

~~CONFIDENTIAL~~
Release Date ~~1/27/74~~

P-W

420
Kerr-McGee #13 Navajo
SE SW 31-36N-30E Apache County

COUNTY Apache AREA Dineh bi Keyah LEASE NO. Nav 14-20-0603-8823

WELL NAME Kerr McGee Corporation #13 Navajo

LOCATION SE SW SEC 31 TWP 36N RANGE 30E FOOTAGE 500 FSL 2200 FWL
 ELEV 8900 GR 8919 KB SPUD DATE 7-8-67 STATUS Open TOTAL 4224
 COMP. DATE 9-5-67 DEPTH 4217 PBTB
 CONTRACTOR Pico Drilling (re-entered 2-17-68, Re-completed 3-28-68) Deepended to 4444'
 PB 4373'

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY
9 5/8	1138	1000 SKS	NA	0-4091'
7	4091	RKD 150 SKS		DRILLED BY CABLE TOOL 4091-4224'
4 1/2	4014-4440'	75SKS		PRODUCTIVE RESERVOIR 4182-4208 Open Hole

INITIAL PRODUCTION 4091-4217 IP, Pump
 BOPD Pump 31 on 24 hr test.
 Re-completion IP pump 9 BOPD/5 MCFPD

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Chuska	Surface			
Chinle	1070'			
Coconino	1815'			
Cutler	2550'			
Hermosa	3618'			
Ismay	3816'			
Desert Creek	3908'			
Akah	3964'			
Blk Sh.	4066'			
Sill	4084'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
IE; Borehole Comp.	4091-4217	4091-4217	SAMPLE DESCRP. _____
Sonic GR; BHSCR			SAMPLE NO. _____
			CORE ANALYSIS _____
			DSTs _____

REMARKS _____ APP. TO PLUG _____
 _____ PLUGGING REP. _____
 _____ COMP. REPORT x
 Re-completion Report

WATER WELL ACCEPTED BY _____
 BOND CO. Firemen's Ins. Co. BOND NO. 188 98 10-528
 DATE _____ ORGANIZATION REPORT 7-14-60
 BOND AMT. \$ 25,000 CANCELLED _____
 FILING RECEIPT 9510 LOC. PLAT WELL BOOK PLAT BOOK
 API NO. 02-001-20044 DATE ISSUED 7-6-67 DEDICATION SW/4

PERMIT NUMBER 420

CONFIDENTIAL
 (over) Release Date 8-16-67

RECEIVED

PLUGGING RECORD

AUG 15 1983

Mailed
5-18-83

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. 14-20-0603-8823		Well No. 13	Field & Reservoir Dineh-Bi-Keyah		
Location of Well 500' FSL & 2200' FWL		Sec. 31, T36N, R30E, G&SRM Survey Apache			
Application to drill this well was filed in name of Kerr McGee Corporation	Has this well ever produced oil or gas yes	Character of well at completion (initial production): Oil (bbls/day) 31 Gas (MCF/day) 35 Dry? no			
Date plugged: 7/31/83	Total depth 4373 P.B.T.D.	Amount well producing when plugged: Oil (bbls/day) 2 Gas (MCF/day) 4 Water (bbls/day) 0			
Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement		
Lower-Hermosa Sill	some oil & no water	4100-4208	*See reverse side for details of P & A operations		
CASING RECORD					
Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, ripped, etc.)	Packers and shoes
9 5/8"	1138'	0'	1138'	-	-
7"	4091'	0'	4091'	-	-
4 1/2"	426'	0'	426'	-	(Liner set @ 4014' to 4440')
Was well filled with mud-laden fluid, according to regulations? yes			Indicate deepest formation containing fresh water. unknown		
NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE					
Name	Address		Direction from this well:		
none					
In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.					
Use reverse side for additional detail.					
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Engineering Assistant</u> of the <u>Kerr McGee Corporation</u> (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.					
August 10, 1983 Date		<i>Aaron Reyna</i> Signature		Aaron Reyna	
APPROVED			STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Plugging Record File One Copy		
By <u>R. A. Y.</u>					
Date <u>8/17/83</u>					
Permit No. _____			Form No. 10		

- *7/30/83 Set @ 4" Halliburton cement retainer @ 4050'. Load hole 155 bbls. fresh water mud. Squeeze the interval 4100-4208 w/20 sacks Class "H" cmt. Stung out of retainer and dumped 2 sacks cmt. on top of retainer, TOC @ 4010'.
- 7/31/83 Fill hole w/81 bbls. fresh water mud. Tag top of cmt. at 3979'. PU tbg. to 3668'. Pumped a 25 sack class "H" cmt. plug from 3668'-3568'. Displaced cmt. w/ 14 bbls. fresh water mud. Perforate 2 holes @ 1865'. Circulate hole w/ 107 bbls. of fresh water mud. Pump 300 sks. of class "H" cmt. top of cmt. at 1070' inside and out of 7" csg. Hole stayed full. Pump 10 sacks class "H" cmt. and spot the plug from 60' to surface.
(Fluid level settled 6' below ground level and stabilized)
- 8/2/83 Cut off 9 5/8" and 7" csg. 4' below ground level. Welded & plugged 7" & 9 5/8" stubs w/ 3/8" plate steel. Welded on 4 1/2" x 10' P&A marker.

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: **Box 250; Amarillo, Texas 79189**
 Federal, State or Indian Lease Number or name of lessor if fee lease: **14-20-0603-8823** Well Number: **13** Field & Reservoir: **Dineh-Bi-Keyah**
 Location: **500' FSL & 2200' FWL** County: **Apache County, Arizona**
 Sec. TWP-Range or Block & Survey: **N-31, 36N, 30E, G&SRM**

Date spudded: **7-8-67** Date total depth reached: **8-4-67** Date completed, ready to produce: **9-5-67** Elevation (DF, RKB, RT or Gr.): **8900' GL** Elevation of casing hd. Range: **8900** feet

Total depth: **4444'** P.B.T.D.: **4373'** 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: **4091'-4217'** Rotary tools used (interval): **0-4091'** Cable tools used (interval): **4091'-4224'**

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, Sonic-Gamma Ray Log** Date filed: **Sept. 30, 1967**

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	32.30	1138	1000sx	none
Production	8 3/4	7	20	4091	100sx	none
					50sx	

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
2 3/8 in.	4131 ft.	none ft.	4 1/2 in.	4014 ft.	4440 ft.	75	none

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZER RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval
2;2	.5" perf	4091-4217;4182-4188	60,700gal oil;30M#sd,3M Andonite	4091-4217
2;2	thru csg	4192-4196;4202-4208	2Mgal 7.5% Dolowash 2247M gal. salt H2P, 18.70#sd	4182-4188;4192-4196;4202-08

INITIAL PRODUCTION

Date of first production: **9-19-67** Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): **pumping 2" x 1 1/2" x 16' rod pump**

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
10-10-79	24	NA	9 bbls.	4 MCF	56 bbls.	40 API (Corr)

Tubing pressure	Casing pressure	Cal'ated rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio
na	vented		9 bbls.	TSTM MCF	56 bbls.	---

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 **Engineering Assistant** 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, 1979** Signature: **Kelley Eisenberg** **Kelley Eisenberg**

RECEIVED

NOV 1 1979
O & G CONS. COMM.

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*
Chuska (Tertiary)	Surface	1070	Massive White sandstone
Chinle (Triassic)	1070'	1815'	Red shale w/thin stringers of sandstone
Coconine	1815'	2550'	Massive sandstone w/shaley stringers in lower 250'
Cutler (Permian)	2550'	3618'	Red shale w/thin beds of red limestone & sandstone
Hermosa (Penn)	3618'	4084'	Limestone predominately dense & tight, w/red & gray shale, some thin sandstone stringers.
Sill (Tertiary)	4084'	4221'	Syenite
Hermosa (Penn)	4221'	4224'	Limestone, gray, fine crystalline, dense

* 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 well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

RECEIVED

APPLICATION TO ABANDON AND PLUG

FEB 22 1983

O & G CONS. COMM.

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 14-20-0603-8823 WELL NO. 13

SURVEY G&SRM SECTION Section 31, T36N, R30E COUNTY Apache

LOCATION 500' FSL & 2200' FWL

TYPE OF WELL oil TOTAL DEPTH 4440'
 (Oil, Gas or Dry Hole)

ALLOWABLE (If Assigned)

LAST PRODUCTION TEST OIL 3 BOPD (Bbls.) WATER 0 BWPD (Bbls.)
 GAS _____ (MCF) DATE OF TEST September, 1979

PRODUCING HORIZON Hermosa Intrusive Sill PRODUCING FROM 4091' TO 4217'

1. COMPLETE CASING RECORD

9 5/8" csg 32.3# H-30 set @ 1138' with 1000 sx cmt
7" csg 20# J-55 set @ 4091' top of cmt @ 2870'
4 1/2" csg 9.5# J-55 (Liner) set from 4014' to 4440' with 75 sx cmt

2. FULL DETAILS OF PROPOSED PLAN OF WORK

1. TIH with 4 1/2" cmt retainer for 9.5# J-55 csg & 2 7/8" tbg & set @ 4130' RKB.
2. Load csg with (5 sx gel to 100 bbl) fresh water mud.
3. PU on cmt retainer to shut off valve. Test to 500 psi to check for tbg leaks & set back
down.
4. Pump 15 sx Class "H" cmt leaving 1 sk on top of retainer. Top of plug @ 4118'.
5. PU tbg to 4064' RKB. Spot #2 plug from 4064' to 3971' using 20 sx Class "H" cmt.
6. PU tbg to 3668' RKB. Spot #3 plug from 3668' to 3551' using 25 sx Class "H" cmt.

For completion of procedure, see other side.
 If well is to be abandoned, does proposed work conform with requirements of Rule 202? _____ If not, outline proposed procedure above.

DATE COMMENCING OPERATIONS Prefer to wait until all snow clears up & roads dry out.

NAME OF PERSON DOING WORK _____ ADDRESS _____

CORRESPONDENCE SHOULD BE SENT TO Aaron Reyna Aaron Reyna
 Name
Engineering Assistant
 Title
P.O. Box 250, Amarillo, Texas 79189
 Address
February 17, 1983
 Date

Date Approved 2/24/83
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: R. G. yfama

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

Permit No. 420

7. TOOH with 2 7/8" tbg.
8. TIH with 4" perforation gun on wireline. Shoot 2 holes @ 1865' ± RKB.
9. Establish circulation & pump #4 plug with 300 sx cmt. Displace with 44 bbls fresh water mud to put cmt in 7" csg to 1090'.
10. TIH with 1 jt tbg and spot #5 plug with 12 sx cmt from 25' to surface.
11. Cmt csg 5' below ground level, weld cap on csg, clean, level, reseed location, and place abandonment sign.

GAS-OIL RATIO TEST REPORTS

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

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Kerr-McGee Corporation
 2. Oil Well GAS Well OTHER (Specify) _____
 3. Well Name Navajo #13
 Location 500' FSL & 2200' FWL
 Sec. N-31 Twp. 36N Rge. 30E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-0603-8823

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"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <u>clean out well</u>	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.)

9-17-79 Open well to put back on production clean out well to PBD 4373. 9-22-79: Perforate from 4100' to 4180' with a 3 1/8" casing gun, one shot every two feet for a total of 40 shots. 9-23-79: Pumped 200 gals 15% HCl & 11 1/2 bbls lease crude. Spotted 800 gals 15% HCl @ 4170. 9-24-79: Pumped 90 bbls of 15% HCl & flushed with 17 bbls lease crude. 9-25-79: RU sand pump and pump sand out of hole. 9-27-79: Put on pump.

The Navajo #13 was shut in February, 1968, due to low production. This work was done to put the well back on production.

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

Signed Kelley Eisenberg Title Engineering Assistant Date 10-29-79
 Kelley Eisenberg

Permit No. 720 RECEIVED 1979

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Sundry Notices and Reports On Wells
 File Two Copies
 Form No. 23

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 Building Farmington, New Mexico 87401**

Federal, State or Indian Lease Number or name of lessor if fee lease: **14-20-0603-8823 Navajo** Well Number: **13** Field & Reservoir: **Dineh-Bi-Keyah Hermosa**

Location: **500' FSL & 2200' FWL** County: **Apache**

Sec. TWP-Range or Block & Survey: **Sec 31, T36N, R30E**

Date spudded: **2-17-68** Date total depth reached: **2-19-68** Date completed, ready to produce: **3-28-68** Elevation (DF, RKB, RT or Gr.) feet: **8900** Elevation of casing hd. flange feet: **8900**

Total depth: **4444** P.B.T.D.: **4373** 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: **4182-4208** Rotary tools used (interval): **4224-4444** Cable tools used (interval):

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

Type of electrical or other logs run (check logs filed with the commission): **Gamma Ray-Sonic** 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	Am't. pulled
Surface	13 3/8"	9 5/8"	32.30	1138	1000	None
Production	8 3/4"	7"	20	4091	150	None

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
2 3/8" in.	4169 ft.	None ft.	4 1/2 in.	4014 ft.	4440 ft.	75	None

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Am't. & kind of material used	Depth Interval
2	0.5" jet	4182-4188, 4192-4196 4202-4208	2000 gal 7 1/2% acid 246,120 gal wtr, 178,000# sand	4182-4208 4182-4208

INITIAL PRODUCTION 000# sand

Date of first production: **3-28-68** Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): **Pumping 2"x1 1/2"x16" RWBC Insert Pump**

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
3-31-68	24	None	9 bbls.	3 MCF	37 bbls.	41.9 API (Corr)

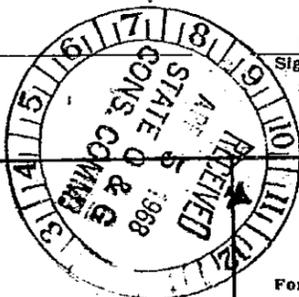
Tubing pressure	Casing pressure	Cal'ted rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio
10 psi	0 psi		9 bbls.	3 MCF	37 bbls.	333

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 **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: **April 3, 1968**

Signature: *[Signature]*



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

Permit No. **420**

Form No. 4

RE-COMPLETION

14

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Hermosa (Penn)	4221'	4386'	Limestone, gray to buff, fine to micro crystalline, shaly, dense
Mississippian	4386'	4444'	Limestone, cream-tan-buff, fine to medium crystalline, some chert

* 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

Form 9-331
(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.
14-20-0603-8823

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo

9. WELL NO.
13

10. FIELD AND POOL, OR WILDCAT
Marsh-Bi-Kayah

11. SEC. T. R. M. OR BLM. AND
OR SURVEY OR AREA
Sec 31, T36N, R30E

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 Building, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
500' FSL & 2200' FWL of Sec. 31

14. PERMIT NO.
State No. 420

15. ELEVATIONS (Show whether OP, WT, GR, etc.)
8900' 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"/>	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 checked="" 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) Perforate <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>			

(NOTE: Report results of multiple completion on Well Completion or Recombination 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.)*

Perf with 2 jets per ft from 4208-4202, 4196-4192 and 4188-4182. Acidized with 2000 gal 7 1/2% dolowash acid. Max press 1600 psi. Ave treating press 300 psi. Ave. Inj rate 3 BPM. Frac with 246,120 gal formation water and 178,000# sand. Max press 1300 psi. Ave treating press 600 psi. Ave inj rate 54 BPM.



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

SIGNED [Signature] TITLE **Production Superintendent** DATE **March 26, 1968**

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Distr: USGS 2
Aris 2*
Tribe 1
JIF 1
WRF 1
RF 1

*See Instructions on Reverse Side

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.

14-20-0603-8823

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo

9. WELL NO.

13

10. FIELD AND POOL, OR WILDCAT

Dineh-Bla-Kayah

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

See 31, T36N, R30E

12. COUNTY OR PARISH

Apache

13. STATE

Arizona

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
KERR-MCGEE CORPORATION

3. ADDRESS OF OPERATOR
215 Petroleum Center Building, Farmington, New Mexico 87401

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

500' FSL & 2200' FWL of Sec. 31

14. PERMIT NO.
State No. 420

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
8900' 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 type="checkbox"/>
FRACTURE TREAT	<input checked="" 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) Perforate	<input checked="" type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
PULL 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 checked="" type="checkbox"/>		

(NOTE: Report results of multiple completion on Well Completion or Recombination 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.)

Propose to perforate with 2 jets per foot from 4182'-4188', 4192'-4196', and 4202'-4208'. Acidize with 2000 gal 7 1/2% dolowash acid and free with 250,000 gal formation water and 182,000# 10-20 sand.



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

SIGNED C. D. Williams TITLE Prod. Supt. DATE Feb 29, 1968

(This space for Federal or State office use)

APPROVED BY [Signature] TITLE _____ DATE 3-7-68

CONDITIONS OF APPROVAL, IF ANY:

USGS, 3
Aris, 2
Tribe, 1
FIF, 1
WRP, 1
RF, 1

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*
(Other instructions on reverse side)

Form approved
Budget Bureau No. 42-11424

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.
13

10. FIELD AND POOL, OR WILDCAT
Dineh-Bi-Kayah

11. SEC. T., R., M., OR BLK. AND SURVEY OR PLAT
Sec 31, T36N, R30E

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-MOGEE CORPORATION

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

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

500° FSL & 2200° FWL of Sec 31

14. PERMIT NO.
State No. 420

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
8900° 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"/>	PULL 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 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) Total depth <input checked="" type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recombination 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.)
Took well off production 2-12-68 and moved pumping unit. Moved in rotary rig and pulled rods and tubing. Nipped up BOP and picked up drill pipe and drill collars. Drilled 6 1/4" hole to 4444'. Ran 4 3/4" liner from 4014'-4440' and cemented with 75 sac 50-50 poxmix with 2% gel (7" osg is set at 4093'). Plug down 3:15 PM 2-20-68. Cleaned out pipe to 4373'. After WOC 18 hrs tested liner to 1500 psi. Held OK. Will move out rotary rig and move in double drum unit for completion work.

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18. I hereby certify that the foregoing is true and correct
SIGNED *[Signature]* TITLE Production Superintendent DATE 2-23-68
(This space for Federal or State office use)

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

Dist:
USGS, 2
Aris, 2
Tribe, 1
JIF, 1
WRF, 1
RF, 1

420

*See Instructions on Reverse Side



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 Building, Farmington New Mexico 87401
Address City State

Unknown at this time

Drilling Contractor

Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor 14-20-0603-8823 Navajo	Well number 13	Elevation (ground) 8900'
Nearest distance from proposed location to property or lease line: 500 feet	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: 2110 feet	
Number of acres in lease: 2,533	Number of wells on lease, including this well, completed in or drilling to this reservoir: 13	
If lease, purchased with one or more wells drilled, from whom purchased: N/A	Name	Address

Well location (give footage from section lines) 500' FSL and 2200' FWL	Section—township—range or block and survey Sec 31, T36N, R30E, G&SRM	Dedication (Comply with Rule 106) SW/4 Sec 31
---	---	--

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

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

Proposed depth: 4600'	Rotary or cable tools Rotary	Approx. date work will start 2-14-68
Bond Status Blanket Bond	Organization Report On file <input checked="" type="checkbox"/> Or attached	Filing Fee of \$25.00 Attached <input checked="" type="checkbox"/> Yes

Remarks: Covered by Commission Order No. 21. Present PSTD 4127'. Present TD, 4224'.
Will deepen to approx 4600'

CONFIDENTIAL

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.

C. D. Williams
Signature C. D. Williams

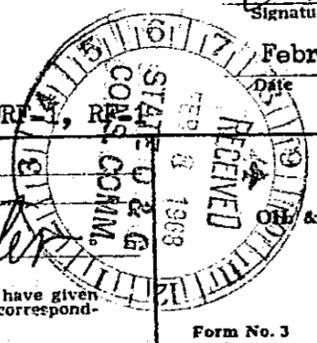
February 2, 1968
Date

Dist: Ariz-2, Tribe-1, JIF-1, RWK-1, WRF-1, RPS-1, STA-1, COG-1, COM-1

Permit Number: 420
Approval Date: 2-13-68
Approved By: *John V. Bannister*

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

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.
Form No. 3



- Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
- 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.
- All distances shown on the plat must be from the outer boundaries of the Section.
- Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES NO
- 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 _____
- If the answer to question four is "no," list all the owners and their respective interests below:

Owner	Land Description
<p>CERTIFICATION</p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p><i>C. D. Williams</i></p> <p>Name <u>C. D. Williams</u></p> <p>Position <u>Prod. Supt.</u></p> <p>Company <u>Herr-McGee Corporation</u></p> <p>Date <u>February 7, 1968</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>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
7" 20# casing is set at 4091' with 150 sxs. Open hole from 4091'-4217'. Will						
deepen and set liner shown below:						
5"	15#	J-55	3900'	4600'	3900-4600	100

POTENTIAL TEST AND REQUEST FOR ALLOWABLE - C. WELLS

DESIGNATE TYPE OF COMPLETION:

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

Other Reason For Filing:

KERR-MCGEE CORPORATION

CONFIDENTIAL

Operator

215 PETROLEUM CENTER BLDG.

Address

FARMINGTON, NEW MEXICO

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or Lessor's Name if Fee Lease	Well Name	County
14-20-0603-8823	NAVAJO	APACHE

Footage Location
500' FSL & 2200' FWL (SE SW)

Sec. Twp. Rge.
Section 31, T36N, R30E

Date spudded	Date completed, ready to produce	Total depth	P.B.T.D.
7-8-67	9-5-67	4224'	4217'
Field and reservoir	Top of pay	Producing interval	
Dineh-bi-Keyah	Hermosa	4084'	4091'-4217'

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.
9-19-67	9-20-67	24 hrs.	Pump	None
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.		
35		2" x 1-1/4" x 10" x 14", 74" stroke, 14 per min.		
Tubing pressure	Casing pressure	Choke size		
5	20	NONE		
*Actual production during test:	Oil (bbls)	Water (bbls)	Gas (MCF)	
33	31	2	35	

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

Gas-oil ratio	Oil gravity	Name of transporter of oil
1.1 MCF/bbl.	42.6 * A.P.I. corrected	KERR-MCGEE PIPELINE CORP.

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	11	Single	

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 Prod. 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.

Sept. 30, 1967
Date

Signature

Witnessed by: KERR-MCGEE CORP. - Bill Morris
Organization

Bill Morris
Signature

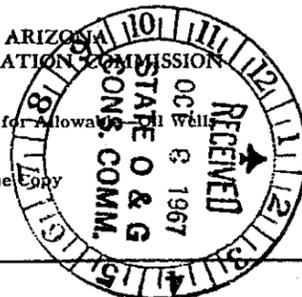
Sept. 30, 1967
Date

Permit No. 420

Form No. 6

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Potential Test & Request for Allowable Wells

File One Copy



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 MEX.**

Federal, State or Indian Lease Number or name of lessor if fee lease **14-20-0603-8823** Well Number **NO. 13** Field & Reservoir **DINEH-BI-KEYAH HERMOSA**

Location **500' FSL & 2200' FWL (SE SW)** County **APACHE COUNTY**

Sec. TWP-Range or Block & Survey
Sec. 31, T36N, R30E

Date spudded **7-8-67** Date total depth reached **8-4-67** Date completed, ready to produce **9-5-67** Elevation (of RKB, RT or Gr.) **8900' GR** feet Elevation of casing hd. flange feet

Total depth **4224'** P.B.T.D. **4217'** 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 **4091' - 4217'** Rotary tools used (interval) **0 - 4091'** Cable tools used (interval) **4091' - 4224'**

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

Type of electrical or other logs run (check logs filed with the commission) **Induction-Electric, Sonic-Gamma Ray** Date filed **- - -**

CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)						
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Surface	13-3/4	9-5/8"	32.30	1138'	1000 sxs cmt.	None
Production	8-3/4	7"	20	4091'	100 sxs 50-50 Pozmix, 50 cmt.	None

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
2-3/8 in.	4131 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 pay.		4091' - 4217'	60,700 gals oil, 30,000# sd, 3000# Adomite.	4091' - 4217'

INITIAL PRODUCTION

Date of first production **9-19-67** Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:) **Pumping 2" x 1-1/4" x 10' x 14' Fluid pack**

Date of test **9-20-67** Hrs. tested **24** Choke size **None** Oil prod. during test **31 bbls.** Gas prod. during test **35 MCF** Water prod. during test **2 bbls.** Oil gravity **42.6° API (Corr)**

Tubing pressure **5** Casing pressure **20** Cal'd rate of Production per 24 hrs. **31 bbls.** Gas **35 MCF** Water **2 bbls.** Gas-oil ratio **1130**

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 **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.

Date **Sept. 29, 1967**

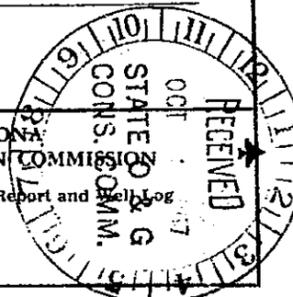
Signature *[Signature]*

CONFIDENTIAL

Permit No. **420**

Form No. 4

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 (TERTIARY)	Surface	1070'	MASSIVE WHITE SANDSTONE.
CHINLE (TRIASSIC)	1070'	1815'	RED SHALE WITH THIN STRINGERS OF SANDSTONE.
COCONINO (PERMIAN)	1815'	2550'	MASSIVE SANDSTONE WITH SHALY STRINGERS IN LOWER 250'
CUTLER (PERMIAN)	2550'	3618'	RED SHALE WITH THIN BEDS OF RED LIMESTONE & SANDSTONE.
HERMOSA (PENN)	3618'	4084'	LIMESTONE PREDONIMATELY DENSE & TIGHT, WITH RED & GRAY SHALE, SOME THIN SANDSTONE STRINGERS.
SILL (TERTIARY)	4084'	4221'	SYENITE.
HERMOSA (PENN)	4221'	4224'	LIMESTONE, GRAY, FINE CRYSTALLINE, DENSE.
TOTAL DEPTH:		4224'	
<i>late P.D.H.M. 4386</i>		<i>4444'</i>	
<i>Miss</i>	<i>4386</i>	<i>4444'</i>	
<i>P.B. 4373'</i>			

* 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.

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 **500' FBL & 2200' FWL (Sec. 31, T36N, R30E)**
At top prod. interval reported below **Same.**
At total depth **Same.**

14. PERMIT NO. **420** DATE ISSUED **7-6-67**

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. 13

10. FIELD AND POOL, OR WILDCAT
Dineh-ki-Kayah

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 31, T36N, R30E

12. COUNTY OR PARISH
APACHE 13. STATE
ARIZONA

15. DATE SPUDDED **7-8-67** 16. DATE T.D. REACHED **8-4-67** 17. DATE COMPL. (Ready to prod.) **9-5-67** 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* **8900' GR** 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD **4224'** 21. PLUG, BACK T.D., MD & TVD **4217'** 22. IF MULTIPLE COMPL., HOW MANY* **Single.** 23. INTERVALS DRILLED BY **→** ROTARY TOOLS **0-4091'** CABLE TOOLS **4091'-4224'**

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
4091' - 4217' HERMOGA

25. WAS DIRECTIONAL SURVEY MADE
NO

26. TYPE ELECTRIC AND OTHER LOGS RUN
Induction-Electric, Sonic-Gamma Ray Log.

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"	32.30	1138'	13-3/4"	1600 sbs	None
7"	20	4091'	8-3/4"	100 sbs 50-50 Fossilix 50 sbs common ext.	None

29. LINER RECORD

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

30. TUBING RECORD:

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8	4131'	None

31. PERFORATION RECORD (Interval, size and number)

4091'-4217' Open hole

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4091'-4217'	Frac 60,700 gals oil, 30,000# sand, 3000# Adomite.

33. PRODUCTION

DATE FIRST PRODUCTION **9-19-67** PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) **Pumping, 2"x1-1/4"x10"x14' Fluid pack** WELL STATUS (Producing or shut-in) **Producing.**

DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9-20-67	24	None	→	31	35	2	1130
				31	35	2	42.6

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) **Fuel and vented.** TEST WITNESSED BY **Gary Roth**

35. LIST OF ATTACHMENTS
Logs as listed in Item 26 above.

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

SIGNED **[Signature]** TITLE **Production Mgr.** DATE **9-29-67**

15 (420) * (See Instructions and Spaces for Addition of Data on Reverse Side)



CONFIDENTIAL

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 28, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers' geologists, sample and core analysis, all types electric, etc.) formations and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s), and name(s), if any, for only the interval reported in item 22. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

FORMATION	POROUS ZONES		DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS	
	TOP	BOTTOM		NAME	NEAR. DEPTH
CHUSIA (TERTIARY)	Surface	1070'	MASSIVE WHITE SANDSTONE.		
CHINLE (TRIASSIC)	1070'	1315'	RED SHALE WITH THIN STRINGERS OF SANDSTONE.		
COCOMING (PERMIAN)	1315'	2550'	MASSIVE SANDSTONE WITH SHALY STRINGERS IN LOWER 250'.		
CUYLER (PERMIAN)	2550'	3618'	RED SHALE WITH THIN BEDS OF RED LIMESTONE & SANDSTONE.		
HERMOSA (PERM)	3618'	4084'	LIMESTONE PREDOMINATELY DENSE & TIGHT, WITH RED & GRAY SHALE, SOME THIN SANDSTONE STRINGERS.		
SILL (TERTIARY)	4084'	4221'	STEMITE.		
HERMOSA (PERM)	4221'	4224'	LIMESTONE, GRAY, FINE CRYSTALLINE, DENSE.		
TOTAL DEPTH:		4224'			

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.

14-20-0603-8823

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

NAVAJO

7. UNIT AGREEMENT NAME

NAVAJO

8. FARM OR LEASE NAME

NO. 13

9. WELL NO.

10. FIELD AND/POOL OR WILDCAT

Dinah-bl-Koyah

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

Sec. 31-T36N-R30E

G&SRM

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
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
500' FSL & 2200' FWS - Sec. 31 - T36N - R30E

14. PERMIT NO. State No. 420

15. ELEVATIONS (Show whether DF, RT, OR, etc.)
8900' OR

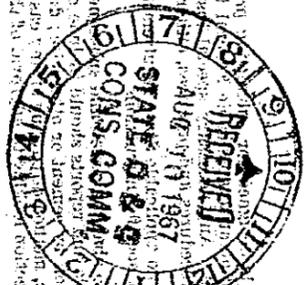
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

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 checked="" type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACURE TREATMENT <input checked="" 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) Total Depth <input checked="" 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.)*

Drilled 8-3/4" hole to 4091'. Set 7" OD, 20#, J-55, SMC casing at 4091' RKB. Cemented with 100 sacks 50-50 Pozmix, 4% gel, 1/4# floccle/sack followed by 50 sacks neat cement. Plug down 5:00 PM 7-25-67. WOC 12 hrs. 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 4224'. Set 7' cement plug on bottom for PBD of 4217'. Open hole pay zone from 4091'-4217'. Frac well with 60,700 gals. crude, 30,000# sand and 3000# Adomite. Max. Pressure 1600 psi. Ave. treating pressure 1400 psi. Ave. injection rate 113bbls/minute.



18. I hereby certify that the foregoing is true and correct.
SIGNED [Signature] TITLE Production Supt. DATE 8-9-67

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

*See Instructions on Reverse Side

17 420

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved
Budget Bureau No. 1-144

ALLOTTEE
TIERRE Navajo
LEASE No. 14-20-0603-8823

LESSEE'S MONTHLY REPORT OF OPERATIONS

Navajo Lease General

State Arizona County Apache Field Dineh-bi-Keh

The following is a correct report of operations and production (including drilling and producing wells) for the month of July, 19 67,

Agent's address 215 Petroleum Center Building Company Kerr-McGee Corporation
Farmington, New Mexico 87401 Signed [Signature]

Phone 327-9637 Agent's title Production Engineer

SEC. AND 1/4 OF 34	TWP.	RANGE	WELL No.	DATE 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)
SE NE 32	36N	30E	4	13						Spudded well 6-27-67, set 9-5/8" OD casing @ 262' RKB. Set 7" @ 2898' RKB. Drilled 6-1/4" hole to 2960'. Open hole pay zone from 2898' to 2960'. Frac with 60,000 gals. crude, 30,000# sand. Ran Reda pump on 3-1/2" tubing set @ 2752'. On 7-23-67, well tested 3249 BO/24 hrs, 43.00 API, 58 ft. 3/bbl GOR.
SE SW 31	36N	30E	13	None						Spudded well 7-8-67. Set 9-5/8" OD casing @ 1138' RKB. Set 7" @ 4093'. Rig up cable tools to drill below 7" casing. 40' \rightarrow
SE SE 29	36N	30E	8	None						Spudded well 7-12-67. Set 9-5/8" OD casing @ 264' RKB. Drilled to total depth 3660'. No shows. Plug back and temporarily abandon until approval is obtained for salt water disposal well. Set three cement plugs.
										Plug No. 1 290 sacks 3000-3660' (TD) Plug No. 2 50 sacks 2300-2400' Plug No. 3 60 sacks 950-1100'

Note.—There were _____ runs or sales of oil; _____ M. cu. ft. of gas sold.

_____ 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.



420

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

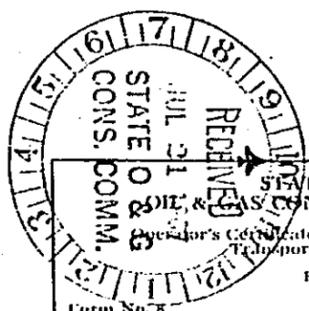
Federal, State or Indian Lease Number or Lease name if not lease <u>14-20-0803-6823</u> Survey or Sec-Twp-Rtg <u>Sec. 29-32-T36N-R30E</u> Operator <u>Kerr-McGee Corporation</u>	Field <u>Dineh-bi-Keyah</u> County <u>Apache</u>	Township <u>Lower Hermosa</u> State <u>Arizona</u>
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO.		
Street <u>215 Petroleum Center Bldg.</u> Above named operator authorizes (name of transporter) <u>Kerr-McGee Pipeline Corporation</u>	City <u>Farmington</u> City <u>Oklahoma City</u>	State <u>New Mexico 87401</u> State <u>Oklahoma 73102</u>
Transporter's street address <u>Kerr-McGee Building</u> Field address <u>P. O. Box 989 - Farmington, New Mexico 87401</u>		
Oil, condensate, gas well gas, casinghead gas		
To transport <u>100</u> % of the <u>oil</u> from said lease.		
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer	% transported	Product transported
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. <p align="center">Change of Gatherer & Transporter Effective: <u>7/19/67</u></p>		

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 [Handwritten Signature]

Date approved: 7-21-67
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: [Handwritten Signature]
 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

19 420

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.
14-20-0603-8823

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NAVAJO

7. UNIT AGREEMENT NAME
NAVAJO

8. FARM OR LEASE NAME
NAVAJO

9. WELL NO.
NO. 13

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

11. SEC. T., B., M., OR BLK. AND SURVEY OR AREA
Sec. 31, T36N, R30E

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
500' FSL & 2200' FWL (SE/4 SW/4) Apache Co. Arizona

14. PERMIT NO.
State No. 420

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
8906'

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 ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <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 Recombination 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 10:00 am 7-8-67. Drilled 13-3/4" hole to 1142' and set 9-5/8" OD, 32.30#, H-40, 8R, ST&C, casing at 1136' RKB. Cemented with 1000 sacks common cement with 2% CaCl and 1/4 floccle/sack. Used pump and plug method. Circ & estimated 50 sxs cement. Plug down at 4:00 am 7-10-67. Released pressure. Floats held OK. WOC 14 hrs. Test casing & BOP's to 1200 psi for 30 mins. Held Ok. Drilling 8-3/4" hole below surface casing.

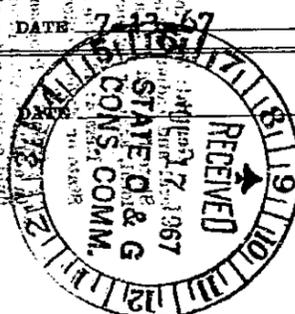
18. I hereby certify that the foregoing is true and correct

SIGNED [Signature] TITLE Production Supt. DATE 7-13-67

(This space for Federal or State office use)

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

*See Instructions on Reverse Side



20 420

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN THIS CATEGORY
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NAVAJO

7. UNIT AGREEMENT NAME
NAVAJO

8. FARM OR LEASE NAME
NAVAJO

9. WELL NO.
NO. 13

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

11. SEC. T., R., M., OR B.L. AND SURVEY OR AREA
Sec. 31, T36N, R30E G&SRM

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
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
500' FSL & 2200' FWL (SE SW)
Sec. 31, T36N, R30E. G&SRM Apache Co., Arizona

14. PERMIT NO.
State No. 420

15. ELEVATIONS (Show whether DF, ST, GR, etc.)
8900' 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"/>	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 checked="" 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.)

Instead of setting 7" casing to Total Depth, it is proposed to set 7" casing 5' into the Intrusive pay zone estimated to be at 3950'. A 6-1/4" hole will be drilled into the Intrusive zone for an open hole completion.

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

SIGNED

C. D. [Signature]

TITLE

Product Support

DATE 7-7-67

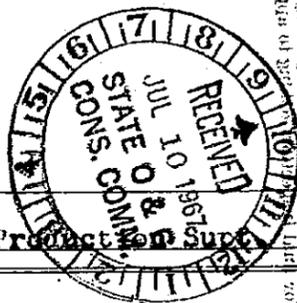
(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:



*See Instructions on Reverse Side

420

27

Form 9-331 C
(May 1963)

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

ARIZ.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

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
500' FSL & 2200' FWL (SE SW) Sec. 31-T36N-R30E G&SRM
At proposed prod. zone
Same. Apache County, Ariz.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
10 miles SW of Red Rock.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)
500'

16. NO. OF ACRES IN LEASE
2533

17. NO. OF ACRES ASSIGNED TO THIS WELL
SW/4 Sec. 31.

18. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
2110'

19. PROPOSED DEPTH
4500'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
8900' GR

22. APPROX. DATE WORK WILL START*
7-7-67

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/4"	9-5/8" OD	32.30	App. 1130'	Sufficient to circulate.
8-3/4"	7" OD	20 - 23#	4500'	Sufficient to cover all potential productive zones.

Blowout-Preventer: 1130' - 4500'
1) Kill and choke manifold.
2) 10" Series 900 Shaffer double BOP with pipe rams below and blind rams above.

Surface casing is to be set approx. 50' into Chile Shale estimated to be at 1130'.

IN ABOVE SPACE DESCRIBE THE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED [Signature] TITLE Prod. Supt. DATE 7-3-67

(This space for Federal or State office use)
PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side



24 420

ARIZ.

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

Pico Drilling Company
Drilling Contractor
Farmington, New Mexico
Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor 14-20-0603-8823 NAVAJO	Well number NO. 13	Elevation (ground) 8900'
Nearest distance from proposed location to property or lease line: 500 feet	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: 2110' feet	
Number of acres in lease: 2533	Number of wells on lease, including this well, completed in or drilling to this reservoir: 11	
If lease, purchased with one or more wells drilled, from whom purchased: NONE	Name	Address

Well location (give footage from section lines) 500' FSL & 2200' FWL	Section—township—range or block and survey Sec. 31-T36N-R30E G&SRM	Dedication (Comply with Rule 105) SW/4 Sec. 31
---	---	---

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

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

Proposed depth: 4500'	Rotary or cable tools Rotary	Approx. date work will start 7-7-67
Bond Status Blanket Bond Amount	Organization Report On file <input checked="" type="checkbox"/> Or attached	Filing Fee of \$25.00 Attached Yes.

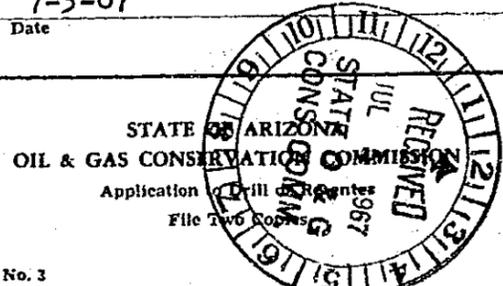
Remarks:
New Well
Covered by Commission Order No. 21.

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

[Signature]
Signature
7-3-67
Date

Permit Number: 420
Approval Date: 7-6-67
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.



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.	

CERTIFICATION

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name _____

Position _____

Company _____

Date _____

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.

Date Surveyed _____

Registered Professional Engineer and/or Land Surveyor _____

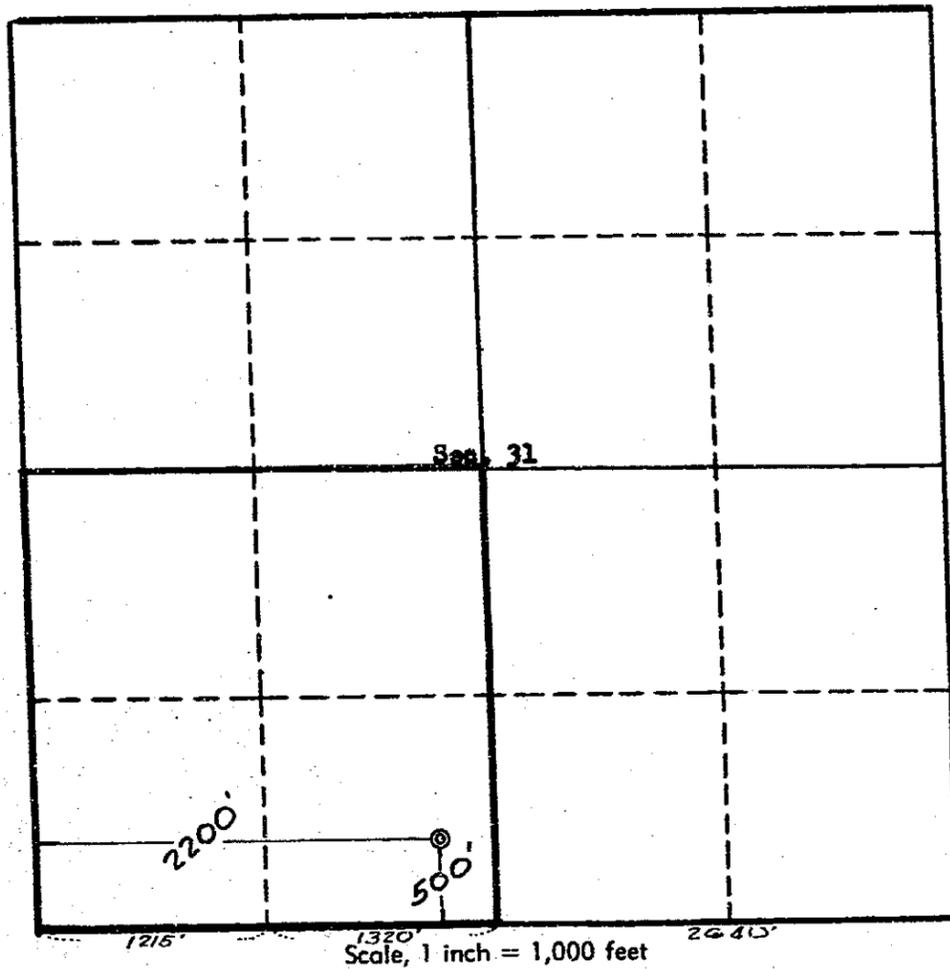
Certificate No. _____

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

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	1130'	0 - 1130'	Sufficient to circ.
7" OD	20-23#	J-55 - ST&C	0	4500'	Sufficient to cover all potential productive zones.	

Company Kerr-McGee Corporation
 Well Name & No. No. 13 Navajo
 Location 500 feet from the South line and 2200 feet from the West line.
 Sec. 31, T. 36 N., R. 30 E., G. & S. R. M., County Apache, Arizona
 Ground Elevation 8900, ungraded.

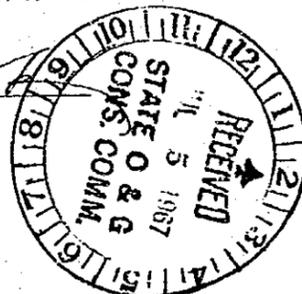


Surveyed July 1, 1967

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: KERR-MC GEE CORPORATION
(OPERATOR)

to drill a well to be known as

KERR-MC GEE #13 NAVAJO
(WELL NAME)

located 500' FSL and 2200' FWL (SE/4SW/4)

Section 31 Township 36N Range 30E, Apache County, Arizona.

The SW/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 6th day of July, 1967.

OIL AND GAS CONSERVATION COMMISSION

By John Dammister
EXECUTIVE SECRETARY

PERMIT No. 420

RECEIPT NO. 9510

API No. 02-001-20044

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill

FORM NO. 27



KERR-McGEE CORPORATION

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

RECEIVED *OK*

FEB 22 1983

O & G CONS. COMM.

OIL AND GAS DIVISION

February 17, 1983

PHONE

806 359-0351

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

RE: Application to Abandon and Plug,
Kerr-McGee Corporation's Navajo
#13. Located in Section 31, T36N,
R30E, G&SRM Survey, Apache County,
Arizona.

Gentlemen:

Enclosed in duplicate is "Application to Abandon and Plug" the above
referenced oil well.

The Navajo #13 was completed on September 5, 1967. The well produced
approximately 1650 B0 until February 1968, when it was deepened in an effort
to find another productive zone. Presently the well is producing 3 BOPD.

Kerr-McGee now wishes to Plug and Abandon the Navajo #13 due to economic
reasons.

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

Sincerely,

KERR-McGEE CORPORATION

Aaron Reyna

Aaron Reyna
Engineering Assistant

W.P. Diffin

W.P. Diffin
District Engineering Manager
Southwest District - N.A.

AR/rh

4469



KERR-McGEE CORPORATION

4221 WEST TWENTY-FIRST AVENUE
P. O. BOX 250 • AMARILLO, TEXAS 79109

RECEIVED

NOV 1 1979

O & G CONS. COMM.

OIL AND GAS DIVISION

October 19, 1979

PHONE
806 359-0351

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

RE: Re-opening of Kerr-McGee Corporation's
Navajo Lease Well No. 13, located in
Dineh-Bi-Ke'ah Field, Apache County, AZ

420

Gentlemen:

Enclosed find, in duplicate, Form No. 4, Well Completion or Recompletion Report and Well Log, and Form No. 23, Sundry Notice and Reports on Wells, for the above referenced well.

If you need any further information, please contact me at 806/359-0351.

Sincerely,

KERR-McGEE CORPORATION

Kelley Eisenberg

Kelley Eisenberg
Engineering Assistant
Southwest District - N. A.

CKE/bl

#420

255-

October 23, 1979

Janell Stroud
Production Clerk
Kerr-McGee Corporation
P.O. Box 250
Amarillo, Texas 79189

Re: Dineh-bi-Keyah Field
Navajo 13, Permit No. 420

Dear Ms. Stroud:

Your Monthly Producers Report for September shows the above captioned well as producing 60 barrels of oil. The last production reported prior to this was June 1968.

It will be necessary to file a Sundry Notice on this well. Also, if any additional work was performed, we will need a Recompletion Report. Forms are enclosed.

Yours truly,

Don Whittaker
Director
Enforcement Section

DW:os
Enc.

MONTHLY PRODUCERS REPORT

Field DINEH-BI-KEYAH
 County APACHE
 Field Office Address

Kerr-McGee Corporation
 Company
 Box 250
 Amarillo, Texas 79189
 Address

Month September 19 79

Well No.	Sale Permit No.	Status (Code)	Actual Oil Produced	Water Produced	Gas Produced (MCF)	Produced	Disposition of Gas - MCF			Disposition of Oil - Bbls.					
							Sold	Other	Code	Oil on Hand Beg. of Month	Bbls. to Transporter	Other	Code	Oil on Hand End of Month	
Navajo 1	377	P O	1057	12	229	29		229 V				1071		101	
3X	386	P O	595	145	299	30		299 U				603		101	
4	384	P O	4666	1822	61	30		61 V				4726		101	
6	390	P O	703	16	410	30		410 V				712		101	
7	389	P O	69	619	17	19		17 V				70		101	
9	396	P O	2135	922	867	30		867 V				2162		101	
10			INJECTION WELL												
11	506	P O	88	7	3613	30		3613 U				89		101	
13	420	P O	60	155	TSTM	4						61		101	
14	416	P O	1289	177	445	30		445 V				1305		101	
15	417	P O	269	53	628	30		628 V				272		101	
16	419	P O	455	83	534	30		534 V				461		101	
17	618	P O	198	11	232	30		232 V				201		101	

I hereby certify that the information given is true and complete to the best of my knowledge.
Janeil Stroud (Signature) October 9, 1979 (Date)
 Janeil Stroud - Production Clerk (Position)

"OTHER" OIL DISPOSITION CODE
 C - Circulating Oil
 D - Drilling
 E - Exploration
 F - Flaring
 G - Gas Lift
 H - Heat
 I - Injection
 J - Loss
 K - Lost (MCF Estimated)
 L - Lost (MCF Estimated)
 M - Reappraising or Pressure Maintenance
 N - Used On Lease
 O - Vented

"OTHER" GAS DISPOSITION CODE
 X - Used Off Lease
 Y - Used For Drilling (show destination on reverse side)
 Z - Gas Lift
 AA - Lost
 AB - Lost (MCF Estimated)
 AC - Reappraising or Pressure Maintenance
 AD - Used On Lease
 AE - Vented

RECEIVED

OCT 12 1979

O & G CONS. COMM.

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Monthly Producers Report
 Form No. 16

6-28-79

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:

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

CANCELLED

DATE 10-24-68

superseded by
 American Casualty Co. Bond
 \$25,000
 #5471020-52



KERR-MCGEE CORPORATION

KERR-MCGEE BUILDING • OKLAHOMA CITY, OKLAHOMA 73102

215 Petroleum Center Building
Farmington, New Mexico 87401

September 4, 1968

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

Attention Mr. James A. Lambert

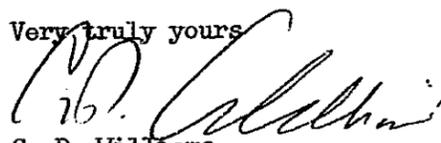
In re Navajo No. 13
Sec. 31, T36N, R30E
Dineh-bi-Keyah Field
Apache County, Arizona
Permit No. 420

Gentlemen

Reference is made to your letter of September 3 and our letter of August 27, 1968, concerning the captioned well. Navajo No. 13 is not a drilling well but is a producing well that has been shut in. It is our intention to continue to carry the well on the monthly producers report in a shut-in status until it is returned to production or other work is performed on it at which time a Sundry Notice will be filed.

If this approach is not satisfactory or if additional information is needed, please advise.

Very truly yours


C. D. Williams
Production Superintendent

lm

CC: Mr. J. I. Fisher



42

September 3, 1968

Mr. C. D. Williams
Kerr-McGee Corporation
215 Petroleum Center Building
Farmington, New Mexico 87401

Re: Kerr-McGee Corporation #13 Navajo
T36N, R30E, G & SRM
Sec. 31: SE/4 SW/4
Apache County, Arizona
Permit #420

Dear Mr. Williams:

Regulations of the Oil and Gas Conservation Commission of the State of Arizona state that when drilling operations have been suspended for sixty days, a well shall be plugged and abandoned unless written permission for temporary abandonment is obtained from the Commission. Please petition this office for permission to temporarily abandon subject well.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf



KERR-MCGEE CORPORATION

KERR-MCGEE BUILDING • OKLAHOMA CITY, OKLAHOMA 73102

215 Petroleum Center Building
Farmington, New Mexico 87401

August 27, 1968

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

Attention Mr. James A. Lambert

In re Navajo No. 13
Sec. 31, T36N, R30E
Dineh-bi-Kayah Field
Apache County, Arizona

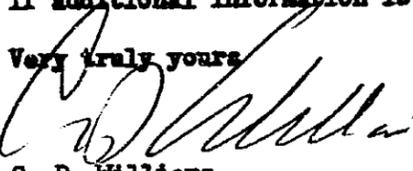
Gentlemen

Reference is made to your letter of August 23, 1968. Enclosed please find two completed copies of Form No. 25 for the Subsequent Report of Shut In for the captioned well. This producing oil well was shut in due to the low producing rate and its questionable economics.

As for future plans pertaining to this well, we plan to just leave it shut in at the present time. The well bore will remain available for utilization in any restimulation, deepening, secondary recovery, or other plans that may develop in the future.

If additional information is needed, please advise.

Very truly yours


C. D. Williams
Production Superintendent

lm

Enclosures

CC/E: Mr. J I Fisher

Navajo Tribe Minerals Department



FL 420

August 23, 1968

Mr. C. D. Williams
Kerr-McGee Corporation
215 Petroleum Center Building
Farmington, New Mexico 87401

Re: Kerr-McGee Corp. #13 Navajo
T36N, R30E, G SRM
Sec. 31: SE/4 SW/4
Apache County, Arizona
Permit #420

Dear Mr. Williams:

In examining Monthly Producers Report dated 8-9-68, we find the captioned well report was annotated "well shut in" 6-28-68. Enclosed are our forms No. 25, Sundry Notices And Reports On Wells. Please furnish us a report on this well. Please advise us of the future plans you have pertaining to this well.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf
Enc.

 **KERR-MCGEE CORPORATION**
KERR-MCGEE BUILDING • OKLAHOMA CITY, OKLAHOMA 73102
215 Petroleum Center Building
Farmington, New Mexico 87401

February 29, 1968

Mr. P. T. McGrath
United States Geological Survey
Post Office Box 959
Farmington, New Mexico 87401

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

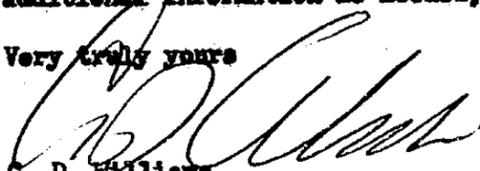
In re USGS Form 9-331
Navajo Well No. 13
SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec 31, T36N, R30E
Dineh-Bi-Keyah Field
Apache County, Arizona

Gentlemen

Enclosed please find Form 9-331, notice of intent to perforate, acidise and frac the Lower Hermosa Intrusive Zone on the Navajo No. 13 well.

Your earliest possible approval of this work is requested. If additional information is needed, please advise.

Very truly yours


C. D. Williams
Production Superintendent

In

cc: Navajo Tribe Minerals Department

J.I. Fisher

WRF
RF

420



February 15, 1968

Kerr-McGee Corporation
215 Petroleum Center Building
Farmington, New Mexico 87401

Attention: Mr. D.D. Williams, Production Superintendent

Re: Kerr-McGee Corporation #13 Navajo
SE SW 31-36N-30E, Apache County, Arizona
Permit 420

Gentlemen:

We are returning herewith your draft #A-118 in the amount of \$25.00 payable to the Commission which accompanied your application to "re-enter" captioned well.

Please be advised that according to Rule 120 an application to re-work must be made at least ten days prior to commencement of work. It is not necessary that a filing fee accompany such application.

Very truly yours,

John Bannister
Executive Secretary
mr
enc



KERR-MCGEE CORPORATION

KERR-MCGEE BUILDING • OKLAHOMA CITY, OKLAHOMA 73102

215 Petroleum Center Building
Farmington, New Mexico 87401

February 7, 1968

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

In re Permit to Re-enter Navajo Well No. 13
SE/SW of Sec 31, T36N, R30E
Dineh-Bi-Keyah field
Apache County, Arizona

Attention Mr. John Bannister

Gentlemen:

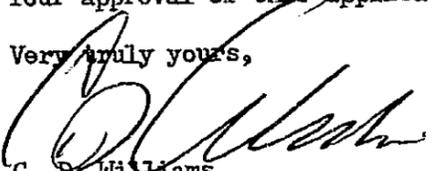
Enclosed please find two copies of Arizona Oil and Gas Conservation Commission Form No. 3 for re-entering and deepening Navajo Well No. 13. A draft for \$25.00 to cover the filing fee is included.

Since the surveyor's plats for location of the well are on file with the Commission, no new plats are submitted.

It is respectfully requested that all information concerning operations on this well be kept confidential. ? *order 24*

Your approval of this application is requested.

Very truly yours,


C. D. Williams
Production Superintendent

lm

CC J. I. Fisher
R. W. King
Navajo Tribe Minerals Department
WRF
RF
Draft

420





KERR-MCGEE CORPORATION

KERR-MCGEE BUILDING • OKLAHOMA CITY, OKLAHOMA 73102

215 Petroleum Center Bldg.

Farmington, New Mexico

June 30, 1967

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

Attn: Mr. John Bannister
Exec. Secretary

RE: Application For
Permit To Drill
Navajo Well No. 13
Dineh-bi-Keyah Field
Apache County, Arizona

Gentlemen:

Enclosed please find two copies of Arizona O&GCC Form No. 3 for the Kerr-McGee Navajo No. 13 located in SE SW Section 31, T36N, R30E. Also enclosed are two copies of the Surveyor's plat for the location of the well. A draft for \$25.00 to cover the filing fee 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.

CDW/hs

Enclosures

