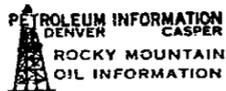


Marathon Oil Co. Navajo  
NE/4-SE/4-Sec 18-Twp 40N-R29E 374  
Apache, County

P-M

ARIZONA  
APACHE CO.  
DRY MESA (D)



Twp 40n-29e  
Section 18  
ne se  
1500 n/s 400 w/e

OPR: Marathon Oil

WELL #: 1 Navaio

ELEV: 6602 KB.

DSTS. & CORES:

SPUD: 4-9-64 COMPL: 5-4-64

TOPS: Log-Simplex  
DeChelly 2950  
Organ Rock 3362  
Hermosa 4690  
Ismay 5298  
Desert Creek 5406  
Molas 6050  
Mississippian 6114

Crd 6200-13 1/2, rec 1  
dolo, fine crys, vert  
fract w/dead oil stain; 9  
ls, fine crys, erinoidal,  
vert fract; 1 sh; 1 ls,  
dense; 1 1/2 dolo w/calcite  
inclusions. Crd 6213 1/2  
39 1/2, rec 14 1/2 ls, dense;  
2 1/2 dolo, dense; 1 dolo  
w/scattered ppp; 6  
dolo, dense w/scattered

TD: 6262 PB:  
CSG: 9-5/8" @ 725 w/500

PERF:

PROD. ZONE:

ppp w/vert fract; 2 dolo, vug scattered staining. Crd  
6238 1/2-62, rec 23 1/2 dolo, vert fract, vug, scattered stain  
w/chert stringers. DST 2867-75, SI 1 hr, open 1 hr, SI  
30 mins, rec 120 mud, FP 0-0#, SIP 1237-987#. DST  
5806-27, SI 1 hr, open 1 hr, SI 1 hr, rec 60 mud, FP 21-43#,  
FSIP 649#, HP 2866-2866#. DST 6226-62, SI 1 hr, open 1 hr,  
SI 1 hr, rec 80 mud, 1000 salt wt, FP 73-510#, SIP 1570-1556#, HP 3039-3024#.

INIT. PROD: D & A

Contr: Loffland.

ARIZ 1-469150

s1

COUNTY Apache AREA Teh-a-tin Mesa LEASE NO. 14-20-603-4329  
Joh Atin

WELL NAME Marathon Oil Company #1 Navajo

LOCATION NE SE SEC 18 TWP 40N RANGE 29E FOOTAGE 1500 FSL 400 FEL

ELEV 6591 GR 6604 KB SPUD DATE 4-9-64 STATUS P&A TOTAL DEPTH 6262  
COMP. DATE 5-4-64

CONTRACTOR

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY
<u>9 5/8</u>	<u>724</u>	<u>640 sx</u>	<u>NA</u>	<u>X</u>
				DRILLED BY CABLE TOOL
				PRODUCTIVE RESERVOIR
				INITIAL PRODUCTION <u>P&amp;A</u>

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
<u>Mississippi</u>	<u>6114</u>		<u>X</u>	
<u>Pennsylvanian</u>	<u>4690</u>			
<u>Permian</u>	<u>3005</u>			
<u>Triassic</u>	<u>1805</u>			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG Am Strat
<u>Sonic-GR</u>			SAMPLE DESCRP.
<u>Induction-Laterlog</u>			SAMPLE NO. <u>1256*</u>
			CORE ANALYSIS <u>X</u>
			DSTs <u>X</u>
			*Tucson 2692

REMARKS Water Analysis - see file

APP. TO PLUG \_\_\_\_\_

PLUGGING REP. X

COMP. REPORT X

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

BOND CO. Ohio Casualty Ins. Co. BOND NO. \_\_\_\_\_

BOND AMT. \$ 2,500 CANCELLED 9-17-68 DATE \_\_\_\_\_

FILING RECEIPT 9372 LOC. PLAT X ORGANIZATION REPORT 3-18-64

API NO. \_\_\_\_\_ DATE ISSUED 3-25-64 WELL BOOK X PLAT BOOK X

DEDICATION E/2 E/4

PERMIT NUMBER 274



**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 Marathon Oil Company		Address P. O. Box 120 Casper, Wyoming	
Lease Name Marathon Oil Co. Navajo Indian Reservation		Well Number 1	Field & Reservoir Toh-a-Tin Mesa
Location 1500-FSL-400 FEL		Sec.-TWP-Range or Block & Survey 18-40N-29E	
County Apache	Permit number 274	Date Issued 3-26-64	Previous permit number Date Issued
Date spudded 4-9-64	Date total depth reached 5-2-64	Date completed, ready to produce 5-5-64	Elevation (DF, RKB, RT or Gr.) RKB - 6602 feet
Total depth 6262	P.R.T.D.	Single, dual or triple completion?	Elevation of casing hd. flange feet

Producing interval (s) for this completion -----		Rotary tools used (interval) 0 - 6262	Cable tools used (interval) -----
Was this well directionally drilled? No	Was directional survey made? No	Was copy of directional survey filed? No	Date filed -----
Type of electrical or other logs run (check logs filed with the commission) Gamma-Ray-Sonic Caliper & dual induction Log-Later Log			Date filed To follow

**CASING RECORD**

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Surface	13 3/4	9 5/8	32.30# & 36#	724.38	640	-----

**TUBING RECORD**

Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)

**PERFORATION RECORD**

Number per ft.	Size & type	Depth Interval	ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD
			Am't. & kind of material used Depth Interval

**INITIAL PRODUCTION**

Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)					
Date of test	Hrs. tested	Choke size	Oil prod. during test bbbls.	Gas prod. during test MCF	Water prod. during test bbbls.	Oil gravity ° API (Corr)	
Tubing pressure	Casing pressure	Cal'ed rate of Production per 24 hrs.	Oil bbbls.	Gas MCF	Water bbbls.	Gas-oil ratio	

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Division Supt. of Operations of the Marathon Oil 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 5/8/64 Signature [Handwritten Signature]

STATE OF ARIZONA OIL & GAS  
 CONSERVATION COMMISSION  
 Well Completion or Recompletion Report and Well Log  
 Form No. P-7 File two copies

274

Form 9-331 b  
(April 1952)


(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Budget Bureau No. 42-10359.4  
Approval expires 12-31-60.

Indian Agency Window Rock

Allottee Navajo Tribal

Lease No. 14-20-603-4329

*P. J. M. [Signature]*  
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	X
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)

May 19, 1964

Marathon Oil Co., Navajo Indian Reservation  
Well No. 1 is located 1500 ft. from N line and 400 ft. from W line of sec. 18

SE 1/4 - Sec. 18 40 29-F  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Toh-a-tin Mesa Apache Arizona  
(Field) (County or Subdivision) (State or Territory)

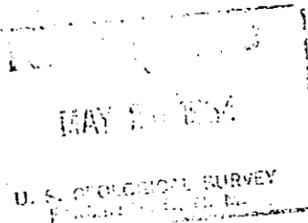
The elevation of the K. B. surface floor above sea level is 6602 ft.

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)

Well plugged and abandoned 5/4/64.  
Location has since been cleaned and leveled.  
Marker has been set and ready for inspection.

Set plugs: 1300-1500'  
2850-3000'  
4600-4750'  
6000-6150'



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

Company Marathon Oil Company

Address P. O. Box 120  
Casper, Wyoming

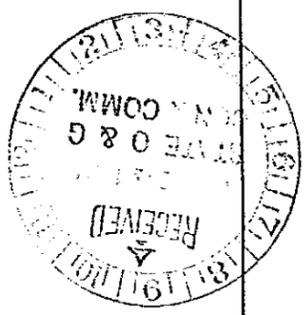
By [Signature]

Title DIVISION SUPERINTENDENT OF OPERATIONS

Copy (2): Mr. John Bannister  
Oil & Gas Conservation Commission  
State of Arizona  
1624 West Adams - Phoenix, Arizona

DETAIL OF FORMATIONS PENETRA )

Formation	Top	Bottom	Description*
Mississippi	6114	6262	Core #1 - 6200-6213½ Dolomite, white, trace dead oil stain, Limestone, red shale stringers.
			Core #2 - 6213½-6238½ Lime stone, cream white, red shale stringers, Dolomite fractured w/light brown stain along vert. fracs
			Core #3 - 6238½-6262 6' Oil stain, brown dolomite, grey fractured.
De Chelley	2950	3362	DST 1 - 2975 DST 1-A -2967-2975 Could not get to bottom Open 5 min. w/fair blow before initial SI. ISI 1-hr. open 1-hr. FSI 1/2 hr. Tool reset twice w/ weak blow which died Rec 120' mud. SI 1237-987# H.H. 1764# Flow not recorded
Middle Paradox	5561	5851	DST #2 - 5805-5827 Open 5 min., Before SI weak blow (1 hr-3/4-1/2) weak blow died at once reset 2-Times. Same results. Rec 60' drilling mud-No Show. SI missed FSI 649# F-21-43# H.H. 2866#
Mississippi	6114	6262	DST #3 - 6226-6262 Open 2 min. fair blow, SI 1-hr FSI 1-hr Fair air blow at end of test Rec. 80' drlg. mud slightly oil out & 1000' Salt Water SI 1570-1556#, F 73-510#, H.H. 3039#



\* 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. P-7



#274  
18,40N-29E

CORE LABORATORIES, INC.  
Petroleum Reservoir Engineering  
DALLAS, TEXAS  
WATER ANALYSIS

File 18-40N-29E-1

Company MARATHON OIL COMPANY Well Name No. 1 NAVAJO Sample No. 1  
Formation MISSISSIPPIAN Depth \_\_\_\_\_ Sampled From MIDDLE OF TEST TOOL  
Location Sec 18 10N 29E Field WILDCAT County APACHE State ARIZONA  
Date Sampled \_\_\_\_\_ Date Analyzed 5-1-64 Engineer HUFF

Total Dissolved Solids 27,207 mg/L CALC.

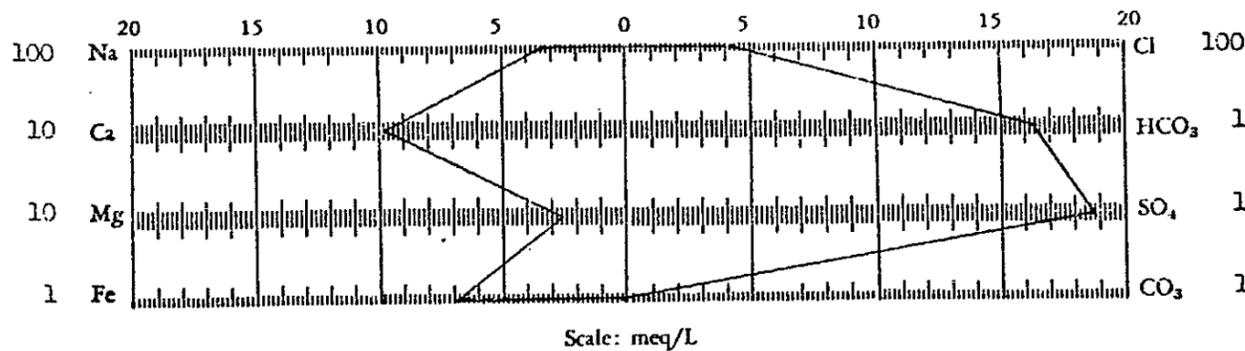
Sp. Gr 1.020 @ 67 °F.

Resistivity 0.282 ohm-meters @ 67 °F. MEAS

Hydrogen Sulfide ABSENT

pH 6.0

Constituents	meq/L	mg/L	Constituents	meq/L	mg/L
Sodium	<u>333.3</u>	<u>7,557</u>	Chloride	<u>428.5</u>	<u>15,174</u>
Calcium	<u>97.8</u>	<u>1,960</u>	Bicarbonate	<u>16.4</u>	<u>1,000</u>
Magnesium	<u>26.9</u>	<u>316</u>	Sulfate	<u>18.7</u>	<u>900</u>
Iron	<u>6.5</u>	<u>180</u>	Carbonate	<u>ABSENT</u>	
Barium			Hydroxide		



All analyses except iron determination performed on a filtered sample.

Form 9-331 b  
(April 1952)


(SUBMIT IN TRIPLICATE)  
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

Budget Bureau No. 42-14359.4  
 Approval expires 12-31-60.

Indian Agency \_\_\_\_\_  
 Navajo Tribal  
 Allottee \_\_\_\_\_  
 Lease No. **14-20-603-4329**

**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	<b>Report of Surface Casing</b>	<b>X</b>

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

April 13, 19 64

Marathon Oil Co. Navajo Indian Reservation  
 Well No. 1 is located 1500 ft. from N line and 400 ft. from E line of sec. 18  
SE 1/4 Sec. 18      40-N      29-E  
(1/4 Sec. and Sec. No.)      (Twp.)      (Range)      (Meridian)  
Toh-A-Tin Mesa      Apache      Arizona  
(Field)      (County or Subdivision)      (State or Territory)

The elevation of the ~~derrick floor~~ ground above sea level is 6500 ft. (Est.)

**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)

Ran 18 joints 9-5/8" 32.30# 8 rd. H-40 ST&C and 4 joints 9-5/8" 36# J-35 ST&C casing landed at 724.38' KB. Cemented with 640 sacks 50/50 pozmix with 2% CaCl<sub>2</sub>. Displaced cement with 56 bbls. water. Bumped plug with 800#. Plug at 684' KB. Plug down at 1:30 PM, 4/11/64. Good returns to surface. Pressured casing with 500# for 1/4 hr. Tested OK. Nipped up and started drilling at 3:00 AM, 4/12/64.



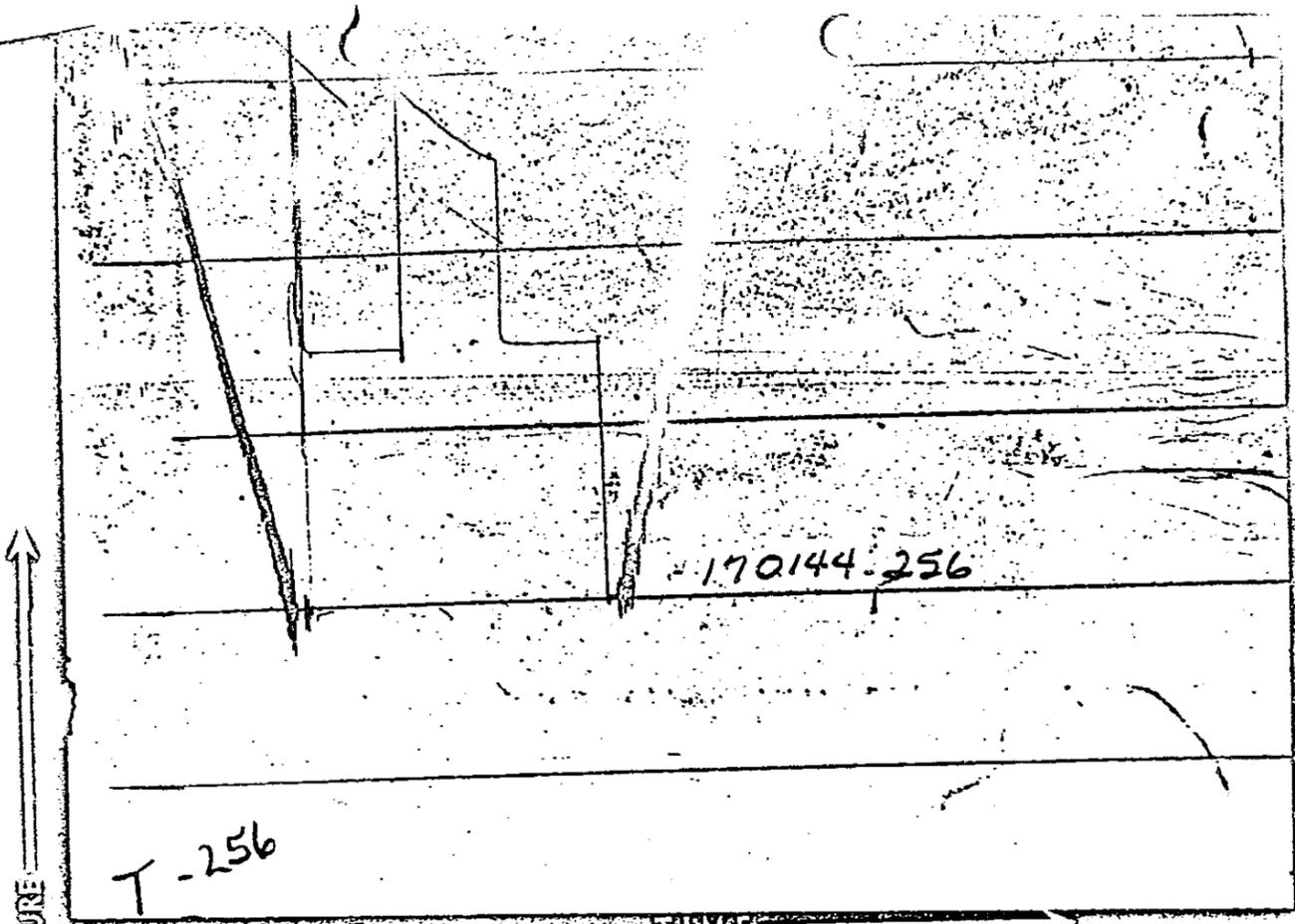
I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company MARATHON OIL COMPANY  
 Address P. O. Box 120  
Casper  
Wyoming  
 By E. F. Lindahl  
 Title Staff Assistant

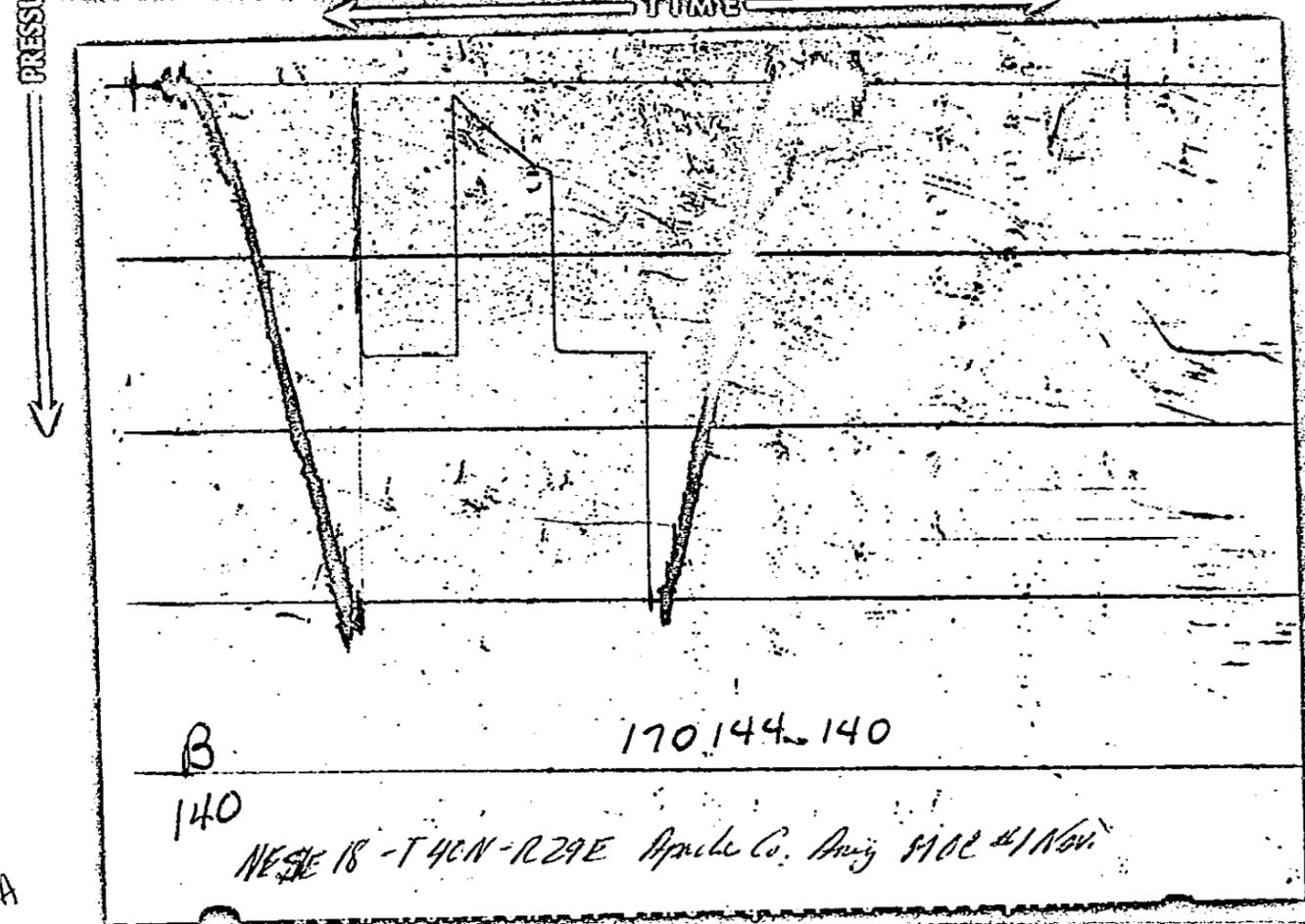
# 274

Gauge No.		Depth		Clock		hour		Ticket No.	
First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure		
Time Diff. .001"	PSIG Temp. Corr.	Time Diff. .001"	Log $\frac{t+0}{0}$	PSIG Temp. Corr.	Time Diff. .001"	PSIG Temp. Corr.	Time Diff. .001"	Log $\frac{t+0}{0}$	PSIG Temp. Corr.
P <sub>0</sub>	.000	20		36	.000	47	.000		497
P <sub>1</sub>	.013	36		1547	.1018	188	.0387		1530
P <sub>2</sub>					.2036	315	.0774		1534
P <sub>3</sub>					.3054	426	.1161		1536
P <sub>4</sub>					.4070	497	.1548		1536
P <sub>5</sub>							.1935		1536
P <sub>6</sub>							.2322		1536
P <sub>7</sub>							.2709		1536
P <sub>8</sub>							.3096		1536
P <sub>9</sub>							.3483		1536
P <sub>10</sub>							.3870		1535
Gauge No.		Depth		Clock		hour			
110		6258'		12		hour			
P <sub>0</sub>	.000	50		61	.000	76	.000		520
P <sub>1</sub>	.012	61		1572	.099	213	.0379		1556
P <sub>2</sub>					.198	340	.0758		1559
P <sub>3</sub>					.297	448	.1137		1560
P <sub>4</sub>					.396	520	.1516		1562
P <sub>5</sub>							.1895		1563
P <sub>6</sub>							.2274		1563
P <sub>7</sub>							.2653		1563
P <sub>8</sub>							.3032		1563
P <sub>9</sub>							.3411		1563
P <sub>10</sub>							.3790		1563
Reading Interval					15		6		Minutes
REMARKS:									

SPECIAL PRESSURE DATA



T-256



B  
140

NESE 18 - T40N - R29E Apache Co. Ariz 5102 4/1 Nov

AA

**PLUGGING RECORD**

Operator <b>Marathon Oil Company</b>		Address <b>P. O. Box 120 Casper, Wyoming</b>		
Name of Lease <b>Marathon Oil Co. Navajo Indian Reservation</b>		Well No. <b>1</b>	Field & Reservoir <b>Toh-a-Tin Mesa</b>	
Location of Well <b>1500 FSL - 400 FEL</b>		Sec-Twp-Rge or Block & Survey <b>18-40N-29E</b>		County <b>Apache</b>
Application to drill this well was filed in name of <b>Marathon Oil Company</b>	Has this well ever produced oil or gas <b>No</b>	Character of well at completion (initial production): Oil (bbls/day)      Gas (MCF/day)      Dry? -----      ----- <b>Dry</b>		
Date plugged: <b>5-4-1964</b>	Total depth <b>6262</b>	Amount well producing when plugged: Oil (bbls/day)      Gas (MCF/day)      Water (bbls./day) -----      -----      -----		
Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement.	
<b>NONE</b>	<b>NONE</b>		<b>6150-6000' 80 Sacks Cement 63 Bbls Mud</b>	
			<b>4750-4600 80 sacks cement 63 Bbls mud</b>	
			<b>3000-2850 60 Sacks Cement 40 Bbls Mud</b>	
			<b>1500-1300 70 Sacks Cement 18 Bbls Mud</b>	

**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
<b>9 5/8"</b>	<b>715.82</b>	<b>-----</b>	<b>715.82</b>		<b>1 - Baker Float Collar 1.60'</b>
					<b>1 - Baker Guide Shoe 1.45'</b>
Was well filled with mud-laden fluid, according to regulations? <b>Yes</b>				Indicate deepest formation containing fresh water.	

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

Name	Address	Direction from this well:
<b>Navajo Indian Reservation</b>		
<b>Pure Oil - Texaco</b>	<b>Pure Oil Co. P. O. Box 1611 Casper, Wyo.</b>	<b>South</b>
<b>Texaco, Inc.</b>	<b>P.O. Box 2100 Denver, Colorado</b>	<b>West</b>
<b>Atlantic Refining</b>	<b>1500 Security Life Bldg. Denver, Colo.</b>	<b>North</b>
<b>Sinclair - Superior</b>	<b>(See Reverse Side)</b>	<b>East</b>
<b>Pan American</b>		

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  
File this form in duplicate with the State of Arizona Oil & Gas Conservation Commission

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the **Division Supt. of Operations** of the **Marathon Oil 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 5/8/64 Signature [Handwritten Signature]

STATE OF ARIZONA OIL & GAS  
CONSERVATION COMMISSION  
Form No. P-15      Plugging Record      File two copies

Sinclair - Room 601, Denver Club Bldg. Denver, Colorado  
Superior - Superior Oil Bldg. Casper, Wyoming  
Pan American - P. O. Box 40 Casper, Wyoming



Sinclair - Room 601, Denver Club Bldg. Denver, Colorado  
Superior - Superior Oil Bldg. Casper, Wyoming  
Pan American - P. O. Box 40 Casper, Wyoming



Form 9-371 b  
(April 1952)


(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Budget Bureau No. 52-10369.4  
Approval expires 12-31-60.

Indian Agency Window Rock

Allottee Navajo Tribal

Lease No. 14-20-603-4329

### 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)

May 19, 1964

Marathon Oil Co., Navajo Indian Reservation

Well No. 1 is located 1500 ft. from S line and 400 ft. from W line of sec. 18

SE - 18 40 IX 29-E  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Toh-a-tin Mesa Apache Arizona  
(Field) (County or Subdivision) (State or Territory)

The elevation of the well floor above sea level is 6602 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)

Well plugged and abandoned 5/4/64.  
Location has since been cleaned and leveled.  
Marker has been set and ready for inspection.



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

Company Marathon Oil Company

Address P. O. Box 120

Casper, Wyoming

By [Signature]

Title DIVISION SUPERINTENDENT OF OPERATIONS

Copy (2): Mr. John Bannister  
Oil & Gas Conservation Commission  
State of Arizona  
1624 West Adams - Phoenix, Arizona

#274

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL  DEEPEN  PLUG BACK

NAME OF COMPANY OR OPERATOR

DATE March 11, 1964

Marathon Oil Company Casper Wyoming  
 Address City State  
 P. O. Box 120, Casper, Wyoming

DESCRIPTION OF WELL AND LEASE

Name of lease Well number Elevation (ground)  
 Marathon Oil Co. Navajo-Indian Reservation 1  
 Well location (give footage from section lines) Section—township—range or block & survey  
 1500' FSL 400' FEL Sec. 18, T-40N, R-29E  
 Field & reservoir (if wildcat, so state) County  
 Toh-Atin Mesa Wildcat Apache  
 Distance, in miles, and direction from nearest town or post office  
 58 Miles Northeast of Kayenta, Arizona  
 Nearest distance from proposed location to property or lease line: 3780 feet Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: feet  
 Proposed depth: 6135' Rotary or cable tools Rotary Approx. date work will start April 5, 1964  
 Number of acres in lease: 2,529.56 Number of wells on lease, including this well, completed in or drilling to this reservoir: None

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

Status of bond Indian Tribal & Allotted Lands Nationwide Oil & Gas Lease Bond Number 800304 Renewed to November 13, 1967.

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone)

Verbal permission for spacing exception granted by John N. Bannister at 11:30 A.M., March 3, 1964. Reason for requesting exception is that rough terrain makes it impossible to move nearer to a normal location. Well to be drilled in the E $\frac{1}{2}$  SE $\frac{1}{2}$  Sec. 18.

\* Fill in Proposed Casing Program on other side

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Div. Superintendent of Operations of the Marathon Oil 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.

March 11, 1964  
 Date

Signature

Permit Number: 277  
 Approval Date: *[Signature]*  
 Approved By: MAR 25 1964

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION  
 Application to Drill, Deepen or Plug Back

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.  
 See instruction on Reverse Side of Form

Form No. P-1

File two copies

Effective Feb. 28, 1962.

OK  
 JKD  
 JB

277  
 9

INSTRUCTIONS

READ CAREFULLY AND COMPLY FULLY

For the purpose of this determination attach hereto a neat, accurate plat, map or sketch of this lease, section, block or lot locating thereon the proposed site for this location. Plat shall be drawn to a scale which will permit the facile observation of all pertinent data. Show distances of the proposed well from the two nearest lease and section lines, and from the nearest wells on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well, and the names and addresses of all adjoining leases or property owners.

In event plat is filed for the purpose of designating the drilling and producing unit, or proration unit, on which the proposed well is to be drilled, the boundaries of such unit shall be shown, also the boundaries of all other such units attributed to other wells on the same lease completed in or drilling to the same reservoir. The acreage contained within each unit shall also be shown.

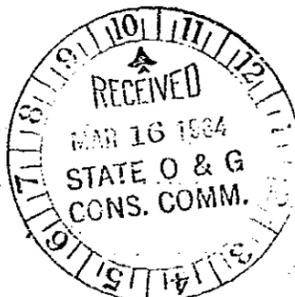
Do not confuse survey lines with lease lines. The sketch or plat should show your entire lease if possible. If it is not practical to show the entire lease and the plat shows only a section, block or lot out of your lease, you should clearly show that same is only a part of the lease.

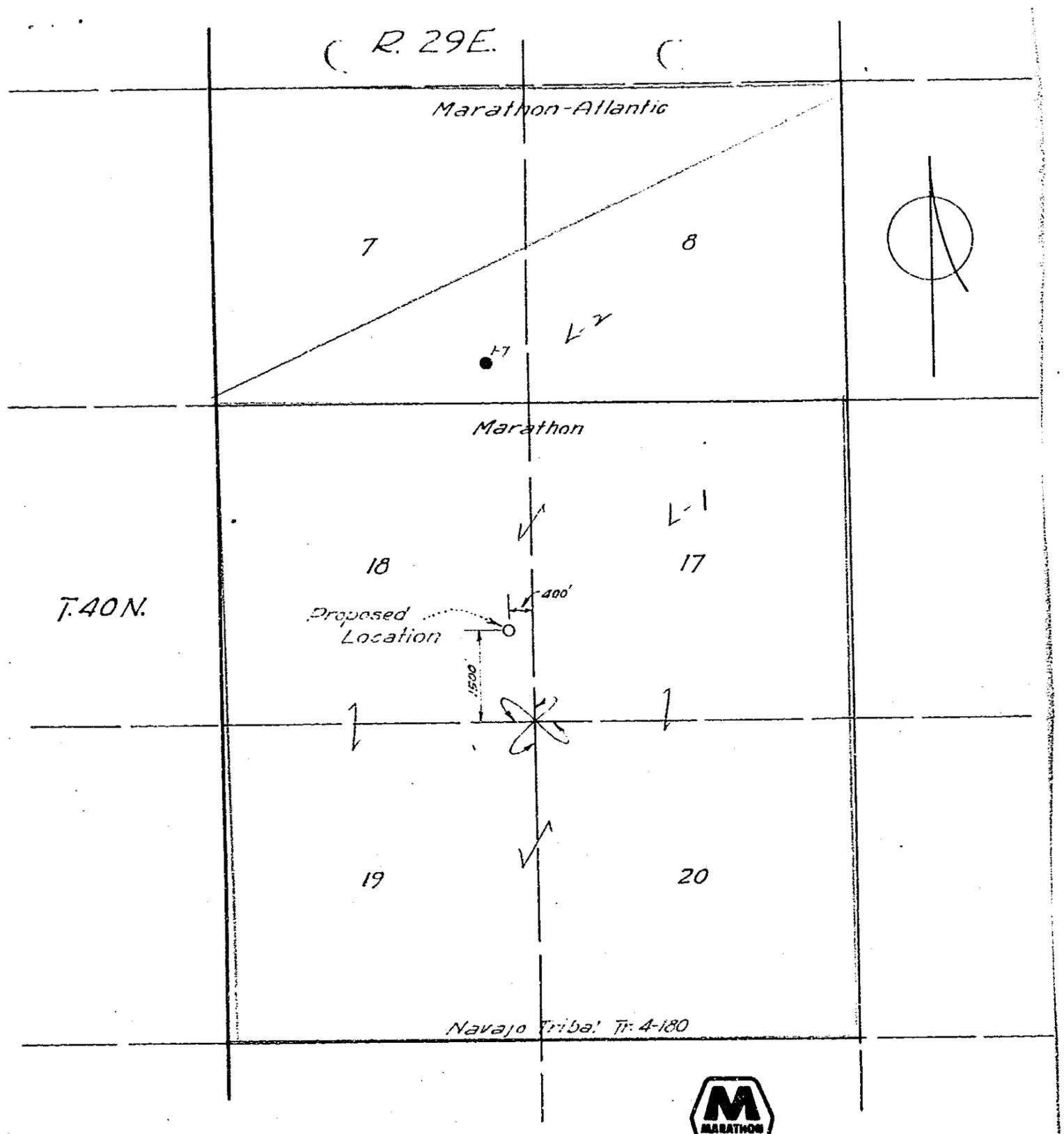
Designate scale to which plat or sketch is drawn. Also designate northerly direction on the sketch or plat.

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths Cement to Sfc.	Sacks Cement
9-5/8"	36#	J-55	Sfc.	700'		As required.
5 1/2"	15.5#	J-55	Sfc.	6135'	T. D.	As required.

Form No. P-1





MARATHON OIL COMPANY

TOH-ATIN MESA AREA  
Apache County, Arizona

Scale: 1" = 2000'  
March, 1964

274

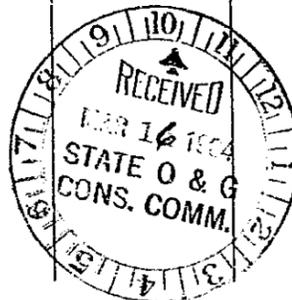


DETACH BEFORE DEPOSITING

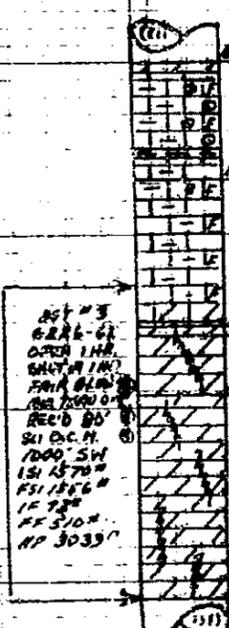
MARATHON OIL COMPANY, POST OFFICE BOX 120, CASPER WYOMING

DATE	YOUR INV. NO.	OUR ORDER NO.	DESCRIPTION	TAXES	DISCOUNT	NET
3-13-64		Brunt	Permit to drill our well located as follows: (Marathon-Navajo Well #1) 1500' FSL, 400' FEL Sec. 18, T-40N, R-29E, Toh-Atin Mesa Area, Apache County, Arizona/ PRODUCERS  TRANSPORTERS  REFINERS  MARKETERS			25.00

274



MARATHON OIL COMPANY  
WELL NO. 1  
TOWNSHIP 10S, RANGE 10E, SECTION 36, TARRANT COUNTY, TEXAS  
DETAILED LOG  
TODD DAVIS, GEOL.



138 COBEY 6200-138, OUTLACED 138 FEET  
17 FT. DOLOMITE, CREAM, FINE STAN, FRACTURED  
LIMESTONE, CREAM, DARK, VERTICAL FRACTURES WITH RED GASS  
SHAPE FRAC, POSSIBLE & ABUNDANT CALCITE  
17 FT. SHALE, RED  
139 LIMESTONE, AS ABOVE  
LIMESTONE, CREAM, DARK, WITH OCCASIONAL RED SHALE STRINGS  
DOLOMITE, DENSE, CREAM-WHITE  
DOLOMITE, SANDY, FINISH TO 1/2 INCH YUGGY POROSITY WITH  
VERTICAL FRAC & LIGHT BROWN OIL STAIN 6236'-38'  
DOLOMITE, CREAM-WHITE, VERTICAL FRACTURES, FINISH TO  
LARGE YUGGY (1/2 INCH DIAMETER) POROSITY, LIGHT BROWN  
OIL STAIN IN PORES & FRACTURES FROM 6250'-6274'  
OCCASIONAL CHERT & SHALE STRINGS

CASING RECORD

SURFACE: 22 JOINTS 9 5/8", WITH 6 JOINTS 4-11-6 1/4"  
WELL HISTORY

- 4-8-64: RURT. LOUJANO BROS. RIG #225. 1-1/2" BOP WORKS, LAMMERS  
MART. 2 WARRIORS 2 R-OCTOBER, BMAO D-500 MARK  
4-3-64: SPUD AT 8:00 PM  
4-12-64: RAN 22 JOINTS 7 7/8" 9 5/8" SURFACE CASING  
CARRIAGE WITH 400 SACKS  
4-17-64: STUCK ON HOLE AT 20 9/16' FOR 18 HOURS  
4-18-64: DST. #1-4. 2 1/2" (WALL SAND 2247-75), RIG'D 120' HOLE  
4-16-64: DST. #2. PRODUK. 5006-AT, RIG'D 60' HOLE  
4-30-64: CORING MISSISSIPPIAN  
5-2-64: DST. #3. PRODUK. BARK #2, RIG'D 60' (5006-5007)  
5-3-64: RUNNING SAND. MAY-DUNE & DUNE. PRODUK. LATERALS  
SLUGGED AND ABANDONED. BO SHAKS AT 6:00-6:00. BO SHAKS  
AT 4:50-4:00, 60 SACKS AT 3:00-2:50, 70 SACKS FROM  
1500-1200. RELEASED RIG. 12:00 NOON 5-4-64, DRILLED  
DEY HILL MARRER.

MAY 7, 1964 TODD DAVIS, WELL SITE GEOLOGIST  
RICH SANDER, DISTRICT GEOLOGIST

March 5, 1975

Mr. Daymon Gililand  
Northwest Pipeline Corp.  
P. O. Box 1526  
Salt Lake City, Utah 84402

Dear Mr. Gililand:

Enclosed are the followings logs you requested this date:

1. Marathon Oil Navajo #1, Permit #274  
Dual Induction-Laterolog & Sonic Log-Gamma Ray
2. Cities Service Monsanto Navajo #1, Permit #559  
Perforating Depth Control, Borehole Compensated  
Sonic Log-Gamma Ray, Sidewall Neutron Porosity Log,  
Proximity Log-Microlog and Dual Induction-Laterolog
3. Cities Service Monsanto C71, Permit #581  
Borehole Compensated Sonic Log-Gamma Ray  
Sidewall Neutron Porosity Log

You are free to make copies of these logs as you wish. Please  
return them as soon as possible.

Also see attached invoice for reproduction costs on the miscellaneous  
data sheets enclosed.

Very truly yours,

Mrs. Rhema Brandt  
Secretary to W. E. Allen  
Director, Enforcement Section

/rlb

Encs.

*Log returned 3-17-75*

BOND

KNOW ALL MEN BY THESE PRESENTS,

That we: Marathon Oil Company, an Ohio Corporation  
of the Hancock County of: Ohio in the State of:  
as Principal,  
and The Ohio Casualty Insurance Company, an Ohio Corporation  
of Hamilton, Ohio

authorized to do business within the State of Arizona,

as surety, are held and firmly bound unto the State of Arizona in the penal sum as indicated, lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The condition of this obligation is that whereas the above bounden principal proposes to drill a well or wells for oil, gas or stratigraphic purposes in and upon the following described land situated within the State, to wit:

1500 feet from South line, 400 feet from East line, Section 18,  
(May be used as blanket bond or for single well)  
T 40 N - R 29 E, Apache County, Arizona, Marathon Oil No. 1 -  
Navajo Indian Reservation.

NOW, THEREFORE, if the above bounden principal shall comply with all of the provisions of the laws of this State and the rules, regulations and orders of the State Land Commissioner, especially with reference to the requirements of A.R.S. 27-516, providing for the proper drilling, casing and plugging of said well or wells, and filing with the State Land Commissioner all notices and records required by said Commissioner, in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, then this obligation is void; otherwise, the same shall be and remain in full force and effect.

Penal sum of Twenty five hundred dollars (\$2,500.00)

Witness our hands and seals, this 18th day of March



ATTEST: [Signature]  
Assistant Secretary  
By: [Signature]  
W. H. Barber  
Vice President Principal

Witness our hands and seals, this 18th day of March

*Countersigned by [Signature] Arizona resident agent 3/14/41*

THE OHIO-CASUALTY INSURANCE COMPANY  
By: [Signature]  
Attorney-in-Fact Surety



Approved \_\_\_\_\_ Date \_\_\_\_\_ STATE LAND COMMISSIONER

RECEIVED  
DATE  
1-17-41

CERTIFIED COPY OF POWER OF ATTORNEY

THE OHIO CASUALTY INSURANCE COMPANY  
HOME OFFICE, HAMILTON, OHIO

No. 7008

Know All Men by These Presents: That THE OHIO CASUALTY INSURANCE COMPANY, in pursuance of authority granted by Article VI, Section 7 of the By-Laws of said Company, does hereby nominate, constitute and appoint:

Lois Campbell ----- of Findlay, Ohio -----

its true and lawful agent and attorney -in-fact, to make, execute, seal and deliver for and on its behalf as surety, and as its act and deed any and all BONDS, UNDERTAKINGS, and RECOGNIZANCES, not exceeding in any single instance

TWO HUNDRED FIFTY THOUSAND ----- (\$ 250,000.00) Dollars.

Excluding, however, any bond guaranteeing the payment of notes and interest thereon.

And the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Company as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its office in Hamilton, Ohio, in their own proper persons.

The authority granted hereunder supercedes any previous authority heretofore granted the above named attorney(s)-in-fact and WILL EXPIRE FOUR (4) YEARS FROM THE DATE HEREOF, UNLESS SOONER REVOKED.

In WITNESS WHEREOF, Frank R. King, Vice-President of the said The Ohio Casualty Insurance Company has hereunto subscribed his name and affixed the Corporate Seal of the said The Ohio Casualty Insurance Company this 1st day of June 19 60.



(Signed) FRANK R. KING  
Vice-President

CANCELLED

STATE OF OHIO,  
COUNTY OF BUTLER

DATE 9-17-68  
On this 1st day of June A. D. 19 60 before

the subscriber, a Notary Public of the State of Ohio, in and for the County of Butler, duly commissioned and qualified, came Frank R. King, Vice-President of THE OHIO CASUALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in, and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn deposed and saith, that he is the officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and the said Corporate Seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal at the City of Hamilton, State of Ohio, the day and year first above written.



(Signed) H. M. LOBET  
Notary Public in and for County of Butler, State of Ohio  
June 29, 1961.  
My commission expires -----

STATE OF OHIO, } SS.  
COUNTY OF BUTLER

I, the undersigned, Assistant Secretary of THE OHIO CASUALTY INSURANCE COMPANY, do hereby certify that I have compared the foregoing copy of the Power of Attorney with the original thereof, and that the same is a correct and true copy of the whole of said original Power of Attorney, and I do hereby further certify that said Power of Attorney is still in force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 18th day of March, A. D., 19 64

W. W. Berger  
Assistant Secretary

September 17, 1968

Mr. D. H. Russell  
Ohio Casualty Insurance Company  
3300 North Central  
Phoenix, Arizona

Re: Marathon Oil Company #1 Navajo  
T40N, R29E, G & SRM  
Sec. 18: NE/4 SE/4  
Apache County, Arizona  
Permit #274  
Bond: no number

Dear Mr. Russell:

Records of this office indicate that on 9-17-68 the Marathon Oil Company fulfilled its obligation to the State of Arizona as to the requirements pertaining to the captioned well. We authorize termination of the captioned bond effective this date.

Yours truly,

John Bannister  
Executive Secretary

JL:jf  
cc: William F. Carpenter



MARATHON OIL COMPANY

PRODUCTION - UNITED STATES AND CANADA  
CASPER DIVISION

P.O. BOX 120  
CASPER, WYOMING 82601

September 9, 1968

Commissioner  
Oil and Gas Conservation Commission  
Phoenix, Arizona 85003

Re: Drilling Bond #936250-3  
Marathon Oil Company Well #1  
Navajo Indian Reservation

Dear Sir:

We are enclosing a reproduced copy of our Bond dated March 18, 1964, which is a drilling bond for our well Marathon Oil Company #1 located in Apache County, Arizona, on the Navajo Reservation. Also enclosed are copies of the Sundry Notices and Plugging Record pertaining to this well and a copy of letter dated May 6, 1964, from Mr. John Bannister to Marathon Oil Company.

We would appreciate your furnishing us with a Release of the subject bond so that same may be filed with our Surety terminating this particular bond.

Yours very truly,

Wm. F. Carpenter  
Title & Lease Record

WFC:mg  
Enc.



*JB*  
MARATHON OIL COMPANY

P.O. Box 268  
Salt Lake City, Utah 84110

May 27, 1964

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

Dear Sir:

Please find enclosed two copies each of the Sonic - Gamma Ray log and Dual Induction - Laterolog on the Marathon Oil Company #1 Navajo, 1500' FSL, 400' FEL, Section 18, Township 40 North, Range 29 East, Apache County, Arizona.

A sample log has already been sent to Mr. John K. Petty.

Sincerely,

*Todd Davis*  
Todd Davis

MJD:wa  
Enclosures 4



DB SP  
MARATHON OIL COMPANY

P.O. Box 268  
Salt Lake City, Utah 84110

May 14, 1964

Mr. John K. Petty  
Petroleum Geologist  
Oil and Gas Conservation Commission  
1624 West Adams  
Phoenix 7, Arizona

Dear Mr. Petty,

In reference to a letter from Mr. Bannister (your file number 274) and our conversation at the location when you visited the well, I am enclosing a copy of the sample log on the Marathon Oil Company #1 Navajo, 1500 feet from the south and 400 feet from the east, section 18, T 40N, R 29E, Apache County, Arizona.

A complete set of cuttings, starting from under surface casing to total depth of 6262 in the Mississippian, including 1 foot chips of the cored interval 6200-6262, have been turned over to the Four Corners Sample Cut in Farmington, New Mexico.

Very truly yours,

*Todd Davis*  
Todd Davis

MJD:wa  
Enclosure



MARATHON OIL COMPANY  
FORMERLY THE OHIO OIL COMPANY

P.O. Box 120  
Casper, Wyoming

May 11, 1964

Mr. John Bannister  
Oil and Gas Conservation Commission  
State of Arizona  
1624 West Adams  
Phoenix, Arizona

Dear Sir:

As requested in your letter of May 6, 1964 we are enclosing 2 copies of your "Plugging Record" and "Well Completion Or Recompletion Report And Well Log" on our Marathon Oil Company Navajo Indian Reservation Well #1 located in the NE $\frac{1}{4}$ -SE $\frac{1}{4}$ , Section 18, T.40N, R29E, Apache County, Arizona.

Copies of the logs run will be furnished as soon as they are available.

Yours very truly,

H. J. BRUNT  
DIVISION SUPERINTENDENT  
OF OPERATIONS

HJB:fa

Enclosures



May 6, 1964

Our File No. 274

Marathon Oil Company  
P. O. Box 120  
Casper, Wyoming

Re: Marathon Oil Company Navajo Indian Reservation  
No. 1 Well, NE/4 SE/4 Section 18 - T40N - R29E  
Apache County, Arizona

Gentlemen:

We have been advised that the captioned well has been plugged in accordance with instructions from Mr. Phil McGrath of the U.S.G.S. in Farmington, New Mexico.

In order to complete our records, we are enclosing copies of our Plugging Record and our Well Completion Report which we request that you fill out and return in duplicate at your earliest convenience.

In addition to these two reports, a copy of any log which you may have run in this well should be filed with this office within sixty days of the plugging of this well.

This information will be treated as confidential if you so request.

If we may be of any help, will you please advise.

Yours very truly,

John Bannister  
Executive Secretary

JB:mkc  
Encl.

Marathon Oil Co

NE/4 SE/4 Section 18 - T40N - R29E, Apache County

April 16, 1964

#274



APR 16 1964

March 26, 1964

Mr. H. J. Brunt  
Marathon Oil Company  
P. O. Box 120  
Casper, Wyoming

In reply please refer  
to File No. 274.

Re: Marathon Oil Co. Navajo-Indian Reservation No. 1  
Section 18-T40N-R29E, Apache County, Arizona

Dear Mr. Brunt:

Enclosed is approved Application for Permit to Drill  
in connection with above referenced location.

We wish you success in this venture.

Very truly yours,

John Bannister  
Executive Secretary

JB/akc  
Encl.

XXXXXXXXXX

March 17, 1964

Mr. E. F. Lindahl  
Marathon Oil Company  
P. O. Box 120  
Casper, Wyoming

In reply please refer  
to File No. 274.

Re: Marathon Oil Co. Navajo-Indian Reservation No. 1 Well  
Apache County, Arizona

Dear Mr. Lindahl:

In verification of our telephone talk of this date, please be advised that prior to spudding the captioned well, it will be necessary that you file with the Oil and Gas Conservation Commission a bond in the sum of \$2,500.00 for any one well or a bond in the amount of \$10,000.00 as a blanket bond for any number of wells you may care to drill. Your application for Permit to Drill will be held pending receipt of this bond.

I should like to request you to deposit a regular sized sample bag full of cuttings taken at regular sampling intervals with the Four Corners Sample Cut Association on West Broadway in Farmington, New Mexico, when the well is complete or at such times as you may wish to release these samples. We would very much appreciate receiving the sample descriptions when available.

I should also like to point out the requirements of completion forms, plugging intentions, plugging and abandonment, and two copies of all logs run on the well in full accordance with the Oil and Gas Conservation Commission's regulations.

As you requested I am enclosing two additional copies of said regulations.

If at any time we may be of help or service to you, please advise.

Yours very truly,

John Bannister  
Executive Secretary

JB:mkc  
Encl.

*E. 3/18/64*

274



MARATHON OIL COMPANY  
FORMERLY THE OHIO OIL COMPANY

P. O. BOX 120  
CASPER, WYOMING

March 13, 1964

State of Arizona  
State Land Commissioner  
Oil & Gas Conservation Commission  
Suite 202, 1624 W. Adams Street  
Phoenix 7, Arizona

Dear Sir:

Enclosed herewith are the following: Application for permit to drill our Marathon-Navajo Well #1. Plat of the location of the well, and a check in the amount of \$25.00 for the permit for the drilling of this well.

If you desire any further information, please advise.

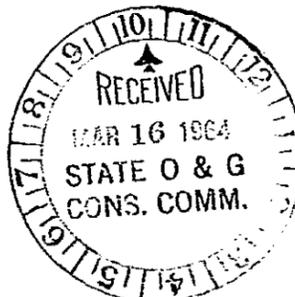
Yours very truly,

*H. J. Brunt*  
H. J. BRUNT, DIVISION  
SUPERINTENDENT OF OPERATIONS

HJB/EFL/rlw  
Enclosures: Form No. P1  
Check for \$25.00  
Plat

File

274





**MARATHON OIL COMPANY**  
FORMERLY THE OHIO OIL COMPANY

P. O. Box 120  
Casper, Wyoming  
January 30, 1964

Mailed 2/3/64:

Examples of type of well names prescribed.  
Organization Report  
Bond  
Application for Permit to Drill, Deepen or Plug  
Target Area - Oil Well  
Target Area - Gas Well  
Well Completion or Recompletion Report & W Log  
Application to Abandon and Plug  
Plugging Record  
Rules and Regulations mkc  
Oil, Gas & Helium in Arizona

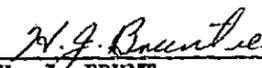
State of Arizona  
Oil & Gas Conservation Commission  
Suite 202, 1624 W. Adams St.  
Phoenix 7, Arizona

Gentlemen:

We anticipate drilling a well in Arizona in the near future and we are in need of copies of all forms, permits, etc., that your office requires in the drilling of a new well. Will you, therefore, please send us a supply of such forms as "Notice Of Intention To Drill", "Well Completion", "Notice Of Intention To Plug & Abandon" and any other forms which you might require.

Thank you in advance for your cooperation concerning this matter.

Very truly yours,

  
\_\_\_\_\_  
H. J. BRUNT  
Division Supt. of Operations

HJB:EFL:jed

