00 P.M. on September 15, 1970, Mr. George Pollock, Humble's maintenance foreman, was advised by Mr. Wally Howard, Kerr-McGee gauger, that Humble had a flow line leak at the Navajo Tract 88 battery in the Dineh bi Keyah Field, Arizona.

Mr. Pollock went to the lease and found oil and water flowing down a steep ravine approximately four miles from the tank battery. At a point one-half mile on down the ravine a dirt dam was quickly put across a stream, which is approximately 2' wide at that point, to catch all fluids. A tank truck was called to pick up what oil had gathered. (Mr. Howard had shut down the wells.)

The situation was looked into on September 16, 1970. A leak in a 3" plastic covered flow line was found near the tank battery. There was a 3" split in a place where something had dented the pipe. This section of pipe was cut out and a new section of 3" plastic covered pipe was installed. All of the pipe was welded. The leak was estimated to have happened between when the Humble pumper, Mr. Donald Hale, visited the battery at 11:00 A.M. September 14, 1970, and when Mr. Howard, Kerr-McGee's gauger, discovered the leak at 11:00 A.M. September 15, 1970.

Humble has placed a temporary dam across the ravine to catch all oil and water that is being carried by a small intermittent flowing stream of water, and all of the fluid is being picked up. Fresh water is being added at the point of spill to aid in flushing residual oil to the dammed area. A cleanup gang is working from the spill down the ravine. The intermittent flowing stream varies in width from 6" to 2' and disappears into the Standing Redrock Creek which is dry at this time.



Arizona Oil & Gas Conservation Commission  
United States Geological Survey  
Page 2  
September 21, 1970

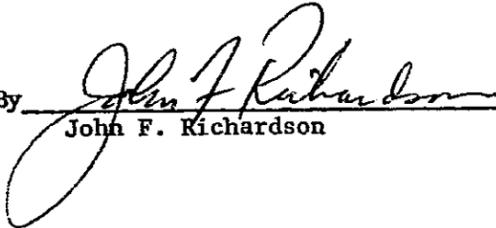
To the best of our knowledge, the spill has not contaminated any water supply for human or animal use. We lost approximately 90 barrels of oil and 46 barrels of water according to our latest well test.

When the cleanup is completed, we will advise.

Very truly yours,

J. ROY DORROUGH

By

  
John F. Richardson

JRD(JFR)mg  
cc: Mr. P. K. Hurlbut  
The Navajo Tribe  
Minerals Department  
P. O. Box 146  
Window Rock, Arizona

September 14, 1970

Mr. John F. Richardson  
Humble Oil & Refining Company  
P. O. Box 120  
Denver, Colorado 80201

Re: Application to connect vacuum pump to Humble 3-88 Navajo well located in the SE/4 NE/4 Section 3, T36 north, R29 east, Dineh bi Keyah Field, Apache County, Our File #443.

Dear Mr. Richardson:

Please refer to Mr. John Bannister's letter dated June 11, 1970, granting permission to install a vacuum pump on the above well. Permission was granted to operate this pump for a ninety (90) day experimental period. Please advise this Commission of the results of this experiment; and, if you plan on making this a permanent installation, complete Form 25 detailing the full particulars and submitting a copy of same to this Commission and to all operators within the Dineh bi Keyah Field. As you well know, the offset operators in this field will have ten days within receipt of said notice in which to advise the Commission of any opposition they may have concerning the permanent installation of the vacuum pump.

Should any operators indicate an opposition, the Commission will call a hearing in order to make an official determination concerning the permanent installation. Should no opposition be expressed in the designated ten-day period, then the Commission may, at its own discretion, grant said application.

Very truly yours,

W. E. Allen  
Director, Enforcement Section

WEA:jd

June 11, 1970

Mr. John F. Richardson  
Humble Oil & Refining Company  
P.O. Box 120  
Denver, Colorado 80201

Re: Application to connect vacuum pump to Humble 3-88 Navajo well located in the SE/4 NE/4 Section 3, Township 36 North, Range 29 East, Dineh bi Keyah Field, Apache County.

Dear Mr. Richardson:

Humble Oil and Refining Company has made application, an approved copy of which is attached hereto, to connect a vacuum pump on a trial basis to see the effect on productivity that would result from the partial vacuum to be created.

The Oil and Gas Conservation Commission grants its approval subject to the following:

- A. The vacuum pump, as described, may be installed and may be operated for a period not to exceed ninety days. All information generated during this test is to be supplied to the Oil and Gas Conservation Commission and to other working owners in the Dineh bi Keyah Field.
- B. At the end of this ninety day period, should Humble Oil and Refining Company desire to install the vacuum pump on a permanent basis, application to do so will be submitted to this Commission on Form 25, detailing full particulars, and a copy thereof will be furnished the remaining operators within the Dineh bi Keyah Field. Other operators in the field will have teandays within receipt of said notice in which to advise this Commission of any opposition that they may have concerning the permanent installation of the vacuum pump.

Should any operator indicate his opposition, the Commission will call a hearing in order that it may make an official determination as to the permanent installation. Should no

Mr. John F. Richardson  
Humble Oil & Refining Co.  
6-11-70  
Page 2

opposition be expressed within the described ten day period, then the Commission may, at its discretion, grant said application.

The Commission wishes to make it clear that, in the event Humble Oil and Refining Company seeks to install the vacuum pump as a permanent installation, this letter does not obligate the Commission to grant this permission.

Should you have any questions, please advise.

Sincerely,

John Bannister  
Executive Secretary

JB/vb  
Enc.

cc - Mr. Roy Dorrrough  
Mr. Fred Beale  
Kerr-McGee Corporation



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
ROOM 202  
1624 WEST ADAMS  
Phoenix, Arizona 85007  
PHONE: 271-5161

July 18, 1969

Mr. R. Brand  
Section Head-Oil & Gas Accounting  
Humble Oil & Refining Company  
2000 Classen Center - North Building  
Oklahoma City, Oklahoma 73106

Re: Monthly Producer's Report

Dear Mr. Brand:

Please review the attached report and submit a corrected report if such be needed. We are particularly interested in the relationship between gas produced and the disposition of the gas; specifically, how much was flared and how much was used on the lease. A prompt reply will be a favor.

Yours truly,

James A. Lambert  
Administrative Assistant

JAL:jf

Enc.

July 23, 1969

Gentlemen:

The amount shown as used and flared is a lease total; for Navajo Tract 88. All future reports will designate this as a lease total.

George P. Harber, Jr.  
Oil & Gas Accounting Section



431  
443

MONTHLY PRODUCERS REPORT

Field DIRCH 14 NORTH  
 County Apache

Field Office Address

State Arizona, U.S.A.

Month June, 1969

Day 19

Produced by Oil & Petroleum Company

2000 Standard Oil Building, Dallas, Texas

Oil & Gas Division, Department of Energy - 1969

Address

Well No.	State Permit No.	Code	Actual Oil Produced	Water Produced	Gas Produced MCF	Days Produced	Disposition of Gas - MCF		Disposition of Oil - Bbls.			
							Sold	Other	Oil on Hand Beg. of Month	Bbls. to Transporter	Other	Oil on Hand End of Month
17-20-0603-8812	131	P C	10996	2032	1864	28	—	0	10996	101	0	
17-20-0603-8812	143	P O	1378	104	2205	21	* 2833 1371	0	1378	101	0	
17-20-0603-8976	388	P O	9758	302	2849	30	1871 116	0	9758	101	0	
								* Lease Total				
								4074				
								2853				
								1371				
								1871				
								116				
								2853				
								1371				
								1871				
								116				



STATUS CODE  
 F - Flowing  
 P - Producing  
 G - Gas Lift  
 S - Shut In  
 T - Temp. Abandoned  
 I - Injection

"OTHER" GAS DISPOSITION CODE  
 X - Used Off Lease  
 D - Used For Drilling  
 C - Gas Lift  
 L - Lost (MCF Estimated)  
 E - Expansion Attached  
 R - Reservoir or Pressure Maintenance  
 U - Used On Lease  
 V - Ventd

"OTHER" OIL DISPOSITION CODE  
 C - Circulating Oil  
 L - Lost  
 S - Sedimentation (355W)  
 E - Expansion Attached

PURCHASER CODE  
 Code No. Name  
 101 Kern-McGee Pipeline  
 102 Kern-McGee Pipeline  
 103 Petroleum

GAS  
 Code No. Name  
 101 Arizona Holium Corp.  
 102 El Paso Nat. Gas  
 103 Kern-McGee Corp.

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Monthly Producers Report  
 Form No. 18

I hereby certify that the information given is true and complete to the best of my knowledge.  
 Signature: [Signature]  
 Date: 7/6/69

OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
ROOM 202  
1624 WEST ADAMS  
Phoenix, Arizona 85007  
PHONE: 271-5161

X-Lambert  
X-Chrono

April 10, 1969

Mr. J. Roy Dorrrough  
Humble Oil & Refining Company  
P. O. Box 120  
Denver, Colorado 80201

Re: Humble #1 Navajo Tract 138  
Humble #2 Navajo 88  
Humble #3 Navajo 88  
Humble Navajo #1-E  
Humble Navajo #1

Our Permit #388 X  
Our Permit #431 X  
Our Permit #443 X  
Our Permit #58 X  
Our Permit #26 X

Recd 4/14/69

Dear Mr. Dorrrough:

This is in reference to our reminder letters dated March 3 and February 28. Please furnish this Commission a Gas-Oil Ratio Test on each of the captioned wells.

Yours truly,

James A. Lambert  
Administrative Assistant

30

443

OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
ROOM 202  
1624 WEST ADAMS  
Phoenix, Arizona 85007  
PHONE: 271-5161

X-Lambert  
X-Chrono

April 10, 1969

Mr. J. Roy Dorrrough  
Humble Oil & Refining Company  
P. O. Box 120  
Denver, Colorado 80201

Re: Humble #1 Navajo Tract 138  
Humble #2 Navajo 88  
Humble #2 Navajo 86  
Humble Navajo #1-E  
Humble Navajo #1

Our Permit #388 X  
Our Permit #442 X  
Our Permit #443 X  
Our Permit #508 X  
Our Permit #26 X

Recd 4/14/69

Dear Mr. Dorrrough:

This is in reference to our reminder letters dated March 3 and February 28. Please furnish this Commission a Gas-Oil Ratio Test on each of the captioned wells.

Yours truly,

James A. Lambert  
Administrative Assistant

JH

443



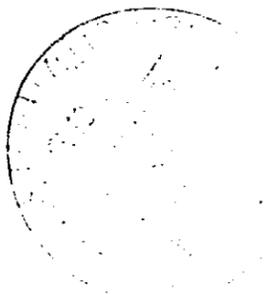
# HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

DENVER DISTRICT

March 24, 1969

POST OFFICE BOX 129



Mr. John Bannister  
Arizona Oil & Gas Conservation Commission  
1624 West Adams - Suite 202  
Phoenix, Arizona 85007

Dear Mr. Bannister:

Attached please find Bureau of Mines "Report of Analysis" of gas samples on all wells drilled by Humble Oil & Refining Company in the Dineh bi Keyah Area, Apache County, Arizona.

Well Name & No.	No. of Reports
Navajo Tract 37 #1-401	1
Navajo Tract 33 #1-421	3
Navajo Tract 38 #2-431	4
Navajo Tract 38 #3-443	1
Navajo Tract 140 #1-393	3
Navajo Tract 151 #1-454	3

These reports should complete all records on the well in this area. Analysis were not made on wells not listed above.

Very truly yours,

*J. Roy Borrough*  
J. Roy Borrough  
Dist. Supt.

Attach.

443

X-Lambert Log  
X-Chromo Log

March 3, 1969

Mr. J. Roy Dorrrough  
Humble Oil & Refining Company  
P. O. Box 120  
Denver, Colorado 80201

Re: Humble #1 Navajo Tract 138 X-388  
Humble #2 Navajo 88 X-431  
Humble #3-85 Navajo X-443

Dear Mr. Dorrrough:

We remind you that Rule 301a, Paragraph 2, of our Rules and Regulations directs the operator to make a semi-annual Gas-Oil Ratio test of each producing oil well. The next test should be taken in March, 1969, and reported to this office by April 10, 1969.

Enclosed are forms for your convenience.

Yours truly,

James A. Lambert  
Administrative Assistant

jf

Enc.

443



# HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

DENVER DISTRICT

POST OFFICE BOX 120

June 5, 1968

Mr. John Bannister  
Executive Secretary  
Oil and Gas Conservation Commission  
State of Arizona  
1024 West Adams  
Phoenix, Arizona 85007

Re: Humble Oil & Refining Company  
#3-88 Navajo, SE NE 36-36N-29E  
Permit 443  
Apache County, Arizona

Dear Mr. Bannister:

We have received your letter of March 21, 1968, regarding core analysis and samples on the above well.

The samples on this well were delivered to the Four Corners Sample Cut in Farmington, New Mexico, in January 1968. I have just talked with these people and they inform me that they are swamped by a backlog of work and have not yet got around to processing samples on the #3-88. As soon as this has been done, the samples will be forwarded in accordance with your rules and regulations. No cores were cut in this well.

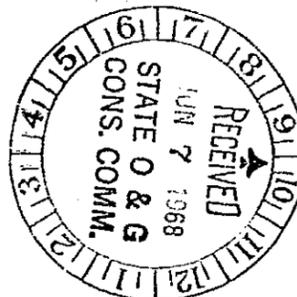
Very truly yours,

HUMBLE OIL & REFINING COMPANY

By Geo. A. Ashland, Jr.  
Geo. A. Ashland, Jr.

cc: Mr. J. Roy Dorrrough

443



April 30, 1968

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

Attention: Mr. J. Roy Dorrough, District Superintendent

Re: Humble #3-88 Navajo  
SE NE 36-36N-29E, Apache County  
Permit 443

Gentlemen:

As you know, this Commission is to be kept currently informed as to the progress of operations on any well. Production reports indicate that this well was produced in February and in March, 1968. However, we have no operations report since February.

You have previously been requested to file the Well Completion Report, Potential Test, GOR, core analysis, and samples. To date this data has not been received.

Your earliest cooperation is requested to bring this well operation into compliance with this Commission's rules and regulations.

Very truly yours,

John Bannister  
Executive Secretary  
mj

OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
ROOM 202  
1824 WEST ADAMS  
Phoenix, Arizona 85007  
PHONE: 271-5161

March 25, 1968

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

Attention: Mr. J. Roy Dorrough, District Superintendent

Gentlemen:

According to our records, the data indicated below has not been submitted as called for by our rules and regulations. You are urged to submit this data at once to bring this operation into compliance with the rules and regulations.'

Well

Humble #3-88 Navajo  
SE NE 36-36N-29E Apache County  
Permit 443

Data

Well completion report, logs,  
samples, Potential Test, GOR  
Test, core analysis

(Order 24, CAsE 26, direct that gas-oil ratio tests shall be conducted on all wells during March, June, September, and December and results filed by 10th day of the following month. The purpose of this is just a reminder.)

Very truly yours,

John Bannister  
Executive Secretary  
mr

HUMBLE OIL & REFINING COMPANY

CENTRAL REGION

P. O. Box 120  
Denver, Colorado 80201

Re: Navajo Tract 88 #3  
SE NE Sec. 36-36N-29E  
Apache County, Arizona

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

Attn: Mr. John Bannister

Gentlemen:

At the time the Intention to Drill was submitted a contractor had not been selected. This is to advise that the drilling contractor is as follows:

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

If any additional information is needed please advise.

Very truly yours,

*M. O. Smith*





# HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

DENVER DISTRICT

November 28, 1967

POST OFFICE BOX 120

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

Attn: Mr. John Bannister

Gentlemen:

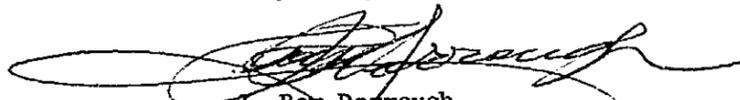
By this letter we request the Oil and Gas Conservation Commission,  
State of Arizona, to keep all information on the following well confidential:

Navajo Tract 88 No. 3  
SE NE Section 36-36N-29E  
Apache County, Arizona

All reports on this well will be clearly marked "CONFIDENTIAL."  
Your cooperation will be greatly appreciated.

If any additional information is needed, please notify us and  
it will be furnished.

Very truly yours,



J. Roy Dorrough  
District Superintendent

cc: United States Geological Survey  
Navajo Tribe - Mr. Henry F. Pohlmann



# HUMBLE OIL & REFINING COMPANY

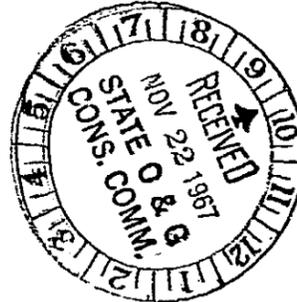
DENVER, COLORADO 80201

DENVER DISTRICT

November 21, 1967

POST OFFICE BOX 120

Oil and Gas Conservation Commission  
State of Arizona  
Room 202, 1624 West Adams  
Phoenix, Arizona 85007



Attn: Mr. John Bannister

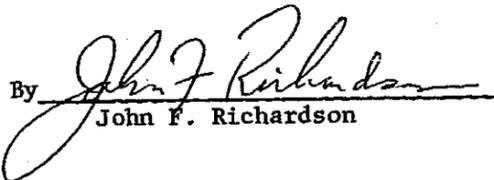
Gentlemen:

Re: Humble #3-88 Navajo  
SE NE 36-36N-29E  
Apache County, Arizona

Attached is our Check No. 5991 in the amount of \$25 to cover the filing fee for the captioned well which we inadvertently failed to enclose with our application for permit to drill which was forwarded to you several days ago. Thank you for calling this matter to our attention.

Very truly yours,

J. ROY DORROUGH

By   
John F. Richardson

JRD(JFR)mg  
Attachment

443

November 20, 1967

Humble Oil and Refining Company  
P.O. Box 120  
Denver, Colorado 80201

Attention: Mr. J. Roy Dorrough

Re: Humble #3-88 Navajo  
SE NE 36-36N-29E, Apache County, Arizona

Gentlemen:

Application for a permit to drill captioned location was received today. However, no check to cover the filing fee was enclosed. This application will be held until your check is received or until other instructions are received from you.

Sincerely,

John Bannister  
Executive Secretary  
MB