[redacted]

P-W

Humble Oil & Ref. Co 2 Navajo-E
SW/4-NE/4 Sec. 9-T41N-R28E
Apache County

65

County Apache

Area East Boundary Butte

Lease No. 14-20-603-412

Well Name Humble Oil & Refining Company 2 Navajo—E

Location SW NE Sec 9 Twp 41N Range 28E Footage 1980 FNL 1980 FEL

Elev 5527 Gr 5536 RKB ~~KB~~ Spud Date 9-26-58 ~~Completed~~ Abandon 12-23-58 Total Depth 6520 / 4950 PBTD

Contractor

Drilled by Rotary X
Cable Tool

Casing Size	Depth	Cement
9 5/8	1008'	475
7	4949'	250

Production Horizon

Initial Production P & A

REMARKS Humble furnished structural cross section (comparative) log dated 11-10-66 on 1-31-69. See log file #28 and East Boundary Butte File.

See permit #444.

Elec Logs IE; Radioactivity; Caliper

Applic. to Plug ___ Plugging Record X Completion Report X

Sample Log Am Strat
Sample Descript.
Sample Set 1791
Core Analysis
DSTs [redacted]

Water well accepted by

Bond Co. & No. The American Insurance Company Bond #5-10-11-58

Bond Am't $ 25,000 Cancelled 11-29-65 Date Organization Report X

Filing Receipt 71085 Dated 9-22-58 Well Book X Plat Book X

Loc. Plat X Dedication W/2 NE

API No. 02-001-20067

Permit Number 65 Date Issued 9-23-58

See 444 for re-entry

Formation Tops	Scout	Sample	E. Log	Remarks
Cutler Rico	2260			
Coconino	2260			
Organ Rock	2619			
Hermosa	4210			
Paradox	4950			
Lower Hermosa	5618			
Molas	5850			
Leadville	6000			
Ouray	6180			
Elbert	6322			

DSTs

CORES: Intervals, analysis

ARIZONA
APACHE COUNTY
BOUNDARY BUTTE, E.

PETROLEUM INFORMATION
DENVER CASPER
ROCKY MOUNTAIN
OIL INFORMATION

Twp 41n-28e
Section 9
c sw ne
1980 s/n 1980 w/e

OPR: Humble Oil & Refining

WELL #: 2 Navajo "E"

ELEV: 5536 DF.

*TOPS: Log-~~XXXXX~~

Cutler 2210
Coconino 2260
Hermosa 4202
Paradox 4912
Molas 5850
Leadville 5998
Ouray 6180
Elbert 6322

DSTS. & CORES:

DST 4264-4330, 2 hrs, gas flowed in 17 min @ est 41 MCFPD, rec 224 GCM, 120 GC filtrate wtr, FP 71-126#, SIP (30 min) 1367#. DST 4574-4629, 2 hrs, gas in 24 min, too small to measure, rec 415 HOCM, FP 157-189#, SIP (30 min) 220#, HP 2303#. Crd 4680-4730, rec 50 sh, sd & ls, trace fluor. DST 4680-4730, 1½ hrs, rec 30 mud, FP 32#, SIP (30 min) 37#, HP 2350#. Crd 4730-4772, rec 42 ls, sd & sh, no show. Crd 4802-4836, rec 34 ls w/small oil show in fractures on bottom. Crd 4836-4855, rec 19 dense ls, no show. DST 4800-4855, 1½ hrs, rec 140 O&GCM, FP 50-60#, SIP (30 min) 300#, HP 2350#. DST 4799-4905, 2 hrs, rec 10 HOCM, 95 OCM, FP 100#, SIP (30 min) 700#. DST 4960-85, 1 hr, rec 50 mud. DST 4990-5025, 1 hr, rec 80 sli OCM, 100 mud, FP 50-75#, SIP (30 min) 550#, HP 2500#. DST 5222-40, 2 hrs, rec 2900 sli GCM, FP 350-1400#, SIP (30 min) 1550#, HP 2600#. DST 5400-5425, 2 hrs, gas in 15 min, too small to measure, rec 180 mud, 4575 GC sulfur wtr, FP 400-1750#, SIP (30 min) 1850#, HP 2750#. (over)

SPUD: 9-27-58 COMPL: 12-30-58
TD: 6520 PB: 4950
CSG: 9-5/8" @ 1808 w/475
5½" @ 4949
PERF: 4810-54; acidized.
Contr: Rutledge
PROD. ZONE:
INIT. PROD: Temp abnd.

*For Electric Logs on Rocky Mountain Wells—Ask Us! Log #21677

A1-952110

HUMBLE OIL & REFINING #2 NAVAJO "E", c sw ne 9-41n-28e, APACHE COUNTY, ARIZONA - 2

6130 6450 6501

DST 6068-6120, 1½ hrs, [redacted]0 mud, 4042 sulfur & GC salt wtr. DST 64[redacted]507, 2 hrs, rec 510 mud, no show, FP 285-332#, SIP (30 min) 585#, HP 3309#. DST 6500-6520, 2 hrs, ~~rec 285 mud~~, ~~3313 sulfur wtr~~, FP 500-1500#, SIP (30 min) 1550#, HP 2750#. 4550' SW

10 6500-5536 285' m + 3312' sul H2O

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

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

DESCRIPTION OF WELL AND LEASE

Operator: HUMBLE OIL & REFINING COMPANY	Address: P. O. BOX 120, Denver, Colorado
Federal, State or Indian Lease Number or name of lessor if fee lease: Navajo Tribe of Indians "E" - 14-20-603-412	Well Number: 2 / Field & Reservoir: East Boundary Butte - Dry
Location: 1980' FNL & 1980' FEL	County: Apache, Arizona
Sec. TWP-Range or Block & Survey: Sec. 9-41N-28E	

Date spudded	Date total depth reached	Date completed, ready to produce	Elevation (DF, RKB, RT or Gr.) feet	Elevation of casing hd. flange feet
9-26-58	11-12-58	Dry	RKB - 5536	5526

Total depth	P.B.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.
6520	D&A	-	-

Producing interval (s) for this completion	Rotary tools used (interval)	Cable tools used (interval)
-	Surface to 6520	None

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

Type of electrical or other logs run (check logs filed with the commission): GRN; ES Ind. & Contact Caliper (If you do not have copies of these, please advise & we will get copies made for you). 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"	36#	1008'	475	None
Production	8-3/4"	7"	23# & 20#	4949'	250	None

Top of cement behind 7" casing at 3570' by temperature log.

TUBING RECORD

Size	Depth set	Packer set at
None in.	ft.	ft.

LINER RECORD

Size	Top	Bottom	Sacks cement	Screen (ft.)
in.	ft.	ft.		

PERFORATION RECORD / ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Am't & kind of material used	Depth Interval	SX
2	Jet Karrot	None 4810-4854	1000 MA & 17430 gal & 17430# Sand	4810-4854	50
2	" "	" 4668-4722	1000 MA & 21000 gal & 21000# "	4668-4722	75
2	" "	" 4596-4632	5000 gal Dowell X	4596-4632	75

Squeezed

INITIAL PRODUCTION

Date of first production	Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)
None	

Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity °API (Corr)

Tubing pressure	Casing pressure	Cal'ted rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas—oil ratio

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

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Area Operations 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.

May 5, 1965
Date

B. M. Bradley
Signature B. M. Bradley

RECEIVED MAY 7 1965 STATE O & G CONS. COMM.

Permit No. 65 dated 9-23-58

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

(Complete Reverse Side)

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
SEE ATTACHED TWO SHEETS FOR FORMATION RECORD, HISTORY OF WELL, DRILL STEM TESTS AND CORE INFORMATION.			

* 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

PLUGGING RECORD

Operator	Address
HUMBLE OIL & REFINING COMPANY	P. O. Box 120, Denver, Colorado 80201

Federal, State, or Indian Lease Number, or lessor's name if fee lease	Well No.	Field & Reservoir
Navajo Tribe of Indians "E" - 14-20-603-412	2	East Boundary Butte - Dry

Location of Well	Sec-Twp-Rge or Block & Survey	County
1980' FNL & 1980' FEL of Sec. 9-41N-28E		Apache

Application to drill this well was filed in name of	Has this well ever produced oil or gas	Character of well at completion (initial production): Oil (bbls/day)	Gas (MCF/day)	Dry?
Humble Oil & Refining Company	No	-	-	Yes

Date plugged:	Total depth	Amount well producing when plugged: Oil (bbls/day)	Gas (MCF/day)	Water (bbls/day)
12-23-58	6520'	-	-	-

Name of each formation containing oil or gas. Indicate which formation open to wellbore 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
			6520-6220 w/ 125 sx
Hermosa 4210-4950	Slight shows of Oil	4210-4950	6170-5970 w/60 sx
Paradox 4950-5618	& Gas	4950-5618	~~5600-5350 w/100 sx~~
			5050-4925 w/50 sx
			4950-4916 in bottom of 7" Csg.
		Perf Squeezed	-4810-4854 50 sx
		~~Perfs Squeezed~~	~~-4668-4722 75 sx~~
	(56' cement above top of	Perfs) Squeezed	-4596-4632 75 sx
			5' to surface.w/DH Marker

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"	994'	None	994'	-	Cemented to surface
7"	4938'	None	4938'	-	Top of cement behind 7" casing at 3570' by temp. survey.

Was well filled with mud-laden fluid, according to regulations?	Indicate deepest formation containing fresh water.
Yes	Coconino - 2260' to 2290'

NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE

Name	Address	Direction from this well:
Humble Oil & Ref. Co.	P. O. Box 120, Denver, Colorado	N-Sec. 4; S-Sec. 16 &E-Sec.10.
Shell Oil Company	Farmington, New Mexico	NE - Sec. 3
Section 8, to the West was dropped by Humble in 1962.		

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.

NONE

Use reverse side for additional detail.

RECEIVED MAY 7 1965 STATE O & G CONS. COMM.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Area Operations 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.

May 5, 1965
Date

B. M. Bradley
Signature B. M. Bradley

Permit No. 65 dated 9-23-58.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Plugging Record
File One Copy

Form No. 10

HALLIBURTON RESEARCH AND TESTING LABORATORIES

Lubbock Division Laboratory
Lovington, New Mexico

MAINTAINED BY HALLIBURTON OIL WELL CEMENTING CO.

No. MT 541

WATER ANALYSIS

Date 8-17-60

To Humble Oil & Refining Co.
Room 119, Pet. Center Bldg.
Farmington, N.M.

Source DST #1

Well & Lease Navajo Tribe #2

Location C-SW-NE-9-41N-28E

Formation

Depth

Specific gravity 60/60 °F		1.048
Color, filtrate		clear
pH		7.0
Resistivity @	79 °F	0.12 ppm
Chlorides, Cl		42,900
Sulfates, SO_4		1,400
M Alkalinity	HNO_3	1,775
Calcium, Ca		2,720
Magnesium, Mg		985
Iron, Fe		negl.
Sodium, Na*		24,100
Sulfides, H_2S		170

NOW
HALLIBURTON COMPANY

Remarks:
cc: Ray Tippit, Halliburton Co., Farmington, N.M.
H.L. Beckmann, Humble Oil & Refining Co., Midland, Texas

ppm equals Parts per million uncorrected or milligrams per liter
* includes Potassium as Na.

Respectfully submitted
Halliburton Oil Well Cementing Co.

Laboratory Analyst
M.A. Carter

By M.A. Carter

RECEIVED
JUL 22 1968
STATE O & G
CONS. COMM.

HUMBLE OIL & REFINING COMPANY
HUMBLE DIVISION
SERVICE LABORATORY
WATER ANALYSIS

Laboratory No. 43418

Houston, Texas
October 24, 1960

COUNTY	Apache County, Arizona	DATE SAMPLED	August 15, 1960
FIELD	East Boundary Butte	DATE RECEIVED	October 14, 1960
WELL	Navajo Tribe of Indians 2 C-SW-NE-9-41N-28E	SUBMITTED BY	
DEPTH	5,395-421 Feet	WORKED BY	F. L. Galloway
FORMATION	Lower Hermosa	SOURCE	Drill Stem Test
OWNER	Humble Oil & Refining Co.		

Analysis

Radicals	*Parts Per Million*
Sodium	25,954
Calcium	5,147
Magnesium	1,471
Chloride	52,300
Sulfate	810
Bicarbonate	1,014
Carbonate	None
TOTAL	86,696
Hydrogen Sulfide	152
Iron, Total	95
Calcium Carbonate Stability	

Comparison Data

	Percent
Primary Salinity	74.90
Secondary Salinity	24.00
Primary Alkalinity	None
Secondary Alkalinity	1.10
Chloride Salinity	98.87
Sulfate Salinity	1.13

Ratios

Chloride: Bicarbonate	88.64
Bicarbonate: Sulfate	0.99
Calcium: Magnesium	2.13
Sodium: Calcium & Magnesium	2.98
Specific Gravity at 76 °F.	1.0605
Resistivity, ohm meters at 76 °F.	0.090
pH	6.3

cc: Mr. R. R. McCarty
Mr. J. W. Graybeal
Mr. A. L. Carpenter
Mr. W. A. Maley
Mr. R. W. Bybee
Dr. H. N. Fisk
Dr. C. R. Hocott

D14827 (6-60)
rb

RECEIVED JUL 22 1968 STATE O & G CONS. COMM.

By ..... ORIGINAL MAILED
Ralph K. Hill
Laboratory Supervisor

OCT 25 1960

RECEIVED JUL 22 STATE O CONS. CO

Navajo Tribe of Indians "E" Well No. 2 - Apache County, Arizona.

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2735	2735	Sand & Shale (2210' top of Cutler-Rico)
2735	3153	418	Shale
3153	3393	240	Shale & Lime Streaks (2260' top of Coconino
3393	3609	216	Shale & Sand (2619' top of Organ Rock)
3609	3955	346	Shale
3955	4282	327	Shale & Lime (4210' top of Hermosa)
4282	4373	91	Shale
4373	4506	133	Shale & Lime with Chert
4506	5643	1137	Shale & Lime (4950' top of Paradox)
5643	5749	106	Lime & Chert (5618' top of Lower Hermosa)
5749	6130	381	Shale & Lime (5850' top of Molas) (6000' top of Leadville)
6130	6208	78	Shale & Lime w/streaks of chert (6180' top of Ouray)
6208	6421	218	Shale & Lime (6322' top of Elbert)
6421	6510	89	Dolomite with streaks of Shale & lime.
6510	6520 TD	10	Dolomite & Sand

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

This well was drilled with Rotary Tools to a total depth of 6520'. At 1014', 31 jts. of 9-5/8" casing, 994', was set at 1008'. Cemented with 325 sx of 4% Gel Cement & 150 sx Neat cement. POB 8:00 AM, 9-28-58. Tested casing with 1200# and tested OK (30 min. test) Drilled plug at 2:00 AM 9-29-58, and drilling continued to total depth of 6520'. Cement plugs were placed from 6520' to 6220' using 125 sx., POB 2:40 PM, 11-15-58; 6170' to 5970' using 80 sx., POB 3:15 PM; 5600' to 5350' using 100 sx., POB 3:55 PM; 5050' to 4925' using 50 sx, POB 4:30 PM. On 11-16-58, drilled hard cement to 4950'. On 11-17-58, 129 jts. of 7" casing, 4938', was set at 4949' and was cemented with 250 sx, Reg. Neat cement. Complete returns and rotated pipe while cementing. Ran Temp. survey and found top of cement at 3570'. Tested casing with 1200# for 30 mins. and tested OK. Logs were run and casing was perforated from 4810' to 4854' with 2 jets per foot. Acidized with 1000 gal. mud acid, avg. inj. rate of 3 bbls. per min. Fraced with 17,430 gal. crude oil and 17,430# sand with 220 gal. Dowell J-90 added, avg. inj. rate of 32 bbls. per min. at 2250#. Well was swabbed in an attempt to start flow. A cement retainer was set at 4753' and perforated from 4810' to 4854' were squeezed with 50 sx. neat cement. Perf. from 4668' to 4722' with 2 jet shots per ft. Acidized with 1000 gal. mud acid at avg. inj. rate of 3 bbls. per min. at 900#. Opened up well and flowed 9 bbls. in 2 hrs. Swabbing was begun and in 18 hrs. recovered 28 bbls. fluid, 20% acid water; 30% acid water in the last 12 hrs. of swabbing. Well was swabbed dry. Sand oil-fraced with 21,000 gal. crude oil and 21,000# sand, avg. inj. rate of 40 bbls. per min., at 1700#. Well was shut in overnight. Opened up well and in the first 24 hrs. well flowed 197 bbls. load oil. Well sanded up and was sand pumped. Swabbing operations were begun and recovered 406 bbls. load oil, and was swabbed dry. A cement retainer was set at 4652' & perf. from 4668' to 4722' were squeezed off with 75 sx reg. cement at 2600# pressure. Perforated from 4596' to 4632' with 2 jet shots per foot. Acidized with 5000 gal. mud acid. Swabbing was begun and recovered all acid water. Set cement retainer at 4540' and squeezed off perforations from 4596' to 4632' with 75 sx reg. cement at 2800# pressure. 56' of cement in casing above top perforations. Dumped 5' cement plug in top of 7" casing. Well [redacted] abandoned on 12-23-58. Casing in well - 9-5/8" and 7".

FOR OIL OR GAS ALERT

#65

Humble Oil & Refining Company
Navajo Tribe of Indians "E" Well No. 2

DRILL STEM TESTS

Date	Type	Formation Tested From	Formation Tested To	Choke Top	Choke Bottom	Minutes Tool Open	For. Pressure Flow.	For. Pressure Shut In	Recovery	Test Satisfactory
10-11-58	OH	4264	4330	1"	1"	120	126	1387	(a)	Yes
10-14-58	OH	4574'	4629	1"	1"	120	189	220	(b)	Yes
10-16-58	OH	4680	4730	1"	1"	90	32	37	(c)	Yes
10-19-58	OH	4800	4855	1"	3/4"	90	60	700	(d)	Yes
10-21-58	OH	4799	4905	1"	3/4"	120	100	700	(e)	Yes
10-23-58	OH	4960	4985	1"	3/4"	60	50	200	(f)	Yes
11-6-58	OH	6068	6130	1"	3/4"	90	1775	1800	(g)	Yes
11-11-58	OH	6450	6501	1"	1"	120	332	585	(h)	Yes
11-12-58	OH	6500	6520	1"	3/4"	90	2100	2175	(i)	Yes
11-13-58	OH	5506'	5526	1"	3/4"	120	1500	1550	(j)	Yes
11-13-58	OH	5400	5425	1"	3/4"	120	1750	1800	(k)	Yes
11-13-58	OH	5222	5240	1"	3/4"	120	1400	1550	(l)	Yes
11-15-58*	OH	4990	5025	1"	3/4"	60	75	550	(m)	Yes

(a) 240' gas cut mud, 120' water & gas cut mud, 90' gas. Gas to surface in 17 mins.
(b) 415' Hvy. oil & gas cut mud. Gas to surface in 24 mins., too small to measure.
(c) 30' drilling mud. No show.
(d) 140' Oil & Gas cut mud.
(e) 10' hvy. oil cut mud, and 95' oil cut mud.
(f) 50' drilling mud. No shows.
(g) 90' drilling mud and 4042' sulphur & gas cut salt water.
(h) 510' drilling mud. No shows.
(i) 4550' salt water.
(j) 285' drilling mud and 3313' sulphur water.
(k) 180' drilling mud and 4575' sulphur water.
(l) 2900' slightly gas cut drilling mud and 100' drilling mud.
(m) 80' sulphur & slightly oil cut mud and 100' drilling mud.

CORES

10-16-58 Core No. 1 from 4680' to 4730'. Recovered 50' shale, sand & lime. Trace of flourescense & fractures from 4690' to 4691'.
10-17-58 Core No. 2 from 4730' to 4772'. Recovered 42' limestone, sand & shale. No show.
10-19-58 Core No. 3 from 4802' to 4836'. Recovered 34' limestone with small show of oil in fractures in 2 or 3 places. Fractures in bottom of core.
Core No. 4 from 4836' to 4855'. Recovered 19' dense limestone. No show.

* With Straddle packers.

8

Form 9-331 b
(April 1952)

RECEIVED
SEP 4 1959
STATE O & G
CONS. COMM.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412
Co. No. 1967A

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	X
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Navajo Tribe of Indians "K" Hubbs, New Mexico September 1, 1959

Well No. 2 is located 1980 ft. from [N] line and 1980 ft. from [E] line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is 5236 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

12-16-59

Set cement retainer at 4540' and squeezed off perforations from 4576 to 4632 feet with 75 sacks regular cement at 2000# pressure. 50 feet of cement in casing above top perforations. Dumped 5' cement plug in top of 7-inch casing. Well plugged and abandoned 12-23-59.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Hubbs Oil & Refining Company

Address Box 2347

Hobbs, New Mexico

By ORIGINAL SIGNED R. A. ... R. E. Alworth

Title Agent

U. S. GOVERNMENT PRINTING OFFICE 16—84376-S

65

Form 9-331 b
(April 1952)

APPROVED
JAN 7 1959
BILLY J. SINGER
ACTING DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412
Co. No. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT (Temporary)	X
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

RECEIVED
JAN 5 1959
GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

Farmington, New Mexico Jan. 1, 1959

Navajo Tribe of Indians "E"
Well No. 2 is located 1980 ft. from [N] line and 1980 ft. from [E] line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is 5536 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Set cement retainer at 4540' and squeezed off perforations from 4596' to 4632' with 75 sx regular cement at 2800# pressure. 56' of cement in casing above top perforations. Dumped 5' cement plug in top of 7" casing. Well temporarily abandoned. Final report for the well on 12-23-58.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268
Farmington
New Mexico

By J. C. Wiseley
Title Agent

U. S. GOVERNMENT PRINTING OFFICE 16—84371-6

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Form 9-331 b
(April 1952)

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412

Co. No. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Sub. Report of Perf. & Frac	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Farmington, New Mexico Dec. 31, 1958

Navajo Tribe of Indians "E"

Well No. 2 is located 1980 ft. from [N] line and 1980 ft. from [E] line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is 5536 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Perforated 7" casing from 4668' to 4722' with 2 Jet shots per foot. Ran tubing with Sweet Pkr. and set at 4712' with pkr. set at 4646'. Acidized with 1000 gal. mud acid; avg. injection rate 3 bbls. per min. at 900#. Opened up well and flowed 9 bbls. in 2 hrs. Swabbing was begun and in 18 hrs. recovered 28 bbls. fluid, 20% acid water; 30% acid water in the last 12 hrs. of swabbing. Well was swabbed dry. Sand-oil fraced with 21,000 gal. crude oil and 21,000# sand, avg. injection rate of 40 bbl. per min. at 1700#. Well was shut in overnight. Opened up well and in the first 24 hrs. well flowed 197 bbls. load oil. Well sanded up and was sand pumped. Swabbing operations were begun and recovered 406 bbls. load oil, and was swabbed dry. A cement retainer was set at 4652' and perforations from 4668' to 4722' were squeeged off with 75 sx regular cement at 2600# pressure. Tubing & retainer were pulled and casing was perf. from 4596' to 4632' with 2 jet shots per foot. Tbg. was set at 4620' with pkr. at 4554'. Acidized with 5000 gal. mud acid. Swabbing was begun and recovered all acid water.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268

Farmington

New Mexico

By J. C. Wiseley

Title Agent

U. S. GOVERNMENT PRINTING OFFICE 16—84371b-8

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Form 9-331 b
(April 1952)

	X		

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412

Co. No. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	X
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	X
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Subsequent Report of Frac. Treatment	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Farmington, New Mexico Dec. 2, 1958

Navajo Tribe "E"

Well No. 2 is located 1980 ft. from {N} line and 1980 ft. from {E} line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is 5536 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

11/17/58: Set 7" Casing at 4949' w/250 sacks reg. neat cement. POB at 7:20 A.M. 11/17/58. Complete returns & rotated while cementing. Ran temp. survey - top of cement at 3570'. Displaced water w/oil. Tested casing w/1200# - O.K.

11/20/58: Ran logs. Perf. casing from 4810' to 4854' w/2 shots per foot. Set 2" tubing at 4852' w/packer at 4754'.

11/21/58: Acidized w/1000 gals. mud acid. Ave. Inj. rate 3 bbls./min. On 16 hr. swabbing test recovered 24 bbls. oil and 12 bbls. acid water.

11/22/58: Sand/Oil frac w/17,430 gals. oil & 17,430# sand, w/220 gals. Dowell J-90. Ave. inj. rate 32 bbls./min. at 2250#.

Verbal approval received 12/1/58:

12/1/58: Set retainer at 4753'. Squeezed formation thru perf. from 4810' to 4854' w/50 sacks reg. neat cement. Preparing to perf. from 4668' to 4722'.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268

Farmington, New Mexico

By J. C. Wiseley

Title Agent

U. S. GOVERNMENT PRINTING OFFICE 16—84376-8

65 13

Form 9-331 b
(April 1952)

		X	

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412

Co. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Report of Drill Stem Test	X
Notice of Intention to Plug Back	X		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Navajo Tribe "E"

Farmington, New Mexico Nov. 18, 1958

Well No. 2 is located 1980 ft. from {N/~~X~~} line and 1980 ft. from {E/~~W~~} line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is 5536 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

11-11-58: DST No. 8 from 6450' to 6501' - Rec. 510' drilling mud - No Show.
11-12-58: DST No. 9 from 6500' to 6520' - Rec. 4550' of salt water.
11-13-58: DST No. 10 from 5506' to 5526' - Rec. 285' drilling mud & 3313' sulphur water
11-13-58: DST No. 11 from 5400' to 5425' - Rec. 180' drilling mud & 4575' sulphur water
11-13-58: DST No. 12 from 5222' to 5240' - Rec. 2900' of slightly gas cut drlg. mud
11-15-58: DST No. 13 from 4990' to 5025' - Rec. 80' of sulphur & slightly oil cut mud and 100' of drilling mud.
11-15-58: (Verbal approval received 11-14-58):
Plugged back as follows: 6520' to 6220' w/125 sacks reg. cement. 6170' to 5970' w/80 sacks reg. From 5600' to 5350' w/100 sacks reg. From 5050' to 4925' w/50 sacks reg.
11-16-58: Drilled hard cement to PBD of 4950'.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268

Farmington, New Mexico

By Russell M. Lilly

Title District Superintendent

U. S. GOVERNMENT PRINTING OFFICE 16—84376-8

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Form 9-331 b
(April 1952)

	X		

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412
Co. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Report of Drill Stem Test	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Farmington, New Mexico Nov. 7, 1958

Navajo Tribe of Indians "I"
Well No. 2 is located 1980 ft. from [N] line and 1980 ft. from [E] line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) - (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is 5536 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

11-6-58

Drill Stem Test No. 7 from 6068' to 6130' with 1" top and 3/4" bottom chokes. Tool open 1-1/2 hours with fair to weak blow. Recovered 90' drilling mud & 4042' sulphur & gas cut salt water. Initial mud 2950#, min. flow. 500, max. flow. 1775, final mud 2950#. Build up after 30 mins. 1800#. Initial shut in pressure 1800#. Chloride in test, 37,000 PPM, in ditch 250 PPM.

Drilling.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268

Farmington

New Mexico

By E.S. Davis

Title Agent

U. S. GOVERNMENT PRINTING OFFICE 16—84376-5

65 15

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Form 9-331 b
(April 1952)

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412
Co. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY Report of Drill Stem Test	X
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Farmington, New Mexico Oct. 24, 1958

Navajo Tribe of Indians "E"

Well No. 2 is located 1980 ft. from [N] [S] line and 1980 ft. from [E] [W] line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) - (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is 5536 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

10-23-58
Drill Stem Test No. 6 from 4960' to 4995' with 1" top and 3/4" bottom chokes. Tool open 1 hr. with fair to weak blow. Recovered 50' drilling mud, no shows. Initial mud 2500#, min. flow 50, max. flow 50, Initial Shut In pressure 1000#, final mud 2450#. Build up after 30 minutes 200#.

Drilling.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268

Farmington

New Mexico

By E. S. Davis
Agent

Title

U. S. GOVERNMENT PRINTING OFFICE 16—84376-8

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Form 9-331 b
(April 1952)

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412
Co. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Report of Drill Stem Test	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Farmington, New Mexico Oct. 24, 1958

Navajo Tribe of Indians "E"

Well No. ~~xxxx~~ 2 is located 1980 ft. from [N] ~~[S]~~ line and 1980 ft. from [E] ~~[W]~~ line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) - (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is 5536 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

10-21-58
Drill Stem Test No. 5 from 4799' to 4905' with 1" top and 3/4" bottom chokes. Tool open 2 hrs. with fair blow. Recovered 10' heavy oil cut mud and 95' oil cut mud. Initial mud 2250, min. flow 100, max. flow 100, Final mud 2250#. Build up after 30 minutes 700#. Initial Shut In pressure 340#.

Drilling.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268
Farmington, New Mexico

By Russell M. Lilly
Title Agent

U. S. GOVERNMENT PRINTING OFFICE 16—84376-8

Form 9-331 b
(April 1952)

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R-359.2.
Approval expires 12-31-55.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412
Co. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Report of Drill Stem Test	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Farmington, New Mexico Oct. 21, 1958

Navajo Tribe of Indians "E"

Well No. 2 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) - (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is _____ ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

10-16-58
Drill Stem Test No 3 from 4690' to 4730' with 1" top and bottom chokes. Tool open 1½ hrs. with fair blow decreasingto weak at end of test. Recovered 30' drilling mud. Initial mud 2350#, min. flow 32, max. flow 32, final mud 2350#. Build up after 30 mins. 37#.

10-19-58
Drill Stem Test No. 4 from 4800' to 4855' with 1" top and 3/4" bottom chokes. Tool open 1½ hrs. Weak blow throughout test. Recovered 140' oil and gas cut mud. Initial mud 2350#, min. flow 50, max. flow 60, final mud 2300#. Build up after 30 mins. 700#.

Drilling.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268

Farmington

New Mexico

By Russell M. Lilly
Agent

Title

U. S. GOVERNMENT PRINTING OFFICE 16—84376-7

65 19

Form 9-331 b
(April 1952)

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R-359.4.
Approval expires 12-31-55.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-432
Co. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Report of Core	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Farmington, New Mexico Oct. 21, 1958

Navajo Tribe of Indians "E"

Well No. 2 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) - (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is _____ ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

10-16-58
Core No. 1 from 4680' to 4730'. Recovered 50' of shale, sand & lime. Trace of flourescense and fractures from 4690' to 4691'.
10-17-58
Core No. 2 from 4730' to 4772'. Recovered 42' limestone, sand & shale. No show.
10-19-58
Core No. 3 from 4802' to 4836'. Recovered 34' Limestone with small show of oil in fractures in 2 or 3 places. Fractures in bottom of core.
Core No. 4 from 4836' to 4855'. Recovered 19' dense limestone. No show.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268

Farmington

New Mexico

By Russell M. Lilly

Title Agent

U. S. GOVERNMENT PRINTING OFFICE 16—84375-7

65 20

Form 9-331 b
(April 1952)

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R-359.4.
Approval expires 12-31-55.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412
Co. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Report of Drill Stem Test	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Farmington, New Mexico Oct. 21, 19 58

Navajo Tribe of Indians "E"

Well No. 2 is located 1980 ft. from {N} line and 1930 ft. from {E} line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 43N (Twp.) 28E (Range) - (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is ____ ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

10-11-58
Drill Stem Test No. 1 from 4264' to 4330' with 1" top and bottom chokes. Tool open 2 hrs. with good blow. Gas to surface in 17 minutes. Recovered 240' of gas cut mud, 120' of water and gas cut mud, 90' of gas. Initial mud 2088#, min. flow 71, max. flow 126, final mud 2088#. Build up after 30 mins. 1387#. Prod. gas at 41 MCF/day.

10-14-58
Drill Stem Test No. 2 from 4574' to 4629' with 1" top and bottom chokes. Tool open 2 hrs. with fair blow. Gas to surface in 24 minutes, too small to measure. Rec. 415' heavily oil & gas cut mud. Initial mud 2303#, min. flow 157, max. flow 169, final mud 2303#. Build up after 30 mins. 220#.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268

Farmington

New Mexico

By Russell H. Lilly

Title Agent

U. S. GOVERNMENT PRINTING OFFICE 16—84275-7

65 121

Form 9-331 b
(April 1952)

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R-359.4.
Approval expires 12-31-55.

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412
Co. 196914

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	X
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Farmington, New Mexico Oct. 21, 19 58

Navajo Tribe of Indians "E"

Well No. 2 is located 1980 ft. from [N] line and 1980 ft. from [E] line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41N (Twp.) 28E (Range) - (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is _____ ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Spudded 13-3/4" hole at 7:00 PM 9-26-58. Drilled to 1014'. Set 31 jts. of 9-5/8" 36# Casing, 994' set at 1008'. Cemented with 325 sacks 4% Gel and 150 sacks Neat Cement. Plug on bottom 8:00 AM, 9-28-58.

Drilled plug at 2:00 AM, 9-29-58, after testing casing with 1200# for 30 Minutes.

Drilling.

Rutledge Drilling Company

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1268

Farmington

New Mexico

By Russell M. Lilly

Title Agent

U. S. GOVERNMENT PRINTING OFFICE 16—84376-7

65 22

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R-359.3.
Approval expires 12-31-55.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo

Allottee

Lease No. 14-20-603-412
Co. Lse. No. 196914

See attached plat.

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	X	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

NAVAJO TRIBE OF INDIANS "E" September 19, 1958

Well No. 8 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 9

SW/4 of NE/4 (¼ Sec. and Sec. No.) 41-N (Twp.) 28-E (Range) -- (Meridian)

East Boundary Butte (Field) Apache (County or Subdivision) Arizona (State or Territory)

The elevation of the derrick floor above sea level is later ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

CASING PROGRAM			CEMENTING RECORD	CORING PROGRAM
Size	Weight	Depth		
9-5/8"	36#	900'	Circulate to surface	1 - 4500-50 Hermosa
7"	20 & 23#	6600'	Circulate to approximately 600' above pay zone.	1 - 4450-4500 Hermosa

Halliburton method of cementing to be used.
Low weight fresh water mud.
Estimated total depth 6600' to test the Mississippian.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1600
Midland, Texas

By B P Gunter

Title Asst. Division Chief Clerk

U. S. GOVERNMENT PRINTING OFFICE 16—84376-7

65 23

\TE LAND DEPARTMENT
STATE OF ARIZONA

Form OG 51

Form Prescribed Under Oil and Gas Conservation Act of 1951

NOTICE OF INTENTION TO DRILL NEW WELL

This notice and surety bond must be filed and permit must be granted before drilling begins

Company Lease No. 196914

State Land Commissioner

Midland Texas ~~Ariz.~~ September 19 1958

In compliance with Statewide Rule 3, notice is hereby given that it is our intention to commence the work of drilling well No. 2 Sec. 9,

Twp. 41-N, Rge. 28-E B. & M., East Boundary Butte Field,

Apache County.

Legal description of lease All of Section 9, 10, 15 and 16
(attach map or plat to scale)

Township 41 North, Range 28 East

Location of Well: 1980' from the North line and 1980' from the East line of Section 9
(Give exact footage from section corners or other legal subdivisions or streets)

Proposed drilling depth 6600 feet. Acres in drilling unit

Has surety bond been filed? Yes. Is location a regular or exception to spacing rule? Regular.

Elevation of ground above sea level ~~To be filed later~~ 5536' feet.

All depth measurements taken from top of Kelly Drive Bushing
(Derrick, floor, Rotary Table or (Kelly Bushing) which is approximately 12 feet above the ground.

PROPOSED CASING PROGRAM

Size of Casing Inches A.P.I.	Weight	Grade & Type	Top	Bottom	Cementing Depths
9-5/8"	36#	J-55 Smls	Surface	900	Circulate to surface
7"	20 & 23#	J-55 & N-80 Smls	Surface	6600	Circulate to approx. 600' above top of pay zone.

Intended Zone or Zones of completion:

Name	Perforated Interval
Hermosa or Mississippian	To be filed later

AFFIDAVIT:

I hereby certify under the penalty of perjury, that the information contained and statements herein made are to the best of my knowledge and belief, true, correct and complete.

Humble Oil & Refining Company
(Applicant)

By [signature]

Application approved this 23 day of September 19 58

Permit No. 65

[signature]
State Land Commissioner

3-62 1/10/58

OK BWJ Sept 23, 1958

STATE OF ARIZONA Form No. 4

Form Prescribed Under Oil and Gas Conservation Act of 1951
REPORT ON TEST OF WATER SHUT-OFF
Navajo Tribe of Indians "E" #2 (Formation Tester) 9-29-58

Operator Humble Oil & Refining Company, Box 1268, Farmington, New Mexico
Well No. 2, Sec. 9, T. 41N, R. 28E, _____ B. & M.
East Boundary Butte Field, in Apache County, was tested for water shut-off
on 9-29-58, 19___. Mr. E.D. Wolcott designated by the supervisor, was
~~was not~~ (strike one) present as prescribed in Statewide Rule 11, there were also present Messers. E. R. Horton, Toolpusher, and D. R. Weisman, Driller, of Rutledge Drilling Company
Shut-off data: 9-5/8 in. 36 lb. casing was cemented at 1008 ft. on 9-28-58
in 13-3/4 hole with 325 sx 2% Gel & 150 sx neat sacks of cement of which 13 sacks were left in casing.
Casing record of well: 31 jts. 9-5/8" 36# 8R J-55 R2 EW Csg., 994.37' set at 1008.12'. Footage includes 1.23' Guide Shoe & 1.67' Float Collar.

Reported total depth 1014' ft. Bridged with cement from 1014 ft. to 0 ft.
Cleaned out to 979 ft. for this test. A pressure of 1000 lb. was applied to the inside of casing for 30 min. without loss after cleaning out to 1014 ft. ~~A _____ tester was run into the hole on _____ in. drill pipe, with _____ ft. of water cushion, and packer set at _____ ft. with tailpiece to _____ ft. Tester valve, with _____ bean, was opened at _____ and remained open for _____ hr. and _____ min. During this interval~~

Note: Lined out portions not applicable.

REPORT ON TEST OF WATER SHUT-OFF
(Bailing)

Operator Not applicable.
Well No. _____, Sec. _____, T. _____, R. _____, _____ B. & M.
_____ Field, in _____ County, was tested for water shut-off
on _____, 19___. Mr. _____, designated by the supervisor, was
was not (strike one) present as prescribed in Statewide Rule 11, there were also present _____

Shut-off data: ___ in. ___ lb. casing was cemented at ___ ft. on ___, 19___
in ___ hole with ___ sacks of cement of which ___ sacks were left in casing.
Casing record of well: _____

Reported total depth ___ ft. Bridged with cement from ___ ft. to ___ ft.
Cleaned out to ___ ft. for this test. Casing test data: _____

APPROVED BY: _____
Commissioner

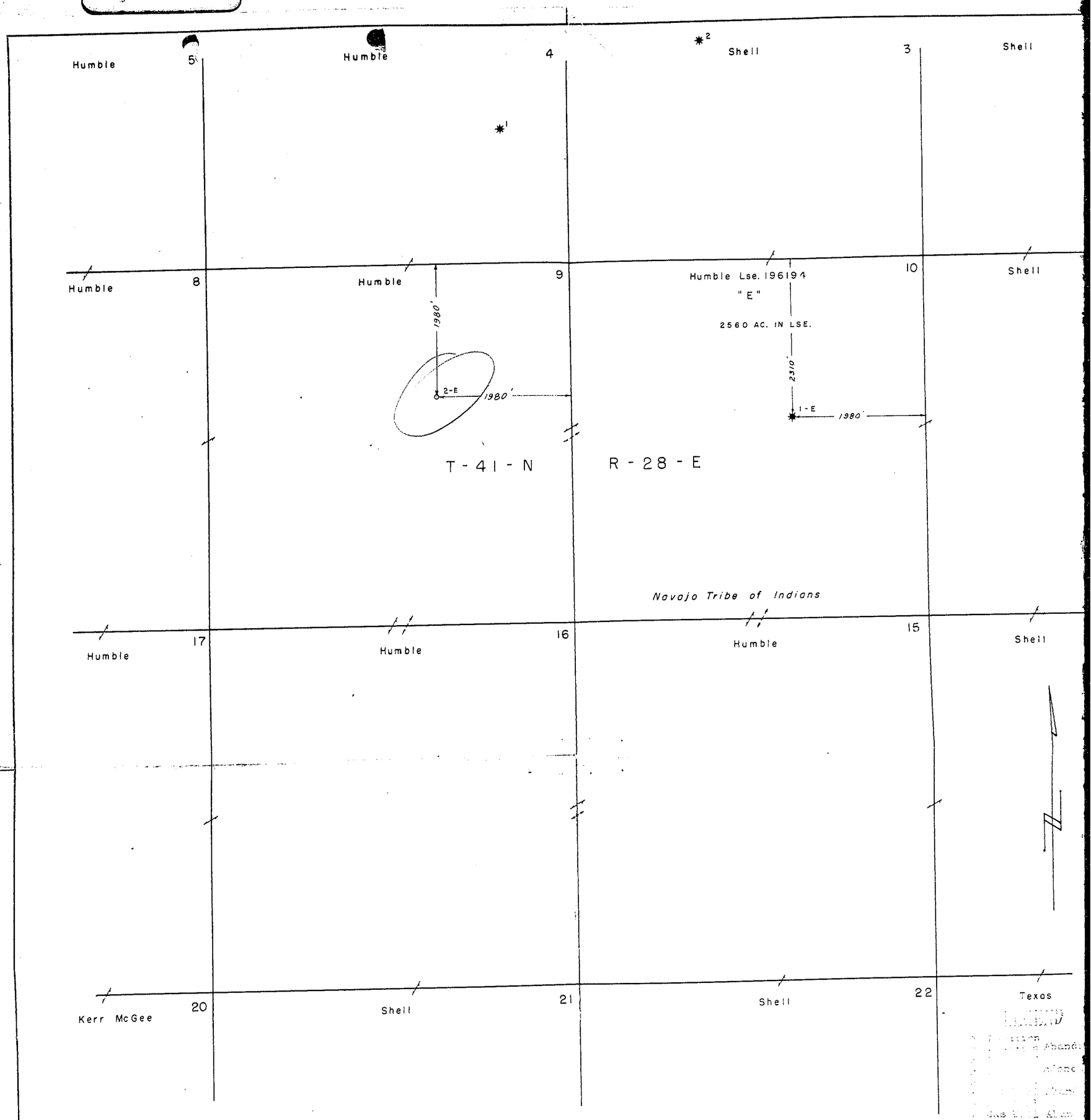
DATE: _____

See instructions on back side of form.

14

65

16469

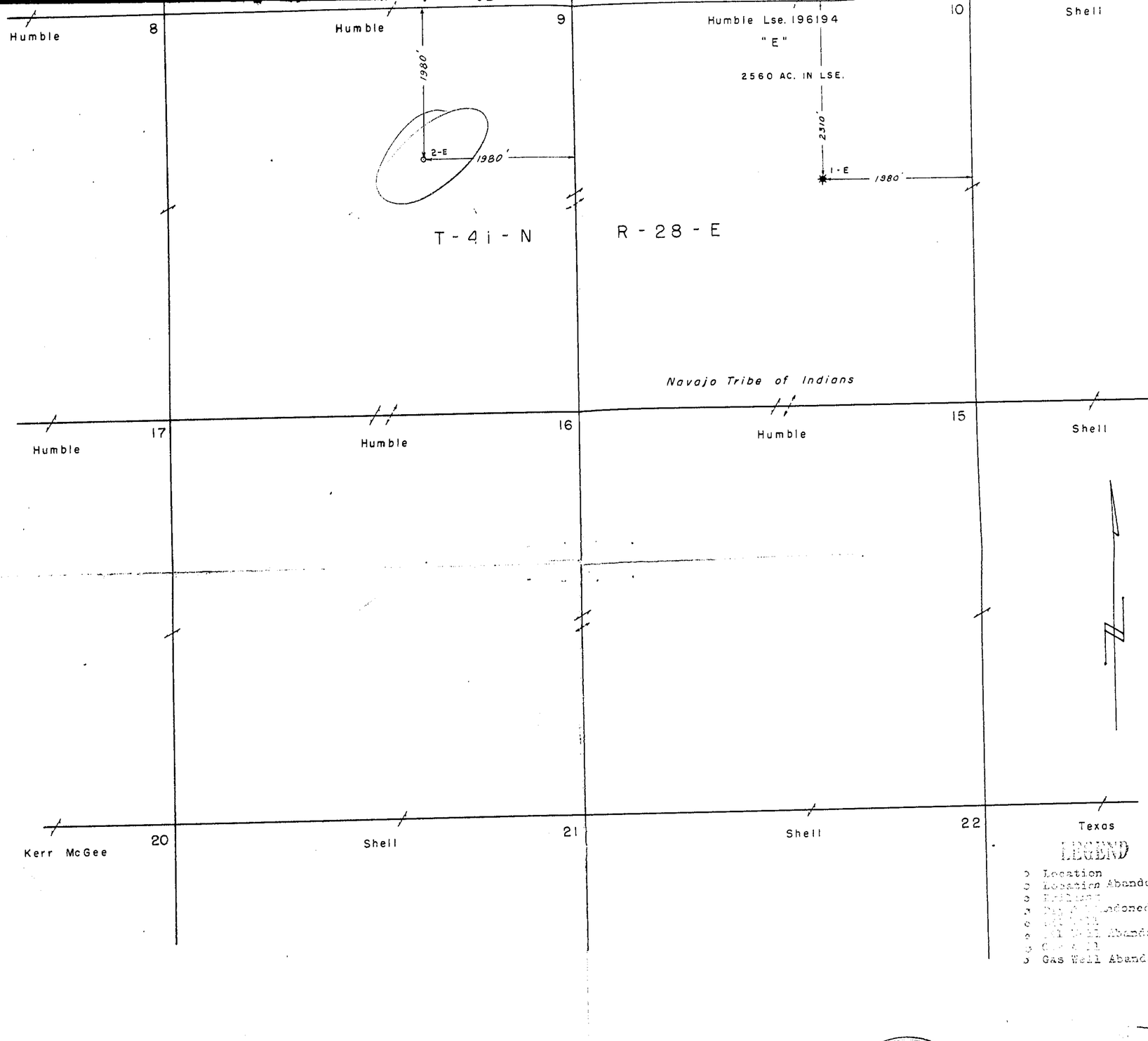


THIS APPLICATION FOR WELL NO

REVISIONS					
NO.	DATE	DESCRIPTION			APPR.

NAVAJO TRIBE OF INDIANS-"E"
9,10,15 & 16, T-41-N R-28
APACHE CO., ARIZONA
MBLE OIL & REFINING COMPANY
IL ENGINEERING DIVISION
MIDLAND, TEXAS
MCKIBBIN SCALE 1"=1000'
Daugherty DATE 7-24-58
SHEET OF
MILES N.W. SHIPROCK NEW MEX

Oil & Ref. Co. Navajo
SW/4-NE/4 Sec. 9-T41N-R28E
Apache County



REGISTERED LAND SURVEYOR
CERTIFICATE EXPIRES
WINDELL STANLEY WESTERFELD
ARIZONA, U.S.A.

Date: 12 Sept.
Windell S. Westerfeld
Registered Land Surveyor
Arizona

THIS APPLICATION FOR WELL NO

REVISIONS					
NO.	DATE	DESCRIPTION	BY	CHK.	APPR

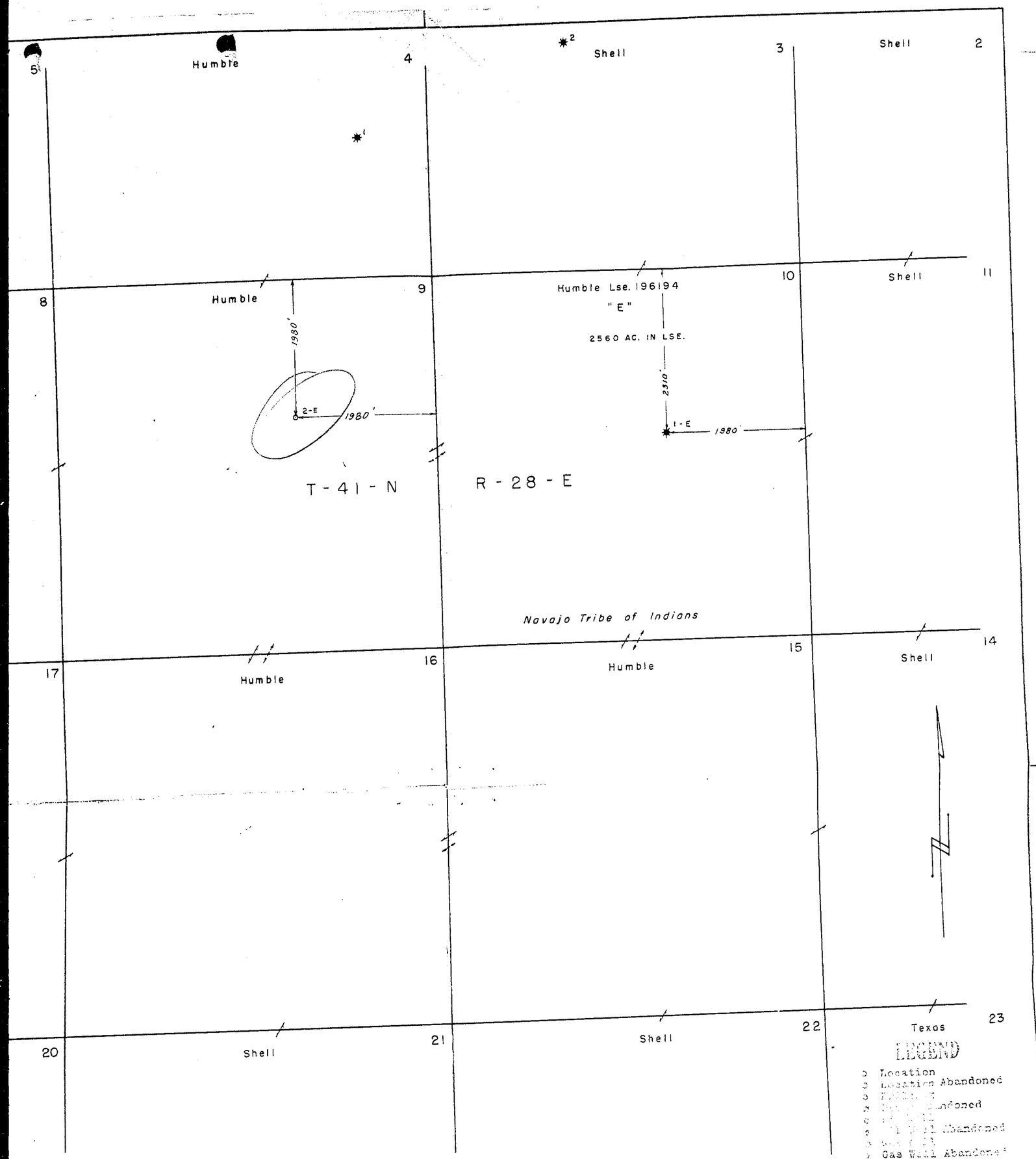
NAVAJO TRIBE OF INDIANS-"E"
SEC. 9,10,15 & 16, T-41-N R-28-
APACHE CO., ARIZONA

HUMBLE OIL & REFINING COMPANY
CIVIL ENGINEERING DIVISIO
MIDLAND, TEXAS

DRAWN D. L. MCKIBBIN
CHECKED A. F. Daugherty
APPR. A.F.D.
SCALE 1" = 1000'
DATE 7-24-58
SHEET OF
FIL
W-C

EAST BOUNDARY BUTTE FIELD 47 MILES N W SHIPROCK NEW MEXICO

Oil & Ref. Co. Navajo
SW/4-NE/4 Sec. 9-T41N-R28E
Apache County



REGISTERED LAND SURVEYOR
CERTIFICATE EXPIRES
ARIZONA, U.S.A.

12 Sept. 58
Herschel S. Westerfeld
Arizona

THIS APPLICATION FOR WELL NO. —

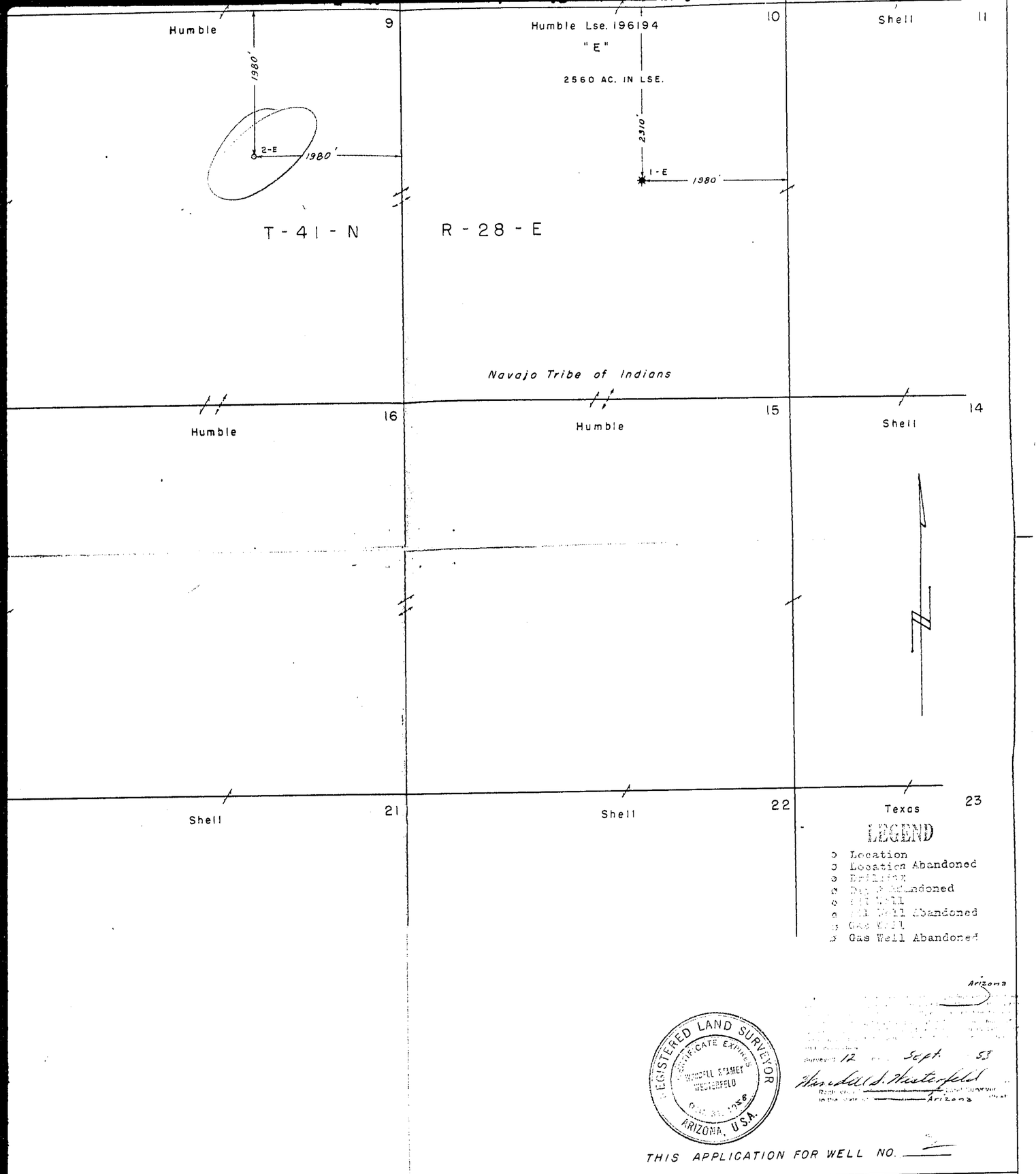
REVISIONS					
NO.	DATE	DESCRIPTION	BY	CHK	APPR

NAVAJO TRIBE OF INDIANS "E" 196194
SEC. 9,10,15 & 16, T-41-N R-28-E
APACHE CO., ARIZONA

HUMBLE OIL & REFINING COMPANY
CIVIL ENGINEERING DIVISION
MIDLAND, TEXAS

DRAWN D. L. MCKIBBIN SCALE 1"=1000'
CHECKED H. F. Daugherty DATE 7-24-58
APPR. H.F.D. SHEET OF
FILE NO. W-C 883

EAST BOUNDARY BUTTE FIELD 47 MILES N W SHIPROCK NEW MEXICO



Arizona

12 Sept. 58

Arizona

REGISTERED LAND SURVEYOR
CERTIFICATE EXPIRES
WINDELL STANLEY WESTERFELD
ARIZONA, U.S.A.

THIS APPLICATION FOR WELL NO. ____

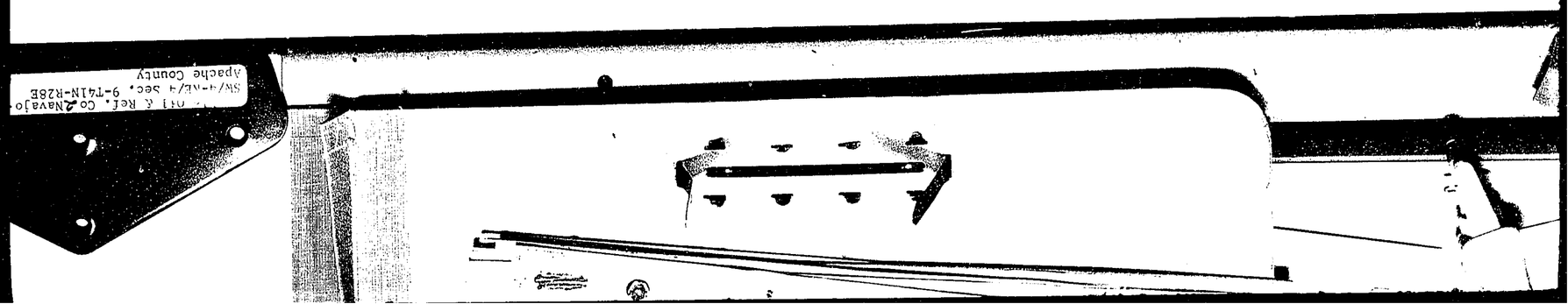
REVISIONS					
NO.	DATE	DESCRIPTION	BY	CHK.	APPR.

NAVAJO TRIBE OF INDIANS-"E" .196194
SEC. 9,10,15 & 16, T-41-N R-28-E
APACHE CO., ARIZONA

HUMBLE OIL & REFINING COMPANY
CIVIL ENGINEERING DIVISION
MIDLAND, TEXAS

DRAWN D. L. MCKIBBIN
CHECKED H. F. Daugherty
APPR. H.F.D.
SCALE 1" = 1000'
DATE 7-24-58
SHEET ____ OF ____
FILE NO. W-C 883

EAST BOUNDARY BUTTE FIELD 47 MILES N W SHIPROCK NEW MEXICO



Operator Humble Oil & Refining Company

Bond Company Federal Insurance Co. **Amount** $10,000.00

Bond No. 8002-92-35 **Date Approved** July 16, 1963

Permits covered by this bond:

SEE HAS FILE

28 producing

118 D&A - File complete.

58 producing

65 PA

CANCELLED

DATE 11-29-65

November 29, 1965

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

Re: Federal Insurance Co. Bond 8027-26-26 covering
Humble Oil & Refining Co. #1 Navajo well
NE/4SE/4 4-41N-28E, Apache County, Arizona
Permit 26

Federal Insurance Co. Bond 8027-26-25 covering
Humble Oil & Refining Co. #E2 Navajo well
SW/4NE/4 10-41N-28E, Apache County, Arizona
Permit 58

Federal Insurance Co. Blanket Bond 8002-92-35

Gentlemen:

Enclosed are approved copies of bonds covering individual wells captioned above.

Inasmuch as all other wells drilled under Federal Insurance Co. Blanket Bond 8002-92-35 have been completed and all required information has been submitted in accordance with our Rules and Regulations, this letter then will constitute authority from this Commission to terminate said blanket bond.

Your cooperation is very much appreciated.

Very truly yours,

John Bannister
Executive Secretary
mr
enc

cc: Federal Insurance Company
New York, New York 10038

November 4, 1965

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

Attention: Mr. R.E. Barnard

Gentlemen:

In response to your letter of October 29, 1965, enclosed are sufficient bond forms for individual bonds covering your two wells.

However, in reviewing our files we note that the #E2 Navajo well file is complete with the exception of copies of the logs run. Before we can release your current blanket bond we must have these logs, and of course, the new bonds.

Your cooperation is very much appreciated.

Very truly yours,

John Bannister
Executive Secretary
mr
enc

HUMBLE OIL & REFINING COMPANY

CENTRAL REGION

P. O. Box 120
Denver, Colorado - 80201

October 29, 1965

Mr. John Bannister
Executive Secretary
Arizona Oil and Gas Commission
1624 West Adams
Phoenix, Arizona 85007

Re: Federal Insurance Company
Bond 8002 92 35

Dear Sir:

Receipt is acknowledged of your letter of October 15 concerning change in bonding requirements for the State of Arizona.

It has been decided that we will take the route of furnishing bonds on an individual well basis. Please send us the necessary forms to furnish bonds for the two wells we now operate in Arizona.

Immediately upon receipt of those forms, proper bonds will be furnished.

Very truly yours,

HUMBLE OIL & REFINING COMPANY

By: R. E. Barnard
R. E. Barnard

REB:bh
cc: R. S. Frazier

RECEIVED
NOV 1 1965
STATE O & G
CONS. COMM.

October 15, 1965

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

Attention: Mr. R.E. Barnard

Re: Federal Insurance Company Bond 8002 92 35

Gentlemen:

As you are aware, the captioned bond in the amount of $10,000 is on file with this Commission to cover bonding requirements of this Commission.

As a result of the public hearing held September 22, 1965 in Phoenix, Arizona, concerning the Rules and Regulations of this Commission, the bonding requirements have been increased to $5,000 for a single well and to $25,000 for a state-wide blanket bond.

As required by law, certified copy of the new Rules and Regulations was filed with the Secretary of State on October 1, 1965, and consequently the new Rules became effective on that date.

This letter is to request that at your earliest convenience you take the necessary steps to increase your state-wide bond to $25,000. Upon receipt of your new bond your old bond of course may be released.

Your earliest cooperation will be appreciated.

Yours very truly,

John Bannister
Executive Secretary
mr

May 3, 1965

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

Re: Humble Navajo #E2 well
SW/4NE/4 S9-T41N-R28E, Apache County, Arizona
Permit 65

This Commission's letters of August 10, 1964 and April 9, 1965 requested that the Well Completion Report be submitted for captioned well.

May we have this information just as soon as possible.

Yours very truly,

J.R. Scurlock
Petroleum Geologist

mr

April 9, 1965

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

Re: Humble Navajo E 2 well
SW/4NE/4 S9-T41N-R28E, Apache County, Arizona
Permit 65

Gentlemen:

By form letter of August 10, 1964 we requested Well Completion Report for captioned well. To date this has not been received.

We are again enclosing these forms and request that the information be forwarded in accordance with Arizona's Rules and Regulations just as soon as possible.

Yours very truly,

J.R. Scurlock
Petroleum Geologist

mr
ec

STATE of ARIZONA
OIL and GAS CONSERVATION COMMISSION
CAPITOL ANNEX
ROOM 202
1624 WEST ADAMS STREET
PHOENIX, ARIZONA

COMPANY Humble Oil & Refining Company DATE 8-10-1964

RE: WELL NAME & NUMBER: Navajo "E" #2

LOCATION: SECTION 9 TWP. 41N R. 28E COUNTY Apache

FILE NUMBER 65

Gentlemen:

We have reviewed our files and find that we need the below checked item (s) in order to complete same. Will you please fill in the enclosed form (s), at your earliest convenience, and return them to this office. May we remind you that your bond (# XXXXXXXXXXXXXXXX, issued by Not Applicable) can be forfeited for failure to comply.

In addition we request a copy of any log run on this (these) well (s) (Not Applicable)

Your cooperation is appreciated. If we may be of service to you please advise.

Yours very truly,

Bill Cooper

Bill Cooper
Records Section

Completion Record X

Plugging Record

Well Log

Application to plug and abandon

cc/Bonding Company

HUMBLE OIL & REFINING COMPANY
PRODUCTION DEPARTMENT
HOUSTON 1, TEXAS

9443

May 28, 1959

RALPH J. SCHILTHUIS
VICE-PRESIDENT

RECEIVED
JUN 4 1959
STATE LAND DEPT.

State Land Commission of Arizona
Phoenix
Arizona

Gentlemen:

This is to certify that Mr. R. R. McCarty, Division Production Manager of our Western Division, is authorized to sign forms, reports, affidavits, and other instruments required by the State Land Commission of Arizona.

Mr. McCarty was previously authorized to sign instruments under the title of Division Superintendent and this letter is written to authorize change in occupational title only.

We will notify you in writing of any additions to or revocations of such authority.

Witness our hands and the seal of the Company, this 28th day of May, A. D. 1959.

HUMBLE OIL & REFINING COMPANY

By Ralph J. Schilthuis
Vice-President

RWB

ATTESTED:

Elizabeth H. Lenney
Assistant Secretary

65

HUMBLE OIL & REFINING COMPANY
PRODUCTION DEPARTMENT
HOUSTON 1, TEXAS

January 29, 1959

RALPH J. SCHILTHUIS
VICE-PRESIDENT

State Land Commission of Arizona
Phoenix, Arizona

Gentlemen:

This is to certify that Mr. D. F. Haynes, Manager, Crude Oil Department; Mr. J. E. McCleary, Assistant Manager, Crude Oil Department; Mr. J. C. Posgate, Assistant Manager, Crude Oil Department, and Mr. R. F. Price, Chief Clerk, Crude Oil Department, are authorized to sign forms, reports, affidavits, and other instruments required by the State Land Commission of Arizona.

We will notify you in writing of any additions to or revocations of such authorities.

Witness our hands and the seal of the Company, this 2nd day of February, A. D. 1959.

HUMBLE OIL & REFINING COMPANY

By Ralph J. Schilthuis
Vice-President

Approved
RJS

1975

ATTESTED:

Elizabeth H. Kenney
Assistant Secretary

RECEIVED
FEB 9 1959
STATE LAND DEPT.

65

HUMBLE OIL & REFINING COMPANY
PRODUCTION DEPARTMENT
HOUSTON 1, TEXAS

November 18, 1958

RALPH J. SCHILTHUIS
VICE-PRESIDENT

State Land Commission of Arizona
Phoenix, Arizona

Return to
NB

Gentlemen:

This is to certify cancellation of the signature authorizations for Mr. W. E. Hubbard and Mr. A. A. Klein to sign forms, reports, affidavits, and other instruments required by the State Land Commission of Arizona, Phoenix, Arizona.

Witness our hands and the seal of the Company, this 24th day of November, A. D. 1958.

HUMBLE OIL & REFINING COMPANY

Form Approved
By RDD

By Ralph J. Schilthuis
Vice President

ATTESTED:

Elizabeth H. Kenney
Assistant Secretary

17486

RECEIVED
DEC 1 1958
STATE LAND DEPT.

65

September 23, 1958

Mr. L. H. Byrd
Humble Oil & Refining Company
Western Division
P. O. Box 1600
Midland, Texas

Dear Mr. Byrd:

We are inclosing an approved copy of our form O&G 51, Notice of Intention to Drill New Well, together with receipt in the amount of $25.00 covering your drilling operation in Section 9, Township 41 North, Range 28 East, Apache County, Arizona.

We note from the intent that the elevation will be furnished later, and we will appreciate having this information as soon as it is available. We are in receipt of the accompanying plat this date.

Very truly yours,

STATE LAND COMMISSIONER

By: Frederick C. Ryan,
Supervisor,
Oil and Gas Conservation

mb
Encls.

65

46.00 Ac unit
Plat on Survey

HUMBLE OIL & REFINING COMPANY

WESTERN DIVISION
P. O. BOX 1600
MIDLAND, TEXAS

September 19, 1958

Re: Notice of Intention to
Drill Navajo Tribe of
Indians "E" No. 2
File: 6-1

State Land Department
State of Arizona
Phoenix, Arizona

Gentlemen:

Please find enclosed copies of Form OG-51 and filing fee on Humble Oil & Refining Company's Navajo Tribe of Indians "E" Well No. 2, located 1980 feet from the North line and 1980 feet from the East line of Section 9, T-41-N, R-28-E, Apache County, Arizona.

Your approval at an early date will be appreciated.

Very truly yours,

L. H. Byrd

L. H. BYRD

JEP/enk
Enc.

14267

65

SEP-22-58 53884 • •71085 Ck ═══ 25.00

STATE OF ARIZONA
STATE LAND DEPARTMENT
STATE OFFICE BUILDING—PHOENIX, ARIZONA

STATEMENT RECEIPT OFFICE COPY

HUMBLE OIL & REF. CO.
P. O. BOX 1600
MIDLAND, TEXAS

SECTION	TOWNSHIP	RANGE
9	41 N.	28 E.

KIND ENTRY	LEASE – REFERENCE NO.
22	65

ACCOUNT NO. GRANT FUND	SUB	CARRYING CAPACITY OR STATIC WATER LEVEL	SEE OTHER SIDE FOR CODE DESCRIPTION: LAND CODE	CROP CODE	WATER CODE	BILLING DESCRIPTION	RATE	ACRES	$ AMOUNT
14	401	35				Drilling Permit Application			25 00

BILLING PERIOD FROM MO.	DAY	YR.	TO MO.	DAY	YR.	DATE BILLED MO.	DAY	YR.	DATE DUE MO.	DAY	YR.	TOTAL ACRES	TOTAL AMOUNT $
						9	23	58					25 00

IF PAYMENT IS MADE ON OR BEFORE THIS DATE → PAY THIS AMOUNT

SEE OTHER SIDE FOR LAW PERTAINING TO PENALTY AND INTEREST — A. C. 1939, 11-307

RENTAL AMOUNT SUBJECT TO PENALTY AND INTEREST IF NOT PAID ON OR BEFORE DATE DUE - - - ($)

5% PENALTY OF RENTAL AMOUNT - - - - - $

TOTAL RENTAL AMOUNT PLUS PENALTY - - - - ($)

10% INTEREST PER ANNUM OF RENTAL AMOUNT AND PENALTY — NUMBER OF DAYS DELINQUENT ( ) $

TOTAL AMOUNT DUE INCLUDING PENALTY AND INTEREST - - - - - $

CASH RECEIVED $

BALANCE DUE OR OVERPAYMENT $

PENALTY AND INTEREST DISTRIBUTION
$

TOTAL PENALTY AND INTEREST $

FORM A-91 REV.

TREAS. NO.

HUMBLE OIL & REFINING COMPANY

SETTLEMENT OF ACCOUNT

THE ATTACHED CHECK IS IN FULL FOR ITEMS SHOWN BELOW AND CONSTITUTES RECEIPT. IF CORRECT DETACH STATEMENT FOR YOUR RECORD.

State Land Department - Oil & Gas Division, Phoenix, Ariz.	$25.00
Drilling Permit (Navajo Tribe of Indians E-2)	
452-414-64-64-919-908	

65

County Apache

Area East Boundary Butte

Lease No. 14-20-603-412

Well Name Humble Oil & Refining Company 2 Navajo—E

Location SW NE Sec 9 Twp 41N Range 28E Footage 1980 FNL 1980 FEL

Elev 5527 Gr 5536 RKB ~~KB~~ Spud Date 9-26-58 ~~Completed~~ Abandon 12-23-58 Total Depth 6520 / 4950 PBTD

Contractor

Drilled by Rotary X
Cable Tool

Casing Size	Depth	Cement
9 5/8	1008'	475
7	4949'	250

Production Horizon

Initial Production P & A

REMARKS Humble furnished structural cross section (comparative) log dated 11-10-66 on 1-31-69. See log file #28 and East Boundary Butte File.

See permit #444.

Elec Logs IE; Radioactivity; Caliper

Applic. to Plug ___ Plugging Record X Completion Report X

Sample Log Am Strat
Sample Descript.
Sample Set 1791
Core Analysis
DSTs [redacted]

Water well accepted by

Bond Co. & No. The American Insurance Company Bond #5-10-11-58

Bond Am't $ 25,000 Cancelled 11-29-65 Date Organization Report X

Filing Receipt 71085 Dated 9-22-58 Well Book X Plat Book X

Loc. Plat X Dedication W/2 NE

API No. 02-001-20067

Permit Number 65 Date Issued 9-23-58

See 444 for re-entry

Formation Tops	Scout	Sample	E. Log	Remarks
Cutler Rico	2260			
Coconino	2260			
Organ Rock	2619			
Hermosa	4210			
Paradox	4950			
Lower Hermosa	5618			
Molas	5850			
Leadville	6000			
Ouray	6180			
Elbert	6322			

DSTs

CORES: Intervals, analysis