

Texas Pacific Coal & Oil Co. Navajo - 190 -
E/4-SE/4-Sec 20-T40N-R26E 25
Apache County

P-M

County Apache

Area 4 Corners

Lease No. NAV Tr 190

Well Name Texas Pacific Coal & Oil Company / Navajo Tract-190

Location SE SE Sec 20 Twp 20N Range 26E Footage 660 FSL; 660 FEL
Elev 5307 Gr 5322 KB Spud 9-18-59 Complete 11-16-59 Total 6424
Date 9-18-59 Abandon 11-16-59 Depth 6424

Contractor: _____ Approx. Cost \$ _____

Drilled by Rotary Cable Tool _____

Casing Size 10 3/4" Depth 1226 Cement 950

Production Horizon _____

Initial Production P & A

REMARKS: 8 cores; 6 DST's: see file.

~~There is no plugging record in file~~

Elec. Logs Microlog; IE; GRN;
Applic Plugging Completion Report
to Plub Record Report

Sample Log Am Stat
Sample Descript _____
Sample Set T-1185 - P-1660
Cores _____

Water well - accepted by _____

Bond Co. & No. Travelers Indemnity file #77 cancelled bond 1307271
1230121

Bond Am't \$ 25,000 ~~10,000~~ Cancelled 4-30-75 Date _____ Organization Report

Filing Receipt 9203 dated 8-13-59 Well Book Plat Book

Loc. Plat Dedication All 20-ADN-26E

Sample 604

PERMIT NO. 95 Date Issued 8-21-59

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: **Texas Pacific Coal and Oil Co.** Address: **P.O. Box 2110, Fort Worth 1, Texas**

Lease Name: **Navajo Tract 190** Well Number: **1** Field & Reservoir: **Wildcat**

Location: **660' from South line; 660' from East line of Section 20, Twp. 40 N, 26 E, S.R. & G. M.**

County: **Apache** Permit number: **95** Date Issued: **8-21-59**

Date spudded: **9-18-59** Date total depth reached: **11-10-59** Date completed, ready to produce: **Dry** Elevation: **5307 Gr.** Elevation of casing hd. flange: **feet**

Total depth: **6424** P.B.T.D.: **-** Single, dual or triple completion?: **Dry** If this is a dual or triple completion, furnish separate report for each completion.

Producing interval (s) for this completion: **-** Rotary tools used (interval): **0-6424** Cable tools used (interval): **No**

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): **-** 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	15"	10 3/4	40.5	1227	950	None

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
None	ft.	ft.	in.	ft.	ft.	ft.	ft.

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval
	None		None	

INITIAL PRODUCTION

Date of first production: **Dry Hole** 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	Gas prod. during test	Water prod. during test	Oil gravity
			bbls.	MCF	bbls.	* API (Corr)

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

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 **Vice President of Production** of the **Texas Pacific Coal and 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.

December 1, 1959
Date

R.W. Hines **R.W. Hines**
Signature

M. J. Wharton

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION
Well Completion or Recompletion Report and Well Log
Form No. P-7 File two copies
Authorized by Order No. **4859**
Effective **April 6, 1959**

95/3

16

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Surface	38	38	Hard rock
38	156	118	Lime & Sand
156	980	824	Shale & Sand
980	1237	257	Shale
1237	1727	490	Sand & Shale
1727	2469	742	Shale
2469	2905	436	Shale & Lime
2905	3353	448	Shale & Anhy
3353	3891	538	Shale
3891	4045	154	Shale & Sandy Lime
4045	4087	42	Sand & Lime
4087	4204	117	Shale & Lime
4204	4248	44	Lime & Sand w/Shale
4248	4328	80	Lime
4328	4390	62	Shale & Lime
4390	4479	89	Lime
4479	4558	79	Lime w/Shale
4558	4649	91	Lime & Chert
4649	4690	41	Lime w/Shale
4690	4745	55	Lime
			Lime - Sli. bleeding oil
4745	4835	90	Lime
4835	4917	82	Lime & Chert
4917	4972	55	Lime
4972	5027	55	Lime & Shale
5027	5074	47	Sand & Lime
5074	5210	136	Lime
5210	5385	175	Lime & Shale
5385	5441	56	Lime w/Shale & Chert
5441	5702	261	Lime
5702	5765	63	Sand & Lime
5765	5852	87	Lime
5852	5866	14	Sand & Lime
5866	5886	20	Lime & Chert
5886	5937	51	Dolomite & Sand
5937	6019	82	Lime
6019	6132	113	Lime & Sand
6132	6148	16	Lime & Shale
6148	6337	189	Shale & Sand
6337	6375	38	Sand
6375	6424	49	Lime
	6424	Total Depth	

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

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.



PLUGGING RECORD

Operator Texas Pacific Coal and Oil Company		Address P. O. Box 2110, Fort Worth 1, Texas	
Name of Lease Navajo Tract 190		Well No. 1	Field & Reservoir Wildcat
Location of Well 660' from South line; 660' from East line		Sec-Twp-Rge or Block & Survey 20, 40N, 26E, S. R. & G. M.	
Application to drill this well was filed in name of Texas Pacific Coal and Oil Co.		Has this well ever produced oil or gas No	Character of well at completion (initial production): Oil (bbls/day) - Gas (MCF/day) - Dry? Yes
Date plugged: November 16, 1959	Total depth 642'	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 None	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement.

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
10 3/4	1226'	None	1226'	None	Guide Shoe & Float Collar

Was well filled with mud-laden fluid, according to regulations? **Yes**

Indicate deepest formation containing fresh water.

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

Name	Address	Direction from this well:
Sinclair Oil & Gas Co.	Box 4005, Albuquerque, New Mexico	East
Humble Oil & Rfg. Co.	Box 1287, Roswell, New Mexico	South
Pan American Pet. Co.	Box 487, Farmington, New Mexico	East
Texaco Inc.	Box 817, Farmington, New Mexico	East

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 Vice President of Production of the Texas Pacific Coal and 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.

December 1, 1959
Date

R. W. Hines
Signature

R. W. Hines

**STATE OF ARIZONA OIL & GAS
CONSERVATION COMMISSION**

Form No. P-15
Authorized by Order No. 4-8-59

Plugging Record File two copies

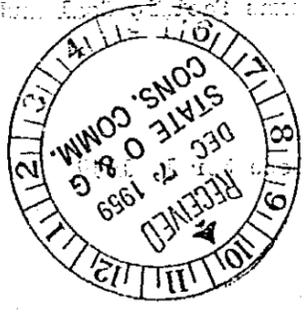
Effective April 6, 19 59

M. Wharton

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CONFIRMING
APPLICATION TO ABANDON AND PLUG

FIELD Wildcat
OPERATOR Texas Pacific Coal and Oil Company ADDRESS P.O. Box 2110, Fort Worth 1, Texas
LEASE Navajo Tract 190 WELL NO. 1 COUNTY Apache
SURVEY S.R. & G. M. SECTION 20 DRILLING PERMIT NO. 95
LOCATION 660' from South Line and 660' from East Line of Section 20, Twp. 40 N,
Range 26 E

TYPE OF WELL Dry Hole TOTAL DEPTH 6124
(Oil, Gas or Dry Hole)
ALLOWABLE (If Assigned) None
LAST PRODUCTION TEST OIL None (Bbls.) WATER _____ (Bbls.)
GAS None (MCF) DATE OF TEST _____
PRODUCING HORIZON _____ PRODUCING FROM _____ TO _____

1. COMPLETE CASING RECORD Set 10 3/4" 40.5# J-55 Smls csg @ 1226.61' cemented with
950 sacks cement, circulated. After 36 hrs. Pressured up on casing to 1500#. Tested OK.

2. FULL DETAILS OF PROPOSED PLAN OF WORK Plug and abandon. Set cement plugs as
Follows: 60 sx 6424-6274, 40 sx 6130-6030, 60 sx 5825-5675, 60 sx 5517-5367, 80 sx
3967-3767, 40sx 1808-1708, 50 sx 1276-1176, 25 sx 25' to surface, with marker as
required by rule 202.

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

DATE COMMENCING OPERATIONS November 16, 1959
NAME OF PERSON DOING WORK R.E. Kenney ADDRESS Farmington, New Mexico
CORRESPONDENCE SHOULD BE SENT TO P.O. Box 2110, Fort Worth 1, Texas

NAME D.A. Horney
TITLE Manager of Production

Date Approved November 24, 1959

Charles Kalil, M.D.
STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION
Charles Kalil, M. D., Vice-Chairman

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION	
Application to Abandon and Plug	
Form No. 15A	File 2 Copies
Authorized by Order No. 4-6-59	
Effective April 6, 1959	

TEXAS PACIFIC COAL AND OIL COMPANY

Navajo Tract 190 Well No. 1
 SE/4 SE/4 Section 20, 40 N, 26E, S. R. & G. M.
 Apache County, Arizona

Detail of Formations Penetrated

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>	<u>Description</u>
Surface	38	38	Hard rock
38	156	118	Lime & Sand
156	980	824	Shale & Sand
980	1237	257	Shale
1237	1727	490	Sand & Shale
1727	2469	742	Shale
2469	2905	436	Shale & Lime
2905	3353	448	Shale & Anhy
3353	3891	538	Shale
3891	4045	154	Shale & Sand Lime
4045	4087	42	Sand & Lime
4087	4204	117	Shale & Lime
4204	4248	44	Lime & Sand w/Shale
4248	4328	80	Lime
4328	4390	62	Shale & Lime
4390	4479	89	Lime
4479	4558	79	Lime w/Shale
4558	4649	91	Lime & Chert
4649	4690	41	Lime w/Shale
4690	4745	55	Lime
			Lime - Sli. bleeding oil
4745	4835	90	Lime
4835	4917	82	Lime & Chert
4917	4972	55	Lime
4972	5027	55	Lime & Shale
5027	5074	47	Sand & Lime
5074	5210	136	Lime
5210	5385	175	Lime & Shale
5385	5441	56	Lime w/Shale & Chert
5441	5702	261	Lime
5702	5765	63	Sand & Lime
5765	5852	87	Lime
5852	5866	14	Sand & Lime
5866	5886	20	Lime & Chert
5886	5937	51	Dolomite & Sand
5937	6019	82	Lime
6019	6132	113	Lime & Sand
6132	6148	16	Lime & Shale
6148	6337	189	Shale & Sand
6337	6375	38	Sand
6375	6424	49	Lime
	6424		Total Depth

TEXAS PACIFIC C & O #1
 Sec. 20-T40N-R26E

95

TEXAS PACIFIC COAL AND OIL COMPANY

Navajo Tract 190 Well No. 1
SE/4 SE/4 Section 20, 40N, 26E, S. R. & G. M.
Apache County, Arizona

Log of Cores and Drill Stem Tests

- Core #1 4690-4738 Rec. 48'; 4690-4727.5 Lm. Dk. gray to buff. VFXLN sli. shly; 4727.5-4738 Same but w/scatt. vert. fract. very tight sli. bleeding oil.
- Core #2 4738-4745.5 Rec. 7.5' Lm. Dk. to F-XLM gray v/scatt. vert. hairline fract. Sli. bleeding oil. Very tight.
- Core #3 4745.5-4757.5. Rec. 12.2' Ls. light to drk. gray becoming shaly toward bottom.
- Core #4 4757.5-4790 Rec. 32.5'. 4757.5-4765 Lm. No sho. 4765-4770 Shale; 4770-4790 Lm. No sho.
- Core #5 4930-4972 Rec. 42'. 4930-32 Lm. No por.; 4932-4936.5' Lm. good por. bleeding sli. briney S. W.; 4936.5-4951 Lm. No. por.; 4951-4962' Shale; 4962-4972 Lm. No sho.
- Core #6 5155-5193 Rec. 33'. 5155-159 Lm. No sho.; 5159-5160 Shale; 5160-5162 Lost; 5162-5180 Lm. No sho.; 5180-5188 Lm. Fair por. bleeding briney S. W.; 5188-5190 Lm. No sho.; 5190-5193 Lost.
- Core #7 5193-5216 Rec. 23'; 5193-5210 Lm. Some por. with salty taste; 5210-5213 shale; 5213-5216 Lm. w/shale streaks.
- Core #8 6112-6132 Rec. 19.3' 14' shale, 5.3' sand, very wet.
- DST #1 5531-5624
Tool open 2 hrs. fair blo. thru out test. No gas to surface.
Rec: 1815' fluid, 375' drilling mud, 1440' salt water. 1 HP 3050#
FHP 3040#. IFP 100#, FFP 820#, ISIP 1885#, FSIP 1785#, bottom hole temp. 118°.
- DST #2 6066-6134
Tool open 1 hr. Good blo. decreasing to weak blo. at end of test.
Rec: 4185' fluid, 270' drilling mud, 1400' muddy salt wtr. 2515' clear salt wtr. 1HP 3155#, FHP 3155#, IFP 540#, FFP 1865#, ISIP 2005#, FSIP 1920#, bottom hole temp 158°.
- DST #3 4390-4460 (Straddle Test)
Tool open 1 hr. 30 min. Good blo. decreasing to very weak blo. at end of test. No gas to surface.
Rec. 2077' drilling mud. No sho. Lower Pkr. failed. 1 HP 2365#, FHP 2340#. IFP 720#, FFP 1275#, ISIP 1465#, FSIP 1330#, bottom hole temp 158°.
- DST #4 4389-4506 (Straddle Test)
Tool open 30 min. Strong blo. immediately decreasing to weak blo. at end of test. No gas to surface.
Rec. 1674' drilling mud. No sho Lower pkr. failed. IHP 2330#, FHP 2295#, IFP 500#, FFP 1110#, ISIP 1110#, FSIP 1200#, bottom hole temp 129°.
- DST #5 4136-4274 (Straddle Test)
Tool open 25 min. Moderate blo. upper pkr. failed. Rec. 1035' drilling mud, no sho. 1 HP 2205#, FHP 2175#, IFP 325#, FFP 375#, ISIP 1705#, FSIP 1400#. Bottom hole temp 126°.
- DST #6 4136-4269 (Straddle Test)
Tool open 3 hrs. Moderate blo. for 1 hr. decreasing to weak blo. at end of test. No gas to surface. Rec. 712' drilling mud. No sho. 1 HP 2205#, FHP 2175#, IFP 205#, FFP 375#, ISIP 1585#, FSIP 850#, bottom hole temp. 126°.

TEXAS PACIFIC COAL AND OIL COMPANY

Navajo Tract 190 Well No. 1
SE/4 SE/4 Section 20, 40N, 26E, S.R.&G.M.
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Log of Cores and Drill Stem Tests

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4727.5-4738 Same but w/scatt. vert. fract. very tight sli. bleeding oil.
- Core #2 4738-4745.5 Rec. 7.5' Lm. Dk. to F-XLM gray v/scatt. vert. hairline
fract. Sli. bleeding oil. Very tight.
- Core #3 4745.5-4757.5. Rec. 12.2' Ls. light to drk. gray becoming shaly toward
bottom.
- Core #4 4757.5-4790 Rec. 32.5'. 4757.5-4765 Lm. No sho. 4765-4770 Shale;
4770-4790 Lm. No sho.
- Core #5 4930-4972 Rec. 42'. 4930-32 Lm. No por.; 4932-4936.5' Lm. good por.
bleeding sli. briney S.W.; 4936.5-4951 Lm. No. por.; 4951-4962' Shale;
4962-4972 Lm. No sho.
- Core #6 5155-5193 Rec. 33'. 5155-159 Lm. No sho.; 5159-5160 Shale; 5160-5162
Lost; 5162-5180 Lm. No sho.; 5180-5188 Lm. Fair por. bleeding briney
S.W.; 5188-5190 Lm. No sho.; 5190-5193 Lost.
- Core #7 5193-5216 Rec. 23'; 5193-5210 Lm. Some por. with salty taste; 5210-5213
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temp. 118°.
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Tool open 1 hr. Good blo. decreasing to weak blo. at end of test.
Rec: 4185' fluid, 270' drilling mud, 1400' muddy salt wtr. 2515' clear
salt wtr. 1HP 3155#, FHP 3155#, IFP 540#, FFP 1865#, ISIP 2005#, FSIP
1920#, bottom hole temp 158°.
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Tool open 1 hr. 30 min. Good blo. decreasing to very weak blo. at end of
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fract. Sli. bleeding oil. Very tight.
- Core #3 4745.5-4757.5. Rec. 12.2' Ls. light to drk. gray becoming shaly toward
bottom.
- Core #4 4757.5-4790 Rec. 32.5'. 4757.5-4765 Lm. No sho. 4765-4770 Shale;
4770-4790 Lm. No sho.
- Core #5 4930-4972 Rec. 42'. 4930-32 Lm. No por.; 4932-4936.5' Lm. good por.
bleeding sli. briney S.W.; 4936.5-4951 Lm. No. por.; 4951-4962' Shale;
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S.W.; 5188-5190 Lm. No sho.; 5190-5193 Lost.
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Rec. 1674' drilling mud. No sho. Lower pkr. failed. 1HP 2330#, FHP 2295#,
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TEXAS PACIFIC COAL AND OIL COMPANY

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shale; 5213-5216 Lm. w/shale streaks.
- Core #8 6112-6132 Rec. 19.9' 14' shale, 5.9' sand, very wet.

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL DEEPEN PLUG BACK

NAME OF COMPANY OR OPERATOR

DATE

Texas Pacific Coal and Oil Company

August 10, 1959

Address

City

State

P. O. Box 2110

Fort Worth 1

Texas

DESCRIPTION OF WELL AND LEASE

Name of lease Navajo Tract 190	Well number 1	Elevation (ground) 5307
Well location (give footage from section lines) 660' FSL & 660' FEL of Section	Section—township—range or block & survey 20, 40N, 26E, SR&GM	
Field & reservoir (If wildcat, so state) Wildcat	County Apache	
Distance, in miles, and direction from nearest town or post office 65 miles West of Shiprock, New Mexico		
Nearest distance from proposed location to property or lease line: 330 feet	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: Only location this lease feet	
Proposed depth: 7000'	Rotary or cable tools Rotary	Approx. date work will start August 17, 1959
Number of acres in lease: 2560	Number of wells on lease, including this well, completed in or drilling to this reservoir: This well only	
If lease, purchased with one or more wells drilled, from whom purchased: No		

Status of bond

Blanket Bond Enclosed

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).

• Fill in Proposed Casing Program on other side

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Manager of Production of the Texas Pacific Coal and Oil Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

August 10, 1959
Date

[Signature]
Signature

Permit Number: 95
Approval Date: August 21, 1959
Approved By: *[Signature]*

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

OIL & GAS CONSERVATION COMMISSION
Application to Drill, Deepen or Plug Back
Form No. P-1 File two copies
Authorized by Order No. 4-6-59
Effective April 6, 1958

9511

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 lease 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	Sacks Cement
10 3/4	40.5	J-55 STC	0	1200'	Circulate	1000
7"	20 23	J-55 N-80	0	7000'	4400' - 7000'	400

Form No. P-1



77000

Company TEXAS PACIFIC COAL AND OIL COMPANY

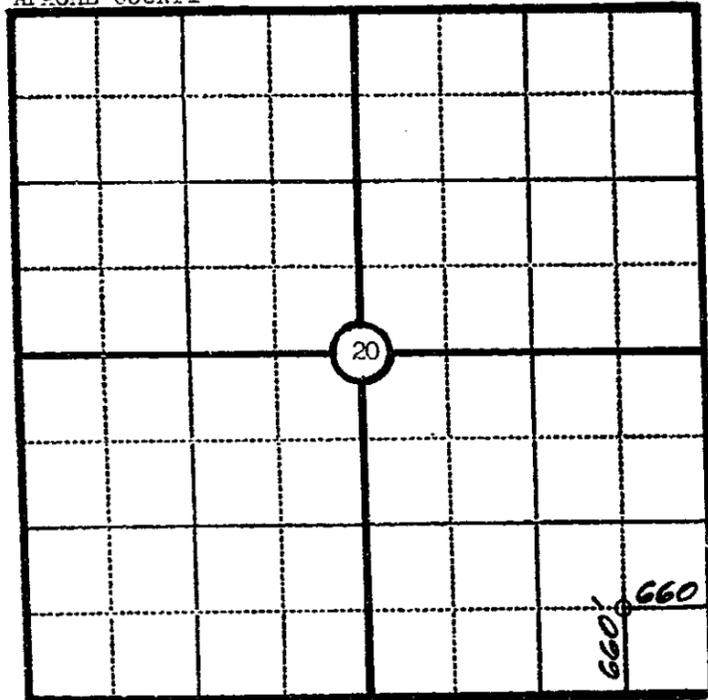
Lease NAVAJO Well No. _____

Sec. 20, T. 40 N., R. 26 E., S.R. & G.M.

Location 660' FROM THE SOUTH LINE AND 660' FROM THE EAST LINE.

Elevation 5307.0 UNGRADED GROUND.

APACHE COUNTY ARIZONA



Scale—4 inches equal 1 mile

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



Seal:

James P. Leese

Registered Land Surveyor.
James P. Leese
Arizona Reg. No. 1849

Surveyed

31 July 1959

SAN JUAN ENGINEERING COMPANY, FARMINGTON, N. M.

95



#77

RECEIVED
AUG 13 1959
STATE O & G
CONS. COMM.



R-25-E

R-26-E

12

Sinclair
Phillips
Pan American

7

Sinclair
Phillips
Pan American

8

Sinclair
Phillips
Pan American

9

Sinclair
Pan American

Navajo

Navajo

Navajo

Navajo

Sinclair
Phillips
Pan American

T.P.C.&O. Co.-1/3
Pure Oil Co.-1/3
Monsanto Chem.-1/3
Ariz. 2
640' Ac.

T.P.C.&O. Co.-1/3
Pure Oil Co.-1/3
Monsanto Chem.-1/3
Ariz. 2
640' Ac.

Texaco

13

18

17

16

Navajo

Navajo

2560' Ac.
Tr. 190

Navajo

Navajo

Sinclair
Phillips
Pan American

T.P.C.&O. Co.-1/3
Pure Oil Co.-1/3
Monsanto Chem.-1/3
Ariz. 2
640' Ac.

T.P.C.&O. Co.-1/3
Pure Oil Co.-1/3
Monsanto Chem.-1/3
Ariz. 2
640' Ac.

Texaco

T
40
N

24

19

20

21

Navajo

Navajo

Navajo

Navajo

Sinclair
Phillips
Pan American

Humble

Humble

Sinclair
Pan American

Navajo

Navajo

Navajo

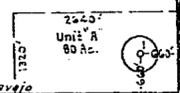
Navajo

25

30

29

28



NAVAJO
ARIZ. 2 TRACT 190
APACHE CO., ARIZONA
SCALE: 1" = 2000'

96

000077



WA

TEXAS PACIFIC OIL COMPANY
1700 ONE MAIN PLACE
DALLAS, TEXAS 75250

December 31, 1970

L. B. JEFFERS
MANAGER OF PRODUCTION SERVICES

AREA CODE 214
741-5933

Oil & Gas Conservation Commission
State of Arizona
4515 North 7th Avenue
Phoenix, Arizona

Attention: Mr. W. E. Allen, Director
Enforcement Section

Re: Navajo Tract 190
SE/4 SE/4 Section 20-T40N-
R26E, Apache County,
Arizona, Your File #95

Gentlemen:

Attached is a copy of Form 10, Plugging Record which you requested
in your letter of December 18, 1970; however, we do not wish to
release our blanket bond #1307271.

If additional information is required please advise.

Yours very truly,

L. B. Jeffers

L. B. JEFFERS

BJH:ss
Attachment

RECEIVED
JAN 04 1971
O & G CONS. COMM.

December 18, 1970

Texas Pacific Oil Company
P. O. Box 747
Dallas, Texas 75221

Re: Texas Pacific Coal & Oil Company Navajo Tract 190
SE/4 SE/4 Section 20-T40N-F26E
Apache County
Our File #95

Gentlemen:

Our records indicate that we have never received Form 10, Plugging Record, on the above referenced well. We have received Form 9, Application to Abandon and Plug; however, to make our file complete, we must have the actual Plugging Record.

When the above mentioned form is received, the Commission will then be in a position to release your blanket bond No. 1307271 should you so desire.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA:jd
Enc.

Operator Texas Pacific Oil Company

Bond Company The Travelers Indemnity Company Amount \$10,000

Bond No. 1230121 Date Approved 10-9-64

Permits covered by this bond:

77

95

106

115

116

see this file

CANCELLED

DATE 11-29-65

BOND

SY 281201

KNOW ALL MEN BY THESE PRESENTS,

That we: Texas Pacific Coal and Oil Company

of the County of: Tarrant in the State of: Texas

as Principal, and American Employers' Insurance Company

of Boston, Massachusetts 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:

(May be used as blanket bond or for single well)

All lands leased to principal within the State of Arizona

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 Ten Thousand and No/100 Dollars

Witness our hands and seals, this 10th day of August, 1959

ATTEST:

TEXAS PACIFIC COAL AND OIL COMPANY

BY: J. I. Norman Secretary

BY: [Signature] Vice President Principal

Witness our hands and seals, this 10th day of August, 1959

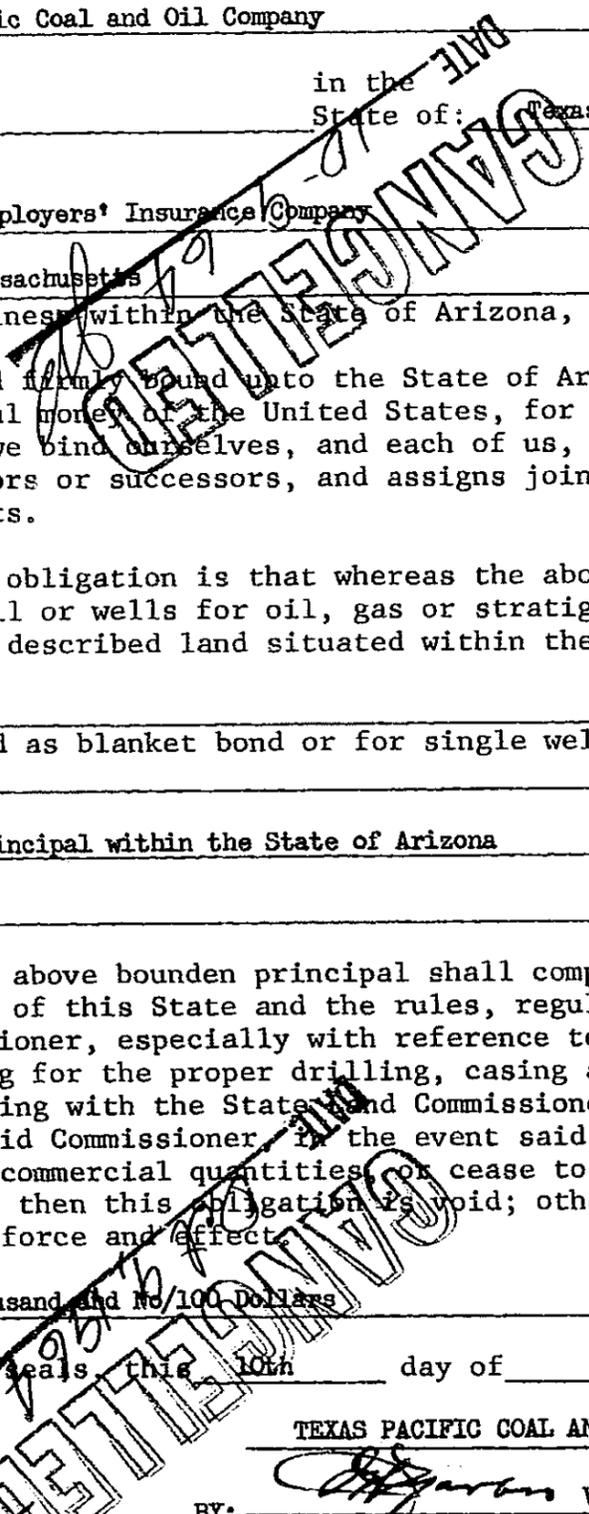
AMERICAN EMPLOYERS' INSURANCE COMPANY

BY: [Signature] Attorney-in-fact Surety

(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved August 21, 1959 Date

M. J. Wharton
STATE LAND COMMISSIONER
OIL & GAS CONSERVATION COMMISSION



95

11/11/59

(((((



#77



RECEIVED
AUG 13 1959
STATE O & G
CONS. COMM.

#17

November 29, 1965

Texas Pacific Oil Company
P.O. Box 747
Dallas Texas 75221

Attention: Mr. Raymond Church

Re: The Travelers Indemnity Company Bond 1307271

The Travelers Indemnity Company Bond 1230121

Gentlemen:

Enclosed is an approved copy of The Travelers Indemnity Company Bond 1307271.

Inasmuch as this above bond is now in full force and effect, this letter will constitute authority from this Commission to terminate The Travelers Indemnity Company Bond 1230121.

Your cooperation is very much appreciated.

Very truly yours,

John Bannister
Executive Secretary
mr
enc

cc:
The Travelers Indemnity Company
2200 N. Central Avenue
Phoenix, Arizona 85004

March 15, 1965

Texas Pacific Oil Company
P.O. Box 747
Dallas, Texas 75221

Attention: Mr. H. Clayton May, Attorney

Gentlemen:

Our files reflect that Texas Pacific Coal & Oil Company was liquidated effective November 1, 1963, and the assets were purchased by Texas Pacific Oil Company, an operating division of Joseph E. Seagram & Sons, Inc.

In order that our well records be accurate and current, in accordance with Arizona Statutes, it is requested that the enclosed form, Organization Report, be completed and returned to this office.

Thank you very much for your cooperation.

Yours very truly,

John Bannister
Executive Secretary

BT

Files: 77-95-106-115-116

October 9, 1964

Texas Pacific Oil Company
P.O. Box 747
Dallas, Texas 75221

Attention: Mr. H. Clayton May

Re: Oil and Gas Bond No. SY 281201

Gentlemen:

We are in receipt of your letter of October 8, 1964 whereby Travelers Indemnity Company's Bond 1230121 was enclosed and is to replace the captioned bond.

This letter will constitute authority to cancel Bond SY-281201.

We appreciate your cooperation in this matter, and if we may be of further service, please advise.

Yours very truly,

John Mansister
Executive Secretary

ms

enc: 2 approved copies Form 2, Bond

cc to File 77, 95, 106, 115, 116

Travelers Indemnity Company's Bond 1230121 is issued to the Principal, Joseph E. Seagram & Sons, Inc. Texas Pacific Oil Company is a subsidiary of Seagram and their wells are covered by this bond. This bond replaces SY-281201 which was issued to Texas Pacific Coal and Gas Oil Company. This latter company is now consolidated into Texas Pacific Company.

TEXAS PACIFIC OIL COMPANY

INDEX 7497
DALLAS, TEXAS 75202

October 8, 1964

REVENUE 1-6000

STOCK EXCHANGE LISTED UNDER NYSE

Oil and Gas Conservation Commission
State of Arizona
1604 West Adams
Phoenix, Arizona 85007

Attn: Mr. John Bannister
Executive Secretary

Re: Oil and Gas Bond No. SY-881201
Replacement Bond No. 1230121

Gentlemen:

Reference is made to your letter dated August 26, 1964, concerning the release of Bond No. SY-881201 now in effect under the name of Texas Pacific Coal and Oil Company.

We are enclosing herewith in triplicate, the Travelers Indemnity Company's Bond No. 1230121 in the amount of \$10,000.00 covering, as principal, Joseph E. Seagram & Sons, Inc., whose operating division is Texas Pacific Oil Company. It is our understanding that you will now be in a position to release Bond No. SY-881201, as requested by Texas Pacific Coal and Oil Company.

Your cooperation in this matter will be sincerely appreciated.

Very truly yours,

H. Clayton May
H. Clayton May
Attorney

HCM:sp
encl.

cc: Mr. G. W. Dodson, Jr.
Mr. Ray Mitchell
Mr. Jess Norman
Texas Pacific Coal and Oil Company
Fort Worth Office



77,95,106,115,116

September 17, 1964

The Employers' Group of Insurance Companies
212 N. St. Paul
Dallas 1, Texas

Attention: Mr. Bruce Harris, Bond Department

Re: SY-281201
Texas Pacific Coal and Oil Co.
\$10,000 Blanket Bond

Gentlemen:

In reply to your letter of September 14, 1964 concerning the captioned bond please be advised that this office has not yet received a bond on behalf of Texas Pacific Oil Company and consequently the bond in question cannot be released at this time.

Yours very truly,

John Eannister
Executive Secretary

nr

Permit 77
95
106
115
116

Ltr of Sep. 14, 1964 included in File 77

XXXXXXXXXX

August 26, 1964

VIA AIR MAIL

Mr. Miles Hart
Texas Pacific Oil Company
P. O. Box 2110
Fort Worth, Texas

Dear Mr. Hart:

Enclosed are the bond forms you requested in telephone conversation today with this office.

Upon receipt of proper bond showing your company as principal, this Commission will then be in a position to release Bond No. SY-281201 now in effect under the name of Texas Pacific Coal & Oil Company covering the following wells:

Navajo Tribal 138-1	Permit No. 77
Navajo Tribal 138-2	Permit No. 106
Navajo Tribal 138-3	Permit No. 115
Navajo Tribal 138-4	Permit No. 116
Navajo Tribal 190-1	Permit No. 95

We appreciate your prompt cooperation.

Very truly yours,

John Benninger
Executive Secretary

JB/mks
Encl.

File: 77
106
115
116
95
Bond File

August 20, 1964

The Employers' Group of Insurance Companies
212 N. St. Paul
Dallas 1, Texas

Attn: Miss C. Nell, Bond Department

Re: Texas Pacific Coal & Oil Co.
\$10,000 blanket bond SY 281201

Gentlemen:

We are in receipt of your letter of August 17, 1964 requesting release of the captioned bond.

Please be advised that this bond may not be released at this time inasmuch as this bond does cover producing wells.

At such time as Texas Pacific Oil Company, which you advise is to be successor to Texas Pacific Coal and Oil Co., furnishes us with a substitute bond, then may the captioned bond be released.

Currently the below listed wells are covered by the bond in question:

Navajo Tribal	138-1	Permit 77
Navajo Tribal	138-2	106
Navajo Tribal	138-3	115
Navajo Tribal	138-4	116
Navajo Tribal	190-1	95

If we may be of any further help, please advise.

Yours very truly,

John Bannister
Executive Secretary

MB

cc: Texas Pacific Coal and Oil Co.
P.O. Box 2110
Fort Worth 1, Texas

The Employers' Group
OF INSURANCE COMPANIES

SOUTHWESTERN BRANCH:
SIDNEY J. GIBSON, MANAGER
212 N. ST. PAUL, DALLAS 1, TEXAS

The Employers' Liability Insurance Company
The American Employers' Assurance Company
The Employers' Fire Insurance Company
The Employers' Marine Insurance Company
The Employers' Life Insurance Company



State Land Commissioner
State of Arizona
Phoenix, Arizona

August 17, 1964

RE: SY-281201 - TEXAS PACIFIC COAL & OIL COMPANY
\$10,000.00 BLANKET OIL & GAS LEASE BOND
COVERING ALL LANDS LEASED TO PRINCIPAL WITHING
THE STATE OF ARIZONA

Gentlemen:

Your records will reflect that we are the Surety regarding the captioned bond executed effective on or about August 10, 1959. The Texas Pacific Coal & Oil Company have requested that we cancel this bond inasmuch as the company was liquidated effective November 1, 1963, and the company purchasing the assets is known as Texas Pacific Oil Company.

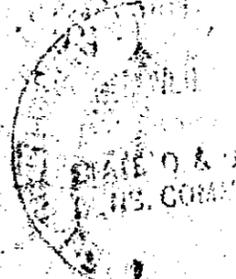
Such being the case, we would like to close our file and would appreciate your sending direct to this office a letter of release giving us the date our liability may be terminated.

Thank you in advance for your kind assistance in this matter.

Very truly,
Sincerely,

Miss C. Hall
Bond Department

CH:jm
cc: The States Company
Fort Worth, Texas



EMPLOYERS' GROUP

Original
February 2, 1960

Texas Pacific Coal & Oil Co.
P. O. Box 2110
Fort Worth 1, Texas

RE: Navajo 190-1
Sec. 20 - 40N. - 26E.

Gentlemen:

Enclosed herewith, is your receipt for Drilling
Permit No. 95, in the amount of \$ 25.00, dated
August 13, 1959.

Yours very truly,

William F. Mauls,
Petroleum Engineer

WFM:gg

TEXAS PACIFIC COAL AND OIL COMPANY

GENERAL OFFICES
FORT WORTH 1
TEXAS

December 17, 1959

PLEASE ADDRESS REPLY TO COMPANY AT
1700 BROADWAY
DENVER 2, COLORADO

State Land Commissioner
Arizona State Land Department
Phoenix, Arizona

Re: Texas Pacific #1 Navajo 190
20-40N-26E, Apache County, Arizona

Dear Sir:

Enclosed for your files is a copy of the Induction-Electrical Log,
the Gamma Ray-Neutron Log, and the Microlog on the above well.

Very truly yours,

TEXAS PACIFIC COAL AND OIL COMPANY

G. E. Jacober
G. E. Jacober

GEJ:d'a

Encls 3

cc: Mr. R. W. Hines
Fort Worth Office

TEXAS PACIFIC COAL AND OIL COMPANY

GENERAL OFFICES
FORT WORTH 1
TEXAS
December 4, 1959

*Mr. Daniels
Chief Clerk
12/7/59*

WJD

Oil and Gas Conservation Commission
3500 North Central Avenue
Suite 312
Phoenix, Arizona

Gentlemen:

Please find enclosed the following Arizona state forms:

- ✓ Well Completion or Recompletion Report and Well Log - Navajo Tract 190 - Form P-7
- ✓ Plugging Record - Navajo Tract 190 - Form P-15
- ✓ Log of Cores and Drill Stem Tests

Yours very truly,

TEXAS PACIFIC COAL AND OIL COMPANY

By

W. E. Daniels

Chief Clerk

W.E.Daniels:djt
Enclosures



OFFICE OF
Oil and Gas Conservation Commission

STATE OF ARIZONA
3500 N. CENTRAL AVE. - SUITE 312
Phoenix, Arizona

Mc Wood Corportion
Attention: Mr. Byron Self
364 Petroleum Building
Abilene, Texas

November 25, 1959

Mr. D. A. Bonney, Manager of Production
TEXAS PACIFIC COAL & OIL COMPANY
P. O. Box 2110
Fort Worth 1, Texas

RE: Texas Pacific Coal & Oil Co.-
Navajo Tract 190-1
Sec. 20, T. 40 N., R. 26 E.
Apache County

Dear "Bonney":

We are returning herewith, your copy of
the properly executed Application to
Abandon & Plug the above well.

Kindly forward us logs, samples and any
other information you have available
on this well.

Your early reply will be appreciated.

Yours very truly,

D. A. Jerome,
Executive Secretary

DAJ:mmr

Enclosure:

October 21, 1959

McWood Corporation
364 Petroleum Building
Abilene, Texas

Attention: Mr. Byron Self

Gentlemen:

We wish to acknowledge receipt of your
Transporter's and Storer's Monthly
Report for September, 1959, for which
we thank you.

We note, however, that your mail is
being addressed to the State Land
Commissioner, Phoenix, which is in-
correct. Would you kindly change
your records, so that all mail will
be addressed to the Oil and Gas Con-
servation Commission, at the above
new address.

Thank you for your cooperation.

Yours very truly,

D. A. Jerome
Executive Secretary

DAJ/mmr

95

October 9, 1959

Mr. R. W. Hines
Texas Pacific Coal & Oil Company
P. O. Box 2110
Fort Worth 1, Texas

Dear Bob:

We note that your office is addressing
mail for our office to:

State Land Department
422 Arizona State Office Bldg.
Phoenix, Arizona

Please be advised that our new and
correct address, for future mailings
is:

Oil & Gas Conservation Commission
3500 N. Central Ave. - Suite 312
Phoenix, Arizona

Thank you for your early attention
to the above.

Yours very truly,

D. A. Jerome
Executive Secretary

DAJ/mmnr

September 16, 1959

Texas Pacific Coal and Oil Company
P.O. Box 2110
Fort Worth 1, Texas

Gentlemen:

We are enclosing herewith for your file
an approved copy of the Application for Permit
to Drill, Deepen or Plug Back Navajo Tract 190
Well No. 1 in Apache County.

Please feel free to call on us if we can be
of assistance.

Yours very truly,

D. A. Jerome
Executive Secretary

Encl.

jds

TEXAS PACIFIC COAL AND OIL COMPANY

GENERAL OFFICES
FORT WORTH 1
TEXAS

HAMILTON ROGERS
EXECUTIVE VICE PRESIDENT

September 16, 1959

Mr. D. A. Jerome
Executive Secretary
Oil and Gas Conservation Commission
Phoenix, Arizona

Dear Don:

Please let me thank you for your letter dated September 15, together with the enclosed copy of general rules and regulations governing conservation practices in Arizona.

I have asked some of our people here to take a look at these regulations, and if we have any constructive suggestions to make, we will do so in the near future. I hope that we can get this information to you before your September 23 meeting, but if not, we will give you the benefit of any views that we may have to help you in the future.

Sincerely,

Hamilton Rogers
HAMILTON ROGERS

HR:JB

File

September 15, 1959

Mr. Hamilton Rogers, Executive Vice-President
Texas Pacific Coal and Oil Company
P.O. Box 2110
Fort Worth 1, Texas

Dear Ham,

Several weeks ago in the Oil and Gas Journal of August 31, 1959, I noted with interest that the Conservation Forum spacing campaign is paying off. Your article on Arizona seemed to indicate that your group apparently was satisfied with the spacing rules in Arizona. We have had some rumblings from various groups about the advisability of our spacing pattern and also with regard to the formula for allowables. I would appreciate it if you would advise me what position you and your group would take if we did not approve the rules as inherited. In other words, the argument is advanced that under our allowables formula there is no inducement for companies to come in and drill because of depth restriction and long pay-out. The members of the Commission want to induce additional exploration in this state and sincerely want to remove any road blocks in our regulations which are inimical to attaining this end.

Our next meeting is on the 23rd of September and we contemplate giving some consideration to this matter. Your advice would be greatly appreciated. For your information I am sending you one of the few copies of the regulations that are available. If there are any other parts that you feel could be modified, altered, or deleted, I would appreciate your considered opinion.

Yours very truly,

D. A. Jerome
Executive Secretary

Encl. 1
DAJ/jds

95

TEXAS PACIFIC COAL AND OIL COMPANY

GENERAL OFFICES
FORT WORTH 1
TEXAS

August 11, 1959

State Land Department
State of Arizona
422 Arizona State Land Office Building
Phoenix, Arizona

Attention: Mr. Frederick C. Ryan

Gentlemen:

We are filing herewith Form P-1, Application for Permit to Drill, a wildcat well to be known as Navajo Tract 190 Well No. 1, Apache County, Arizona.

We are also enclosing a Blanket Bond in the amount of \$10,000.00, and our Check No. 432529 to cover filing fee.

If anything further is needed, please advise.

Yours very truly,

TEXAS PACIFIC COAL AND OIL COMPANY

By

[Handwritten Signature]
Manager of Production

DAB:D:DK
Enc.

95

000077



P-W

Woods Oil Co. State
NW/4-NW/4 Sec. 20 -Twp. 16N -R4E
Weyburn County

COUNTY Yavapai AREA _____ LEASE NO. State

WELL NAME Cottonwood Oil Company State

LOCATION NW NW SEC 20 TWP 16N RANGE 4E FOOTAGE 560 FNL 560 FWL

ELEV 3412 GR _____ KB _____ SPUD DATE 9-19-59 STATUS D&A TOTAL _____
3728 ± GL Page Springs 7 1/2' quad COMP. DATE 10-4-59 DEPTH 1485'

CONTRACTOR _____ Pipe set on 9-13 & 14-59

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY
16	212'	50 sx		
12 3/4	976?	300 sx		DRILLED BY CABLE TOOL <input checked="" type="checkbox"/>
(Csg. program doubtful) See sample log				PRODUCTIVE RESERVOIR _____
				INITIAL PRODUCTION <u>P&A</u>

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Supai	1220			Probably Tertiary Volcanic unit described by Twadler & Metzger, USGS B 117, p. 55.

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG <u>to 1256'</u>
			SAMPLE DESCRP. _____
			SAMPLE NO. <u>T 1190 P 59</u>
			CORE ANALYSIS _____
			DSTs _____
			P-399, 599, 1521

REMARKS State Oil & Gas Lease 7482-02 cancelled 10 a.m. 9-23-66 APP. TO PLUG _____
(had expired 8-23-66) PLUGGING REP. _____
 COMP. REPORT

WATER WELL ACCEPTED BY Frank Gyberg, Cornville, AZ

BOND CO. Fireman's Fund Insurance Company BOND NO. M-605-2443
 BOND AMT. \$ 2,500 CANCELLED 11-19-68 DATE _____ ORGANIZATION REPORT
 FILING RECEIPT 9204 LOC. PLAT WELL BOOK PLAT BOOK
 API NO. 02-025-05004 DATE ISSUED 8-k8-59 DEDICATION W/2 NW/4

PERMIT NUMBER 96

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 Cottonwood Oil Co., Inc.		Address	
Federal, State or Indian Lease Number or name of lessor if fee lease Arizona 017262		Well Number 1	Field & Reservoir Wildcat
Location 560' S of N line & 560 E of W line in NW 1/4 of Sec. 20		County Yavapai	
Sec. TWP-Range or Block & Survey Section 20, T16 N, R4E, C&SRB&M			
Date spudded	Date total depth reached	Date completed, ready to produce	Elevation (DF, RKB, RT or Gr.) feet
			Elevation of casing top feet
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.
Producing interval (s) for this completion		Rotary tools used (interval)	Cable tools used (interval)
Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed
Type of electrical or other logs run (check logs filed with the commission)			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	19"	16"	52.5	201'	200	

TUBING RECORD

LINEAR RECORD

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

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & 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 bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)
Tubing pressure	Casing pressure	Cal'ed 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 representative of the Cottonwood Oil Co., Inc. (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 February 9, 1967

Arthur J. Starless
Signature
Its Representative

Permit No. 96

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

DATE	TIME	ARRIVAL	DEPART	REMARKS	NO.	CLASS	STATUS	TYPE	NO.	CLASS	STATUS	TYPE
10/10/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
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10/12/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
10/13/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
10/14/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
10/15/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
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10/24/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
10/25/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
10/26/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
10/27/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
10/28/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
10/29/50	10:00	10:15	10:30	ARRIVED	10	10	10	10	10	10	10	10
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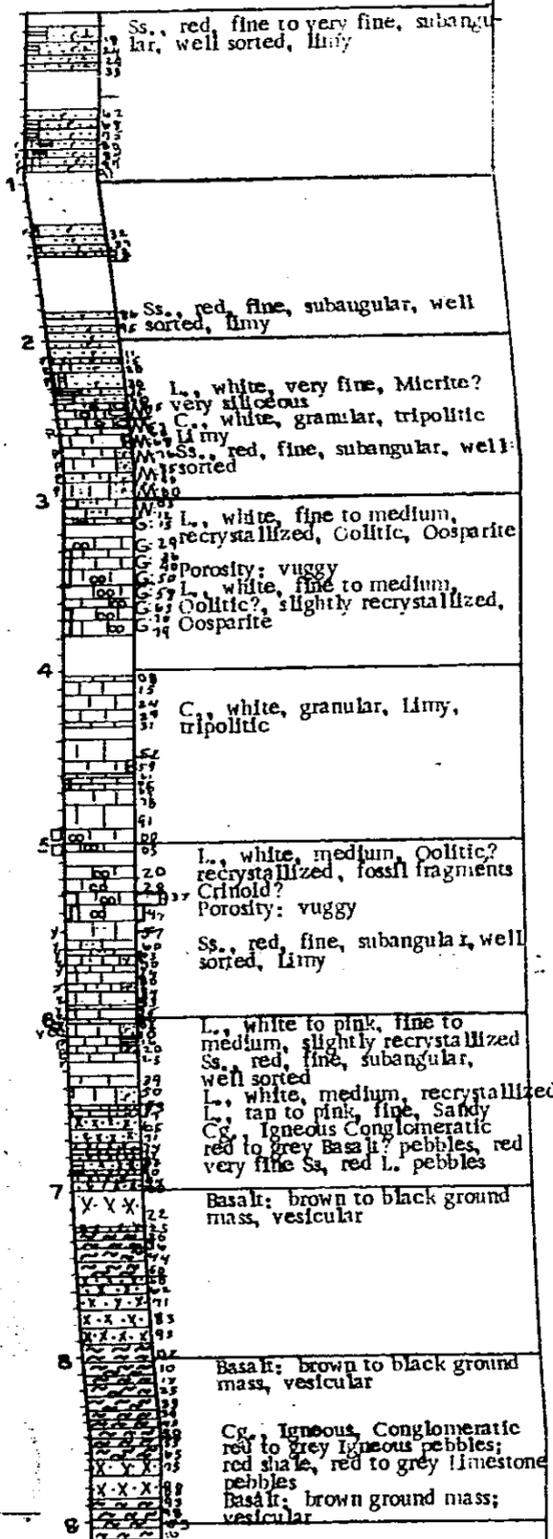
COMPANY: Home
 BY: 10/10/50
 CHECKED: 10/10/50
 DATE: 10/10/50
 TIME: 10:00
 REVISION: 10/10/50
 SHEET NO. 1 OF 2
 PAGE 2

Permit No. 91

Samples start at 0' in Quaternary

ABBREVIATIONS FOR LIMESTONE CLASSIFICATION

B: BOUNDSTONE
 G: GRAINSTONE
 P: PACKSTONE
 W: WACKSTONE
 M: MUDSTONE



1	21-22	Ss., red, fine, subangular, well sorted, limy
2	22-23	L., white, very fine, Micrite? very siliceous
3	23-24	C., white, granular, tripolitic limy
3	24-25	Ss., red, fine, subangular, well sorted
3	25-26	L., white, fine to medium, recrystallized, Colitic, Oosparite
3	26-27	Porosity: vuggy
3	27-28	L., white, fine to medium, Colitic?, slightly recrystallized, Oosparite
4	28-29	C., white, granular, limy, tripolitic
5	29-30	L., white, medium, Colitic? recrystallized, fossil fragments
5	30-31	Crinoid?
5	31-32	Porosity: vuggy
5	32-33	Ss., red, fine, subangular, well sorted, limy
6	33-34	L., white to pink, fine to medium, slightly recrystallized
6	34-35	Ss., red, fine, subangular, well sorted
6	35-36	L., white, medium, recrystallized
6	36-37	Cg., tan to pink, fine, Sandy
6	37-38	Cg., Igneous Conglomeratic red to grey Basalt? pebbles, red very fine Ss, red L. pebbles
7	38-39	Basalt: brown to black ground mass, vesicular
8	39-40	Basalt: brown to black ground mass, vesicular
8	40-41	Cg., Igneous, Conglomeratic red to grey, Igneous pebbles; red shale, red to grey limestone pebbles
8	41-42	Basalt: brown ground mass; vesicular
10	42-43	Basalt: black ground mass; traces of white to tan vesicles
10	43-44	Cg., Igneous conglomeratic red to grey, Igneous pebbles red to grey limestone pebbles
10	44-45	Tuff: grey to maroon to red soft; few sandine crystals
11	45-46	Tuff: red to grey soft, smooth sandine crystals; few Basalt pebbles
11	46-47	Tuff: red to grey smooth, soft, smooth hard, sandine crystals
11	47-48	Tuff: red to grey soft, sandine crystals, sandy
12	48-49	Tuff: green to grey to red, soft sandy, Micaceous, very sandy, abundant colorless sandine crystals
12	49-50	Cg., with light grey Chert pebbles.
13		Additional samples not available.
14		
15		T.D.: L 485' in Quaternary? PROD: D&A

Cottonwood

COTTONWOOD OIL COMPANY
 #1 STATE

VOLCANIC ROCKS

In the northern part of Verde Valley on the flanks of House Mountain, sedimentary rocks of the Verde Formation overlap Tertiary volcanic rocks. The sedimentary rocks thin progressively and pinch out toward the center of the mountain.

South of House Mountain near Adobe House Bend a basaltic lava flow is interbedded with sedimentary rocks of the Verde Formation. Limestone and marl that probably are part of the middle limestone facies overlie the flow; conglomerate of the Verde Formation underlies the flow (section 10, p. 109). The conglomerate thins and pinches out to the northeast. Underlying the conglomerate are Tertiary volcanic rocks, and, where the conglomerate is missing, the basaltic flow in the Verde Formation rest directly on a tilted basalt flow in the Tertiary volcanic rocks.

In the southern part of Verde Valley, volcanic rocks of the Verde Formation rest unconformably on older Tertiary volcanic rocks, and here the contact between the two series of volcanic rocks is not easily recognized. No attempt was made to map the rocks separately, and both are shown on plate 1 as Tertiary volcanic rocks.

THICKNESS

The total thickness of the Verde Formation is unknown because the base of the formation is not exposed and because the records for the two or three oil-test holes which penetrate the formation are poor. However, the available information suggests that the formation is locally at least 1,800 feet thick.

The base of the lowermost measured section is at an altitude of 2,910 feet, and the top of the uppermost measured section is at an altitude of 4,660 feet. The lowermost beds in wells (A-13-5)28bc2 and (A-16-3)33dd are at an altitude of 2,500 feet; if there is no structural displacement between the area of the wells and the area of the uppermost measured section, the Verde Formation may be as much as 2,200 feet thick.

The volcanic sedimentary rocks that constitute the lowermost exposed beds of the Verde Formation in the southernmost part of the valley are 338 feet thick (section 1, p. 96). A great thickness of volcanic sedimentary rock probably is below the base of the exposed section, and erosion here at the lower end of the valley has removed many hundreds of feet of rocks.

The mudstone facies is at least 1,000 feet thick; information from well logs and surface exposures indicates that this facies is at altitudes ranging from 2,500 to 3,500 feet. Because the lowermost beds are not exposed and have not been penetrated by wells, the total thickness of the mudstone facies is greater. The part of the mudstone facies that

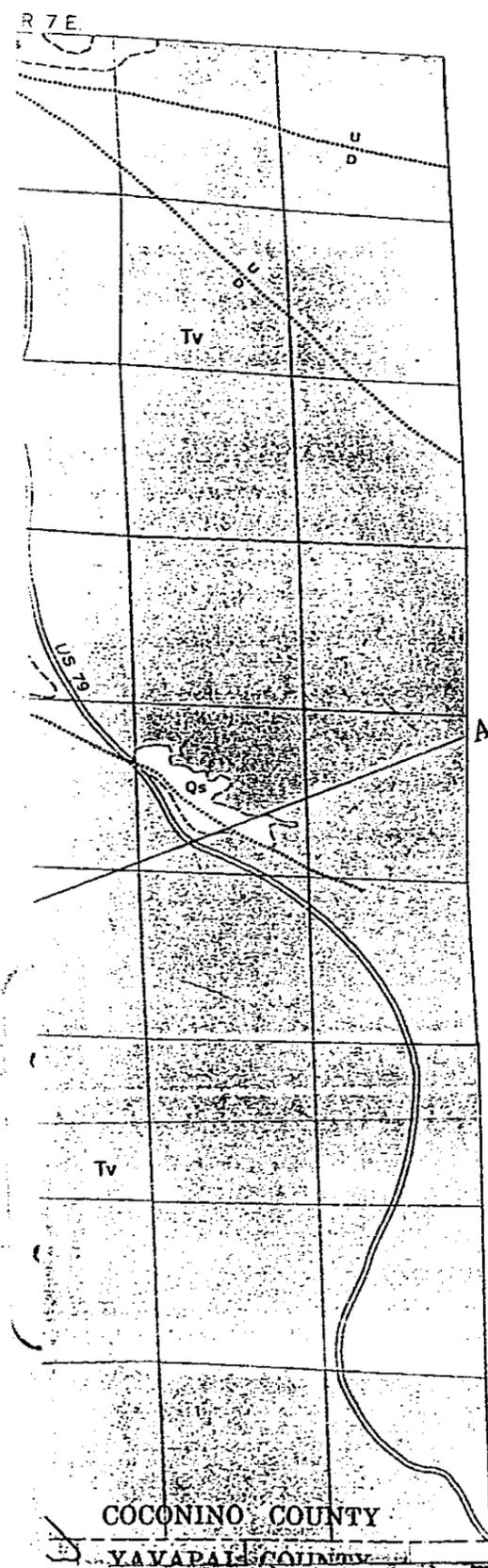


Housefield Mesa (see unit
glass shards about 30

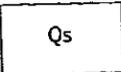
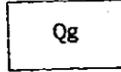
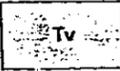


Information southeast of
View southeast.

BULLETIN 1177
PLATE 1



EXPLANATION

Pleistocene and Recent	 <p>Qs</p>	QUATERNARY
	<p>Streamwash</p> <p>Unconsolidated gravel, sand, silt, and clay; mostly deposited by recent streams; good but shallow aquifers along perennial streams; generally above the water table</p>	
Pleistocene	 <p>Qg</p>	QUATERNARY
	<p>Gravel</p> <p>Unconsolidated and semiconsolidated gravel, some sand, silt, and clay; forms talus deposits, alluvial-fan deposits, and the alluvial veneer on pediment surfaces; generally above water table and not known to yield water to wells or springs</p>	
	<p>UNCONFORMITY</p>	
	 <p>Volcanic rocks</p> <p>Rhyolite, rhyodacite, and associated tuffaceous sedimentary rocks; not water bearing</p>	
	<p>UNCONFORMITY</p>	
Pliocene(?) or Pleistocene	 <p>QTV QTv</p> <p>Verde Formation</p> <p>QTV, sedimentary rocks, consolidated and semiconsolidated lacustrine and fluvial deposits. QTvl, limestone of the thick limestone facies where exposed. QTvv, basalt flows and tuffaceous sedimentary rocks. Limestone beds are the chief aquifers and in many places supply large quantities of water to wells. Also, some clastic rocks are good aquifers</p>	TERTIARY OR QUATERNARY
	<p>UNCONFORMITY</p>	
Miocene(?) and Pliocene(?)	 <p>Tv</p> <p>Volcanic rocks</p> <p>Basaltic lava flows, dikes, necks, tuffs, cinders, and intercalated fluvial sediments; locally contain quantities of water adequate for stock wells; generally above water table</p>	TERTIARY
	<p>UNCONFORMITY</p>	
Miocene(?)	 <p>TS</p> <p>Sedimentary rocks</p> <p>Conglomerate, gravel, and sandstone; in Dry Beaver Creek include siltstone, clay, and limestone; symbol queried where sedimentary rocks not investigated. Generally above water table; poor aquifer owing to very low permeability</p>	
	<p>UNCONFORMITY</p>	

OIL, GAS, AND WATER POSSIBILITIES OF
THE SHEEPSHEAD WASH AREA
TWPS. 15, 16 and 17, N.-R. 4 E
YAVAPAI COUNTY, ARIZONA

A GEOLOGICAL REPORT

BY

DONALD P. MCCARTHY

FOR

COTTONWOOD OIL COMPANY, INC.

MESA, ARIZONA

1959

RECEIVED

SEP 24 1970

O & G CONS. COMM.

Permit 96

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OIL, GAS, AND WATER POSSIBILITIES OF THE SHEEPSHEAD WASH AREA
TWPS. 15, 16 and 17 N. - Rg. 4 E., Yavapai County, Ariz.

A Geological Report by Donald P. McCarthy

ABSTRACT

A thin section - about 1500 feet - of Paleozoic rocks ranging from Devonian upward to Pennsylvanian and containing possible petroleum source and reservoir beds, occurs in the Sheepshead Wash Area of Yavapai County, Arizona. A large, though quite young, anticlinal axis exists in the area. A test well, Cottonwood Oil Co., #1 located in the NW NW Sec. 20, T.1S, R 4 E. is presently drilling and has recorded shows of dead migratory oil in some of the younger Tertiary rocks. The ultimate chances of success for this as well as for any other exploratory test in this area cannot be pre-determined. However, the relatively shallow depths involved and the resultant modest cost, coupled with the prospect of such tremendous profits which would be realized with production in this state, make this a very worthwhile venture. Additional surface mapping should be done to outline the anticlinal axis northward beyond Anderson Butte.

INTRODUCTION

The area included within this investigation covers over 30,000 acres extending, as a north-south strip of land about 4 miles wide, from Anderson Butte on the north to two miles south of Cornville, Post Office on the south. The area is bisected by U. S. Highway No. 89-A which runs northeastward between Cottonwood, Arizona and Sedona, Arizona. Arizona Highway No. 79, many county roads, and ranch trails give further access to the area.

Topography in the western portion of the area where alternating resistant limestone beds and pink colored marls outcrop consists of distinct mesas and cuestas separated by narrow, deep dry washes which are incised in former detrital outwash material. The eastern portion influenced by the outcrop of resistant lava flows is a rough area cleft by dry consequent water courses in youthful stage of development. Deep narrow canyons have been eroded in the lava flows. Abrupt changes in direction of drainage are common. Natural depressions which existed on the original surface of the flows have largely been filled by detrital material through which the washes have subsequently cut shallower sided canyons as the base level of erosion lowered.

The climate is arid. Records gathered over a 16-year period at Clemenceau near Cottonwood, Arizona show average temperature in the month of January of 44.2°F; in July, 84.0°F; Maximum temperature recorded was 110°F and minimum was -9°F. Precipitation average over the 16 years is 11.29 inches per year. August with an average rainfall of 1.80 inches is the wettest month and June's average of 0.24 inches is the dryest.

Vegetation consists of both grasslands and chaparral types. The higher buttes support chaparral, some juniper and lesser amounts of pinon pine. Grasslands at lower elevations give a good cover after late summer rains and determine the major economy of the area, namely cattle ranching.

Field work was commenced on September 21, and completed by October 19, 1959. Concurrent with the field work, samples from the drilling well, Cottonwood Oil Co., #1 were examined and logged and the other geologic duties relating to a drilling well were performed.

The cooperation of the Arizona Oil and Gas Conservation Commission represented in the field by Mr. Phil Johnson is acknowledged. Thanks are due also to Mr. Floyd Twenter of the Water Supply Division of the U. S. Geological Survey. In addition, the published works of previous investigators, listed in a bibliography following this report, were frequently consulted and are here acknowledged.

GENERAL GEOLOGY

PRE-CAMBRIAN rocks outcrop and are of importance in the Jerome Mining District a few miles west of the area of this investigation. However, they do not contribute to the oil, gas, or water potential

through yellowish-gray to pale olive.

Devonian, Martin Limestone.

In this region the Martin Limestone has the following measured thicknesses: 505 feet at Jerome, 415 feet on the western flank of Mingus Mountain west of Jerome, 390 feet at the headwaters of the East Verde River about 60 miles to the southeast, and 381 feet at a point 20 miles to the northwest near Simmons. A thickness in the Sheepshead Wash Area of 450 to 500 feet is probable. The Martin is fossiliferous, and frequently exhibits etched out cross-bedding.

The Martin Limestone can be divided into four units: The lower unit, from 35 to 55 feet thick consists of gray-brown impure dolomitic limestone and colomite in thin to medium beds. Impurities consist of clay and arenaceous material with some evidence of cross-bedding.

The second unit, "lithographic unit" consists of light gray, dense to fine crystalline limestone beds totalling about 100 feet in thickness. Some chert nodules occur in this unit and a pale red sandy zone up to 10 feet thick forms a good marker bed near the top.

The middle unit ranges from 65 to 78 feet in thickness and consists of dolomite and calcite, with dolomite predominate.

The upper unit is comprised of about 250 feet of thin to thick-bedded light gray dolomite limestone separated by thin interbeds of lime siltstone and shale. The uppermost 50 feet of this unit includes gray-pink dolomitic limestone with many inclusions of light-red sandstone masses from less than 1 inch to 9 inches in length. Abundant corals of both solitary and roof-like colonial types occur in a 7-foot bed about 100 feet below the top of this unit.

Mississippian, Redwall Limestone.

A disconformity separates the Redwall Limestone from the underlying Devonian rocks in this area. However, the absence of any thick breccia or conglomerate zone at the base of the Redwall suggests only a brief cessation of deposition.

Thickness of the Redwall in the region varies from about 250 feet to over 350 feet, and a 300-foot section is predicted for the Sheepshead Area.

The Redwall is a white to gray-pink, pure, coarsely crystalline limestone. Some beds are abundantly fossiliferous consisting almost wholly of fossils, particularly crinoids.

Subdivisions of the Redwall can be made as follows: The lower 75 feet is very colitic. This is succeeded by about 75 feet of limestone characterized by irregular masses of chert. The upper part, about 150 feet thick, is yellowish-gray, massive, thick-bedded, very fossiliferous limestone.

On outcrop, the Redwall frequently stands as a massive white cliff marked by small solution caves accented with brick-red clay sediment which is residual from solution of the limestone.

Pennsylvania-Permian. Supai Formation.

The Supai Formation disconformably overlies the Mississippian Redwall, the contact zone being marked by a rubble zone consisting of limestone blocks and chert pebbles cemented by red silty material.

The Supai underlies the entire northeast corner of Arizona and includes both Permian and Pennsylvanian red beds composed chiefly of sandstone, siltstone, and shale. The lower 350 to 470 feet of the Supai is a zone consisting of impure gray-lavender limestone beds and intercalated red siltstones which has been correlated with the Pennsylvanian Nace Formation of southeast and east-central Arizona. The lithologic similarity of these lower Supai beds to the upper Supai and the absence of any depositional or fossil break in this vicinity has made the subdivision of the Supai into distinct systems for each period impractical at the present time.

Total thickness of the Supai varies from 1155 feet on the east side of Chino Valley to 2200 feet on Fossil Creek located southeast of Sheepshead about 60 miles. Only the lowermost portion of the Supai, possibly only the Pennsylvanian equivalent is thought to be present in the area of this report, the upper several hundred feet having been removed by erosion prior to deposition of the Tertiary rocks.

MESOZOIC ERA - The Mesozoic Era is not evidenced by any sediments in this vicinity. Whether the area was uplifted and undergoing erosion throughout the era or whether rocks once-deposited were removed by later erosion is not known. It is evident, however, that major erosion occurred prior to the deposition of Cenozoic Rocks.

CENOZOIC ROCKS - Cenozoic rocks in the Sheephead area are comprised of the Hickey Formation; the Verde Formation; and Quaternary gravels and alluvium. The Hickey and Verde Formations are probably of Pliocene and early Pleistocene Age.

Hickey Formation - The Hickey Formation consists of massive basaltic-type lava flows intercalated with interflow pyroclastic rocks which contain much volcanic ash in the form of lightly consolidated bentonitic clay-shale, occasional coarse quartz grains, pellets of red shale, and red-brown cinders. The interflow sediments probably accumulated during lulls in volcanism and some material at least, from outside non-volcanic sources is apparent in the form of the quartz grains and the red shale pellets. Calcite and gypsum are common in both sedimentary and all but the most massive volcanic flow material.

The thickness of the Hickey Formation is as variable as its manner of formation would indicate. Thick accumulation in proximity to the source volcanoes would decrease rapidly outward. Lava flows from several active sources probably coalesced in the intervening areas to form heterogeneous layers of variable composition, both laterally and vertically. Over 1400 feet of Hickey Formation is exposed on Mingus Mountain near Jerome, at least 1000 feet is present in Lonesome Valley on west of Mingus Mountain. An apparent total thickness of 570 feet of Hickey Formation has been penetrated in the Cottonwood Oil Co. Well #1, NW NW Sec. 20, T. 16 N. 4 E. Here an unknown thickness was eroded away before deposition of the succeeding Verde Formation.

Verde Formation - The Verde Formation is an alternating series of orange-pink marl, sandstone, and limestone of lake origin which covers about 300 square miles in the Upper Verde Valley. The lake was apparently confined to the east and north by the Mogollon Rim, and on the west by the concurrently forming Black Hills which were rising as the north-south Verde Fault Zone became active. Lava flows probably caused the damming of the ancestral Verde River in the vicinity of Camp Verde and rapid deposition of the Verde Formation ensued. The eventual breaching of the dam released the impounded waters and the Verde Formation is now being removed by erosion of the Verde River and its tributaries.

Lithologically, the Verde outcrops consist of lemticular white limestone beds usually about 6 inches to 5-feet thick. In some localities such as north of Clarksdale nearly pure limestone makes up a thick section and in the Cottonwood Oil Co., Well #1 nearly pure white limestone was encountered between depths of 250 and 600 feet. Generally, however, the white limestone beds are interbedded with pink to orange, fine grained, limy sandstone beds which in fact make up the major part of the formation in most places. Along the west side of the ancient Verde Lake in proximity to the fault, thick gravel beds accumulated as material was rapidly eroded from the upthrown side of the Verde Fault and swept out into the lake on the downthrown block.

The thickness of the Verde Formation is extremely variable and largely dependent on the depth of the old lake. It fills deeply eroded channels in the Hickey Formation which are well exposed in Oak Creek Canyon northeast of Page Springs. It overlaps beyond the Hickey Formation in the area north of Anderson Butte and lies directly on the Supai Formation both there and also on the south flank of Casner Mountain located in the NW part of T. 18 N., R. 4 E. A thickness of 650 feet of Verde Formation was penetrated by the Cottonwood Oil Co. Well #1. In addition, at least 200 feet of Verde Formation has been removed by erosion from the well site.

Descriptions of surface exposures of the Verde Formation are included with the structural map. (Plate 1).

Quaternary rocks - The Quaternary in this area is represented by alluvial fill along most of the washes. There is some wind-deposited sand, and soil cover. None of these are important in arriving at structural configuration of the underlying rocks and consequently their outcrops have not been outlined.

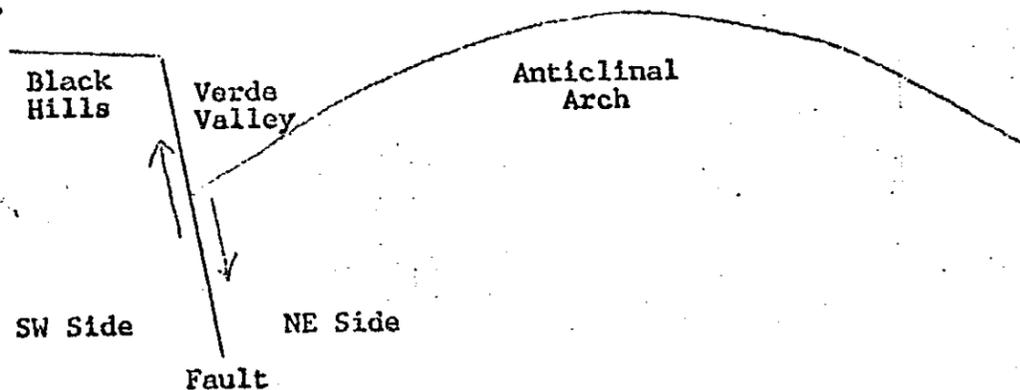
STRUCTURE

The Verde Fault Zone which extends North-Northwest, is located about eight miles to the west of the Sheepshead Wash Area, and marks the local boundary line between typical Basin and Range physiography on the southwest and Colorado Plateau on the northeast.

The Verde Faulting occurred after the accumulation of the Hickey Formation and hence the definition of distinct Basin and Range and Colorado Plateau types dates from the late Tertiary in this locality. In the Jerome area, some older faulting is evident and thought to be of Cretaceous and early Tertiary age.

Paleozoic formations which were tilted generally northeastward before the period of Verde faulting may have been initially tilted by the Cretaceous or even much earlier movement.

The Late Tertiary movement on the Verde Fault Zone appears to have dropped the area now occupied by the Verde Valley down on the northeast side of the fault forming a broad arch whose axis roughly parallels the fault a few miles to the east of the fault.



Ill. 1. Schematic Cross-section illustrating Structural Effects of Verde Fault. (Vertical scale greatly exaggerated)

Limestone members of the Verde Formation clearly illustrates the southwest and west dip toward the fault zone as shown on the accompanying structural map, Plate 1. Disconformable relations between the Verde Formation, the Hickey Formation and underlying Paleozoic rocks are conceded; however, it is presumed that the Verde Limestones were deposited essentially horizontally and their present inclination from the horizontal reflects structural inclination of nearly the same degree in the underlying Paleozoic rocks. This can be verified with additional detailed mapping which should be extended north and northeast on the axis of the broad arch. Direct structural attitude of Paleozoic formations can be determined there in a large area of Supai outcrop.

Local structural details evident on the map, Plate 1, show a closure at Anderson Butte with a southward plunging nose ex-

tending to Cornville. A flat terrace occurs in Secs. 32 and 33, T. 16 N. and Secs. 4, 5 and 9, T. 15 N. in Sec. 29, T. 17 N. - R. 4 E. a small dome closure occurs associated with a volcanic plug. This plug was evidently active after the Verde Formation was deposited therefore the dome should be considered as certainly young and probably superficial.

OIL AND GAS EXPLORATION

In 1939, two wildcat oil ventures were drilled near Camp Verde by the Arizona-Verde Oil Co. Drillers Logs of these wells from the files of the Arizona Oil and Gas Conservation Commission show that they were abandoned at 1625 feet and 1225 feet respectively in igneous rock after penetrating what is considered to be Verde and Hickey Formations. Currently several wildcat tests are being drilled many miles to the northeast of the Sheepshead area far back into the Colorado Plateau. Some of these tests have reported good Devonian sections of rocks carrying salt water.

Sites of oil seeps reported in the area immediately north of Cornville and in Spring Creek east of Cottonwood Oil Co. Well #1 were examined by this writer but the existence of oil could not be verified.

There were shows of dead oil in the Cottonwood Oil Co. Well #1 at the following depths: 528-837 feet, staining in porous, loosely cemented aggregates of calcite crystals; 618-622 feet, trace dead oil staining on some fragments of fine-grained sandstone; 660 feet, trace black dead oil in fine grained, calcareous sandstone. All the above occurred in the Verde formation. The interval between 1003 and 1011 feet, an interflow zone of clastic sedimentary material within the Hickey Formation produced many soft pieces of black asphalt tar on the mud pit and adhering to drilling tools. A rainbow was evident on the mud pit and occasionally small brown droplets were visible on the mud recovered by the bailer. It is believed that all the above shows represent oil which at one time migrated through this section since there is nothing in either the Verde or Hickey Formation which could be considered as a source-bed for oil. Probably the oil migrated upward along a fracture, or updip from an overlapped unconformity from a source in the Paleozoic formations which at the time of this writing still have not been penetrated by the drill at the Cottonwood Oil Co. test.

WATER RESOURCES

Permanent streams in the general area include the Verde River; Oak Creek; Spring Creek from the spring in Sec. 16, T. 16 N. R. 4 E., to its Junction with Oak Creek; Sheepshead Wash below the spring in Sec. 28, T. 16 N., R. 4 E. All this water is both of excellent quality and abundant.

Cottonwood Oil Co., Well #1 encountered fresh water in the quantities determined by bailing at the following depths: 240 feet - 200 gals per hour; 263-275 feet - water sand could not bail down; 885-888 feet - 300 gals. per hour; 900-910 - could not bail down; and below 1220 feet - over 1600 gals. per hour, could not bail down.

CONCLUSIONS

The Upper Verde Valley is an area of temperate climate, and rapidly developing industry. Decisions to fully explore all oil and gas possibilities should wisely consider this fact as well as the fact that the metropolitan district of Arizona lies little more than 100 miles distant. All petroleum requirements are presently supplied from outside the state.

Pertinent conclusions regarding the Sheepshead Wash area are:

1. Source and reservoir beds for petroleum in order of favorability include Devonian dolomites and possibly reefs; Mississippian fossiliferous and colitic limestones; and Pennsylvanian limestones and sandstones. The total thickness of these beds is expected to be between 1200 and 1500 feet and they could all be tested with wells ranging to a total depth on the order of 3000 feet in the area of this report.
2. An Anticlinal structural trap exists in the area of this report. This is not tantamount to a statement that it will contain petroleum. Since oil, if generated by the Paleozoic rocks, may have escaped in an up-dip direction to the south and west long before the present structural trap was formed. Furthermore, the Tertiary erosion surface on which the Hickey Formation accumulated was a dissection of the Supai to as deep as the Pennsylvanian portion presumably. The older Paleozoic rocks at that time had only the following thicknesses of sediments overlying them: Top Mississippian - about 500 feet of basal Supai overlying; Top Devonian - about 1000 feet of basal Supai and Mississippian over-

lying; Section of the Devonian - 1500 feet overlying. Such shallow depths could not, for example, have contained extremely high-pressure gas in any but the lower Devonian portion.

Any petroleum migrating through the section after the trap was formed in Latest Tertiary should be retained. This may be the case particularly of low pressure gas which can travel great distances and may have originated many miles distant to the north and northeast and may now be found in this trap.

3. In final analysis, the wildcat test being undertaken by the Cottonwood Oil Company appears, all things considered, to be a very worthwhile speculative venture whose chances for success are absolutely indeterminate except by completing the test to the Pre-Cambrian.

4. Water supply both surface and in ground reservoirs is abundant and may have value for both industrial and agricultural purposes.

RECOMMENDATIONS

It is recommended that: 1. The mapping project be continued along the major axis north and northeast of Anderson Butte toward Sycamore Pass.

2. The present drilling well be carried to the Pre-Cambrian at an anticipated total depth of about 3000 feet.

(signed) Donald P. McCarthy

Donald P. McCarthy
Geologist.

(SEAL)
REGISTERED GEOLOGIST
ARIZONA, U.S.A.

DONALD P.
McCARTHY

Certificate Expires:
Dec. 31, 1959.

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

This is to advise you that I accept the abandoned wildcat well, known as the Cottonwood Oil #1 State

located on the NE NW $\frac{1}{4}$ of Section 20 Township 16N

Range 4E, County of Yavapai, Arizona, as a water well to be used for domestic purposes.

Further, I accept full responsibility for the proper maintenance and use of the above well, including final plugging, in full compliance with the Rules and Regulations adopted by the Oil and Gas Conservation Commission.

I understand that I am responsible for compliance with the provisions of the State Water Code, Chapter 1, Title 45, Arizona Revised Statutes and with any applicable requirements of U.S. Geological Survey.

Signature Frank Gyberg

Frank Gyberg

Street _____

City and State Coraville, Arizona

STATE OF Arizona

COUNTY OF Yavapai

On this, the 27th day of January, 1967, before me,
F. Mc Clellan the undersigned officer, per-

sonally appeared Frank Gyberg, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument and acknowledged that

he executed the same for the purpose therein contained.

In witness whereof I hereunto set my hand and official seal.

Notary Public F. Mc Clellan

My Commission expires My Commission Expires June 28, 1968

Permit No. 965

State of Arizona
Oil & Gas Conservation Commission
WATER WELL ACCEPTANCE
Form 26 - File one copy

WELL SITE CHECK

By JRS
Date 9-25-67

Contractor _____ Person(s) Contacted none

Spud Date _____

Type Rig _____ Rotary Cable Tool Present Operations _____

Samples _____

Pipe _____ Drilling with Air Mud _____

Water Zones _____ Size Hole _____

Lost Circ. Zones _____ Size Drill Pipe _____

Formation Tops _____ Type Bit _____

Cores, Logs, DST _____ No. Bit _____ Drilling Date _____

_____ Formation _____

Crews _____ Lithology _____

REMARKS, PHOTO, MAP

Visited location. Took pictures. Cellar and pit need to be filled in. (Danger to cattle)

Cottonwood #1 State

WELL NAME _____

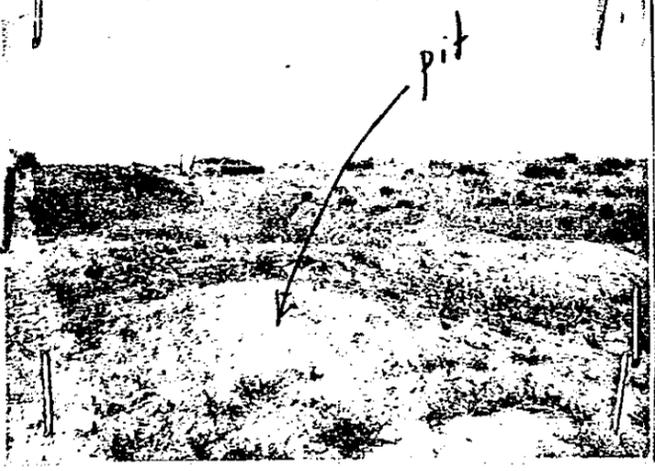
Permit No. 96
Confidential: yes No

PERMIT # 96

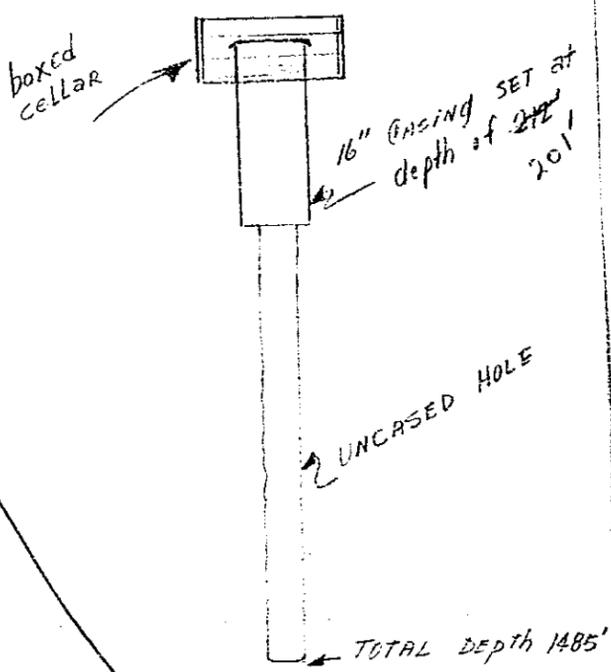
Cottonwood Oil Co. #1 STATE

Location: NW/4 NW/4 Section 20-
T16N - R4E

(Footage location: 560 FNL, 560 FWL)



Cottonwood State #1
NW/8 pm 9-12-66
(cow could step in
CELLAR)



NEED:

- (1) Fill in Pit and Cellar
(DANGER TO CATTLE)
- (2) Location Levelled with
bulldozer (clean up)
- (3) Should be plugged
(possible WATER contamination)
- (4) PERMANENT identification
MARKER pipe.

(Has been accepted as water well by
FRANK Gyberg; CORNVILLE, Ariz.)



ORIGINAL
SEND ALL REMITTANCES TO
P. O. DRAWER 14
DUNCAN, OKLA 74114

CEMENTING SERVICE
INVOICE & TICKET
No. CS 434986
In Remitting or Corresponding
Please Refer To Above Invoice Number

FORM HOWCO #489-A-2

DATE	CUSTOMER'S ORDER NO.	CUSTOMER'S REG. NO.	SEC.	TWP.	RANGE	TRUCK CALLED OUT	OR LOCATION	JOB BEGAN	JOB COMPLETED
9-14-59						9-13 9:30 A.M.	9-13 9:30 P.M.	9-14 12:30 P.M.	9-14 1:30 P.M.

WELL NO. AND FARM	PLACE OR DESTINATION	COUNTY	STATE
1 State	Cottonwood Arizona	Yavapai	Arizona

OWNER	CONTRACTOR	CHARGE TO
Cottonwood Oil Co., Inc.	Cottonwood Oil Co., Inc.	Cottonwood Oil Co., Inc.
1410 N. CENTRAL AVENUE PHOENIX, ARIZONA	1410 N. CENTRAL AVE PHOENIX, ARIZONA	1410 N. CENTRAL AVE PHOENIX, ARIZONA

DUNCAN USE ONLY

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE-JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA									
TYPE OF JOB (✓) ONE	CASING	HOLE DATA	TUBING OR DRILL PIPE	CEMENTING PACKER	MAKE/FLOAT EQUIPMENT				
SURFACE ✓	NEW ✓	BORE SIZE 19"	SIZE	SIZE	FLOAT COLLAR	GUIDE SPODE	FLOAT SPODE	OTHER EQUIPMENT	RECEIVED FEB 10 1967 STATE O & G CONS. COMM.
INTERMEDIATE	USED	TOTAL DEPTH 201	TYPE	TYPE					
PRODUCTION	SIZE 16"	ROTARY	WEIGHT	WEIGHT					
SQUEEZE	WEIGHT 52.5	CABLE TOOL ✓	TOTAL DEPTH	DEPTH SET					
PUMPING	DEPTH 201								
PLUG BACK	TYPE								
ROUTING									
OTHER (write in)									

SQUEEZE OR PLUG BACK DATA				CEMENT DATA			
PURPOSE	Depth From	TO APPROX.	IN SIZE CASING HOLE	BULK? SACKS	SACKED? TYPE	MIXED WT. PER GAL	% GEL. OTHER ADMIX
WATER				200	109	15.5	Portland
GAS							
Abandon							

OTHER DATA ON SERVICE OPERATION		PRESSURE	
BOTTOM PLUG TYPE None	CIRCULATING	MINIMUM	MAXIMUM
TOP PLUG TYPE None			
TYPE HEAD			
CEMENT LEFT IN CASING 10	FT.		
<input checked="" type="checkbox"/> BY REQUEST <input type="checkbox"/> NECESSITY MEASURED WITH LINE?			

TRUCK NO. & TYPE	TRUCK LOCATION	TITLE	NAME
5314 7-10	Farmington New Mexico	Cementor	G. R. Hall
		Driver	F. Groome
		Cementor	
		Driver	
		Cementor	
		Driver	

INVOICE SECTION		
DEPTH OF JOB 201	FT.	
PRICE REF.	SERVICE AND RENTAL CHARGES	AMOUNT
R-15	BASE CHARGE	\$199.00
	EXTRA TRUCK	
	STAND BY TRUCK	
F	operator express 2 miles	\$30.00
	Arizona permit	\$23.63
R-1	MILEAGE 342 @ 75¢/mile	\$256.50
TERMS 3/98	Cash discount will be allowed if paid by sub. 20th of following month. 6% interest charged after 60 days from date of invoice.	\$509.13
This is to certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to the services furnished covered by this invoice.		TAX No
PRINTED IN U.S.A.		TOTAL

20501 65 3 30 4950

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

This is to advise you that I accept the abandoned wildcat well, known as the Cottonwood Oil #1 State

located on the NW NW $\frac{1}{4}$ - $\frac{1}{4}$ of Section 20 Township 16N
Range 4E, County of Yavapai, Arizona, as
a water well to be used for domestic purposes.

Further, I accept full responsibility for the proper maintenance and use of the above well, including final plugging, in full compliance with the Rules and Regulations adopted by the Oil and Gas Conservation Commission.

I understand that I am responsible for compliance with the provisions of the State Water Code, Chapter 1, Title 45, Arizona Revised Statutes and with any applicable requirements of U.S. Geological Survey.

Signature Frank Gyberg
Street _____
City and State Cornville, Arizona

STATE OF Arizona

COUNTY OF Yavapai

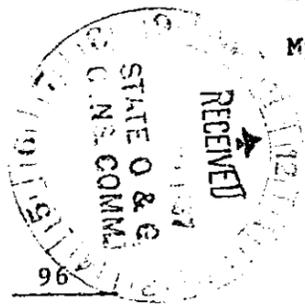
On this, the 27th day of January, 1967, before me,

F. Mc Cellan the undersigned officer, personally appeared Frank Gyberg, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purpose therein contained.

In witness whereof I hereunto set my hand and official seal.

Notary Public F. Mc Cellan

My Commission expires My Commission Expires June 28, 1968



Permit No. 96

State of Arizona
Oil & Gas Conservation Commission
WATER WELL ACCEPTANCE
Form 26 - File one copy

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL DEEPEN PLUG BACK

NAME OF COMPANY OR OPERATOR

DATE

Cottonwood Oil Company, Inc.

August 12, 1959

Address

City

State

1410 N. Central Avenue

Phoenix,

Arizona

DESCRIPTION OF WELL AND LEASE

Name of lease Arizona O & G 3633-1	Well number 1	Elevation (ground) 3412
Well location (give footage from section lines) Section—township—range or block & survey 560' S. of N. Line & 560' E. of the W. Line in NW ¹ Sec. 20, T16N, R4E, 600 A.		
Field & reservoir (If wildcat, so state) Wildcat	County Yavapai	
Distance, in miles, and direction from nearest town or post office Approx. 5 miles NE of Cottonwood, Arizona		
Nearest distance from proposed location to property or lease line: 560 feet	Distance from proposed location to nearest drilling completed or applied—for well on the same lease: No other wells in area feet	
Proposed depth: 3,000 ft.	Rotary or cable tools Rotary	Approx. date work will start Aug. 20, 1959
Number of acres in lease: 600	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
New, 1 well, \$2500.00

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)

* Fill in Proposed Casing Program on other side

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the.....President.....of the Cottonwood Oil Company, Inc.(company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

August 12, 1959
Date

Cottonwood Oil Co. Inc.
Richard F. Harless, Pres.
Signature

Permit Number: 96
Approval Date: August 18, 1959
Approved By: Mr. W. H. ...
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

STATE OF ARIZONA STATE LAND COMMISSIONER
Application to Drill, Deepen or Plug Back
Form No. P-1 File two copies
Authorized by Order No. 4-6-59
Effective April 6, 1959

OK
8/14/59
BMY

96



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 lease 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.

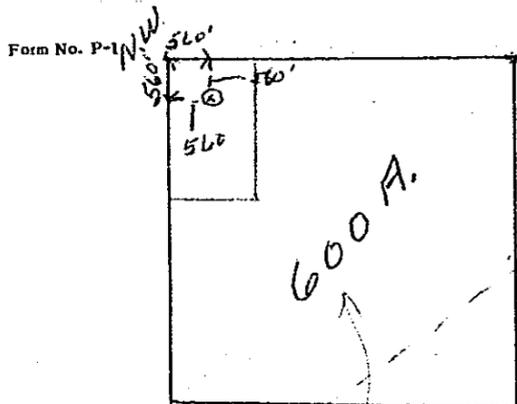
Do not confuse survey lines with lease lines. The sketch or plat should show your entire lease if possible. If it is not practical to show the entire lease and the plat shows only a section, block or lot out of your lease, you should clearly show that same is only a part of the lease.

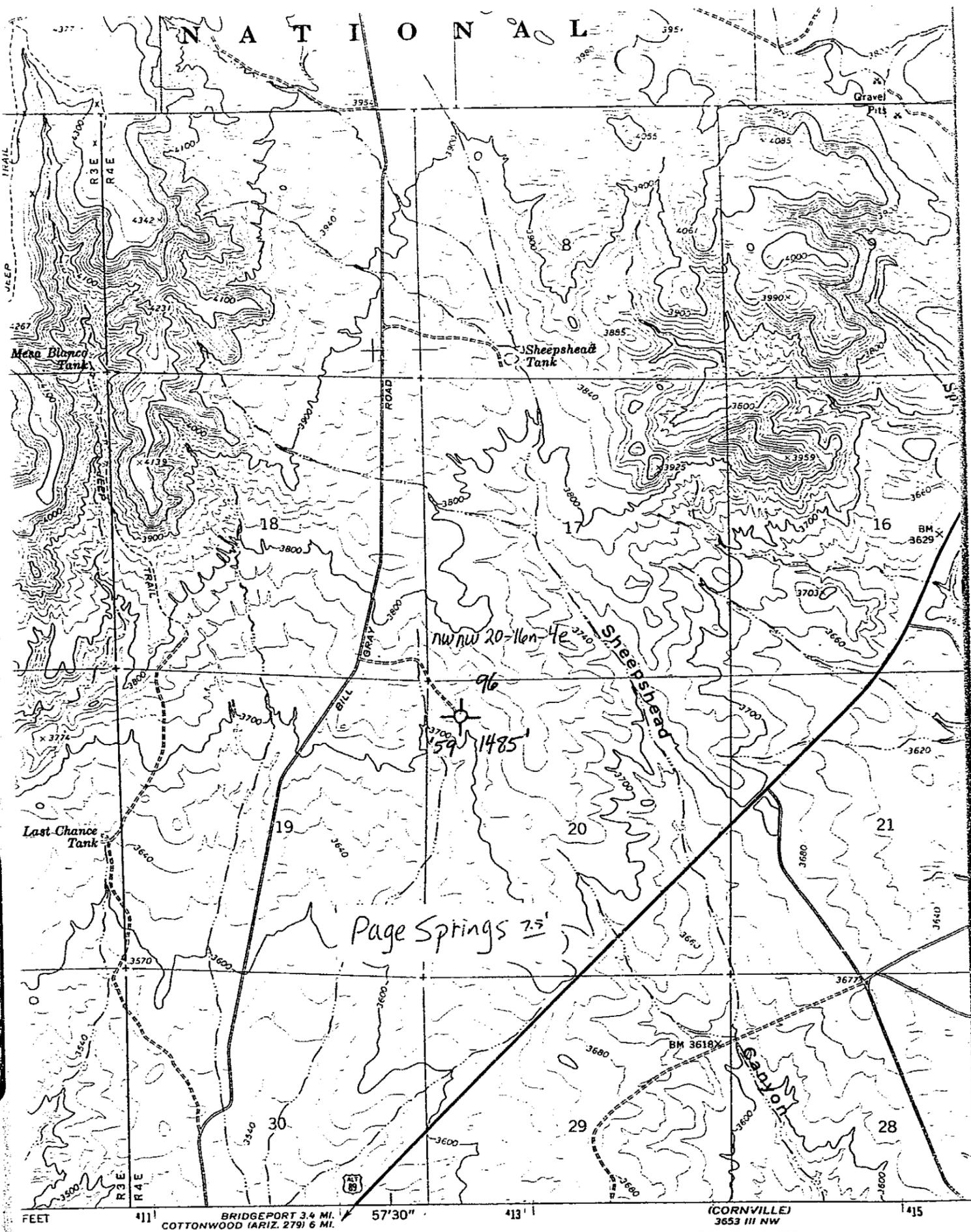
Designate scale to which plat or sketch is drawn. Also designate northerly direction on the sketch or plat.

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top Surface	Bottom	Cementing Depths	Sacks Cement
12-3/4" OD	30 lbs	Seamless	Surface	200'	200'	Sufficient to fill
8"	17 lbs	Seamless	Surface	Top of pay	Top of pay	Sufficient to fill

Cement to Surface





In the Superior Court

OF

MARICOPA COUNTY, STATE OF ARIZONA

CLIFFORD L. WOLFSWINKEL,

Plaintiff,

vs.

ARNOLD L. KIMMES, et al,

Defendant.

No. C174096

SUBPOENA DUCES TECUM

The State of Arizona Sends Greeting to

JOHN BANNISTER, Director

Arizona State Oil & Gas

4515
3515 N. 7th Avenue

Phoenix, Arizona

YOU ARE COMMANDED, That all and singular business and excuses being laid aside, you appear and attend before our Superior Court of Maricopa County, State of Arizona, at the Court Room of Division No. 6 at the Court House in said County, on the 11th day of June, 1973, at 1:30 o'clock P. M., then and there to testify in the above-entitled action now pending in said Superior Court, on the part of the

....., and that you bring with you and produce, then and there in your possession pertaining to the Cotton- in particular Cottonwood Oil Co., Inc. scribed as a certain well in Section 20, Range 4 East of the Gila and Salt River Base ai County, Arizona.

deeds, evidences and writings which you have in your custody or ses. And disobedience will be punished as a contempt by the said the seal of (said) Court this June 5 day of

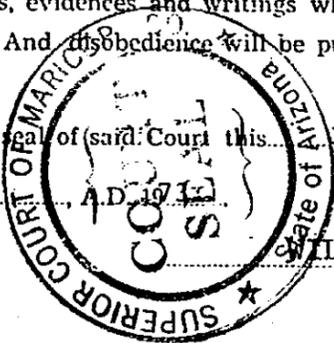
WILSON D. PALMER,
Clerk of Said Superior Court.

By E. EDSEY Deputy Clerk.

Exhibit No. 4
Case No. C174096
PLF 6-11-73
FOR IDENTIFICATION
6-11-73
IN EVIDENCE

DEF WILSON D. PALMER, Clerk
By E. Edsey

43-H-37
43-EX



COPY

file 96

In the Superior Court

OF

MARICOPA COUNTY, STATE OF ARIZONA

CLIFFORD L. WOLFSWINKEL,

Plaintiff,

vs.

ARNOLD L. KIMMES, et al,

Defendant.

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Arizona State Oil & Gas

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3515 N. 7th Avenue

Phoenix, Arizona

YOU ARE COMMANDED, That all and singular business and excuses being laid aside, you appear and attend before our Superior Court of Maricopa County, State of Arizona, at the Court Room of Division No. 6 at the Court House in said County, on the 11th day of June, 1973, at 1:30 o'clock P. M., then and there to testify in the above-entitled action now pending in said Superior Court, on the part of the plaintiff,

and that you bring with you and produce, then and there any and all records in your possession pertaining to the Cottonwood Oil Co., Inc., in particular Cottonwood Oil Co., Inc.

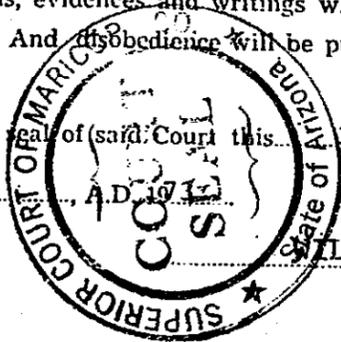
Well No. 1 also described as a certain well in Section 20,

Township 16 North, Range 4 East of the Gila and Salt River Base and Meridian, Yavapai County, Arizona.

now in your custody, and all deeds, evidences and writings which you have in your custody or power, concerning the premises. And disobedience will be punished as a contempt by the said Court.

Given under my hand and the seal of said Court this June 5 day of

June



WILSON D. PALMER,
Clerk of Said Superior Court.

By

C. EDGEMAN

Deputy Clerk.

file 96

ORGANIZATION REPORT

Full Name of Company, Organization, or Individual

Cottonwood Oil Company, Inc.

Post Office Address (Box or Street Address)

1410 N. Central Avenue, Phoenix, Arizona

Plan of Organization (State whether organization is a corporation, joint stock association, firm or partnership, or individual)

Arizona Corporation

Purpose of Organization (state type of business in which engaged)

Owning and development of oil and gas properties

If a reorganization, give name and address of previous organization.

If a foreign corporation, give (1) State where incorporated	(2) Name and postoffice address of state agent	(3) Date of permit to do business in state
Principal Officers or Partners (if partnership) NAME	TITLE	POSTOFFICE ADDRESS
<u>Richard F. Harless</u>	<u>President</u>	<u>1410 N. Central Avenue</u>
<u>William B. Feinberg</u>	<u>Sec.-Treasurer</u>	<u>3300 N. Central Avenue</u>

DIRECTORS NAME	POSTOFFICE ADDRESS
<u>Richard F. Harless</u>	<u>1410 N. Central Avenue, Phoenix, Arizona</u>
<u>William B. Feinberg</u>	<u>3300 N. Central Avenue, Phoenix, Arizona</u>
<u>Dix Price</u>	<u>Luhrs Tower, Phoenix, Arizona</u>

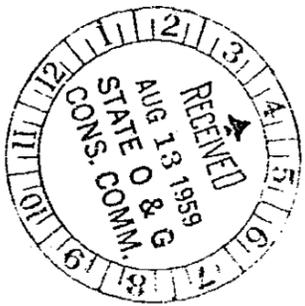
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the President of the Cottonwood Oil Company, Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

August 12, 1959
Date

Cottonwood Oil Co. Inc.
By Richard F. Harless
Signature *Pres.*

STATE OF ARIZONA STATE LAND COMMISSIONER
Organization Report
File one copy

Authorized by Order No. 4-6-59
Effective April 6, 19 59



In the Superior Court

OF

MARICOPA COUNTY, STATE OF ARIZONA

CLIFFORD L. WOLFSWINKEL,

Plaintiff,

vs.

ARNOLD L. KIMMES, et al,

Defendant.

No. C174096

SUBPOENA DUCES TECUM

The State of Arizona Sends Greeting to

JOHN BANNISTER, Director

Arizona State Oil & Gas

3515 N. 7th Avenue

Phoenix, Arizona

YOU ARE COMMANDED, That all and singular business and excuses being laid aside, you appear and attend before our Superior Court of Maricopa County, State of Arizona, at the Court Room of Division No. 11 at the Court House in said County, on the 31st day of March, 19 71, at 1:30 o'clock P.M., then and there to testify in the above-entitled action now pending in said Superior Court, on the part of the plaintiff, and that you bring with you and produce, then and there any and all records in your possession pertaining to the Cottonwood Oil Co., Inc., in particular Cottonwood Oil Co., Inc. Well No. 1 also described as a certain well in Section 20, Township 16 North, Range 4 East of the Gila and Salt River Base and Meridian, Yavapai County, Arizona.

now in your custody, and all deeds, evidences and writings which you have in your custody or power, concerning the premises. And disobedience will be punished as a contempt by the said Court.

Given under my hand and the seal of said Court this 30th day of March



WILSON D. PALMER,
Clerk of Said Superior Court.

Dick Woods
264-9494

By D. PATTERSON
Deputy Clerk.

KNOW ALL MEN BY THESE PRESENTS,

Permit # 96

That we: Cottonwood Oil Company, Inc., Richard E. Harlow and Dix Price

of the Maricopa County of: Maricopa in the State of: Arizona

as Principal, and Fireman's Fund Insurance Company # M-6052443

of California Corporation 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:

560 ft. south of the north line and 560 ft. east of the west line in
(May be used as blanket bond or for single well)

1/4 of Section 20, Township 16 North, Range 4 East (200 Acres)

Maricopa County, Arizona

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 Two Thousand Five Hundred Dollars (\$2,500.00)

Witness our hands and seals, this 13th day of August, 1959
COTTONWOOD OIL COMPANY, INC.

[Signature]
Principal

Witness our hands and seals, this 13th day of August, 1959

Fireman's Fund Insurance Company

by [Signature] Surety

C. G. Sullivan, Attorney-in-Fact.

(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved _____ Date _____ STATE LAND COMMISSIONER

Form P-2 # 96

GENERAL
POWER OF
ATTORNEY

FIREMAN'S FUND INSURANCE COMPANY

KNOW ALL MEN BY THESE PRESENTS: That FIREMAN'S FUND INSURANCE COMPANY, a Corporation duly organized and existing under the laws of the State of California, and having its principal office in the City and County of San Francisco, in said State, has made, constituted and appointed, and does by these presents make, constitute and appoint **C. G. SULLIVAN, LARRY W. CROSS, RALPH A. CASH**

and **JAMES R. DAY**, jointly or severally-

of PHOENIX in the State of ARIZONA, its true and lawful Attorney(s)-in-fact, with full power and authority hereby conferred, to make, execute, seal and deliver, on its behalf, and as its act and deed, ANY AND ALL BONDS, RECOGNIZANCES, CONTRACTS, AGREEMENTS OF INDEMNITY AND OTHER CONDITIONAL OR OBLIGATORY UNDERTAKINGS-

And such bonds or undertakings, when signed, sealed and delivered by **C. G. SULLIVAN, LARRY W. CROSS, RALPH A. CASH** and **JAMES R. DAY**, jointly or severally-

shall bind said Corporation as fully and to the same extent as if the same were signed by the President and Secretary of said Corporation under its corporate seal.

IN WITNESS WHEREOF, FIREMAN'S FUND INSURANCE COMPANY, under and by authority of a certain Instrument of Authority and pursuant to Article VIII, Section 30 and Section 31, of its By-laws (certified copies whereof are hereinafter set forth), has caused these presents to be signed by its Assistant Vice-President, and its corporate seal to be hereunto affixed this 22ND day of OCTOBER, 1963.

[Corporate Seal]

FIREMAN'S FUND INSURANCE COMPANY

By F. J. BUTCHER
F. J. BUTCHER, Assistant Vice-President

STATE OF CALIFORNIA,

CITY AND COUNTY OF SAN FRANCISCO

On this 22ND day of OCTOBER, 1963, before me personally appeared **F. J. BUTCHER**, personally known to me to be Assistant Vice-President of FIREMAN'S FUND INSURANCE COMPANY, the Corporation described in and that executed the within instrument, and also known to me to be the person who executed it on behalf of the Corporation therein named, and he acknowledged to me that such Corporation executed the same; and, being by me duly sworn stated that he is and at the time of the execution of said instrument was the aforementioned officer of said FIREMAN'S FUND INSURANCE COMPANY; that the seal affixed to said instrument is the corporate seal of said Corporation; and that he signed said instrument and caused the said corporate seal to be affixed thereto, pursuant to the authority conferred by a certain Instrument of Authority of said Corporation and Article VIII, Section 30 and Section 31, of the By-laws of said Corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year herein first above written.

[Notarial Seal]

ETHEL L. WATKINS
(ETHEL L. WATKINS) Notary Public
My commission expires March 2, 1967

STATE OF CALIFORNIA,

CITY AND COUNTY OF SAN FRANCISCO

I, WEBSTER JONES, Assistant Secretary of FIREMAN'S FUND INSURANCE COMPANY, do hereby certify that the following is a full, true and correct copy of Article VIII, Section 30 and Section 31, of the By-laws of the FIREMAN'S FUND INSURANCE COMPANY adopted on the 15th day of June, 1963, and now in full force and effect, to wit:

"Article VIII, Appointment and Authority of Resident Assistant Secretaries, and Attorneys-in-Fact and Agents to accept Legal Process and Make Appearances. Section 30. Appointment. The Chairman of the Board of Directors, the President, or Vice President or any other person authorized by the Board of Directors, the Chairman of the Board of Directors, the President or any Vice-President, may, from time to time, appoint Resident Assistant Secretaries and Attorneys-in-Fact to represent and act for and on behalf of the Corporation and Agents to accept legal process and make appearances for and on behalf of the Corporation. Section 31. Authority. The Authority of such Resident Assistant Secretaries, Attorneys-in-Fact, and Agents shall be as prescribed in the instrument evidencing their appointment, and any such appointment and all authority granted thereby may be revoked at any time by the Board of Directors or by any person empowered to make such appointment."

And I do hereby further certify that the following is a full, true and correct copy of an Instrument of Authority executed on the 15th day of June, 1963, pursuant to Article VIII, Section 30 and Section 31, of the By-laws of FIREMAN'S FUND INSURANCE COMPANY, and that said Instrument of Authority is now in full force and effect, to wit:

"INSTRUMENT OF AUTHORITY. KNOW ALL MEN BY THESE PRESENTS: That **F. J. BUTCHER**, Assistant Vice-President of FIREMAN'S FUND INSURANCE COMPANY, is hereby vested with full power and authority to appoint and revoke Resident Assistant Secretaries or Attorneys-in-Fact of this Corporation and Agents to accept legal process and make appearances for and on behalf of this Corporation under and pursuant to Article VIII, Section 30 and Section 31, of the By-laws of this Corporation."

FIREMAN'S FUND INSURANCE COMPANY

By STUART D. MENIST
STUART D. MENIST, Vice-President"

And I do hereby further certify that **STUART D. MENIST**, who executed said Instrument of Authority, is, and at the time of the execution thereof was a Vice-President and duly authorized to so act on behalf of said FIREMAN'S FUND INSURANCE COMPANY, and that **F. J. BUTCHER**, who executed the foregoing Power of Attorney on behalf of said Corporation, is, and at the time of the execution thereof was Assistant Vice-President and duly authorized to so act on behalf of said FIREMAN'S FUND INSURANCE COMPANY.

And I do hereby further certify that the Certification of this Power of Attorney is signed and sealed by facsimile under and by the authority of the following resolution adopted by the Board of Directors of the Fireman's Fund Insurance Company at a meeting duly called and held on the 15th day of March 1963, and that said resolution has not been amended or repealed:

"RESOLVED, that the signature of any Assistant Secretary of this Corporation, and the seal of this Corporation, may be affixed or printed by facsimile to any certificate to a Power of Attorney of this Corporation, and that such printed facsimile signature and seal shall be valid and binding upon this Corporation."

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of FIREMAN'S FUND INSURANCE COMPANY, this 22ND day of OCTOBER, 1963.

[Corporate Seal]

WEBSTER JONES
WEBSTER JONES Assistant Secretary of
FIREMAN'S FUND INSURANCE COMPANY

CERTIFICATE

I, **Winifred H. Browne**, Assistant Secretary of FIREMAN'S FUND INSURANCE COMPANY, a Corporation of the State of California, do hereby certify that the above and foregoing is a full, true and correct copy of the original power of attorney issued by said Corporation and that I have compared same with the original and that it is a correct transcript therefrom and of the whole of the original. Said power of attorney is in full force and effect and has not been revoked.

IN WITNESS WHEREOF, I have hereunto by facsimile set my hand and affixed the seal of said Corporation, at the City and County of San Francisco, this 13 day of August, 1959.



Winifred H. Browne
Assistant Secretary

November 19, 1968

Mr. Richard F. Harless
Suite 1000, Financial Center
Central Avenue at Osborn Road
Phoenix, Arizona 85012

Re: Cottonwood Oil Company State #1
NW NW 20-T16N-R4E
Yavapai County, Arizona
Permit #98

Fireman's Fund Insurance Company Bond #M-6052443

Dear Mr. Harless:

This is to advise you that the captioned bond covering the captioned well may now be released. The requirements of this Commission have been satisfied.

Sincerely,

John Bannister
Executive Secretary

JB:jf

cc: Fireman's Fund Insurance Company
3800 North Central Avenue
Suite 595
Phoenix, Arizona 85013

RICHARD F. HARLESS
ATTORNEY AT LAW
SUITE 1000, FINANCIAL CENTER
CENTRAL AVENUE AT OSBORN ROAD
PHOENIX, ARIZONA 85012

TELEPHONE
264-1831

October 4, 1968

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

Dear Mr. Bannister:

Herewith is a copy of letter directed to Mr. P. T. McGrath of the U.S.G.S.

It is my understanding that you want to be present or have a representative present during the plugging process. Will you contact Mr. Norton direct to determine the time the plugging will start.

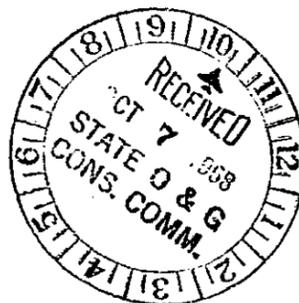
May I assume that the Cottonwood Well located in Section 20, Township 16 North, Range 4 East will ultimately be accepted as a water well?

Sincerely yours,


RICHARD F. HARLESS

RFH/DW

Encl.



TELEPHONE
264-1831

RICHARD F. HARLESS
ATTORNEY AT LAW
SUITE 1000, FINANCIAL CENTER
CENTRAL AVENUE AT OSBORN ROAD
PHOENIX, ARIZONA 85012

July 17, 1968

*Sample #9
8-1255
Geological Sample
100 ft
213 1/2 W. Adams
Cottonwood*

Oil & Gas Conservation Commission
Room 202, 1624 W. Adams
Phoenix, Arizona 85007

Attn: Mr. John Bannister
Executive Secretary

Re: Cottonwood Oil Co. #1 State Well
Permit 96
Fireman's Fund Insurance Co. Bond M6052443

Dear Mr. Bannister:

Following our recent conversation with reference to the above entitled well, I again made diligent efforts to secure all available information pertaining to this well. I submit the following for your consideration.

I discovered an invoice of Halliburton Oil Well and Cementing Company which verified the setting and cementing of the surface casing. I am attaching a copy of it for your information.

I have not been able to locate Mr. Charles Branch, the driller who drilled this well. As I told you we traced him through mutual friends to Alaska and from there we lost trace of him and have not been able to pick up a trail.

It is my information that when Mr. Branch took his rig from the well site that he took with him all drill logs and sample logs. I understand that he was never completely paid for his services and undoubtedly he has destroyed these samples and logs.

The most reliable information that I have is that the well was drilled to approximately 1250 feet and that water was standing high up in the well. I have heretofore submitted a well completion report which was filed on or about February 9, 1967.

Mr. Bannister

Re: Cottonwood Oil Co. #1 State Well

Page -2-

I trust that this information which I have supplied will be sufficient that you can declare this well as a water well and release the bond. If I can be of any further assistance to you please advise.

Sincerely,

Richard F. Harless
RICHARD F. HARLESS

RFH: jr

1 Lodged with the court this
2 17 day of April, 1968.

3 /s/ JOSEPH E. CLIFFORD, III
4 Joseph E. Clifford, III

5
6 Copy of the foregoing mailed
7 this 17 day of April, 1968,
8 to:

9 Richard F. Harless
10 Suite 1000
11 3443 North Central Avenue
12 Phoenix, Arizona 85012

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11 /s/ JOSEPH E. CLIFFORD, III

C 204340

4-22-68
Judge
Charvin,
Box 8,
V. Edlquist,
Deputy Clerk.

RICHARD F. HARLESS

FILED 4-18
DEPT. OF _____

Richard F. Harless

VS

THE OIL AND GAS CONSERVATION
COMMISSION OF ARIZONA, ET AL

APR 22 1968

Joseph E. Clifford, I

Formal written Judgment denying all relief and dissolving
the Restraining Order issued on October 4, 1967 is lodged with
the Court this date.

ATTORNEY GENERAL
STATE OF ARIZONA



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Drawer 1857
Roswell, New Mexico 88201

January 15, 1968

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

Dear Mr. Bannister:

By letters of December 28, 1967, this office called on Richard F. Harless to plug and abandon three wells in sec. 4, T. 17 N., R. 4 E., G.&S.R.M.; one well in sec. 3, T. 17 N., R. 4 E., G.&S.R.M.; and one well in sec. 32, T. 18 N., R. 4 E., G.&S.R.M., all in Yavapai County, Arizona. We advised Mr. Harless that unless the abandonment work were done promptly we would call on the sureties on the lease bonds for the wells in secs. 3 and 4 to do the abandonment work. The well in sec. 32 was drilled without our approval and no lease bond was filed.

As of this date Mr. Harless has not commenced any of the abandonment work. If such work has not been commenced by February 1, 1968, we plan to call on the sureties on the lease bonds to abandon the wells.

The Bureau of Land Management in Phoenix, Arizona, has informally advised us that Mr. Harless has filed an application for an oil and gas lease on sec. 4, T. 17 N., R. 3 E. The lease will not be issued unless (1) the three wells in sec. 4 are properly plugged and abandoned, or (2) a \$10,000 surety bond with retroactive provisions covering the abandonment of the three wells is furnished by Mr. Harless.

There is some question as to whether the three wells in sec. 4 can be properly plugged and abandoned with the \$5,000 provided by the Federal lessee's bond. Perhaps we can cooperate in getting the work done under the Federal lessee's bond and the \$2,500 drilling bonds required by the Arizona Oil and Gas Conservation Commission. We shall keep you advised of our actions in this matter.

Sincerely yours,

JOHN A. ANDERSON
Regional Oil and Gas Supervisor



BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF ARIZONA

IN THE MATTER OF THE HEARING CALLED
BY THE OIL AND GAS CONSERVATION
COMMISSION OF THE STATE OF ARIZONA
ON ITS OWN MOTION FOR THE PURPOSE
OF CONSIDERING:

CASE NO. 21
ORDER NO. 22

WHY THE COTTONWOOD OIL CO. INC. #1
STATE WELL, THE RICHARD F. HARLESS
#1 FEDERAL WELL, THE YAVAPAI OIL
CORP. #18 ALSBURY FEDERAL WELL, THE
RICHARD F. HARLESS #27B FEDERAL
WELL, AND THE RICHARD F. HARLESS
#36C WELL, SHOULD NOT BE ORDERED
PLUGGED FOR VIOLATION OF THE DULY
ADOPTED RULES AND REGULATIONS OF
THE OIL AND GAS CONSERVATION COM-
MISSION.

ORDER OF THE COMMISSION

BY THE COMMISSION

This cause having come regularly on for hearing at 11:00 a.m.
on July 19, 1967, at Phoenix, Arizona, before the OIL AND GAS CON-
SERVATION COMMISSION of the STATE OF ARIZONA, hereinafter referred
to as the "COMMISSION".

Now, on this 19th day of July, 1967, the COMMISSION, a
quorum being present, having considered the testimony presented, and
being fully advised in the premises, finds as follows,

FINDINGS:

(1) THAT due public notice having been given as required
by law, the COMMISSION has jurisdiction of the cause and the subject
matter thereof.

Page 2
Case No. 21
Order No. 22

(2) THAT as to each of the wells subject hereto the operator of record is in violation of Rule 202.B of the duly adopted Rules and Regulations of the COMMISSION.

(3) THAT it is in the best interests of the State of Arizona and of the health and welfare of the people of the State of Arizona that said wells be plugged and abandoned or converted to a water well as indicated in the order below, and that the permits for each well as issued by this COMMISSION should be terminated.

(4) THAT upon full and timely compliance with the provisions of this order and all other obligations to this COMMISSION the various bonds may be released in accordance with provisions of Rule 101.E.

(5) THAT the operator of each of the captioned wells be given sixty (60) days from receipt of this notice within which to bring himself into compliance with this order and all other Rules and Regulations.

(6) THAT the plea of Richard F. Harless as an individual, as President of Yavapai Oil Corp., and as President of Cottonwood Oil Company, Inc., is without merit and fails to excuse the violations of Rule 202.B.

IT IS THEREFORE ORDERED.

(a) THAT the request of Richard F. Harless as an individual, as President of Yavapai Oil Corp., and as President of Cottonwood Oil Company, Inc., for additional time in which to commence work on these wells is hereby denied.

Page 3
Case No. 21
Order No. 22

(b) THAT the Cottonwood Oil Co. Inc. #1 State well, located NW/4 NW/4 Section 20-Township 16 North-Range 4 East, Yavapai County, Arizona, Permit 96, has been accepted by Mr. Frank Gyberg, Cornville, Arizona, as a water well. This well need not be plugged.

All samples and a copy of any logs which may have been run together with a copy of the driller's log, shall be furnished to the COMMISSION within the time herein allowed.

Permit 96 is hereby terminated. Fireman's Fund Insurance Company bond M605 2443 in the amount of \$2,500.00 may be released upon the full and timely compliance with this order and the Rules and Regulations of this Commission and upon written application as provided in Rule 101.E.

(c) THAT the Richard F. Harless #1 Federal well, located SW/4 NW/4 Section 4-Township 17 North-Range 4 East, Yavapai County, Arizona, Permit 169, shall be plugged and abandoned in the following manner:

Cement plugs shall be set at the following intervals:
from total depth to 1700 feet;
from 1250 feet to 1200 feet;
from 750 feet to 700 feet;
from 550 feet to 500 feet;
from 250 feet to 200 feet;
from 15 feet to surface.

The intervals between the plugs shall be filled with heavy mud-laden fluid. A surface marker shall be set in accordance with Rule 104.A and Rule 202.A.7. Well site shall be leveled, the pit back filled, and all debris removed.

Page 4
Case No. 21
Order No. 22

Plugging Record (Form 10) and Well Completion Report (Form 4), as well as all samples and a copy of all logs which may have been run, together with a copy of the driller's log, shall be furnished to the COMMISSION within the time herein allowed.

Permit 169 is hereby terminated. Hartford Accident & Indemnity Company bond 3186294 in the amount of \$2,500.00 may be released upon the full and timely compliance with this order and the Rules and Regulations of this COMMISSION and upon written application as provided in Rule 101.E.

(d) That the Yavapai Oil Corp. #18 Alsbury Federal well, located NE/4 SW/4 Section 32-Township 18 North-Range 4 East, Yavapai County, Arizona, Permit 257, shall be plugged and abandoned in the following Manner: the entire hole from total depth to surface shall be set with cement. A surface marker shall be set in accordance with Rule 104.A and Rule 202.A.7. Well site shall be leveled, the pit back filled and all debris removed.

Plugging Record (Form 10) and Well Completion Report (Form 4), as well as all samples and a copy of all logs which may have been run, together with a copy of the driller's log, shall be furnished to the COMMISSION within the time herein allowed.

Permit 257 is hereby terminated. U.S. Fidelity & Guaranty Company bond 22757-13-1651-63 in the amount of \$2,500.00 may be released upon the full and timely compliance with this order and the Rules and Regulations of this COMMISSION and upon written application as provided in Rule 101.E.

Page 5
Case No. 21
Order No. 22

(e) THAT the Richard F. Harless #27B Federal well, located NW/4 NW/4 Section 4-Township 17 North-Range 4East, Yavapai County, Arizona, Permit 278, shall be plugged in the following manner:

cement plugs shall be set at the following intervals:
from total depth to 1700 feet;
from 1250 feet to 1200 feet;
from 750 feet to 700 feet;
from 550 feet to 500 feet;
from 250 feet to 200 feet;
from 15 feet to surface.

The intervals between the plugs shall be filled with heavy mud-laden fluid. A surface marker shall be set in accordance with Rule 104.A and Rule 202.A.7. Well site shall be leveled, the pit back filled, and all debris removed.

Plugging Record (Form 10) and Well Completion Report (Form 4), as well as all samples and a copy of all logs which may have been run, together with a copy of the driller's log, shall be furnished to the COMMISSION within the time herein allowed.

Permit 278 is hereby terminated. U.S. Fidelity & Guaranty Company bond 22757-13-703-64 in the amount of \$2,500.00 may be released upon the full and timely compliance with this order and the Rules and Regulations of this COMMISSION and upon written application as provided in Rule 101.E.

(f) THAT the Richard F. Harless #36C Federal well, located NE/4 NE/4 Section 3-Township 17 North-Range 4 East, Yavapai County,

Page 6
Case No. 21
Order No. 22

Arizona, Permit 285, shall be plugged in the following manner: the entire hole from total depth to surface shall be filled with cement. A surface marker shall be set in accordance with Rule 104.A and Rule 202.A.7. Well site shall be leveled, the pit back filled, and all debris removed.

Plugging Record (Form 10) and Well Completion Report (Form 4), as well as all samples and a copy of all logs which may have been run, together with a copy of the driller's log, shall be furnished to the COMMISSION within the time herein allowed.

Permit 285 is hereby terminated. U.S. Fidelity & Guaranty Company bond 22757-13-963-64 in the amount of \$2,500.00 may be released upon the full and timely compliance with this order and the Rules and Regulations of this COMMISSION and upon written application as provided in Rule 101.E.

(g) THAT prior to commencing plugging operations notice shall be given to the COMMISSION in ample time to enable the COMMISSION to have a representative present to witness these operations.

IT IS FURTHER ORDERED:

THAT full compliance with the conditions of this order and all other applicable Rules and Regulations of the COMMISSION shall be made within sixty (60) days of receipt of this order.

DONE at Phoenix, Arizona, on the day and year hereinabove designated.

OIL AND GAS CONSERVATION COMMISSION
STATE OF ARIZONA

(S E A L)

(Original signed)
By _____
Lucien B. Owens, Vice Chairman

DEPARTMENT OF LAW
OFFICE OF THE
Attorney General
STATE CAPITOL
Phoenix, Arizona 85007

DARRELL F. SMITH
THE ATTORNEY GENERAL
WILLIAM E. EUBANK
CHIEF ASSISTANT ATTORNEY GENERAL

June 7, 1967

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

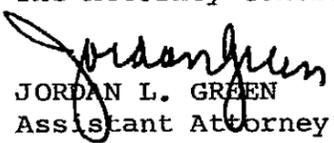
Dear Mr. Bannister:

Reference is made to your letter of May 9, 1967, relative to Fireman's Fund Bond M6052443, Cottonwood Oil Co. #1 State well. You are hereby advised to indicate by letter to Fireman's Fund that there has not been a full compliance with the rules and regulations of the Oil and Gas Conservation Commission and particularly with those rules and regulations which you feel have not been complied with.

If there is anything in your files which are presently in our possession which you require to answer this letter, they are always available to you.

Sincerely,

DARRELL F. SMITH
The Attorney General


JORDAN L. GREEN
Assistant Attorney General

JLG:bb



May 9, 1967

Attorney General
159 The Capitol
Phoenix, Arizona 85007

Attention: Mr. Jordan Green, Assistant Attorney General

Re: Cottonwood Oil Co. #1 State well
NW NW 29-16N-4E, Yavapai County, Arizona
Permit 96

Fireman's Fund Bond M6052443

Dear Sir:

Attached hereto is letter dated May 5, 1967 from Fireman's Fund concerning captioned well and bond. As you are aware, File 96 covering this well is in your possession. Would you please confirm that the Water Well Acceptance form mentioned in Fireman's letter is in the file.

However, even though this is the case, this bond is not subject to release, inasmuch as the information as called for in our Rules and Regulations in the drilling of this well has not been furnished to this Commission; and it is our feeling that until such time as this well is brought into full compliance with our Rules and Regulations that this bond should not be released. Form 4, attached, together with the log, should be submitted to this office.

Will you please furnish this office with a copy of your reply to Fireman's Fund.

Very truly yours,

John Bannister
Executive Secretary
mr
enc

cc: Fireman's Fund, 505 Del Webb Bldg., 3800 N. Central,
Phoenix, Arizona 85013

Condy C. Meehan: RESIDENT VICE PRESIDENT



PHOENIX BRANCH OFFICE: 3800 NORTH CENTRAL AVENUE, SUITE 505 • PHOENIX, ARIZONA 85013
PHONE: 264-5621

May 5, 1967

State of Arizona
Office of Oil and Gas
Conservation Comm.
Room 202
1624 W. Adams
Phoenix, Arizona 85007

Attention: Mr. John Bannister
Executive Secretary

Re: Cottonwood Oil Co. #1 State well
NW NW 20-16N-R4E, Yavapai County, Arizona
Permit 96
Bond No: M6052443

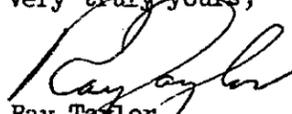
Gentlemen:

On April 27th, I talked with Mr. Richard F. Harless, President of Cottonwood Oil Co., who assured me that the "cattlemen" had accepted the well which had been previously declared as a water well by your department.

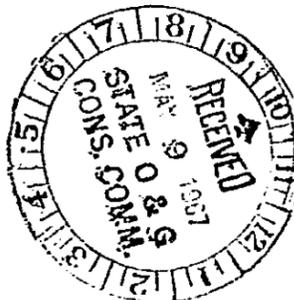
Mr. Harless advised that due to this fact we should be released under our bond M6052443. We would appreciate your advising as to the release of the bond and if this is not the case, please advise as to what necessary steps must be taken to secure a release.

Thank you for your assistance and cooperation.

Very truly yours,


Ray Taylor
Claims Representative

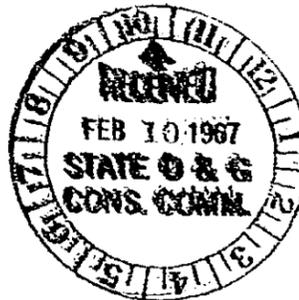
RT/cab



TELEPHONE
264-1831

RICHARD F. HARLESS
ATTORNEY AT LAW
SUITE 1000, FINANCIAL CENTER
CENTRAL AVENUE AT OSBORN ROAD
PHOENIX, ARIZONA 85012

February 9, 1967



Oil & Gas Conservation Commission
Room 202, 1624 W. Adams
Phoenix, Arizona 85007

Attn: Mr. John Bannister
Executive Secretary

Re: Cottonwood Oil Co. #1 State Well
Permit 96
Firemans Fund Insurance Co. Bond M6052443

Dear Mr. Bannister:

Since receiving your letter of January 31st I have been searching for information concerning the above entitled well. This well was drilled under contract by one Charles W. Branch, Jr. When he left the site he took all records with him which pertained to this well. I have not yet been able to locate him, therefore I am sending to you the information which I have in my possession at this time.

Enclosed is an invoice for the cementing of the well head casing which shows that the well was cemented to 201 feet. ~~I am also enclosing a copy of a report of Donald P. McCarthy,~~ a Geologist, who was retained by Cottonwood Oil Company to make a geological report of the area and the well. You will note on page 10 of this report under Water Resources he summarizes to 1220 feet, as I recall there was very little drilling in this well after this report was made. I believe the total dept of the well would not exceed 1250 feet. I am also enclosing your form for Well Completion which I have filled in according to the information I have available.

I trust that this will be satisfactory so that you can declare this well a water well.

Very truly yours,


RICHARD F. HARLESS
Attorney at Law

RFH:jt
cc: Mr. Larry E. Mills

CERTIFIED MAIL
No. 231533

January 31, 1967

Cottonwood Oil Co. Inc.
1000 Financial Center
3443 N. Central
Phoenix, Arizona 85012

Attention: Mr. Richard F. Harless

Re: Cottonwood Oil Co. #1 State well
NW NW 20-16N-R4E, Yavapai County, Arizona
Permit 96

Firemans Fund Insurance Co. Bond M6052443

Gentlemen:

Mr. Frank Gyberg has now furnished to this Commission satisfactory evidence of his acceptance of captioned well for a water well.

However, before our files on this well are considered complete and may be closed, and before Firemans Fund Insurance Company Bond M6052443 may be released, we must have furnished to this Commission Well Completion Report together with a copy of any logs which may have been run, and the set of samples. Should any of these not be available for any reason, a copy of the driller's log should be furnished with the Well Completion Report.

Should this file not be properly completed prior to the scheduled hearing on February 15, 1967 concerning the plugging of this well, the Commission at that time will consider such action as may be deemed necessary.

If we may be of any help to you on this matter, please advise.

Very truly yours,

John Bannister
Executive Secretary
mr
enc: Well Completion Report forms

CC: Firemans Fund Insurance Co., 3800 N. Central, Phoenix, Ariz.

FRANK A. GYBERG
ZA Ranch
Cornville, Arizona
Jan. 27. 1967

John Bannister, Exec. Sec.
Oil & Gas Cons. Commission
Phoenix, Ariz.

Dear Mr. Bannister

I am indeed sorry this form somehow became immersed with some other papers- hence all the delay- I am thankful for the "nudge" from your office -to the effect "it had not been sent in-" I am having it duly notarized this day-and sent forward- Thank you again for the reminder.

Sincerely,

Frank Gyberg



December 27, 1966

Mr. Frank Gyberg
Cornville, Arizona

Re: Cottonwood Oil #1 State well
NW NW 20-16N-4E, Yavapai County, Arizona
Permit 96

Dear Mr. Gyberg:

We are in receipt of your letter of December 21, 1966 wherein you express your desire to take over the captioned well as a water well.

Please be advised that in order to do this the enclosed form of this Commission must be signed by you and must be notarized. This is necessary in order that the ultimate plugging of the well in an acceptable manner may be assured and to insure compliance with the State Water Code.

For your convenience, we have filled out this form. All that will be required is your signature and notarization.

Should you have any questions, please contact this office.

Very truly yours,

John Bannister
Executive Secretary
mr
enc

cc: Mr. Richard F. Harless
1000 Financial Center
3443 N. Central
Phoenix, Arizona 85012

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

This is to advise you that I accept the abandoned wildcat well, known as the Cottonwood Oil #1 State

located on the NW NW $\frac{1}{4}$ - $\frac{1}{4}$ of Section 20 Township 16N
Range 4E, County of Yavapai, Arizona, as
a water well to be used for domestic purposes.

Further, I accept full responsibility for the proper maintenance and use of the above well, including final plugging, in full compliance with the Rules and Regulations adopted by the Oil and Gas Conservation Commission.

I understand that I am responsible for compliance with the provisions of the State Water Code, Chapter 1, Title 45, Arizona Revised Statutes and with any applicable requirements of U.S. Geological Survey.

Signature Frank Gyberg
Street _____
City and State Cornville, Arizona

STATE OF _____

COUNTY OF _____

On this, the _____ day of _____, 19____, before me,
_____, the undersigned officer, per-

sonally appeared _____, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument and acknowledged that _____ executed the same for the purpose therein contained.

In witness whereof I hereunto set my hand and official seal.

Notary Public _____

My Commission expires _____

Permit No. 96

State of Arizona
Oil & Gas Conservation Commission
WATER WELL ACCEPTANCE
Form 26 - File one copy

December 21, 1966

Oil and Gas Conservation Commission
State Capitol Annex, Room 202
1624 West Adams
Phoenix, Arizona

Attn: Mr. John Bannister
Executive Secretary

Re: Cottonwood No. 1 Well

Dear Mr. Bannister:

I am the lessee of the grazing area which comprises Section 20, Township 16 North, Range 4 East, G&SRB&M, Yavapai County, Arizona. I hereby accept the well which was drilled in the Northwest Quarter of said Section 20 as a water well.

Very truly yours,

Frank Gyberg
FRANK GYBERG
Cornville, Arizona



September 26, 1966

Telcon Mr. Bannister from Okla. City

Memo to: File 96
169
278
257
285

I personally inspected each of the five well sites involved in our orders to Mr. Harless and found that no attempt had been made to comply with the orders of this Commission.

The only rig on site was the Walker-Neer rig on the #247B Federal. The excessive rust noted on the equipment and on the wire line indicated that this rig had been sitting idle for quite some period of time.

In my opinion there has definitely been no work on any of the wells within the period required by our Rule 102.B.

Threemans fund

will convert to
water well

or



SAMUEL P. GODDARD
GOVERNOR
LYNN LOCKHART
CHAIRMAN
ORME LEWIS
VICE CHAIRMAN
HIRAM S. CORBETT
MEMBER
LUCIEN B. OWENS
MEMBER
GEORGE T. SILER
MEMBER

Office of
Oil and Gas Conservation Commission

STATE OF ARIZONA

ROOM 202
1624 WEST ADAMS

Phoenix, Arizona 85007

PHONE: 271-5161

JOHN BANNISTER
EXECUTIVE SECRETARY
J. R. SCURLOCK
PETROLEUM GEOLOGIST

CERTIFIED MAIL
No. **Delivered 9-26-66*
Receipts in File 278

September 24, 1966

U.S. Fidelity and Guaranty Co.
3424 N. Central Avenue
Phoenix, Arizona
** No. 231520*

Firemans Fund Insurance Co.
3800 N. Central Avenue
Phoenix, Arizona 85012
** 231519*

Hartford Accident and Indemnity Co.
P.O. Box 2945
Phoenix, Arizona 85002
** No. 231518*

Re: Yavapai Oil Corp. #18 Alsbury Federal well
NE SW 32-18N-4E, Yavapai County, Arizona, Permit 257
U.S. Fidelity & Guaranty Co. Bond 22757-13-1651-63

Harless #27B well
NW NW 4-17N-4E, Yavapai County, Arizona, Permit 278
U.S. Fidelity & Guaranty Co. Bond 22757-13-703-64

Harless #36C Federal well
NE NE 3-17N-4E, Yavapai County, Arizona, Permit 285
U.S. Fidelity & Guraranty Co. Bond 22757-13-963-64

Cottonwood Oil Co. #1 State well
NW NW 20-16N-4E, Yavapai County, Arizona, Permit 96
Fireman's Fund Insurance Company Bond M6052443

Harless #1 Federal well
SW NW 4-17N-4E, Yavapai County, Arizona, Permit 169
Hartford Accident & Indemnity Co. Bond 3186294

Gentlemen:

The principals on your captioned bonds have failed to comply with this Commission's order sent by letter on August 17, 1966. Copy is attached for your files.

Inasmuch as principals have failed to comply, you are hereby ordered to plug the captioned wells under your bonds. The plugging

U.S. Fidelity & Guaranty Co.
Firemans Fund Insurance Co.
Hartford Accident & Indemnity Co.
September 24, 1966
Page 2

of each of the wells involved is set out in detail on the attached letters.

The plugging of these wells must be accomplished within thirty days of receipt of this letter by you. Should this order be ignored, we of course have no alternative but to turn to the Attorney General for further action.

Inasmuch as these wells are located within close proximity of each other, it is suggested that in order to conserve costs a joint effort of the bonding companies be made and the cost perhaps prorated. If this method of compliance is used, one plugging team could accomplish the whole project at a greatly reduced cost.

Please be assured of the cooperation of this Commission in any way possible.

Very truly yours,

John Bannister
Executive Secretary
nr
encl

cc: Mr. Richard F. Harless, 1000 Financial Center, Phoenix, Arizona
Cottonwood Oil Co., Attention: Mr. Richard F. Harless
Yavapai Oil Corp., Attention: Mr. Richard F. Harless

No. 231517

Attorney General, Attention: Mr. John McGowan

U.S. Geological Survey, P.O. Box 959, Farmington, New Mexico

State Land Department

bcc: Dennis DeConcini, Governor's Office

September 22, 1966

Mr. Richard F. Harless
Attorney at Law
1600 Financial Center
3424 N. Central Avenue
Phoenix, Arizona 85012

Re: Cottonwood Oil #1 State
NW NW 20-16N-4E, Yavapai County
Permit 96

Harless #1 Federal
NW NW 4-17N-4E, Yavapai County
Permit 169

Yavapai Oil Corp. #18 Alsbury Federal well
NE SW 32-18N-4E, Yavapai County, Arizona
Permit 257

Harless #27B well
NW NW 4-17N-4E, Yavapai County,
Permit 278

Harless #36C Federal well
NE NE 3-17N-4E, Yavapai County
Permit 285

Dear Mr. Harless:

Your letter of September 21, 1966 concerning this Commission's plugging orders for captioned wells is hereby acknowledged.

As you were advised, on Monday September 19, 1966, this Commission met at its regular meeting on September 21, 1966. You failed to appear before this Commission at that time. Consequently I remain under their specific orders to proceed with the plugging of these wells and I will fulfill their orders.

Mr. Richard F. Harless
September 22, 1966
Page 2

As you were advised, should these orders not be timely complied with, I will have no alternative but to immediately request that the bonding companies bring these wells into compliance with our Rules and Regulations and orders.

Should you have any questions, would you please advise.

Very truly yours,

John Bannister
Executive Secretary
NR

cc: Attorney General, Attention: Mr. John McGowan
U.S. Geological Survey, P.O. Box 959, Farmington, N.M.
State Land Department
U.S. Fidelity & Guaranty Co., 3426 N. Central Avenue, Phoenix
Fireman's Fund Insurance Co., 3800 N. Central Ave., Phoenix
Hartford Accident & Indemnity Co. P.O. Box 2945, Phoenix

bcc: Dennis Deconcini, Governor's Office

RICHARD F. HARLESS
ATTORNEY AT LAW
SUITE 1000, FINANCIAL CENTER
CENTRAL AVENUE AT OSBORN ROAD
PHOENIX, ARIZONA 85012

TELEPHONE
264-1831

September 21, 1966

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

Attn: Mr. John Bannister
Executive Secretary

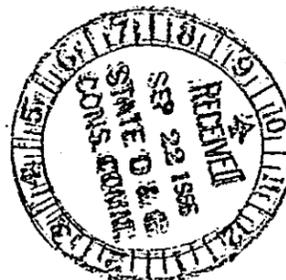
Re: Harless #1 Federal Well
NW NW 4-17N-4E Yavapai County
Permit 169

Cottonwood Oil #1 State
NWNW 20-16N-4E, Yavapai County
Permit 96

Yavapai Oil Corp. #18 Alsbury Well
NE SW 32-18N-4E, Yavapai County
Permit 257

Harless #27B Federal Well
NW NW 4-17N-4E, Yavapai County
Permit 278

Harless #36C Federal Well
NE NE 3-17N-4E, Yavapai County
Permit 285



Dear Mr. Bannister:

This is in response to your letters dated August 17, 1966 pertaining to the above entitled matters. Although I am the designated operator and am on the bonds for these particular wells, in each instance other parties have an interest, and I deemed it advisable to confer with all interested parties before taking final action pursuant to your order to have each well plugged and abandoned. I find that the other interested parties are making requests to have a hearing before the commission with reference to all of these items. Therefore, I

Oil and Gas Conservation Commission
September 21, 1966
Page 2

must give consideration to the desires and wishes of these interested parties and await the outcome of the hearing before taking final steps in these matters.

I understand you will receive within the next two days requests for hearings from various interested parties. Please advise me of the date of the hearings.

Very truly yours


RICHARD F. HARLESS
Attorney at Law

(See ARS 27-516(b) As amended
and ARS 27-517)

RFH:jt

cc: Hartford Accident & Indemnity Co.
Fireman's Fund Insurance Company
U.S. Fidelity and Guaranty Company
U.S. Geological Survey
Attn: Mr. Phil McGrath

September 21, 1966

Memo to: File 96
169
278
257
285

This office received information that it was the intention of Mr. Harless to appear at our regular monthly meeting today to request a hearing as to the plugging orders.

Mr. Harless did not appear, nor are we able to determine that any steps have been taken by him to comply with our orders.

John Bannister
Executive Secretary
nr

September 19, 1966

Memo to: File 96
169
278
257
285

From: John Bannister, Executive Secretary

At approximately 10:30 a.m. this date, Mr. Richard F. Harless called in person at this office.

He requested additional time, advising that he desired to raise money to do further work on, or to twin, the Harless #1 (aka Harless #9) well. A part of this request was a stay concerning our plugging orders.

He was advised that no extension could be granted and that full compliance with the plugging orders must be accomplished by midnight, Friday, September 23, or that it then would be necessary to go to the bonding companies.

Mr. Harless was informed that this office could expect to receive copies of all logs run, as well as samples, to bring these wells into full compliance with all applicable statutes, Rules and Regulations.

Mr. Harless discussed at length his situation with Mr. Silas M. Newton and advised that he had severed relations with him approximately one year ago. However, due to certain contracts, Mr. Newton was still very much involved and that it was hoped that through the instrumentality of Mr. Ed Garrison, the lessee of record, that the lease containing the Harless #1 (aka Harless #9), the Harless #27 and #27B, that Mr. Newton might be removed from participation in this venture.

This office made it exceedingly clear to Mr. Harless that under no circumstance would the plugging orders be revoked; and it was further explained that correct administrative procedures were being used as to these orders and that a hearing to enforce was not called for under our Rules and Regulations or statutes.

Mr. Harless advised that he would move immediately to bring himself into compliance with our plugging orders.

POST OFFICE DEPARTMENT
OFFICIAL BUSINESS

896

PENALTY FOR PRIVATE USE OR VOID
PAYMENT OF POSTAGE



INSTRUCTIONS: Fill in items below and complete instructions on other side, if applicable. Moisten gummed ends, attach and hold firmly to back of article. Print on front of article RETURN RECEIPT REQUESTED.

RETURN TO

REGISTERED NO.

NAME OF SENDER

CERTIFIED NO.

23/510

STREET AND NO. OR P. O. BOX

OIL & GAS CONSERVATION COMMISSION

STATE OF ARIZONA

1624 WEST ADAMS - SUITE 202

TELEPHONE: 271-5161

INSURED NO.

CITY, STATE, AND ZIP CODE

PHOENIX, ARIZONA, 85007

POB Form 3811 Sep. 1963

INSTRUCTIONS TO DELIVERING EMPLOYEE
 Deliver *ONLY* to addressee Show address where delivered
(Additional charges required for these services)

RECEIPT
Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE (must always be filled in)
Cottonwood Oil (Haulers)

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY
J. Thendgill

DATE DELIVERED SHOW WHERE DELIVERED (only if requested)

CERTIFIED MAIL
No. 231510

August 17, 1966

Cottonwood Oil Company
1000 Financial Center
3443 North Central Avenue
Phoenix, Arizona 85012

Attention: Mr. Richard F. Harless, Attorney at Law

Re: Cottonwood Oil #1 State
NW NW 20-16N-4E, Yavapai County, Arizona
Permit 96

Gentlemen:

Captioned well is in violation of Rule 202.B of this Commission's Rules and Regulations. Consequently this well is ordered plugged and abandoned.

This well must be plugged and abandoned in the following manner:

The entire hole from total depth to surface shall be filled with cement. The exact location of the well shall be marked by a piece of pipe not less than 4 inches in diameter securely set in the concrete and extending at least 4 feet above the general ground level. A permanent sign of durable construction shall be welded or otherwise permanently attached to the pipe and shall contain the following information: (1) The name of the well; (2) Location of the well by quarter-quarter section, township and range; (3) The State's drilling permit number.

This work must be completed within 30 days of receipt of this order of the Commission. Should this work not timely be completed we will have no choice but to go to the bonding company and order it to plug this well.

In addition, at the time the plugging is accomplished, copies of all logs taken, the driller's log, the Plugging Record (Form 10), and Well Completion Report (Form 4) shall be submitted to the Commission.

Cottonwood Oil Company
August 17, 1966
Page 2

Should you have any questions concerning this order, please advise.

Very truly yours,

John Bannister
Executive Secretary

MF

enc: Form 10
Form 4

cc: Mr. Robert Achata
Fireman's Fund Insurance Company
505 Del Webb Building
3800 N. Central
Phoenix, Arizona 85012

Mr. Silas Newton
Sedona, Arizona

bcc: Mr. Dennis DeConcini, Governor's Office

May 18, 1966

Memo to Files: Cottonwood Oil #1 State
NW NW 20-16N-4E, Yavapai County
Permit 96

Harless #1 Federal
NW NW 4-17N-4E, Yavapai County
Permit 169

Yavapai Oil #18 Alsbury
NE SW 32-18N-4E, Yavapai County
Permit 257

Harless #27 Federal
NW NW 4-17N-4E - Yavapai County
Permit 267

Harless #27B Federal
NW NW 4-17N-4E, Yavapai County
Permit 278

Harless #36C Federal
NE NE 3-17N-4E, Yavapai County
Permit 285

On-site check reveals this area has no work in progress at this time.

The rig is still located on the #27B but has not been in use for some time. I was unable to locate either Mr. Silas Newton or Mr. Ozzie Young to determine what plans are in effect concerning this area.

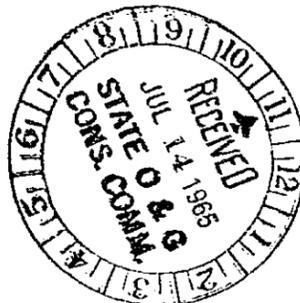
John Bannister
Executive Secretary
nr

96, 169, 257, 267, 285

RICHARD F. HARLESS
ATTORNEY AT LAW
1218 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85004
258-8558

July 13, 1965

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



Attn: Mr. John Bannister
Executive Secretary

Dear Mr. Bannister:

In our discussions and your letters you have requested information with reference to the time of completion of certain wells now under the control of Yavapai Oil Corporation. Following is such information.

- # 96 1. Cottonwood No. 1, located on the NW $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 20, T16N, R4E, G&SRB&M, Yavapai County, Arizona. *Permit 96*

No drilling has been done on this well since 1960. A steel plate is welded on top of the well so no one can enter it. It is our intention to re-enter this well and complete it. Recently I talked with one of the Sutcliffe brothers, who has a reversionary right in the lease and informed him that it is our intention to re-enter the well within the next two or three months. I would like to have up to and including November 1, 1965 to carry out this intention.

- # 169 2. Harless No. 1, (aka Harless No. 9), located on the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 4, T17N, R4E, G&SRB&M, Yavapai County, Arizona. *Permit 169*

There has been a discovery in this well. A tool stuck in the well has prevented us from producing the well. We have arranged for equipment to come into the area within the next sixty days which we feel will be adequate to reactivate this well. I shall keep you advised.

- # 267 3. Harless No. 27, located on the NW $\frac{1}{4}$ Sec. 4, T17N, R4E, G&SRB&M, Yavapai County, Arizona.

We have declared this well to be a water well and shall proceed to get clearance to accept this well from the Forest Service.

- # 285 4. Well No. 36C, NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 3, T17N, R4E, G&SRB&M, Yavapai County, Arizona.

As explained in my letter to you dated July 9, 1965, the lease on this well has been terminated. However, negotiations are now

Mr. John Bannister
July 13, 1965
Page 2

under way for the reacquisition of the area and we hope to reactivate this well on or before November 1, 1965.

#257 5. Alsbury Well, located on Sec. 32, T18N, R4E, G&SRB&M, Yavapai County, Arizona.

As I have explained to you in my letter of July 9th, unless Mr. Alsbury supplies an independent bond and makes plans for the activation of this well within the next sixty days we will apply to plug and abandon this well.

In spite of delays in our plans it now appears that something productive will be done within the next two or three months in further exploration on these wells, and I trust you will be patient awhile longer as we undertake this new program with the backing of substantial independent interests.

I shall report to you on matters from time to time and keep you informed.

Sincerely,

RICHARD F. HARLESS
Attorney at Law

RFH:jt

RICHARD F. HARLESS
ATTORNEY AT LAW
1218 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85004
253-8558

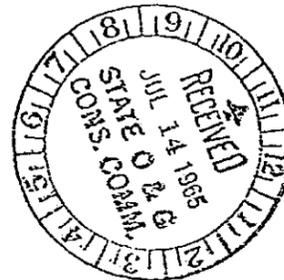
File (96) 169, 257, 267,
278, 285

July 9, 1965

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

Attn: Mr. John Bannister
Executive Secretary

Re: Permits No. 285, 267, 257, 278,
169 and 96



Dear Mr. Bannister:

In response to your letters of June 3rd and 6th, 1965, following is a report concerning the bonds and applicable power of attorney concerning each of the above permits.

- ✓1. Permit No. 278, Well No. 27B, U.S. Fidelity & Guaranty Company Bond No. 22757-13-703-64.
- ✓2. Permit No. 285, Well No. 36-C, U.S. Fidelity & Guaranty Company Bond No. 22757-13-963-64.
- ✓3. Permit No. 267, Well No. 27, U.S. Fidelity & Guaranty Company Bond No. 22757-13-347-64. (Erroneously called Hartford Accident & Indemnity Bond). (Your letters of June 3 and 6, 1965).

Copies of the above listed bonds along with the Power-of-Attorney of Mr. Durand Eaton who executed the bonds enclosed.

- ✓4. Permit No. 257, Alsbury, U.S. Fidelity & Guaranty Company Bond No. 22757-13-1651-63.

Attached is a copy of this bond. Mr. Eaton's Power-of-Attorney is also applicable to this bond. You will recall that I advised you that after the filing of this bond Mr. Alsbury had this lease transferred to his name and did not file an operating agreement. I requested that he issue the bonds in his name. He did file with the US Bureau of Land Management a \$10,000 bond, and advised me that he would file a bond with you in the amount of \$2,500. I have made numerous requests to

Mr. John Bannister
July 9, 1965
Page 2

Mr. Alsbury and his bonding company to file with you such a bond. Today I have again requested that this bond be filed in order to relieve my bond, and have advised Mr. Alsbury that unless this is done on or before September 1, 1965 I will apply to plug and abandon this well.

5. Permit No. 169, Harless Federal No. 1, Hartford Accident and Indemnity Company Bond No. N 3186294.
6. Permit No. 96, Cottonwood No. 1, Fireman's Fund Bond No. M-6052443.

Copies of the above listed bonds along with the Power-of-Attorney of the appropriate agent executing the bonds enclosed.

With reference to your letter of May 27th, wherein you requested information on several items, the following is supplied.

Permit No. 267, Harless No. 27. Application was made to convert this well into a water well which would release the bond in this instance. My records show that I forwarded to you a letter from the Forest Service giving permission to convert this well. However, I am informed that you do not have such a letter, therefore I have again made a request of the Forest Service for a permit to hold this well as a water well. Enclosed is a copy of a letter dated May 8, 1964, which states in substance that a well drilled for oil and gas may be converted to a water well when there is a shortage of water. There is a need for water in this area and inasmuch as the subject well has ample water it should not be plugged. As soon as the Forest Service accepts this well I will forward a copy of their acceptance to you. You will recall that Mr. Cecil Miller did file a letter of acceptance of the well, but in my letter of May 14, 1964, I requested that you hold Mr. Miller in abeyance because of his failure to also file a letter allowing me to re-enter the well at a later date to deepen the same.

Permit No. 285, Well No. 36C. Although this lease has been terminated since the subject well was started, I have negotiated with the party who acquired Section 3, T17N, R4E, G&SRB&M, which is the area involved, terms have been worked out and I am confident that the area will be acquired within thirty days. I will advise you of the progress on this matter on or before August 14, 1965. Upon the reacquisition of this area a new permit will be applied for, meanwhile our bond continues in force.

If I can be of further assistance, or if further information is necessary, please contact me.

Sincerely,

RICHARD F. HARLESS
Attorney at Law

RFH:jt

Enc.

If I can be of further assistance, or if further information is necessary, please contact me.

Sincerely,

RICHARD F. HARLESS
Attorney at Law

RFH:jt

Enc.

May 27, 1965

Mr. Richard F. Harless
Attorney at Law
1218 N. Central Avenue
Tucson, Arizona

Re: Cottonwood Oil #1 State well
Permit 96

Yavapai Oil Alsbury #13 well
Permit 257

Harless #27 Federal well
Permit 267

Harless #36C Federal
Permit 285

Dear Mr. Harless:

We are in receipt of your letter of May 21, 1965.

As to the Cottonwood #1 State well, you are aware that this well has only a steel plate welded on top of the pipe. This of course is not a protection for any water, etc., which may be in this hole.

You indicated in your letter that you feel the well should be completed but you do not indicate positive intention to do this.

Would you please advise us specifically if this is your intention, and if so, give us some indication as to a possible time.

Permit 257 was secured by the Yavapai Oil Corporation under your signature. This office of course must look to you, as permittee, for responsibility of this well. The bond of course is to Yavapai Oil Corporation and not to Mr. Alsbury.

Mr. Richard F. Harless

Page 2

May 27, 1965

Would you please advise this office, and in more detail, your intentions concerning this well.

As to the Harless #27 Federal, your letter indicates that this well has been accepted by the U.S. Forest Service as a water well. As we have previously advised, we must have a letter in our files from the U.S. Forest Service reflecting acceptance of this well as a water well. Our files do not contain such a letter. Will you please secure this as soon as possible.

Since this well has been completed, a copy of any logs, including your daily drilling log or other information secured by you, must be filed with this office.

As to the Harless #36C Federal, inasmuch as the original lease upon which this was commenced has expired, the permit involved must be terminated. If it is your desire to re-enter this hole, you must secure a new permit and furnish evidence from the bonding company that the bond now in force covers you operations on the new lease and on the new permit. Of course a completely new bond may be furnished.

In lieu of this, this office will have no choice but to enforce our order to plug this well.

We have no desire to work a hardship on you or your operations; but it is necessary and mandatory that our records clearly reflect all of the items which we have discussed in this letter.

Your earliest cooperation will be greatly appreciated.

Yours very truly,

John Bannister
Executive Secretary
nr

RICHARD F. HARLESS
ATTORNEY AT LAW
1218 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85004
258-8558

May 21, 1965

Oil and Gas Conservation Commission
State Capitol Annex, Room 202
1624 West Adams
Phoenix, Arizona

Attn: Mr. John Bannister
Executive Secretary

Dear Mr. Bannister:

I have your letters of March 2 and April 29, 1965, with reference to the following oil and gas wells:

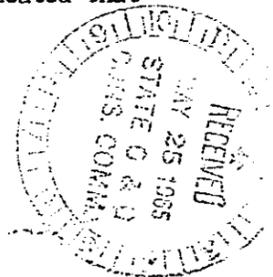
Harless #1 Federal well
NW/4NW/4 S4-T17N-R4E, Yavapai County
Permit 169

Harless #27B Federal
NW/4NW/4 S4-T17N-R4E, Yavapai County
Permit 278

Harless #36C Federal
NE/4NE/4 S3-T17N-R4E, Yavapai County
Permit 285

I am filing herewith Sundry Notices and Reports on the aforesaid wells. Although there has been a temporary cessation of activity on some of these wells, it is our plan and intention to complete all of them except Harless #27 Federal which was drilled under Permit 267. That well has been designated a water well and was released to and accepted by the U. S. Forest Service. The Cottonwood Oil Well #1 drilled under Permit 96 has been inactive for several years. I have maintained the bond on this well because I feel the well should be completed. Presently there is a steel plate welded on top of the pipe and a wire fence around the well. I would be glad to discuss this matter with you should you desire.

The Alsbury Well #18 drilled under Permit 257 is really on the lease belonging to and under the control of Mr. Alsbury of Los Angeles. I talked to him recently about plans for this well, and he indicated that he would go forward in the future.



Mr. John Bannister
Executive Secretary
Page Two
May 21, 1965

The Sundry Notices and Reports on the other wells mentioned in your letter are attached hereto. I have held up filing these notices because of the inactivity on the wells for several months. If it is your desire for me to file notices even though the activity has been dormant, I shall do so. Be assured that I will report to you any activity on any of the wells.

I trust that this is satisfactory to you.

Sincerely yours,


RICHARD F. HARLESS
Attorney at Law

RFH:mb

Enclosures





SAMUEL P. GODDARD
GOVERNOR
LYNN LOCKHART
CHAIRMAN
R. KEITH WALDEN
VICE CHAIRMAN
ORME LEWIS
MEMBER
LUCIEN B. OWENS
MEMBER

OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
ROOM 202
1824 WEST ADAMS
Phoenix, Arizona 85007
PHONE: 271-5161

JOHN BANNISTER
EXECUTIVE SECRETARY
J. R. SCURLOCK
PETROLEUM GEOLOGIST

April 29, 1965

Mr. Richard F. Harless
Attorney at Law
1218 N. Central Avenue
Phoenix, Arizona

Re: Cottonwood Oil #1 State well
NW/4NW/4 S20-T16N-R4E, Yavapai County
Permit 96

Harless #1 Federal well
NW/4NW/4 S4-T17N-R4E, Yavapai County
Permit 169

Yavapai Oil Alsbury #18 well
NE/4SW/4 S32-T18N-R4E, Yavapai County
Permit 257

Harless #27 Federal
NW/4NW/4 S4-T17N-R4E, Yavapai County
Permit 267

Harless #27B Federal
NW/4NW/4 S4-T17N-R4E, Yavapai County
Permit 278

Harless #36C Federal
NE/4NE/4 S3-T17N-R4E, Yavapai County
Permit 285

Dear Dick:

Enclosed are the Sundry Notices and Reports on Wells forms which you should fill out, one on each of the subject wells.

Please give us as complete a report as possible, covering such data as spud date, acidizing, perforating, treatments, present depth, present status, etc.

As I say, we also need from you a written request to suspend

Mr. Richard F. Harless

Page 2

April 29, 1965

operations on Permits 169, 257, and 278 as well as a declaration of your future intentions in these holes.

According to correspondence in the file for Permit 285, you will need a new permit to again commence operations. We also note this hole was ordered plugged. However, since you have stated verbally that you have regained control of this lease, I think the thing for you to do is to advise the Commission of your intentions and request the Commission to set aside the plugging order.

Mr. Bannisster's letter of May 19, 1964 advised you that a written acceptance by the Forest Service of the well drilled under Permit 267 must be furnished this office. To date the Forest Service acceptance has not been received in this office. We again request that it be furnished as soon as possible.

The hole drilled under Permit 96 appears to have been abandoned since April of 1961. Will you please advise of the current status and intention on this well. If it has been plugged, we do need the plugging record, the well completion report, and copies of logs.

All of your requests to the Commission can be handled in one letter if you desire.

You are also probably aware that the Regulations require that you maintain a orderly set of ten-foot drilling samples for our purposes. And of course we would pick these up at the well sites.

Duplicate copies of all logs run are to be filed with the Commission as soon as possible.

The Form No. 25, Sundry Notices and Reports on Wells should be submitted monthly. Since the Commission desires that it be kept informed as to the progress and developments of all wells, it should be notified when a well is spudded, logged or tested, the results of the tests, if operations are being suspended for any reason, etc., whether or not any of these coincide with the monthly reporting. We are enclosing a supply of the form sufficient for your needs to accomplish this; should you exhaust the supply please let us know and we shall furnish you another supply.

If you have any questions, or if we can be of any service to you, please contact us.

Yours very truly,

J.R. Scurlock
Petroleum Geologist

JR
enc

45-800

Jim -

Re Cottonwood Oil Co State #1

NW NW 20-16N-4E

Permit #96

From all indications in the file - this well was T&A'd approx 4-7-61. The file shows only that a plate was welded over the surface casing. At your first opportunity (do not make a special trip) check this & if necessary order Herless to plug.

There is no record of the bonds having been cancelled.

JB

3-23-65

February 21, 1963

Farmer-Orth Agency
222 W. Osborn Road
Phoenix 11, Arizona

Re: NW $\frac{1}{4}$ Sec. 20,
T16N, R4E,
Yavapai County,
Arizona

Attention: Mr. Fred Forger

Gentlemen:

Confirming our telephone conversation of this date, we wish to advise that this office has no record of having receiving an application for permit to drill an oil or gas well nor a bond covering the drilling of a well from Mr. W. E. Sutcliffe for the captioned location.

Yours very truly,

N. A. Ludewick
Executive Secretary

NAL:hme

November 10, 1961

Mr. T. E. McCullough
P. O. Box 1000
Flagstaff, Arizona

Dear Sir:

Your local representative, Mr. Parsons, called me today regarding the status of the Cottonwood Oil Co. Inc. State #1 in Sec. 20, T16N, R4E, Yavapai County, Arizona. This well is in a state of suspension by virtual of the permission granted to the operators by this Commission.

If your principals desire to reactivate this well and re-enter it, this Commission will need some statement from the officials of the Cottonwood Oil Company, Inc. to the effect that:

- 1 - They no longer have an interest in said well; or
- 2 - They are working in conjunction with your group on said well; or
- 3 - They would present some type of legal document acquiescing in your principals' plans.

Should a new company take over this well, we would have to know that the new company or group did have the right to do so legally and did own the casing and wellsite equipment.

It would also be necessary that a surety bond be filed with this office in the sum of \$2,500 in lieu of the one we presently have as Mr. Richard Harless has indicated that his group want to plug and abandon this well and be released on the bond.

We have endeavored to call Mr. Harless this day, but he is out-of-town. We shall call him on Monday to ascertain if he is aware of your principals' plans and what his group's pleasure is in this matter since they are the permittees of record. Also, they are the ones to have supplied bond in the instant case.

Mr. T. E. McCullough

Page 2

We certainly want to cooperate with all groups in any manner that we can provided we are dealing with the proper persons who are legally entitled to re-enter or deepen said well.

Yours very truly,

D. A. Jerome
Executive Secretary

DAJ:hme

RICHARD F. HARLESS
ATTORNEY AT LAW
1218 NORTH CENTRAL AVENUE
PHOENIX 4, ARIZONA
ALPINE 2-1148

August 18, 1961

Mr. Brooks Pierce
Petroleum Geologist
Oil & Gas Conservation Commission
3500 North Central
Suite 221
Phoenix 12, Arizona

Re: Cottonwood Oil Company
State #1, Sec. 20, T3N,
R4E, Yavapai Co., Arizona

Dear Mr. Pierce:

I have your letter of August 7. Since receiving this letter I talked with Mr. Jerome and I explained to him that the Cottonwood Oil Company, Well #1 located in Section 20, Township 3 North, Range 4 East, Yavapai County, had been capped with a steel plate. However, it is the intention of some of the parties who drilled this well to approximately 1300 feet, to resume drilling, and complete the well to approximately 3000 feet. ~~Mr. Don McCarthy~~ was the geologist on this well. I am making a request upon him to file a report upon his observations up to this point.

Yours very truly,

Richard F. Harless
Richard F. Harless

RFH: CW

August 7, 1961

Mr. Richard F. Harless
1218 North Central Avenue
Phoenix, Arizona

Dear Mr. Harless:

Re: Cottonwood Oil Company--State #1
Sec. 20, T3N, R4E, Yavapai County, Arizona

Dear Mr. Harless:

Will you please be so kind as to favor this office with a reply to our letter of July 13 in which we asked to be advised of the disposition of the above described test.

Yours very truly,

Brooks Pierce
Petroleum Geologist

BP:vjb

Follow-up.

July 13, 1961

Mr. Richard F. Harless
1218 North Central Avenue
Phoenix, Arizona

Re: Cottonwood Oil Company - State #1
Sec. 20, T3N, R4E, Yavapai Co. Arizona

Dear Mr. Harless:

This has reference to my letter of March 30 in which I indicated that 90 days from that date should be sufficient time for you to evaluate the geologic merits of your leasehold block on which the above test was drilled.

Since you were kind enough to take immediate steps to remedy the hazard at that time, I thought possibly you would have cleared this matter up by now.

We would appreciate any information you can furnish this office concerning your proposed operations on this test.

Yours very truly,

Brooks Pierce
Petroleum Geologist

BP:hme

April 7, 1961

**Mr. Jay H. Cravens, Forest Supervisor
United States Dept. of Agriculture
Forest Service - Coconino National Forest
Flagstaff, Arizona**

Re: Cottonwood Oil Company State #1, Yavapai County

Dear Mr. Cravens:

This is to advise that the Cottonwood Oil Company State #1 located in Section 20, T 16 N, R 4 E, Yavapai County has been properly temporarily abandoned. I instructed Mr. Knudson of P. O. Box 1208, Casa Grande, Arizona the proper safety measure in temporarily abandoning this well. I visited the location last week end and it was done in a very satisfactory manner.

We would appreciate it in the future if you would contact this office when you run across a similar situation in your area.

Yours very truly,

**Brooks Pierce
Petroleum Geologist**

BP:hmc



OFFICE OF
State Land Department
STATE OF ARIZONA
Phoenix, Arizona

OBED M. LASSEN
STATE LAND COMMISSIONER

March 28, 1961

Jay H. Cravens,
Forest Supervisor
United States Dept. of Agriculture
Forest Service
Coconino National Forest
Flagstaff, Arizona

Re: Your File #1590

Dear Mr. Cravens:

Reference is made to your letter of March 17, 1961, addressed to Mr. Obed M. Lassen in regard to the abandoned well in Section 20, Township 16N, Range 4E, which has been referred to me by the Commissioner.

I talked to Mr. D. A. Jerome, Executive Secretary of the Oil & Gas Conservation Commission this morning concerning the matter of the open casing. Mr. Jerome informed me that this hazard was discussed with the operators at last week's meeting of the Conservation Commission and that the operators had agreed to speedily remedy this situation.

Thank you for calling this to the Department's attention. We welcome such information.

Yours very truly,

F. C. RYAN,
Supervisor, Mineral, Oil & Gas
Production Division

FCH:yda

cc: D. A. Jerome ✓

April 7, 1961

Mr. J. D. Knudson
P. O. Box 1208
Casa Grande, Arizona

Dear Mr. Knudson:

This past week end I was in the vicinity of the Cottonwood Oil Company test and I was very pleased to see that you did a very good job of temporarily abandoning the hole.

We appreciate this and in the future, we will be glad to cooperate with you in any manner that we can.

Yours very truly,

Brooks Pierce
Petroleum Geologist

BP:hme

cc Mr. Richard F. Harless
1218 North Central Avenue
Phoenix, Arizona

March 30, 1961

Mr. Richard F. Harless
1218 North Central Avenue
Phoenix, Arizona

Re: Cottonwood Oil Company State #1 - NW NW Sec. 20
T 3 N, R 4 E., Yavapai County, Arizona

Dear Mr. Harless:

This has reference to our pleasant conversation of March 23 relative to the plugging of the above captioned well. I had a long distance telephone call from Mr. J. B. Knudson of Casa Grande wanting the instructions on the procedure to temporarily abandoning the hole. I gave him verbal authority to temporarily abandon this hole by welding a metal plate over the opening and of the exposed surface casing and to fence in the cellar and the pits. This he promised me he would do within the next two days which I presumed he did.

This is your written authority to temporarily abandon this test for a period of 90 days. It is the opinion of this office that owing to the time that has elapsed since operations were ceased that you have had sufficient time to evaluate the geological merits of your leasehold block.

Again may I thank you for the prompt action that you have taken in this matter, and I sincerely hope that you will take such action as necessary to either properly plug this hole or re-enter to assume further drilling within the 90 day period that we are granting you.

Yours very truly,

Brooks Pierce
Petroleum Geologist

BP:hme

A-116

October 5, 1960

Cottonwood Oil Co. Inc.
1410 N. Central Avenue
Phoenix, Arizona

Gentlemen:

On July 1, 1960, you were notified by the Oil and Gas Conservation Commission of existing violations with regard to Well No. 1 having the following legal description:

560 feet south of the north line and
560 feet east of the west line in the
Northwest quarter of Section 20,
Township 16 North, Range 4 East.
(600 Acres). Yavapai County, Arizona.

We have been advised that to date no action has been taken to remedy these violations.

The Commission has requested that legal action be taken to recover on your bond. Please be advised that unless within 30 days from this date you comply with the statutes and rules and regulations adopted thereunder, we will begin proceedings to have your bond forfeited; the money to be used to plug and abandon the above described well in the manner prescribed by the rules and regulations of the Oil and Gas Conservation Commission.

Very truly yours,

WADE CHURCH
The Attorney General

ARTHUR E. ROSS
Assistant Attorney General

AER:bn
cc: Fireman's Fund Insurance Co.



PAUL FANNIN
GOVERNOR

M. F. WHARTON
CHAIRMAN

CHARLES KALIL, M. D.
VICE-CHAIRMAN

ERNEST W. CHILSON
MEMBER

R. KEITH WALDEN
MEMBER

ANTHONY T. DEDDENS
MEMBER

OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA
3500 N. CENTRAL - SUITE 312
Phoenix, Arizona
CR 9-3397 CR 9-2731

D. A. JEROME
EXECUTIVE SECRETARY

July 1st, 1960

The Honorable Wade Church
Attorney General of Arizona
State Capitol Building
Phoenix, Arizona

Re: Forfeiture of bond of:
COTTONWOOD OIL CO.
Richard Harless-State #1

Dear Sir:

The Oil and Gas Conservation Commission has passed a motion requesting your office to bring legal action to forfeit the bonds of each and all of the named operators for failure to comply with the rules and regulations of the Oil and Gas Conservation Commission of Arizona relative to the plugging of abandoned wells.

For your assistance the records and reports of the Petroleum Engineer of the Oil and Gas Commission of Arizona show the following to exist:

1. Each applicant obtained a permit to drill and filed a bond in the amount of \$2500 conditioned upon his compliance with the rules and regulations of the Oil and Gas Conservation Commission of Arizona and specifically the requirement of plugging wells upon abandonment.
2. That drilling was commenced and thereafter discontinued.
3. That the rig was removed and the operator failed to plug said well as required by the rules and regulations of the Oil and Gas Commission of Arizona.
4. That the above mentioned operator has not filed an application to plug his well.
5. That the inspection of the Petroleum Engineer of this Commission has established the fact that such wells were not plugged.
6. Said operator was contacted by phone on April 4, 1960, and notified that the rig had been moved from the location. Mr. Harless stated he would immediately call the other persons concerned with the well and that operations to plug and abandon would be started and that he would notify

96

Hon. Wade Church

2.

July 1st, 1960

this office. On April 11, 1960, in a telephone conversation with Mr. Harless, he agreed to move a rig over the hole in one week and commence operations, and that he did not plan to plug and abandon the hole. Since that time, Mr. Harless has not replied to several phone calls to his office regarding this well. These calls were made by W. F. Maule, Petroleum Engineer.

7. It is the opinion of the Commission that more than a reasonable length of time has expired within which said operator could have plugged his said well or resumed operation.

8. The name and address of the bonding company and agent for the bondsman for said operator is as follows:

Operator: Cottonwood Oil Co., Inc. - Richard Harless
Bonding Company: Fireman's Fund Insurance Company
Agent: Mr. C.G. Sullivan, Attorney
Address: Luhrs Building Arcade, Phoenix, Arizona

It is the request of the Commission, pursuant to motion to that effect unanimously adopted at its meeting of June 22, 1960, that you, as Attorney General of the State of Arizona, file action against said operator, if necessary, but particularly against the bondsman of said operator for the purpose of forfeiting the bond and collecting the penalty thereunder for failure of the operator to comply with the rules and regulations of the Commission to plug the said wells.

There is attached hereto for your information a copy of the form of bond required and which is the same form of bond which has been executed on behalf of the bondsman for the above named operator. Each of the bonds has been furnished pursuant to the rules and regulations of the Commission and the provisions of Statute 27-516 A3 A. R. S.

Should you desire any further information concerning these matters, please advise us. Will you keep us advised concerning your actions taken thereon?

We are,

Very truly yours,

By M. Wharton
Chairman
OIL AND GAS CONSERVATION
COMMISSION OF ARIZONA

February 2, 1960

Cottonwood Oil Co. Inc
1410 N. Central Ave.
Phoenix, Arizona

RE: State #1
Sec. 20-16N.-4E.

Gentlemen:

Enclosed herewith, is your receipt for Drilling
Permit No. 96, in the amount of \$25.00, dated
August 13, 1959.

Yours very truly,

William F. Maule
Petroleum Engineer

WFM:EG