

Release Date 9/7/78

CONFIDENTIAL



P-W

HUMBLE #1 NAVAJO-146
SE SW 15-35N-30E Apache County 452

sl

COUNTY Apache AREA Dineh bi Keyah Navajo LEASE NO. 14-02-0603-8880

WELL NAME Humble #1 Navajo-146

LOCATION SE SW SEC 15 TWP 35N RANGE 30E FOOTAGE 740 FSL - 1900 FWL
ELEV 765 GR 8775 KB SPUD DATE 2-2-68 STATUS P+A 10-16-69 TOTAL DEPTH 4213'
COMP. DATE 7-16-68 PBTD 4120

CONTRACTOR Mesa Drillers, Lubbock, Texas

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY	DRILLED BY CABLE TOOL	PRODUCTIVE RESERVOIR	INITIAL PRODUCTION
<u>9 5/8"</u>	<u>1210'</u>	<u>1050 sks</u>		<u>x</u>			
<u>5 1/2</u>	<u>4152</u>	<u>215 sks</u>					<u>P&A</u>

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Cutler	1770'		x	
Hermosa	2823'			
Ismay	3013'			
Desert Creek	3100'			
Akah	3160'			
Black Shale	3268'			
Barker Creek	3300'			
Mississippian	3462'			
Devonian	3660'			
McCracken	3826'			
Aneth	3930'			
Pre-Cambrian	4038'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
<u>IES, Sonic-GR</u>	<u>3854-64; 3882-86;</u> <u>3898-3901; 3832-44</u>	<u>3832-3901</u>	SAMPLE DESCRP. _____ SAMPLE NO. _____ CORE ANALYSIS _____ DSTs <u>x</u>

REMARKS	APP. TO PLUG	PLUGGING REP.	COMP. REPORT
	<u>x</u>	<u>x</u>	<u>x</u>

WATER WELL ACCEPTED BY _____

BOND CO. The American Insurance Co. BOND NO. 5-10-11-58
 BOND AMT. \$ 25,000 CANCELLED 3-16-98 DATE _____ ORGANIZATION REPORT 3-22-67
 FILING RECEIPT 9536 LOC. PLAT x WELL BOOK x PLAT BOOK x
 API NO. 02-001-20074 DATE ISSUED 1-31-68 DEDICATION SW/4

PERMIT NUMBER 452 **CONFIDENTIAL**
 (over) Release Date 9-4-68

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

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

DESCRIPTION OF WELL AND LEASE

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

Federal, State or Indian Lease Number or name of lessor if fee lease: 14-20-0603-8880 - Navajo Tract 146 Well Number: 1 Field & Reservoir: Wildcat

Location: SE SW (750' FSL & 1900' FWL) of Sec. 15 County: Apache

Sec. TWP-Range or Block & Survey: Section 15-35N-30E - G&SRM

Date spudded: 2-2-68 Date total depth reached: 2-28-68 Date completed, ready to produce: Temp. ST 7-16-68 Elevation (DE, RKB, RT or Gr.): 8775' KB Elevation of casing hd. flange: 8765'

Total depth: 4213' P.B.T.D.: 4120' 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: 3832-3901' (Over-all) Rotary tools used (interval): 0-4213' Cable tools used (interval): None

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

Type of electrical or other logs run (check logs filed with the commission): IES & Gamma Ray Sonic Date filed: March, 1968

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#	1210'	1050	None
Production	8-3/4"	5-1/2"	14#	4152'	215 / 3750#	None
					Gilsonite	

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
in.	ft.	ft.	in.	ft.	ft.	ft.	
2 1/2	3830	3800	None				

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval
3	Hyperjet	3854-64', 3882-86' & 3898-3901'	1000 gals. mud acid	3854-3901'
2	Hyperjet	3832-44'	1000 gals. reg. acid	3832-3901'

INITIAL PRODUCTION plus 27500 gals. water & 20000# sand

Date of first production: 7-6-68 Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): Flow

Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
			bbls.	MCF	bbls.	- ° API (Corr)
7-14-68	24	-	0	370	0	-

Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio
			bbls.	MCF	bbls.	
50#	-	-	0	370	0	-

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

Date: 2-28-69 Signature: J. Roy Dorrough



Permit No. 452 STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log Form No. 4 File One Copy

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Cutler	1770	2823	<i>No E. Log above 1210'</i>
Hermosa	2823	3013	
Ismay	3013	3100	
Desert Creek	3100	3160	
Akah	3160	3268	
Black Shale	3268	3300	
Barker Creek	3300	3462	
Mississippian	3462	3660	
Devonian	3660	3826	
McCracken	3826	3930	
Aneth	3930	4038	
Pre-Cambrian	4038	4213 TD	

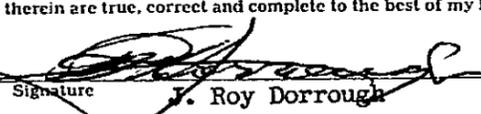
* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

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.

PLUGGING RECORD

Operator Humble Oil & Refining Company		Address P. O. Box 120, Denver, Colorado 80201			
Federal, State, or Indian Lease Number, or lessor's name if fee lease. 14-20-0603-8880 - Navajo Tract 146		Well No. 1	Field & Reservoir Dineh bi Keyah		
Location of Well SE SW (750' FSL & 1900' FWL) of Section 15-35N-30E - G&SRM		Sec-Twp-Rge or Block & Survey	County Apache		
Application to drill this well was filed in name of Humble Oil & Refining Co. - Navajo Tract 146	Has this well ever produced oil or gas On test only	Character of well at completion (initial production): Oil (bbls/day) Gas (MCF/day) Dry? Temp. Abd. - Non Commercial			
Date plugged: 10-16-69	Total depth 4077'	Amount well producing when plugged: Oil (bbls/day) Gas (MCF/day) Water (bbls/day) None None None			
Name of each formation con- taining 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		
McCracken	Gas	3826-3930'	See attached copy of U.S.G.S. Report for complete plugging summary.		
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
5-1/2"	4152'	None	4152'	-	-
9-5/8"	1210'	None	1210'	-	-
Was well filled with mud-laden fluid, according to regulations? Yes			Indicate deepest formation containing fresh water. Chuska		
NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE					
Name	Address		Direction from this well:		
No operators adjacent to this lease.					
Navajo Tribe of Indians owns all surface					
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 Dist. Supt. of the Humble Oil & Refining Company (company) and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.					
Date 10-24-69	Signature  J. Roy Dorrrough				
Permit No. 452			STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Plugging Record File One Copy		
	Form No. 10				

94

APPLICATION TO ABANDON AND PLUG

FIELD Dineh bi Keyah

OPERATOR Humble Oil & Refining Company ADDRESS P. O. Box 120, Denver, Colorado; 80201
Federal, State, or Indian Lease Number
or Lessor's Name if Fee Lease 14-20-0603-8880 - Navajo Tract 146 WELL NO. 1

SURVEY 35N-30E - G&SRM SECTION 15 COUNTY Apache
LOCATION SE SW (750' FSL & 1900' FWL) of Section 15

TYPE OF WELL Non Commercial - Temp. Abandoned TOTAL DEPTH 4213' - PBD 4120'
(Oil, Gas or Dry Hole)

ALLOWABLE (If Assigned)

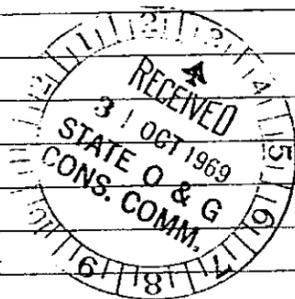
LAST PRODUCTION TEST OIL -0- (Bbls.) WATER -0- (Bbls.)
GAS 370 (MCF) DATE OF TEST 7-14-68

PRODUCING HORIZON McCracken PRODUCING FROM 3832' TO 3901'

1. COMPLETE CASING RECORD

Surface - 9-5/8" 32# set at 1210'.

Production - 5 1/2" 14# set at 4152'.



2. FULL DETAILS OF PROPOSED PLAN OF WORK

See attached well bore sketch.

A regulation Dry Hole Marker will be installed.

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

DATE COMMENCING OPERATIONS Immediately after approval.

NAME OF PERSON DOING WORK Mr. H. L. Farris ADDRESS P. O. Box "I", Farmington, N. M. 87401

CORRESPONDENCE SHOULD BE SENT TO J. Roy Dorrough
Name J. Roy Dorrough
Title Dist. Supt.

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

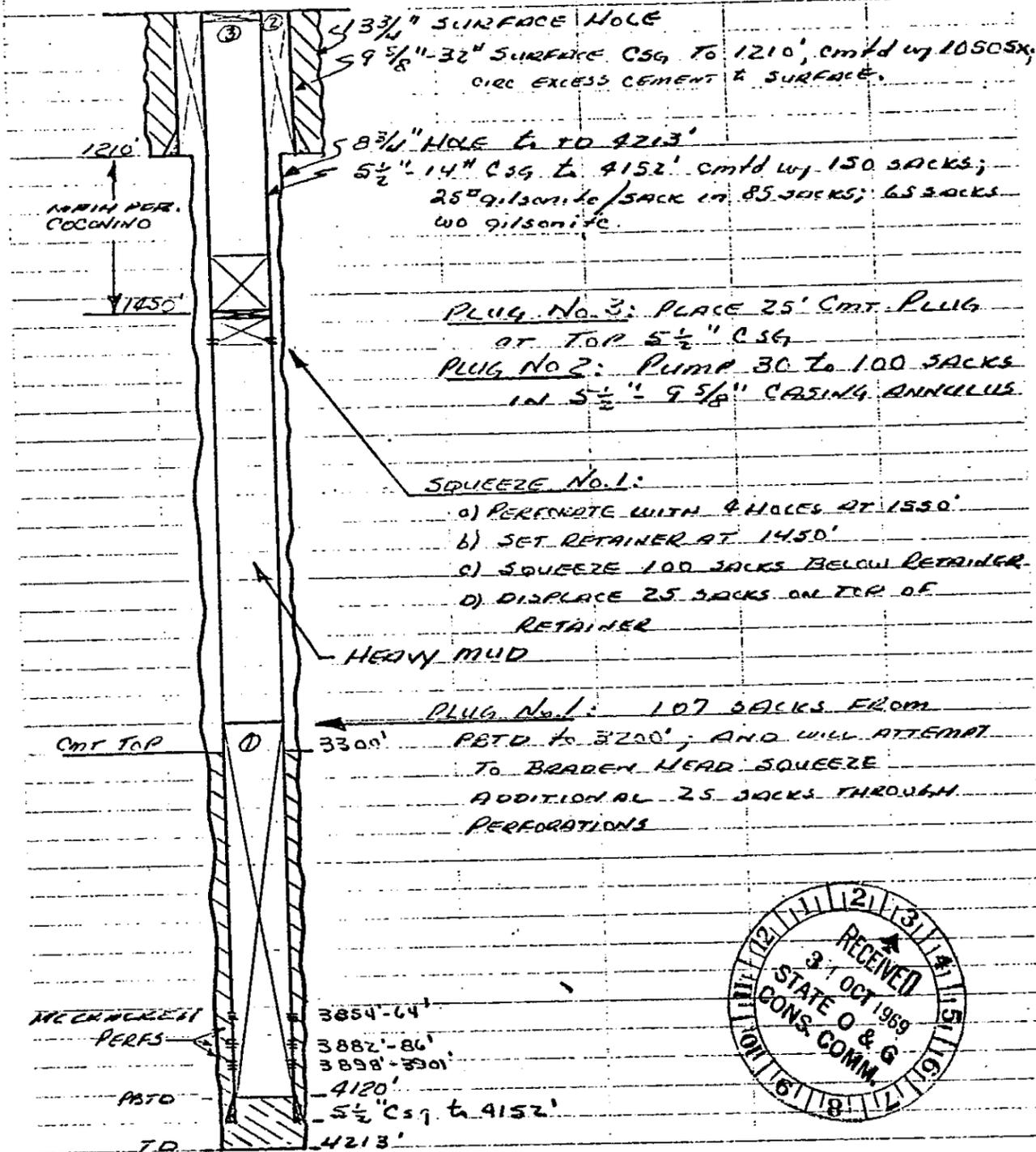
Date 9-30-69

Date Approved 10-6-69
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: John Bannister

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

Permit No. 452

WELL BORE SKETCH



NOTE: TOP OF 5 1/2" CSG, 5 1/2" - 9 5/8" CASING ANNULUS, AND CASING HEAD SIDE OUTLETS WILL BE CAPPED WITH WELDED PLATES.

HUMBLE OIL & REFINING CO.
 PROPOSED PLUGGING PROCEDURE
 NAVAJO TRACT 146, WELL No. 1
 SE SW SECTION 15 - 35N - 30E
 APACHE CO, ARIZONA

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.

14-20-0603-8880

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo Tract 146

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Dineh bi Keyah

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

Sec. 15-35N-30E - G&SRM

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

1. OIL WELL GAS WELL OTHER Non Commercial - Temp. Abandoned

2. NAME OF OPERATOR
Humble Oil & Refining Company

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
SE SW (750' FSL & 1900' FWL) of Section 15

14. PERMIT NO.
Arizona #452

15. ELEVATIONS (Show whether DF, RT, OR, etc.)
8775' KB

12. COUNTY OR PARISH
Apache

13. STATE
Arizona

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

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

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Ran tubing to 4120', displaced 5 1/2" casing with mud. Displaced 107 sx cement 4120' to 3200'. Did bradenhead squeeze on casing and tubing to 1500# - squeezed approximately 8 sx cement in perforations 3854-64', 3882-86' and 3898-3901'. Pulled tubing. Checked top of cement with wire line at 3287'. Perforated 4 holes with Schlumberger at 1550'. Set 5 1/2" permanent type cement retainer at 1450'. Squeezed 100 sx cement in perforations at 650 psi. Spotted 25 sx cement plug on top of retainer. Placed 30' cement plug in top of 5 1/2" casing. Pumped 200 sx cement in annulus between 5 1/2" and 9-5/8" casing. Finished with pressure of 700#, casing stood full of cement. Checked later - annulus standing full of cement.

Welded a steel plate across top of 5 1/2" and casing annulus. Capped casing head side outlets with welded steel plates. Regulation dry hole marker welded onto steel plate. Job complete 10-16-69. P + A

Location is cleaned and ready for inspection.

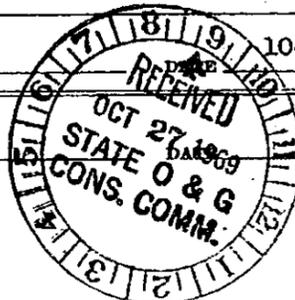
cc: Mr. Perry K. Hurlbut - Minerals Supervisor - Navajo Tribe
Mr. Cato Sells - Water Development - Navajo Tribe

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

SIGNED J. Roy Dorrigh TITLE Dist. Supt.

(This space for Federal or State office use)

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



*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

LAND OFFICE 14-20-0603-8880
LEASE NUMBER _____
UNIT _____

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Arizona County Apache Field Dineh bi Keyah
The following is a correct report of operations and production (including drilling and producing wells) for the month of September, 1969.
Agent's address P. O. Box 120 Company Humble Oil & Refining Company
Denver, Colorado 80201 Signed _____
Phone 534-1251 Agent's title District Superintendent

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
---------------------	------	-------	----------	---------------	----------------	---------	-------------------------------	-------------------------------	--------------------------------------	--

NAVAJO TRACT 146 - ARIZONA PERMIT NO. 452

Sec. 15
SE SW

35N 30E 1 0

Operations suspended 7-16-68. See Sundry Notice dated 8-6-68. No work has been done since this date.

SUNDRY NOTICE APPLICATION TO PLUG AND ABANDON SUBMITTED 9-30-69.

NOTE: CONTINUE IN TEMPORARY ABANDONED STATUS PER LETTER DATED 2-29-68 AND YOUR APPROVAL OF 3-4-68. ALSO YOUR LETTER DATED 6-12-69 GRANTING APPROVAL TO continue in this STATUS UNTIL 6-16-70.



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

NOTE.—There were No runs or sales of oil; No M cu. ft. of gas sold;

No 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.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

LAND OFFICE _____
LEASE NUMBER 14-20-0603-8880
UNIT _____

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Arizona County Apache Field Dineh bi Keyah
The following is a correct report of operations and production (including drilling and producing wells) for the month of July, 1969, and August 1969
Agent's address P. O. Box 120 Company Humble Oil & Refining Company
Denver, Colorado 80201 Signed _____
Phone 534-1251 Agent's title Dist. Supt.

SEC. AND 1/4 OF 1/4	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)
---------------------	------	-------	----------	---------------	----------------	---------	-------------------------------	-------------------------------	--------------------------------------	--

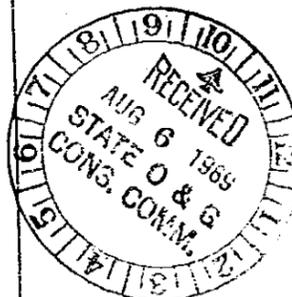
NAVAJO TRACT 146 - ARIZONA PERMIT NO. 452

9 Sec. 15 SE SW

35N 30E 1 0

Operations suspended 7-16-68. See Sundry Notice dated 8-6-68. No work has been done since this date.

NOTE: CONTINUE IN TEMPORARY ABANDONED STATUS PER LETTER DATED 2-29-68 AND YOUR APPROVAL OF 3-4-68. ALSO YOUR LETTER DATED 6-12-69 GRANTING APPROVAL TO CONTINUE IN THIS STATUS UNTIL 6-16-1970.



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

NOTE.—There were no runs or sales of oil; no M cu. ft. of gas sold;

no 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.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate
(Other instructions on reverse side)

Form approved
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Humble Oil & Refining Company

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
SE SW (750' FBL & 1900' FWL) of Section 15

5. LEASE DESIGNATION AND SERIAL NO.
14-20-0607-8880

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME
-

8. FARM OR LEASE NAME
Navajo Tract 146

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA
Sec. 15-35N-30E - GASFM

12. COUNTY OR PARISH
Apache

13. STATE
Arizona

14. PERMIT NO.
Arizona No. 452

15. ELEVATIONS (Show whether DF, KT, OR, etc.)
8775' KB

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

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

(Other) **Operations subsequent to 4-24-68**
(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.)

Moved in pulling unit and perforated ~~3832-44'~~; ~~3832-44'~~; ~~3832-44'~~ and 3832-44'.
Swabbed down, no gas. Treated with 1000 gallons regular acid squeezed into formation at 4000#, no break while acid was going in formation. Fracture treated with 27500 gallon of CaCl water and 20000# sand, with Dowell J-33 and G-2 added. Maximum pressure 5800#, final pressure 5700#, 30 minute shut in 2750#.

Swabbed to 500', no show of gas. Swabbed down and flowed some gas, would not burn. Continued swabbing and flowing, recovered 222 barrels frac water and flowed gas at maximum rate of 370 MCFPD. Tubing pressure 50#, separator pressure 40#. Shut well in on 7-16-68. Temporarily abandoned.

NOTE: CONTINUE IN TEMPORARY ABANDONED STATUS PER LETTER DATED 2-29-68 AND YOUR APPROVAL OF 3-4-68.

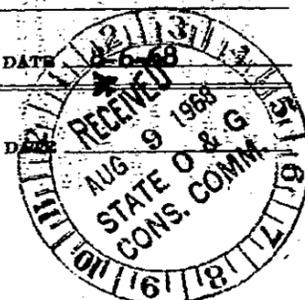
CONFIDENTIAL

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

SIGNED J. Roy Dorough TITLE Dist. Supt. DATE 8-6-68

(This space for Federal or State office use)

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



15

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-R356.5.
LAND OFFICE _____
LEASE NUMBER 14-20-0603-8880
UNIT _____

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Arizona County Apache Field Wildcat
The following is a correct report of operations and production (including drilling and producing wells) for the month of July, 1968, through June 1969
Agent's address P. O. Box 120 Company Huble Oil & Refining Company
Denver, Colorado 80201 Signed [Signature]
Phone 534-1251 Agent's title Dist. Supt.

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DATA PRODUCED	BARRIS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRIS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NAVAJO TRACT 146 - ARIZONA PERMIT NO. 452										
Sec. 15 SE SW	35N	30E	1							Perforated, stimulated and tested. See Sundry Notice dated 3-6-68. Operations suspended on 7-16-68. Temp. Abd.

NOTE: CONTINUE IN TEMPORARY ABANDONED STATUS PER LETTER DATED 2-29-68 AND YOUR APPROVAL OF 3-4-68.

CONFIDENTIAL



NOTE.—There were no runs or sales of oil; no M cu. ft. of gas sold;

no 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.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-E356.5.

LAND OFFICE _____
LEASE NUMBER _____
UNIT _____

LESSEE'S MONTHLY REPORT OF OPERATIONS

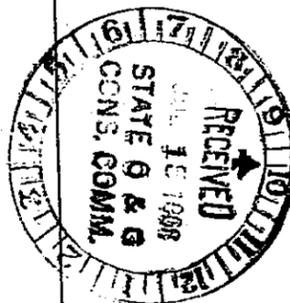
State Arizona County Apache Field Dineh bi Keyah

The following is a correct report of operations and production (including drilling and producing wells) for the month of June, 1968.

Agent's address P. O. Box 120 Company Apache Oil & Refining Company
Denver, Colorado 80201 Signed [Signature]

Phone 534-1251 Agent's title Dist. Chief Engineer

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NAVAJO TRACT 146 - ARIZONA PERMIT NO. 452										
Sec. 15 SE SW	35N	30E	1	0						Rigging up pulling unit to perforate additional zones and test.



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

NOTE.—There were No runs or sales of oil; No M cu. ft. of gas sold;

No 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.

Form 5-331
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

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

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Humble Oil & Refining Company

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
SE SW (750' FSL & 1900' FWL) of Section 15

14. PERMIT NO.
Arizona No. 452

15. ELEVATIONS (Show whether DF, RT, CR, etc.)
8775' KB

5. LEASE DESIGNATION AND SERIAL NO.
14-20-0603-8880

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME
-

8. FARM OR LEASE NAME
Navajo Tract 146

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA
Sec. 15-35N-30E - GABRM

12. COUNTY OR PARISH 13. STATE
Apache Arizona

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

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

Perforated 1 shot per foot 3854-64', 3882-86' and 3898-3901' with 4" Hyperjet. Set packer at 3835' and swabbed well down, make very small amount of gas. Tubing pressure 220# after 18 hours shut in. Acidized with 1000 gallons mud acid, swabbed back acid water, no gas. Tubing pressure 40# after 16 hours shut in. Filled casing with inhibited water. Temporarily shut in on 4-24-68.

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

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

SIGNED John F. Richardson TITLE Dist. Chief Engineer

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:



452 *See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

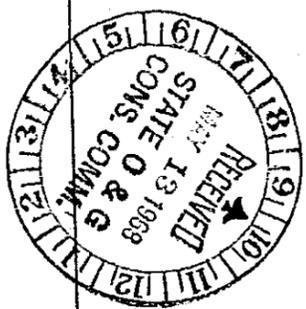
Form approved.
Budget Bureau No. 42-R356.5.

LAND OFFICE 14-20-0603-8880
LEASE NUMBER _____
UNIT _____

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Arizona County Apache Field Dineh bi Keyah
The following is a correct report of operations and production (including drilling and producing wells) for the month of April, 1968,
Agent's address P. O. Box 120 Company Humble Oil & Refining Company
Denver, Colorado 80201 Signed [Signature]
Phone 534-1251 Agent's title Dist. Chief Engineer

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NAVAJO TRACT 146 - ARIZONA PERMIT NO. 452										
Sec. 15 SE SW	35N	30E	1	0						Perforated and acidized, no gas or oil. Temporarily shut in on 4-24-68.



452

Note.—There were no runs or sales of oil; no M cu. ft. of gas sold;
no 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 8th of the succeeding month, unless otherwise directed by the supervisor.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

LAND OFFICE _____
LEASE NUMBER 14-20-0603-8880
UNIT _____

LESSEE'S MONTHLY REPORT OF OPERATIONS

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

SEC. AND 1/4 OF 1/4	TWE.	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)
NAVAJO TRACT 146										
Sec. 15 NW SE SW 35N		30E	1	0						Operations suspended 2-29-68. See Sundry Notice dated 3-14-68. No work has been done since that date.



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

NOTE.—There were None 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.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLE COPY
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
14-20-0603-8880

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo Tract 146

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 15-35N-30E-08SM

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 **Temporarily abandoned**

2. NAME OF OPERATOR
Humble Oil & Refining Company

3. ADDRESS OF OPERATOR
2000 Classen Center North, Oklahoma City, Oklahoma 73106

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

750' FSL and 1900' FWL, Section 15

14. PERMIT NO.
452

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
8775' KB

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	(Other)	<input type="checkbox"/>
(Other)	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	ALTERING CASING	<input checked="" type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	TEMP. ABANDONMENT*	<input checked="" type="checkbox"/>
ABANDON*	<input type="checkbox"/>	Operations subsequent to 2-26-68	
CHANGE PLANS	<input type="checkbox"/>	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Operations Subsequent to 2-26-68 and Temporary Abandonment

2-27-68 Drilling @ 4194'
 2-28-68 4213'. Preparing to run 5-1/2" casing.
 2-29-68 Ran 4141' of 5-1/2" 14# J-55 ST&C casing. Set casing @ 4152' KB and cemented with 150 sx Class A cement with 4% gel and 25#/sack gilsonite and 65 sx Class A cement with 4% gel. Cement top 3300' by temperature survey. Displaced cementing plug with corrosion inhibited water. Well temporarily abandoned pending development of market.

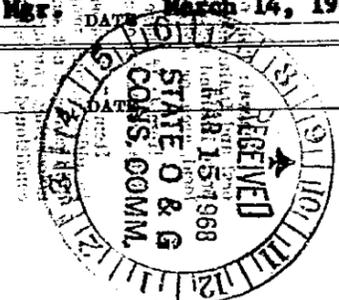
Note: This report supplements report of 2-26-68 made prior to reaching total depth.

18. I hereby certify that the foregoing is true and correct.
 SIGNED: **COPY C. L. PROKOP** TITLE **Expl. Dirg. Operations Mgr.** DATE **March 14, 1968**
 (This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

CONFIDENTIAL

Release Date _____
*See Instructions on Reverse Side



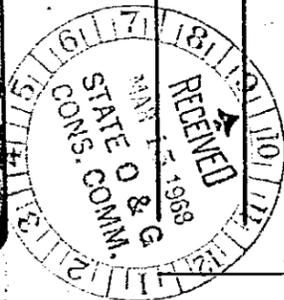
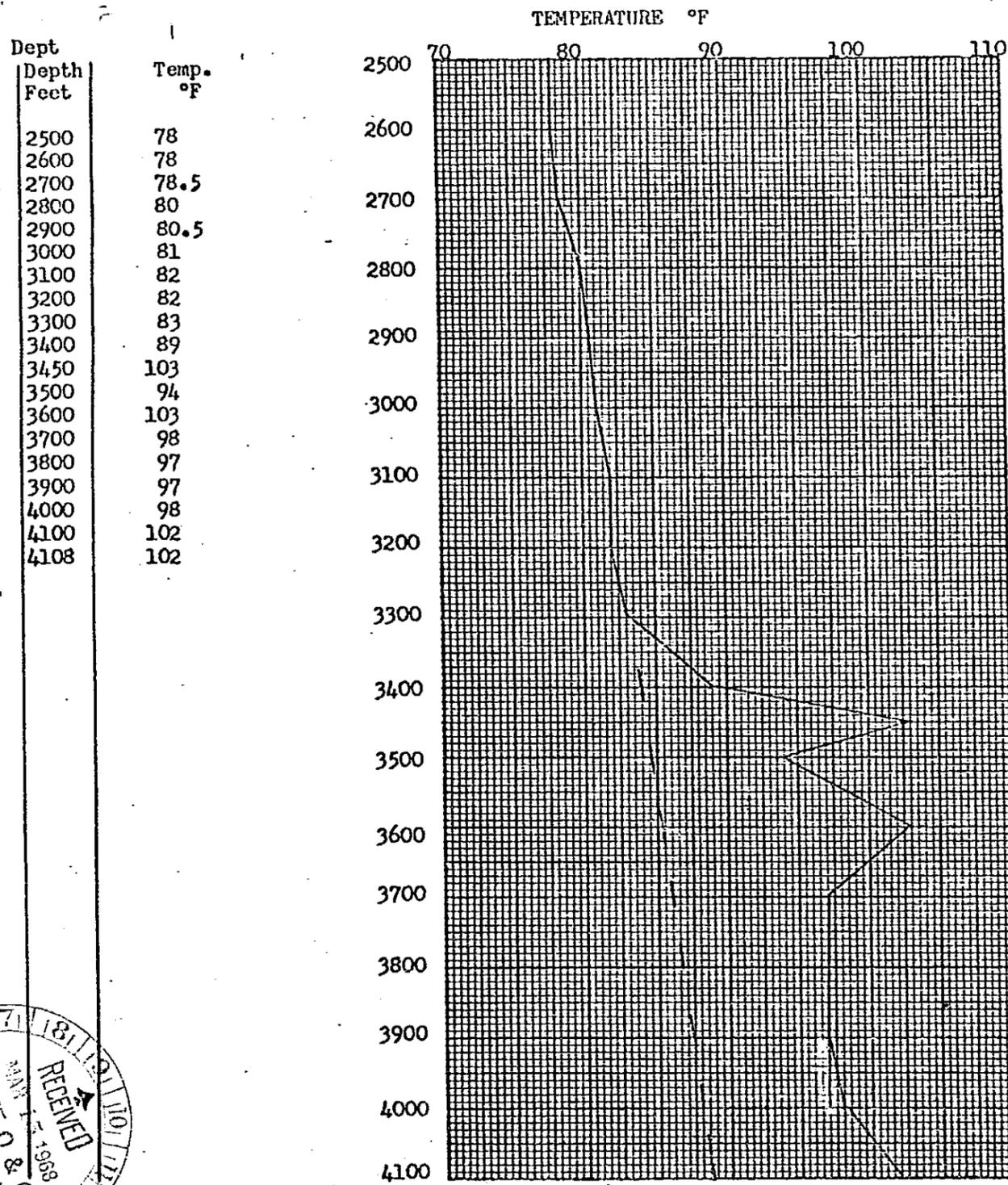
452

19

HUMBLE OIL & REFINING CO.
 NAVAJO 146 NO. 1
 DINEH'BI KEYAH FIELD



TEMPERATURE SURVEY
 FEBRUARY 29, 1968
 OUR FILE NO. 2-2648-T



Cement Top 3300'
 K. B. Total Depth 4108'

REMARKS

452
 61

CONFIDENTIAL

DRILL STEM TESTS

DST #1 Run 2-20-68
Interval 3825-3936 feet

Initial Hydrastatic		1789 psi
Initial Flow	5 Min.	44 "
Initial Shut In	1 hour	873 "
Final Flow	1 hour	87 "
Final Shut In	2 hours	873 "
Final Hydrastatic		1789 "

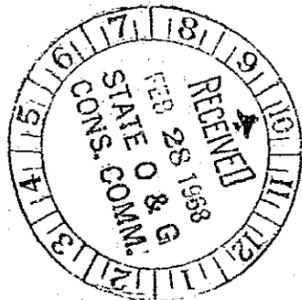
Recovery: Gas to surface in 25 mins, Max rate 138 MCF/day.
Recovered 100 feet mud. Grude mud logger analysis i
indicated helium content in gas.

Field Analysis: 4% He - no hydrocarbons - Humble letter.
3-18-68

DST #2 Run 2-22-68
Interval 3944-4075'

Initial Hydrastatic		1832 psi
Initial Flow	5 Min.	131 "
Initial Shut In	1 hour	873 "
Final Flow	1 hour	131-218 "
Final Shut In	2 hours	873 "

Recovery: Gas to surface in 21 mins., Max. rate 12.4 Mof/day.
Recovered 640 feet of gas cut mud. Grude mud
logger analysis indicated helium content in gas.



452

50

SUNDRY NOTICES AND REPORTS ON WELLS

Confidential

1. Name of Operator Humble Oil & Refining Company
 2. OIL WELL GAS WELL OTHER (Specify) Well not completed as of this date
 3. Well Name Navajo Tract 146 No. 1
 Location 740' FSL and 1900' FWL
 Sec. 15 Twp. 35N Rge. 30E County Apache, Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease
Navajo Tract 146 14-20-0603-8880
 5. Field or Pool Name Wildcat

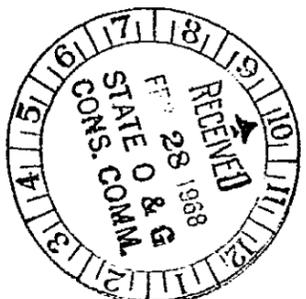
6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

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

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

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

2-2-68 Spud
 2-4-68 Set 9-5/8" 32# H-40 casing @ 1210'. Cemented with 1050 sx Class A cement. Cement circulated. Deviation 1/2°.
 2-7-68 Drilling @ 1950'
 2-10-68 Drilling @ 2775'
 2-13-68 Drilling @ 3183'
 2-16-68 Drilling @ 3545'
 2-19-68 Drilling @ 3895'
 2-20-68 3929' - DST Interval 3818-3929'.
 2-21-68 Drilling @ 4030'
 2-22-68 4075' - Running Electric Logs
 DST Interval 3944-4075'
 2-23-68 Drilling @ 4099'
 2-26-68 Drilling @ 4170'



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

Signed C. L. Prokop

The Expl. Drig. Oper. Mgr. Date February 26, 1968

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

Permit No. 452

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL

RE-ENTER OLD WELL

Humble Oil & Refining Company
NAME OF COMPANY OR OPERATOR

2000 Classen - North Building, Oklahoma City, Oklahoma ~~73106~~ 73106
Address City State

Mesa Drillers
Drilling Contractor
P. O. Box 108, Lubbock, Texas 79408
Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor Navajo Tract 146 - 14-20-0603-8880	Well number 1	Elevation (ground) Approx. 8800' *
Nearest distance from proposed location to property or lease line: 1,900 feet	Distance from proposed location to nearest drilling completed or applied—for well on the same lease: First Well feet	
Number of acres in lease: 1280 1280	Number of wells on lease, including this well, completed in or drilling to this reservoir: 1	

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

Well location (give footage from section lines) Section—township—range or block and survey Dedication (Comply with Rule 105)
740' N of SL, 1900' E of WL Sec. 15 Sec. 15-35N-30E - G&SRM 160 - E SW 1/4

Field and reservoir (if wildcat, so state) County
Wildcat Apache

Distance, in miles, and direction from nearest town or post office
Approximately 45 miles SW of Shiprock, New Mexico

Proposed depth: 4600'	Rotary or cable tools Rotary	Approx. date work will start 2-4-68.
Bond Status Blanket Bond on File Amount \$25,000	Organization Report On file <input checked="" type="checkbox"/> Or attached	Filing Fee of \$25.00. Attached Check No. 6308 dtd 1-30-68

Remarks: **Mud Program: 0-900' - Native with proper properties to maintain hole. 900'-TD - Low solids water base.**

Testing: **DST on shows, DST in Devonian-McCracken. Possible cores on shows.**

Logs: **IES & Gamma Ray/Sonic with Caliper.**

Stimulation: **As necessary.**

Blow Out Preventers: **Series 600 double acting on 9-5/8" surface casing.**

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

* Will provide exact elevation on next report.

C. L. Prokop
Signature **C. L. Prokop**
Date **1-30-68**

Permit Number: **452**
Approval Date: **1-31-68**
Approved By: *John Danmuth*

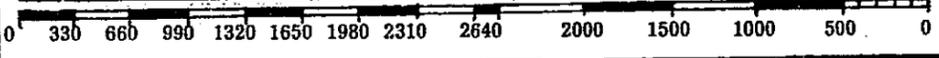
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Application to Drill or Re-enter
File Two Copies

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

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

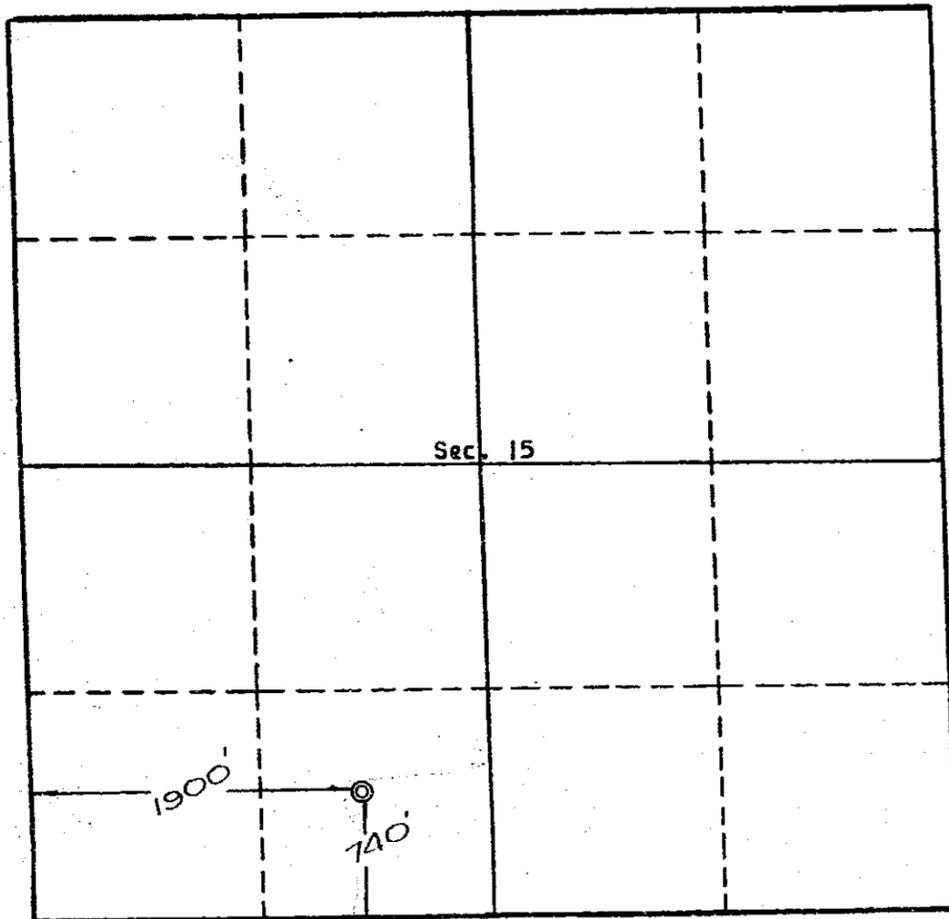
Owner	Land Description
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> </div> <div style="width: 50%; padding-left: 10px;"> <p style="text-align: center;">CERTIFICATION</p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p>Name <u>C. L. Prokop</u> <u>Expl. Drlg. Operations Mgr.</u> Position <u>See above</u></p> <p>Company <u>Humble Oil & Refining Company</u></p> <p>Date <u>1-30-68</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 <u>See attached plat</u> <u>Ernest V. Echohawk</u></p> <p>Certificate No. <u>2311</u></p> </div> </div>	



PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
9-5/8"	32.30#	H-40	0	950'	950'	Circ. to surface.
7"	20#	J-55	0	As Needed		Suffieient to cover all pays

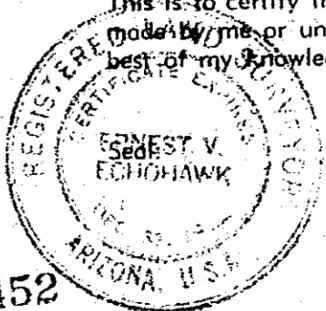
Company HUMBLE OIL & REFINING CO.
Well Name & No. Navajo Tract 146 #1
Location 740 feet from the South line and 1900 feet from the West line.
Sec. 15, T. 35 N., R. 30 E., G. & S. R. M., County Apache, Arizona
Ground Elevation _____



Scale, 1 inch = 1,000 feet

Surveyed January 27, 19 68

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



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



PERMIT TO DRILL

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

To: HUMBLE OIL & REFINING COMPANY
(OPERATOR)

to drill a well to be known as

HUMBLE #1 NAVAJO 146
(WELL NAME)

located 740' YSL and 1900' FWL (SE SW)

Section 15 Township 35N 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 31st day of January, 19 68.

OIL AND GAS CONSERVATION COMMISSION

By John Bannister
EXECUTIVE SECRETARY

PERMIT N^o 452

RECEIPT NO. 9536
API No. 02-001-20074

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill

FORM NO. 27

"Forms-when to file" attached

X-Chano
X-Lambert

June 12, 1969

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

Re: Humble #2 Navajo 138
T35N, R30E, G & SRM
Sec. 6: SE/4 SE/4
Permit #400 X
Apache County

Humble #1 Navajo 146
T36N, R30E, G & SRM
Sec. 15: SE/4 SW/4
Apache County
Permit #452

Humble #1 Navajo 87
T36N, R29E, G & SRM
Sec. 23: SE/4 NE/4
Apache County
Permit #401 X

Humble #1 Navajo 151
T35N, R30E, G & SRM
Sec. 35: SE/4 NE/4
Apache County
Permit #454 X

Dear Mr. Dorrrough:

Authorization from this Commission is hereby granted to continue the captioned wells in a temporary abandoned status. This temporary abandoned status will expire June 16, 1970. We will require our Form #25 (or U.S.G.S. Sundry Notice Report) to be submitted monthly as you have done in the past.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf

452



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. F. DORR
SUPERINTENDENT

June 5, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

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

Attn: Mr. James A. Lambert

Gentlemen:

Re: Humble #2 Navajo 138
T35N, R30E, G & SRM
Sec. 6: SE/4 SE/4
Apache County
Permit 400

Humble #1 Navajo 87
T36N, R29E, G & SRM
Sec. 23: SE/4 NE/4
Apache County
Permit 401

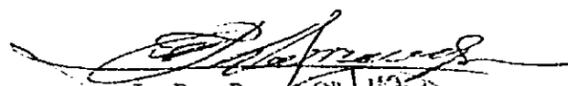
Humble #1 Navajo 146
T36N, R30E, G & SRM
Sec. 15: SE/4 SW/4
Apache County
Permit 452

Humble #1 Navajo 151
T35N, R30E, G & SRM
Sec. 35: SE/4 NE/4
Apache County
Permit 454

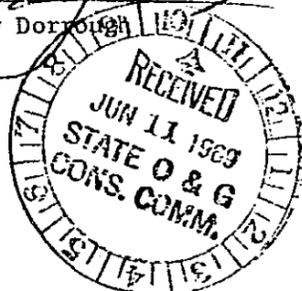
In answer to your letter of June 2, 1969, relating to the above, this is to advise that the working interest owners in the immediate vicinity of the above listed wells are currently actively attempting to form a unit which might eventually lead to the economic exploitation and production of helium bearing gas wells in the area.

Each of the above listed wells could become involved as a producer of helium bearing gas. We therefore request extension of the temporary abandoned status of these wells.

Very truly yours,


J. Roy Dorrough

JRD:mg



452

X-Chrono
X-Lambert

June 2, 1969

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

Re: Humble #2 Navajo 138
T35N, R30E, G & SRM
Sec. 6: SE/4 SE/4
Apache County
Permit 400 X

Humble #1 Navajo 87
T36N, R29E, G & SRM
Sec. 23: SE/4 NE/4
Apache County
Permit 401 X

Humble #1 Navajo 146
T35N, R30E, G & SRM
Sec. 15: SE/4 SW/4
Apache County
Permit 452

Humble #1 Navajo 181
T35N, R30E, G & SRM
Sec. 35: SE/4 NE/4
Apache County
Permit 454 X

Dear Mr. Dorrrough:

For the past year these wells have been carried in the temporary abandoned status. Please advise us what plans you have for each of the wells in the ensuing year and make new request for extending temporary abandon status should you wish that these wells remain in that status.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jjf

452

June 21, 1968

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

Dear Mr. Dorrough:

Your letter of May 31, 1968 requests that certain gas wells be exempt from Capacity Testing in compliance with Rule 401. Our records do not reflect that any of these have been completed gas wells. Therefore, we will need the information indicated on the attached sheet.

We do have on file the application that the Humble 488 be considered as a salt water injection well.

As soon as we receive clarification on the above points, consideration will be given to your request.

Very truly yours,

John Bannister
Executive Secretary
jr

452

Humble Oil & Refining

Well	Completion Report	Samples	
# 1-140 Permit 393	due		
# 2-138 Permit 400	due		
# 1-87 Permit 401	due		
# 1-88 Permit 421	due		
# 4-88 Permit 447	due	due	Applic to convert to salt water injec
# 1-146 Permit 452	due	due	
452			



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

DENVER DISTRICT

May 31, 1968

POST OFFICE BOX 177

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

Attn: Mr. John Bannister

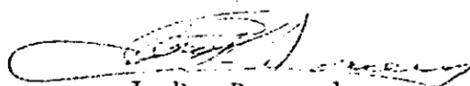
Dear Sir:

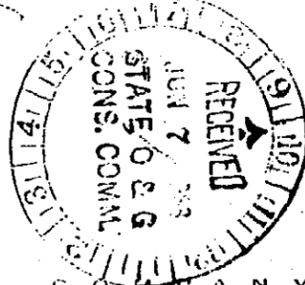
In compliance with Rule 401 and Directive D-2-67, we hereby request exemption from Capacity Tests of Gas Wells on the following shut-in gas wells during the month of June, 1968.

- 401 #1 Navajo Tract 87
SE NE Section 23-36N-29E, Apache County
- 421 #1 Navajo Tract 88
SE SE Section 25-36N-29E, Apache County
- 447 #4 Navajo Tract 88
SE NW Section 25-36N-29E, Apache County
- 400 #2 Navajo Tract 138
SE SE Section 6-35N-30E, Apache County
- 343 #1 Navajo Tract 140
SE NE Section 8-35N-30E, Apache County
- 452 #1 Navajo Tract 146
SE SW Section 15-35N-30E, Apache County

Your approval of these exemptions will be appreciated.

Very truly yours,


J. Roy Dorrough



452

4-11-68

Marvin Smith, Humble, Denver

Re: Humble 1-146
Permit 452

Exploration Dept. turning this well to
Produc Dept., who will begin opera-
tions shortly (before 5-1-68) to
complete.

Will acidize; if results indicative,
will perforate & test McCracken
(for helium).

Will keep us informed.

452

HUMBLE OIL & REFINING COMPANY

OKLAHOMA CITY, OKLAHOMA 73106

EXPLORATION DEPARTMENT
CENTRAL DIVISION

March 18, 1968

2000 CLASSEN CENTER-NORTH
JACKSON 8-2411

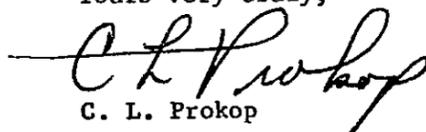
Mr. John Bannister
Oil & Gas Conservation Commission
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Dear Sir:

Your letter of March 13, 1968, requested gas analysis data on Humble's #1 Navajo Tract 146, Permit 452. To date we have not made a complete analysis.

A field analysis was made with the gas chromatograph in the Core Lab Inc. mud logging trailer. This showed the gas recovered during both DST #1 (3825-3936') and DST #2 (3944-4075') contained essentially no hydrocarbons and approximately 4 percent helium.

Yours very truly,


C. L. Prokop

CLP:lh

HUMBLE OIL & REFINING COMPANY

OKLAHOMA CITY, OKLAHOMA 73106

EXPLORATION DEPARTMENT
CENTRAL DIVISION

March 14, 1968

2000 CLASSEN CENTER-NORTH
JACKSON B-2411

Mr. John Bannister
Arizona O. & G. Conservation Commission
1624 West Adams - Room 202
Phoenix, Arizona 85007

Dear Sir:

Attached is a Sundry Notice detailing work on Humble's Navajo Tract 146 No. 1, Apache County, Arizona, subsequent to the interim report of February 26, 1968. Also attached is a temperature survey showing the cement top outside the 5-1/2" production casing.

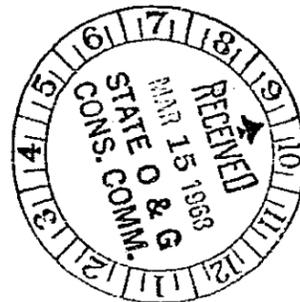
This well has been placed on a temporarily abandoned status in accordance with your approval of March 4, 1968.

Please retain all well information in a confidential status for the prescribed six months period.

Yours very truly,

C. L. Prokop
C. L. Prokop

CLP:lh
Attach.



HUMBLE OIL & REFINING COMPANY

OKLAHOMA CITY, OKLAHOMA 73106

February 29, 1968

EXPLORATION DEPARTMENT
CENTRAL DIVISION

2000 CLASSEN CENTER - NORTH
JACKSON 8-2411

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

CONFIDENTIAL

Mr. John Bannister

Gentlemen:

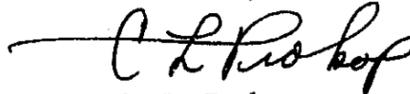
In accordance with Rule 202.B of the Arizona Oil and Gas Conservation Commission Rules and Regulations, we request permission for temporary abandonment of the following well:

Navajo Tract 146 #1 - Permit #452
740' N of SL, 1900' E of WL, Sec. 15-35N-30E
Apache County, Arizona

Operations of this well have been suspended and the well is temporarily abandoned pending development of a helium market for the field, which may take some time, and additional development in other wells in the helium bearing formations in the area.

Pending development of a helium market and additional drilling, we request approval to keep this well in the temporarily abandoned status for an indefinite period.

Yours very truly,



C. L. Prokop
Exploration Drilling
Operations Manager

CLP:lh



APPROVED

By

Date

John Bannister
3-4-68

OIL & GAS CONSERVATION COMMISSION
STATE OF ARIZONA
1624 WEST ADAMS - SUITE 202
TELEPHONE: 271-3161
PHOENIX, ARIZONA, 85007

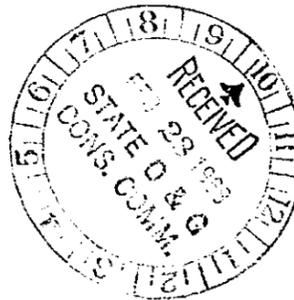
HUMBLE OIL & REFINING COMPANY

OKLAHOMA CITY, OKLAHOMA 73106

EXPLORATION DEPARTMENT
CENTRAL DIVISION

February 26, 1968

2000 CLASSEN CENTER-NORTH
JACKSON B-2411



Mr. John Bannister, Executive Secretary
Arizona Oil and Gas Conservation Commission
1624 West Adams, Room 202
Phoenix, Arizona

Dear Sir:

Attached you will find interim information on Humble Navajo Tract 146 No. 1. These data are being submitted on forms ordinarily used at the time of completion of a well. A full completion report will be submitted when the well has been completed. Also included are IES, Sonic, and Gamma-Ray logs. Field data from the drill-stem tests are also attached.

This well is being drilled tight. Please retain this well information in a confidential status.

Very truly yours,

A handwritten signature in cursive script that reads "C. L. Prokop".

C. L. Prokop

CLP:ml
Attachments



452

HUMBLE OIL & REFINING COMPANY

OKLAHOMA CITY, OKLAHOMA 73106

EXPLORATION DEPARTMENT
CENTRAL DIVISION

February 22, 1968

2000 CLASSEN CENTER—NORTH
JACKSON 8-2411

Mr. John Bannister, Executive Secretary
Arizona Oil and Gas Conservation Commission
1624 West Adams, Room 202
Phoenix, Arizona

Dear Sir:

Attached you will find Application for Permit to Drill our next well at Dineh bi Keyah, the Navajo Tract 151 No. 1.

On our Application for Permit to Drill the Navajo Tract 146 No. 1 we did not supply the exact elevation because ~~it had not been~~ taken at that time. The elevation of the Kelly bushing from this well is 8,775 feet. *permit 452*

Thank you for your cooperation and help.

Very truly yours,

Charles L. Prokop
Charles L. Prokop

CLP:ml
Attachment