

Release Date 8-11-67 77

CONFIDENTIAL

P-W

Kerr-McGee #16 Navajo  
SEW 30-36N-30E Apache County 419

COUNTY Apache AREA 10 mi SW Red Rock LEASE NO. Nav 14-20-0603-8823

WELL NAME Mtn. States Petroleum (5-1-94)  
Kerr-McGee #16 Navajo

LOCATION SE NW SEC 30 TWP 36N RANGE 30E FOOTAGE 1970 FNL - 1890 FWL  
ELEV 7537 GR KB SPUD DATE 7-29-67 STATUS OK TOTAL DEPTH 3221  
COMP. DATE 8-20-67 PB 3212

CONTRACTOR

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY
9 5/8	265	300 Sks	Na	0-3163
7	3163	150 Sks		3163-3221

PRODUCTIVE RESERVOIR \_\_\_\_\_  
INITIAL PRODUCTION 217 BOPD (on 24 hr pmp (Reda) Test) plus 13 MCF & 14 BBLS water.

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Chinle	Surface		x	
Permian	796'			
Cutler (permian)	1500'			
Pennsylvania	2630'			
Tertiary	3150'			
Hermosa	3217'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
Comp. Formation Density	3163-3212	3150-3217	SAMPLE DESCRP. Farm Cut
IE Induction			SAMPLE NO. 1420*
			CORE ANALYSIS _____
			DSTs _____
			#2082 Tucson*

REMARKS \_\_\_\_\_  
APP. TO PLUG \_\_\_\_\_  
PLUGGING REP. \_\_\_\_\_  
COMP. REPORT x

WATER WELL ACCEPTED BY \_\_\_\_\_

BOND CO. Plymouth Ins Co BIA BOND BOND NO. 188-98-10-528  
DATE \_\_\_\_\_  
BOND AMT. \$ 25,000 CANCELLED 12/1/97 ORGANIZATION REPORT 7-14-60  
FILING RECEIPT 9509 LOC. PLAT x WELL BOOK x PLAT BOOK x  
API NO. 02-001-20043 DATE ISSUED 6-19-67 DEDICATION NW/4

PERMIT NUMBER 419

**CONFIDENTIAL**

(over Release Date 8-11-67)

## 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 **KERR-MCGEE CORPORATION** Address **215 Petroleum Center Bldg.-Farmington, New Mexico**

Federal, State or Indian Lease Number or name of lessor if fee lease **14-20-0603-8823** **NAVAJO** Well Number **16** Field & Reservoir **Dineh-bi-Keyah, Lower Hermosa**

Location **1970' FNL & 1890' FWL (SE NW)** County **Apache**

Sec. TWP-Range or Block & Survey **Sec. 30 - T36N - R30E G&SRM**

Date spudded **7-29-67** Date total depth reached **8-10-67** Date completed, ready to produce **8-20-67** Elevation (DE, RKB, RT or Gr.) **7558' GR grade** Elevation of casing hd. flange **feet**

Total depth **3221'** P.B.T.D. **3212'** 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 **3150'-3217' Hermosa Intrusive** Rotary tools used (interval) **0-3163** Cable tools used (interval) **3163'-3221'**

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

Type of electrical or other logs run (check logs filed with the commission) **Induction-Electric, Formation Density** Date filed **Attached**

CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)						
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Surface	13-3/4"	9-5/8" OD	32.30	265'	300	None
Production	8-3/4"	7" OD	23#	3163'	150	None

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
3-1/2 in.	3028 ft.	None ft.	None 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
Open Hole		3163'-3212'	63,504 gal. oil & 30,000# sand.	3163'-3212'

INITIAL PRODUCTION

Date of first production **8-17-67** Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:) **Pumping - Reda Pump.**

Date of test **9-1-67** Hrs. tested **24** Choke size **None** Oil prod. during test **217** bbls. Gas prod. during test **13** MCF Water prod. during test **14** bbls. Oil gravity **42.0° API (Corr)**

Tubing pressure **85** Casing pressure **0** Cal'ed rate of Production per 24 hrs. **217** bbls. Gas **13** MCF Water **14** bbls. Gas-oil ratio **60/1**

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

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the **Production 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.

**9-7-67**  
Date

*[Signature]*  
Signature

Permit No. **419**

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

Form No. 4

**DETAIL OF FORMATIONS PENETRATED**

Formation	Top	Bottom	Description*
CHINLE (TRIASSIC)	Surface	796'	RED SHALE WITH THIN STRINGERS OF SANDSTONE.
COCONINO (PERMIAN)	796'	1500'	MASSIVE SANDSTONE WITH SHALY STRINGERS IN LOWER 250'.
OUTLER (PERMIAN)	1500'	2630'	RED SHALE WITH THIN BEDS OF RED LIMESTONE & SANDSTONE.
HERMOSA (PENN)	2630'	3150'	LIMESTONE PREDOMINATELY DENSE & TIGHT, WITH RED & GRAY SHALE, SOME THIN SANDSTONE STRINGERS.
INTRUSIVE SILL (TERTIARY)	3150'	3217'	SYENITE.
HERMOSA (PENN)	3217'	3221'	LIMESTONE, GRAY, FINE CRYSTALLINE, DENSE
			TOTAL DEPTH 3221'.

\* 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.

**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>14-20-0603-8823</b>	Field <b>Dineh-BI-Keyah</b>	Reservoir <b>Hemosa</b>
Survey or Sec-Twp-Rge <b>Sec 29, 30, 31, 32 T-36N-R30E</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) <b>Giant Industries</b>		
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% of the</b>	<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. Rainy

Permit No. 419

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. 3

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  
 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)  
 1970' FNL & 1890' FWL  
 Sec. 30, T36N, R30E

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

5. Lease Designation and Serial No.  
 14-20-0603-8823

6. If Indian, Allottee or Tribe Name  
 Navajo

7. If Unit or CA, Agreement Designation  
 P/N 419

8. Well Name and No.  
 Navajo #16

9. API Well No.  
 02-001-20043

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 checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Shut-in</u>
	<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.)

The long-term shut-in for the subject well expired 12-31-92. Kerr-McGee requests a one year extension to 12-31-93.

**APPROVED**

By SLR  
Date 2/17/93



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

Signed D. Bruner 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  
TO TRANSPORT OIL OR GAS FROM LEASE**

Federal, State or Indian Lease Number, or lessor's name if fee lease <b>14-20-0603-8823 Navajo</b>		Field <b>Dineh-Bi-Keyah</b>	Voir <b>Hermosa</b>
Survey or Sec-Twp-Rge <b>Several - 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

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.

14-20-0603-8823

6. If Indian, Allottee or Tribe Name

Navajo

7. If Unit or CA, Agreement Designation

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)

1970' FNL & 1890' FWL  
Sec. 30, T36N, R30E

8. Well Name and No.

Navajo #16 *file 419*

9. API Well No.

02-001-20043

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 type="checkbox"/> Change of Plans
<input checked="" 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>Mechanical Integrity Test</u>	<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

*D. Burns*

Title

Regulatory Specialist

Date

7-15-92

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

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NAVAJO 16  
Dineh-Bi-Keyah Field

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MECHANICAL INTEGRITY TEST

5/26-  
5/27/92

MI & RU on well. Bled down pressure off WH. ND WH & NU BOP w/closing unit. PU & TIH w/7" Baker Model-EA retrievomatic compression pkr, 99 jts 2-7/8" 6.5# 8rd EUE J-55 tbg & set pkr @ 3113' RKB. Set pkr 50' above top of open hole. Set pkr & close in BOP. MI 140 BFW treated w/Tretolite XC-370 Bactericide chemical. Unloaded wtr in steel tank. Ran 2" steel line from rig pump to 2" 2000 WKM valve on csg. Pump & loaded 7" csg, pressure tstd 7" csg to 600 psig. Pressure held for 30 mins. Bled off pressure to steel tank, unset 7" Model-EA Baker pkr, TOOH w/99 jts 2-7/8" tbg, 7" Baker pkr. LD all equipment on float to move to next location. RD & release rig to next location.

Open hole completion: 3163'-3212' RKB.  
TD @ 3212' RKB

Chart recording attached.

NOTE: Notify Mark Keely w/BLM; Arlene Luther w/Navajo Tribal EPA; Steve Rauzi w/Arizona Oil & Gas Commission. Above agencies were not present to witness pressure testing.

SUPERVISOR: Ray Benally



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

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

5. Lease Designation and Serial No.

14-20-0603-8823

6. If Indian, Allottee or Tribe Name

Navajo

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Navajo #16

9. API Well No.

02-001-20043

10. Field and Pool, or Exploratory Area

Dineh-Bi-Keyah

11. County or Parish, State

Apache Co., AZ

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)

1970' FNL & 1890' FWL  
Sec. 30, T36N, R30E

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Mechanical Integrity Test</u>
	<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.)\*

The long term shut in for the subject well expired December 31, 1991. Kerr-McGee would like to extend the shut in for one additional year to December 31, 1992.

The casing integrity will be tested to allow the well to remain in a shut in status. Kerr-McGee requests that the test be deferred until late spring or early summer due to the current adverse weather conditions. The test will be conducted prior to July 1, 1992.

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

Signed D. Bunas G. Bunas

Title Analyst II

Date 2-28-92

(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

PIN 419

GAS-OIL RATIO TEST REPORTS

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

Form 9-331  
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN PLICATE  
(Other instructions on reverse side)

Form approved  
Budget Bureau No. 42-R1424.

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

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
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  
1,970' FNL and 1,890' FWL of Sec. 30-T36N-R30E,  
G & SRM Survey

14. PERMIT NO. State No. 419

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
7,558' GR

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-0603-8823

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
NAVAJO

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
NAVAJO

9. WELL NO.  
NO. 16

10. FIELD AND POOL, OR WILDCAT  
DINEH-BI-KEYAH

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 30, T36N, R30E  
G & SRM Survey

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"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input checked="" 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"/>	(Other) <input type="checkbox"/>
(Other) <input type="checkbox"/>	CLEAN OUT <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.)\*

Acidize well with 1,000 gals. Resi-sol and 100 gal. crude down tubing annulus. Pump spent acid out. Pull rods, pump, and tubing. Clean out to 3,212. Fracture treat with 500 gals. scale preventative, 97,300 gals. crude, 8,250# 100 mesh sand, 81,000# 10-20 sand @ 120 BPM. Clean out to 3,212. Run tubing, pump, and rods and place well on production.

Est. Date: December 1, 1977

RECEIVED

NOV 14 1977

O & G CONS. COMM.

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

SIGNED Loy D. McRae TITLE District Manager-Engineering DATE 11-11-77

(This space for Federal or State office use)

APPROVED BY W. B. Allen TITLE \_\_\_\_\_ DATE 11-18-77

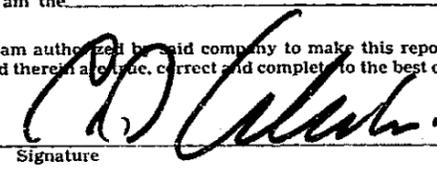
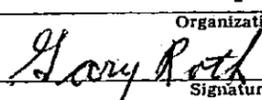
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

ARIZONA SECONDARY RECOVERY PROGRAM PROPOSED

The Arizona Oil and Gas Conservation Commission will hold a hearing September 19 to consider an application by Kerr-McGee Corp for a secondary recovery program using injection of salt water into the Hermosa formation in Dineh Bi Keyah field, Apache County. The location for the project is in 29 through 33-36n-30e, 5 and 6-35n-30e, and 25 and 36-36n-29e. The field has produced more than 13.7 million bbls of oil, 1.8 billion cu ft of gas and 2.4 million bbls of water. The hearing begins at 10:00 am at the Oil and Gas Conservation Commission office, 8686 North Central Avenue, Suite 106, Phoenix.

419

POTENTIAL TEST AND REQUEST FOR ALLOWABLE - OIL WELLS				
DESIGNATE TYPE OF COMPLETION:				
New Well <input checked="" type="checkbox"/>	Work-over <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug Back <input type="checkbox"/>	Same Reservoir <input type="checkbox"/> Different Reservoir <input type="checkbox"/>
Other Reason For Filing:				
<b>Kerr-McGee Corporation</b>				
Operator <b>215 Petroleum Center Building - Farmington, New Mexico</b>				
Address				
DESCRIPTION OF WELL AND LEASE				
Federal, State or Indian Lease Number, or Lessor's Name if Fee Lease <b>14-20-0603-8823</b>		Well Name <b>NAVAJO WELL NO. 16</b>		County <b>Apache</b>
Footage Location <b>1970' FNL &amp; 1890' FWL</b>				
Sec. Twp. Rge. <b>Sec. 30-T36N-R30E G&amp;SRM</b>				
Date spudded <b>7-29-67</b>	Date completed, ready to produce <b>8-20-67</b>	Total depth <b>3221'</b>	P.B.T.D. <b>3212'</b>	
Field and reservoir <b>Dineh-bi-Keyah Lower Hermosa</b>		Top of pay <b>3150'</b>	Producing interval <b>3163'-3212'</b>	
TEST DATA				
Date of first production <b>8-17-67</b>	Date of test <b>9-1-67</b>	Length of test <b>24 hrs.</b>	Producing method (flow pump, gas lift) <b>Pumping-Reda Pump</b>	Amount of load oil injected if any. <b>None.</b>
Number of barrels of oil produced from completion or recompletion date to test date <b>4194</b>		If well is produced by pumping, give pump size, length of stroke and strokes per minute. <b>Reda Pump.</b>		
Tubing pressure <b>85</b>	Casing pressure <b>0</b>	Choke size <b>None.</b>		
*Actual production during test: <b>231 bbls</b>	Oil (bbls) <b>217</b>	Water (bbls) <b>14</b>	Gas (MCF) <b>13</b>	
*Production must actually equal or exceed wells daily allowable or test must be for full 24 hours				
Gas-oil ratio <b>60 CF/bbl.</b>	<del>Oil gravity</del> <b>42.0</b>	* A.P.I. corrected	Name of transporter of oil <b>Kerr-McGee Pipeline Corp.</b>	
Number of acres attributed to this well <b>160</b>	Number of producing wells in this reservoir on this lease, including this well <b>10</b>	Single, dual or triple completion? <b>Single</b>	Daily allowable requested (bbls)	
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.				
<b>Production Supt.</b>				
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the _____ of the <b>Kerr-McGee Corporation</b> (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 <b>September 7, 1967</b>		Signature 		
Witnessed by: <b>Kerr-McGee Corporation</b> Organization  Signature <b>September 7, 1967</b> Date		STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION  Potential Test & Request for Allowable—Oil Wells  File One Copy		
Permit No. _____ <b>419</b>		Form No. 6		

6e

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

Form approved  
Budget Bureau No. 42-R355.5

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

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

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

2. NAME OF OPERATOR  
KERR-MCGEE CORPORATION

3. ADDRESS OF OPERATOR  
215 Petroleum Center Bldg. - Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 1970' FNL & 1890' FWL (SE NW)  
At top prod. interval reported below Same. Sec. 30, T36N, R30E.  
At total depth Same.

14. PERMIT NO. DATE ISSUED  
State No. 419 6-16-67

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-0603-8823

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
NAVAJO

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
NAVAJO

9. WELL NO.  
NO. 16

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

11. SEC., T., R., M. OR BLOCK AND SURVEY OR AREA  
Sec. 30, T36N, R30E  
G&SRM

12. COUNTY OR PARISH  
Apache

13. STATE  
Arizona

15. DATE SPUNDED 7-29-67 16. DATE T.D. REACHED 8-10-67 17. DATE COMPL. (Ready to prod.) 8-20-67 18. ELEVATIONS (OF, RES. RT. OR, ETC.) 7558' Graded Ground 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TYD 3221' 21. PLUG BACK T.D., MD & TYD 3212' 22. IN MULTIPLE COMPL. HOW MANY? 23. INTERVALS DRILLED BY 0-3163' 23. INTERVALS CABLE TOOLS 3163'-3221'

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TYD)\*  
3150' - 3217' Hermosa Intrusive

25. WAS DIRECTIONAL SURVEY MADE? No 26. TYPE ELECTRIC AND OTHER LOGS RUN Induction-Electrical, Formation Density 27. WAS WELL CORED? No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8" OD	32.30	265'	13-3/4"	300 SXS	None.
7" OD	23#	3163"	8-3/4"	150 SXS	None.

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
None					3-1/2" OD	3028'	None.

31. PERFORATION RECORD (Interval, size and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3163' - 3212'	Open Hole Completion.
	Frac w/63,504 gallons oil, 30,000# sand, 3000# Adomite.

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
8-17-67	Pumping - Reda Pump	Producing

DATE OF TEST	HOURS TESTED	PROB. SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO.
9-1-67	24	None		217	13	14	60/1

FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
85	0.3		217	13	14	42.0

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

35. LIST OF ATTACHMENTS  
Induction-Electrical and Formation Density Log.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.  
SIGNED: [Signature] TITLE: Production Supt. DATE: 9-7-67

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

A19



Date: Bed W. 8.28.67

#16 Navajo

IP 708 Beys on 24 hp pump (Reda) test.  
+ 1.0% BSEW.  
(production is diminishing.)

#

419

8

Form 9-331  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)

Form approved  
Budget Bureau No. 42-R1424

6. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-8823

7. INDIAN, ALLOTTEE OR TRIBE NAME

NAVAJO

8. UNIT AGREEMENT NAME

NAVAJO

9. NAME OR LEASE NAME

NAVAJO

10. WELL NO.

No. 16

11. FIELD AND POOL OR WILDCAT

Dineh-bi-Keyah

12. SEC. T. R. M. OR BLK. AND SURVEY OR AREA

Sec. 30-T36N-R30E

G&SRM

13. COUNTY OR PARISH

Apache

14. 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  
Kerr-McGee Corporation

3. ADDRESS OF OPERATOR  
215 Petroleum Center Bldg.-Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
1970' FNL & 1890' FWL

14. PERMIT NO. State No. 419

15. ELEVATIONS (Show whether DV, ST, CR, etc.)  
7558' GR

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 checked="" type="checkbox"/>
FRACURE TREAT	<input type="checkbox"/>	FRACURE TREATMENT	<input checked="" type="checkbox"/>
SHOOT OR ACIDISE	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	(Other) Total Depth	<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 data, 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 8-3/4" hole to 3163'. Set 7" OD, 23#, J-55 casing at 3163' RKB. Cemented with 100 sacks 50-50 Pozmix, 4% 1/4" floccle/sack followed by 50 sacks neat cement. Plug down 5' 15" 8-7-67. Tested casing to 1500 psi for 30 minutes. Held OK. Move out rotary rig and move in cable tool unit. Drilled 6-1/4" hole to 3221'. Set 9' cement plug on bottom for PBID of 3212' open hole pay zone from 3163'-3212'. Frac well with 63,504 gallons crude, 30,000# sand and 3000# Adomite. Maximum pressure 1900 psi. Average pressure 1700 psi. Average Injection Rate 104.5 EPM. Swab testing well

18. I hereby certify that the foregoing is true and correct.  
SIGNED [Signature] TITLE Production Supt. DATE 8-18-67

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

419 \*See Instructions on Reverse Side



WELL SITE CHECK

By [Signature]  
Date 8-9-67

Contractor \_\_\_\_\_ Person(s) Contacted \_\_\_\_\_

Spud Date \_\_\_\_\_

Type Rig \_\_\_\_\_ Rotary Cable Tool Present Operations \_\_\_\_\_

Samples \_\_\_\_\_

Pipe \_\_\_\_\_ Drilling with Air \_\_\_\_\_ Mud \_\_\_\_\_

Water Zones \_\_\_\_\_ Size Hole \_\_\_\_\_

Lost Circ. Zones \_\_\_\_\_ Size Drill Pipe \_\_\_\_\_

Formation Tops \_\_\_\_\_ Type Bit \_\_\_\_\_

Cores, Logs, DST \_\_\_\_\_ No. Bit \_\_\_\_\_ Drilling \_\_\_\_\_

Formation \_\_\_\_\_

Crews \_\_\_\_\_ Lithology \_\_\_\_\_

REMARKS, PHOTO, MAP

*Cable tool drilling into attempt open hole completion. Have set 7" Drilling 6 1/4" hole.*

WELL NAME Ken Mc Bee

Permit No. 519  
Confidential:  Yes  No

Form 9-321  
(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

6. LEASE DESIGNATION AND SERIAL NO.

44-20-0603-8823

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

NAVAJO

7. UNIT AGREEMENT NAME

NAVAJO

8. FARM OR LEASE NAME

NAVAJO

9. WELL NO.

No. 16

10. FIELD AND POOL, OR WILDCAT

Dineh-bi-Keyah

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

Sec. 30 T36N-R30E

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  
Kerr-McGee Corporation

3. ADDRESS OF OPERATOR  
215 Petroleum Center Bldg. - Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
1970' FNL & 1890' FWL

14. PERMIT NO.  
State No. 419

15. ELEVATIONS (Show whether DT, RT, CR, etc.)  
7558' GL

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input checked="" 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 ACIDISE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDISING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Spud <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.)

Spud at 7:00 am, 7-29-67. Drilled 13-3/4" hole to 270' and set 9-5/8" OD, 32.30#, H-40, 8R, ST&C casing at 265' RKB. Cemented with 300 sxs cement with 2% CaCl and 1/4# flocele/sack. Used pump and plug method. Circulated cement. Plug down at 9:15 pm 7-29-67. Released pressure. Floats held OK. WOC 15 hrs. Test casing and BOP to 1200 psi for 30 mins. Held OK. Drilling 8-3/4" hole below surface casing.



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

SIGNED C. G. [Signature] TITLE Production Supt. DATE 8-1-67

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

419

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

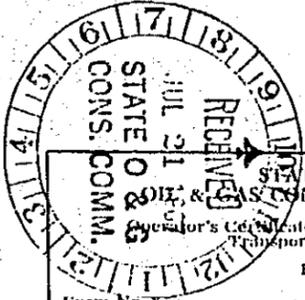
<small>Federal, State or Indian Lease Number, or lessee's name if fee lease</small> <b>14-20-0603-6823</b>	<small>Field</small> <b>Dinch-bi-Keyah</b>	<small>Region</small> <b>Lower Herrerosa</b>
<small>Survey or Sec-Twp-Rge</small> <b>Sec. 29-32-T36N-R30E</b>	<small>County</small> <b>Apache</b>	<small>State</small> <b>Arizona</b>
<small>Operator</small> <b>Kerr-McGee Corporation</b>		
<small>ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:</small>		
<small>Street</small> <b>215 Petroleum Center Bldg.</b>	<small>City</small> <b>Farmington</b>	<small>State</small> <b>New Mexico 87401</b>
<small>Above named operator authorizes (name of transporter)</small> <b>Kerr-McGee Pipeline Corporation Attention: Mr. A. R. Gockel</b>		
<small>Transporter's street address</small> <b>Kerr-McGee Building</b>	<small>City</small> <b>Oklahoma City</b>	<small>State</small> <b>Oklahoma 73102</b>
<small>Field address</small> <b>P. O. Box 989 - Farmington, New Mexico 87401</b>		
<small>Oil, condensate, gas well gas, casinghead gas</small>		
<small>To transport</small> <b>100</b>	<small>% of the</small> <b>oil</b>	<small>from said lease.</small>
<small>OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:</small>		
<small>Name of gatherer</small>	<small>% transported</small>	<small>Product transported</small>
<small>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.</small>		
<b>Change of Gatherer &amp; Transporter Effective: 7/19/67</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 Production Superintendent 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 7/19/67 Signature *P. D. [Signature]*

Date approved: 7-21-67  
 STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 By: *John Kanner*  
 Permit No. 417



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

ARIZONA

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL

RE-ENTER OLD WELL

KERR-MCGEE CORPORATION  
NAME OF COMPANY OR OPERATOR

215 PETROLEUM CENTER BLDG. FARMINGTON, NEW MEXICO  
Address City State

UNKNOWN AT THIS TIME. WILL PROBABLY BE PICO DRILLING COMPANY, FARMINGTON, NEW MEXICO  
Drilling Contractor

Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor Well number Elevation (ground)  
11-20-0603-8823 NAVAJO 16 ~~2890~~ 7537

Nearest distance from proposed location to property or lease line: 1890 feet  
Distance from proposed location to nearest drilling completed or applied—for well on the same lease: 2452 feet

Number of acres in lease: 2533  
Number of wells on lease, including this well completed in or drilling to this reservoir: 9

If lease, purchased with one or more wells drilled, from whom purchased: NONE  
Name Address

Well location (give footage from section lines) Section—township—range or block and survey Dedication (Comply with Rule 105)  
1970' FNL & 1890' FWL Sec. 30-T36N-R30E G&SRM NW/4 Sec. 30

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

Distance, in miles, and direction from nearest town or post office  
10 Miles SW of Red Rock, Arizona

Proposed depth: 3600' Rotary or cable tools: Rotary  
Approx. date work will start: July 1, 1967

Bond Status: Blanket Bond Organization Report: On file  Or attached  
Amount: Filing Fee of \$25.00: Attached  YES

Remarks:  
NEW WELL.  
COVERED BY COMMISSION ORDER NO. 21.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Production Supt. of the KERR-MCGEE 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.

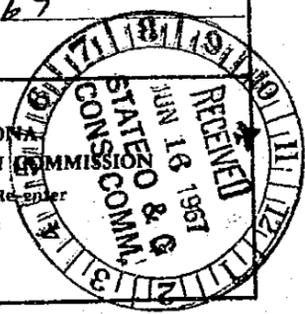
CONFIDENTIAL

Signature: [Handwritten Signature]

Date: 6/13/67

Permit Number: 419  
Approval Date: 6-19-67  
Approved By: 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

OK  
13

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 XX 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
SEE ATTACHED SURVEY PLAT.	<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 _____</p> <p>Company _____</p> <p>Date _____</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>Registered Professional Engineer and/or Land Surveyor _____</p> <p>Certificate No. _____</p>



**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
9-5/8" OD	32.30#	H-40 ST&C	0	250'	0 - 250'	Sufficient to circ.
7" OD	20#	J-55 ST&C	0	3600'	Sufficient to cover all potential productive zones.	

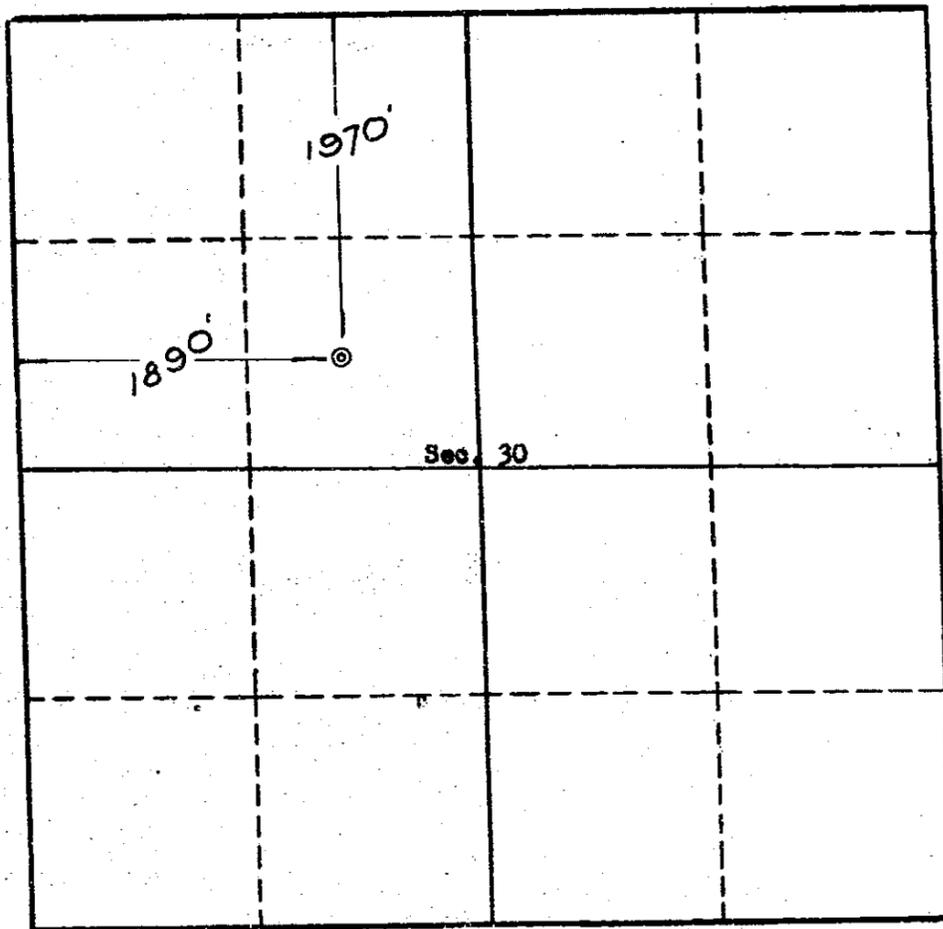
Company Kerr-McGee Corporation

Well Name & No. No. 16 Navajo

Location 1970 feet from the North line and 1890 feet from the West line.

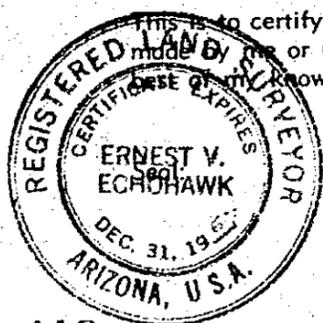
Sec. 30, T. 36 N., R. 30 E., G. & S. R. M., County Apache, Arizona

Ground Elevation 7537 ungraded



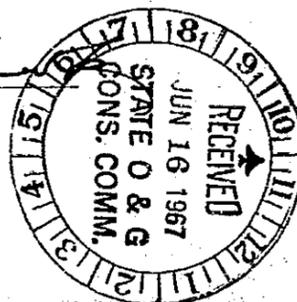
Scale, 1 inch = 1,000 feet

Surveyed May 20, 1967



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

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



419



# PERMIT TO DRILL

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

To: Kerr-McGee Corporation  
(OPERATOR)

to drill a well to be known as

Kerr-McGee #16 Navajo

(WELL NAME)

located 1900 FNL - 1890 FWL

Section 30 Township 36N Range 30E, Apache County, Arizona.

The NW/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 19th day of June, 19 67

OIL AND GAS CONSERVATION COMMISSION

By John Kinnister  
EXECUTIVE SECRETARY

PERMIT N<sup>o</sup> 419

RECEIPT NO. 9509

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

**DINEH-BI-KEYAH FIELD**

**Operator:** Mountain 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

419

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

**CANCELLED**  
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 Diné-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: K0274  
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: \_\_\_\_\_

LEASES / AGREEMENTS AFFECTED: NAVAJO #16 (419) JUN 3 1994  
Dineh Bi Keyah Field - Apache County, Arizona

Lease #: 14-20-0603-8823 API #: 020012004300S1

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

SIGNATURE: Judy Burkhardt  
DATE: 5/13/94

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

419

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

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 Burkhart*

Judy Burkhart,  
Secretary

Attachment

CONSERVATION COMMISSION

MAY 31 1994



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

WPA



**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*  
Warren E. Richardson  
District Manager  
Southwestern District

WER/mm

RECEIVED

NOV 6 1973

O & G CON. COMM.

419



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

Operator KERR MC GEE ~~OIL INDUSTRIES INC~~ Corporation  
 Bond Company Insurance Co. of N. America Amount 25,000  
 Bond No. M 41 95 25 (KM528) Date Approved 10-28-65

Permits covered by this bond:

10	386	417
36	389	418
37	390	419
38	391	420
39	392	422
57	396	426
63	397	427
64	398	441
142	399	445
238	402	446
303	403	→ see this file
90	404	
91	405	
349	406	
303	407	
377	408	
378	409	
379	410	
380	411	
381	413	
384	414	
385	416	

**CANCELLED**

DATE 10-24-68

Superseded by  
 American Casualty Co. Bond  
 #25,000  
 #5471020-52  
 DATE 10-19-73



**KERR-MCGEE CORPORATION**

KERR-MCGEE BUILDING • OKLAHOMA CITY, OKLAHOMA 73102

215 Petroleum Center Building

Farmington, New Mexico

September 7, 1967

State of Arizona  
O&G Conservation Commission  
Room 202 - 1624 W. Adams  
Phoenix, Arizona 85007

Attn: Mr. John Bannister

RE: Arizona Forms 4 & 6  
Navajo Well No. 16  
Dineh-bi-Keyah Field  
Apache County, Arizona

Gentlemen:

Enclosed please find Arizona Oil and Gas Conservation Commission Form No. 4 and No. 6 for our Navajo Well No. 16. This well is located in Section 30, T36N, R30E (G&SRM), in the Dineh-bi-Keyah Field, of Apache County, Arizona.

Also enclosed are copies of the Induction-Electrical Log and the Formation Density Log for the above captioned well.

Very truly yours,  
KERR-MCGEE CORPORATION

*C. D. Williams*  
C. D. Williams  
Production Supt.

CDW/hs

Enclosures

cc: J.I. Fisher  
R. W. King  
Tribe  
WRF #16  
RF

419



**KERR-MCGEE CORPORATION**

KERR-MCGEE BUILDING • OKLAHOMA CITY, OKLAHOMA 73102

215 Petroleum Center Building  
Farmington, New Mexico  
September 7, 1967

State of Arizona  
O&G Conservation Commission  
Room 202 - 1624 W. Adams  
Phoenix, Arizona 85007

Attn: Mr. John Bannister

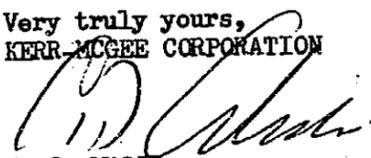
RE: Arizona State Form 5  
Navajo Well No. 16  
Dineh-bi-Keyah Field

Gentlemen:

Enclosed please find State of Arizona Conservation Commission Form No. 5 for our Navajo Well No. 16 located in the Dineh-bi-Keyah Field, Apache County, Arizona. This report covers the month of August 1967.

If additional information is required please advise.

Very truly yours,  
KERR-MCGEE CORPORATION

  
C. D. Williams  
Production Supt.

GDW/hs

Enclosures

cc; JIF  
Tribe  
WRF  
RF



**KERR-MCGEE CORPORATION**

KERR-MCGEE BUILDING • OKLAHOMA CITY, OKLAHOMA 73102

215 Petroleum Center Building  
Farmington, New Mexico 87401

August 11, 1967

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

Attention: Mr. John Bannister  
Executive Secretary

Re: Confidential Well Information  
Dineh-bi-Keyah Field  
Apache County, Arizona

Dear John:

Please be advised that Kerr-McGee has removed from confidential well status the following wells:

Navajo No. 1	-	SESW, Section 32, T36N, R30E
Navajo No. 2	-	SESW, Section 32, T36N, R30E
Navajo No. 3X	-	SESE, Section 32, T36N, R30E
Navajo No. 4	-	SENE, Section 32, T36N, R30E
Navajo No. 6	-	SENE, Section 31, T36N, R30E
Navajo No. 7	-	SESW, Section 29, T36N, R30E
Navajo No. 8	-	SESE, Section 29, T36N, R30E
Navajo No. 9	-	SESE, Section 30, T36N, R30E
Navajo No. 14	-	SESW, Section 31, T36N, R30E
Navajo No. 15	-	SESW, Section 30, T36N, R30E
Navajo No. 16	-	SESW, Section 30, T36N, R30E
Navajo No. C-2	-	SESW, Section 33, T36N, R30E

Kerr-McGee desires to hold in the confidential status the information on the following wells:

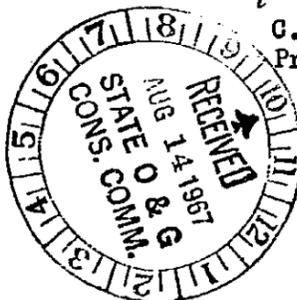
Navajo No. 5	-	SESE, Section 31, T36N, R30E
Navajo No. 13	-	SESW, Section 31, T36N, R30E
Navajo No. B-1	-	SESW, Section 5, T35N, R30E
Navajo No. B-2	-	SENE, Section 5, T35N, R30E
Navajo No. E-1	-	SESE, Section 20, T36N, R30E

Very truly yours,

G. D. Williams  
Production Superintendent

CDW:la

CC: USGS - Farmington  
Navajo Tribe - Farmington



419

 **KERR-MCGEE**  
KERR-MCGEE BUILDING - OKLAHOMA CITY, OKLAHOMA 73102  
215 Petroleum Center Building  
Farmington, New Mexico  
June 14, 1967

State of Arizona  
O&G Conservation Commission  
Room 202 - 1624 W. Adams  
Phoenix, Arizona

Attn: Mr. John Bannister  
Exec. Secretary

RE: Application For Permit  
To Drill  
Navajo Well No. 10  
Navajo Well No. 16  
Dinah-bi-Kayah Field  
Apache County, Arizona

Gentlemen:

Enclosed please find two copies each of Arizona O&G Form No. 3 for the Kerr-McGee Navajo No. 10 located in SE NE Sec. 30-T36N-R30E, and the Kerr-McGee Navajo No. 16 located in SE NW Sec. 30-T36N-R30E, Apache County, Arizona. Also enclosed are two copies each of the Surveyor's plat for the location of the two wells. A draft for \$50.00 to cover the filing fees is included.

Your approval of this application is requested. Please keep this information confidential.

Very truly yours,  
KERR-MCGEE CORPORATION



C. D. Williams  
Prod. Supt.

CEW/hs

Enclosures

