

100-100000

Release Date 6-10-78

CONFIDENTIAL



P-W

PENNZOIL #1-11 Hopi 474
NW/4NW/4 Sec. 11-29N-14E Coconino

sl

COUNTY Coconino AREA 35 mi SE/Tuba City LEASE NO. 14-20-0450-5094

WELL NAME Pennzoil #1-11 Hopi

LOCATION NW/4 NW/4 SEC 11 TWP 29N RANGE 14 E FOOTAGE 660' FNL 660' FWL
ELEV 5638' GR 5650 KB SPUD DATE 10-24-68 STATUS TOTAL DEPTH 6945'
COMP. DATE 11-28-68

CONTRACTOR Cactus Drilling Corporation, P. O. Box 2146, Lovington, NM

CASING SIZE 11 3/4" DEPTH 902' CEMENT 710 Sks LINER SIZE & DEPTH NA DRILLED BY ROTARY X
DRILLED BY CABLE TOOL
PRODUCTIVE RESERVOIR
INITIAL PRODUCTION Dry

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Chinle	1622'	X	X	
Shinarump	2860'			
Moenkopi	2970'			
Coconino	3248'			
Supai	4709'			
Naco Lime	5570'			
Redwall	5984'			
Temple Butte	6313'			
Topeats Sand	6615'			
Granite Naco	6843'			
Wathered Sand	6868'			
Granite				

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG <u>Am Strat</u>
<u>TE-4;BCSL-GR-4;GR-Newton</u>	<u>NA</u>	<u>NA</u>	SAMPLE DESCRP. <u> </u> SAMPLE NO. <u>1457</u> CORE ANALYSIS <u> </u> DSTs <u> </u>

REMARKS Confidential per Goodrich 6-25-68 APP. TO PLUG X
PLUGGING REP. X
COMP. REPORT X

WATER WELL ACCEPTED BY

BOND CO. Federal Insurance Company BOND NO. 8036-99-07
DATE ORGANIZATION REPORT 4-23-68
BOND AMT. \$ 5,000 CANCELLED
FILING RECEIPT 9556 LOC. PLAT X WELL BOOK X PLAT BOOK X
API NO. 02-005-20003 DATE ISSUED 10-17-68 DEDICATION W/2 NW/4

PERMIT NUMBER 474 **CONFIDENTIAL**
(over) Release Date 6-10-69

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 **Pennzoil United, Inc.** Address **P. O. Drawer 1828 - Midland, Texas 79701**

Federal, State or Indian Lease Number or name of lessor if fee lease **Hopi "11" Lse # 14-20-0450-5094** Well Number **1** Field & Reservoir **Wildcat**

Location **660 FNL & 660 FWL** County **Coconino**

Sec. TWP-Range or Block & Survey **Section 11, T-29-N, R-14-E**

Date spudded **10-24-68** Date total depth reached **11-20-68** Date completed, ready to produce **-** Elevation (DF, RT or Gr.) **5638** feet Elevation of casing hd. flange **5638** feet

Total depth **6940** P.B.T.D. **Dry hole-Plugged** Single, dual or triple completion? **Dry Hole** If this is a dual or triple completion, furnish separate report for each completion.

Producing interval (s) for this completion **Dry Hole** Rotary tools used (interval) **0-6940'** Cable tools used (interval) **-**

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

Type of electrical or other logs run (check logs filed with the commission) **Induction ES, GR-N, Sonic** Date filed **12-3-68**

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"	11 3/4"	42#	902	710 SX	-

TUBING RECORD

LINER RECORD

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

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

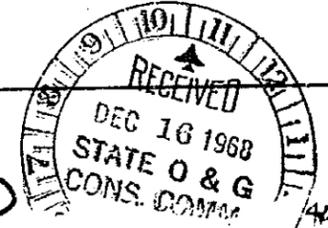
Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
			bbls.	MCF	bbls.	° API (Corr)

Tubing pressure	Casing pressure	Cal'd 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 Drilling Superintendent of the Pennzoil United, 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 December 10, 1968 Signature [Handwritten Signature]



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

Permit No. 474

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Chinle	1622		Shale & Limestone
Shinarump	2860		Shale & Sand (Conglomerate)
Moenkopi	2970		Shale w/one sand zone
Coconino	3248		Sand and Shale
Supai	4709		Shale w/some gyp and anhy.
Naco Lime	5570		Limestone and shale
Redwall	5984		Limestone-oolitic in top - one chert zone.
Temple Butte	6313		Dolomite w/few sand stringers
Topeats Sand	6615		Sandstone w/some chert
Granite Nash	6843		Granite, reworked
Weathered Granite	6868		Weathered granite

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

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

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

Form No. 4

Form 9-381a
(Feb. 1961)

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau 42-R358.3
Approval expires 12-31-66.

Land Office _____
Lease No. 14-20-0450-5094
Unit Hopi

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

December 10, 1968

Well No. 1 is located 660 ft. from N line and 660 ft. from W line of sec. 11

NW/4 of Sec. 11 29-N 14-E NMPM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat Coconino Arizona
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 5650 ft.

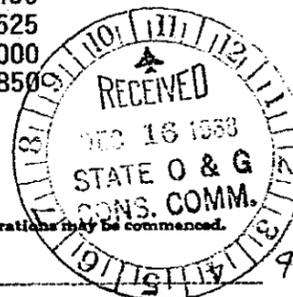
DETAILS OF WORK

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

Spudded 17 1/2" hole 3:00 P.M. 10-24-68. Drld. to 905'. Ran 11 3/4" OD, 42# csg. to 902'. Cement w/710 sx Class "A". Plug down at 11:45 P.M. 10-25-68. After 24 hrs WOC, tested csg. w/1500# for 30 min - OK. Drld. 7 7/8" hole to 6940'. No commercial shows. Ran logs and DST-no shows. Plugged & Abandoned as follows:

- Plug #1 - 70 sx 6940-6700
- Plug #2 - 30 sx 6300-6200
- Plug #3 - 30 sx 5900-5800
- Plug #4 - 30 sx 5550-5450
- Plug #5 - 30 sx 4725-4625
- Plug #6 - 30 sx 3100-3000
- Plug #7 - 45 sx 950-850

Steel cap welded on top P&A 11-22-68.



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

Company Pennzoil United, Inc.

Address P. O. Drawer 1828

Midland, Texas 79701

By [Signature]

Title Drilling Superintendent

474

APPLICATION TO ABANDON AND PLUG

FIELD Wildcat
 OPERATOR Pennzoil United, Inc. ADDRESS P. O. Drawer 1828 - Midland, Texas 79701
 Federal, State, or Indian Lease Number or Lessor's Name if Fee Lease Hopi "11" Lse #14-20-0450-5094 WELL NO. 1
 SURVEY _____ SECTION 11 COUNTY Coconino
 LOCATION 660 FNL & 660 FWL of Sec. 11, T-29-N, R-14-E, G&SRM

TYPE OF WELL Dry Hole TOTAL DEPTH 6940
(Oil, Gas or Dry Hole)

ALLOWABLE (If Assigned) _____
 LAST PRODUCTION TEST OIL None (Bbls.) WATER None (Bbls.)
 GAS None (MCF) DATE OF TEST _____

PRODUCING HORIZON None PRODUCING FROM _____ TO _____
 1. COMPLETE CASING RECORD 11 3/4" OD, 42#, H-40 csg. set at 902' - Cemented w/710 sx Class "H" - Cement circulated to the surface.

2. FULL DETAILS OF PROPOSED PLAN OF WORK Run logs to determine if potential zones are present but not tested.

Will plug as follows:

Plug #1 - 70 sx 6940-6700; Plug #2 - 30 sx 6300-6200; Plug #3 - 30 sx 5900-5800; Plug #4 - 30 sx 5550-5450; Plug #5 - 30 sx 4725-4625; Plug #6 - 30 sx 3100-3000; Plug #7 - 45 sx 950-850;

Cap casing for future water well for Hopi Tribe

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

DATE COMMENCING OPERATIONS _____

NAME OF PERSON DOING WORK Halliburton Co. ADDRESS Farmington, New Mexico

CORRESPONDENCE SHOULD BE SENT TO _____

Name

Drilling Superintendent

Title

Address

P. O. Drawer 1828 - Midland, Texas 79701

Date

December 19, 1968

Date Approved 12/23/68
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: [Signature]

Permit No. 474

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

HALLIBURTON DIVISION LABORATORY
 HALLIBURTON COMPANY
 Farmington, New Mexico
LABORATORY REPORT

No. _____

To Pennzoil United, Inc.

Date 11-25-68

Drawer 1828

Midland, Texas

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

We give below results of our examination of Samples from DST No. T-511611 on Hopi "11" No. 1

Submitted by _____

Marked As Noted

	# 1 1890' FI 700' WCDM	# 2 1190' FI MCSW	# 3 Top Hydrospring Tool
Ph	ND	6	6
Chlorides	25,002 mp1	47,226 mp1	52,782 mp1
Total Dissolved Solids	41,247 mp1	77,911 mp1	87,077 mp1



FN 474

Gauge No.		Depth		Clock		hour		Ticket No.		
1475		6741'		12		hour		511611		
	First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
P ₀	.000	31	.000		364	.000	384	.000		798
P ₁	.027	101	.0408		274	.0708	465	.0416		2653
P ₂	.054	167	.0816		2028	.1416	542	.0832		2744
P ₃	.081	230	.1224		2078	.2124	612	.1248		2790
P ₄	.108	285	.1632		2106	.2832	678	.1664		2019
P ₅	.135	340	.2040		2126	.3540	739	.2080		2041
P ₆	.152	364 *	.2448		2139	.4250	798	.2496		2056
P ₇			.2856		2147			.2912		2069
P ₈			.3264		2156			.3328		2080
P ₉			.3672		2162			.3744		2087
P ₁₀			.4080		2167			.4160		2093
Gauge No. 105		Depth 6940'		Clock 24		hour				
P ₀	.000	129	.000		430	.000	463	.000		862
P ₁	.014	178	.0202		1978	.0348	529	.0208		1914
P ₂	.028	241	.0404		2088	.0696	603	.0416		2006
P ₃	.042	307	.0606		2140	.1044	675	.0624		2054
P ₄	.056	362	.0808		2170	.1392	743	.0832		2084
P ₅	.060	382	.1010		2188	.1740	803	.1040		2103
P ₆	.074	430 *	.1212		2203	.2090	862	.1248		2121
P ₇			.1414		2216			.1456		2131
P ₈			.1616		2220			.1664		2142
P ₉			.1818		2226			.1872		2151
P ₁₀			.2020		2233			.2080		2157
Reading interval		4	6	10	6	Minutes				
REMARKS:		* Last interval equal to 2 minute.								

SPECIAL PRESSURE DATA

477

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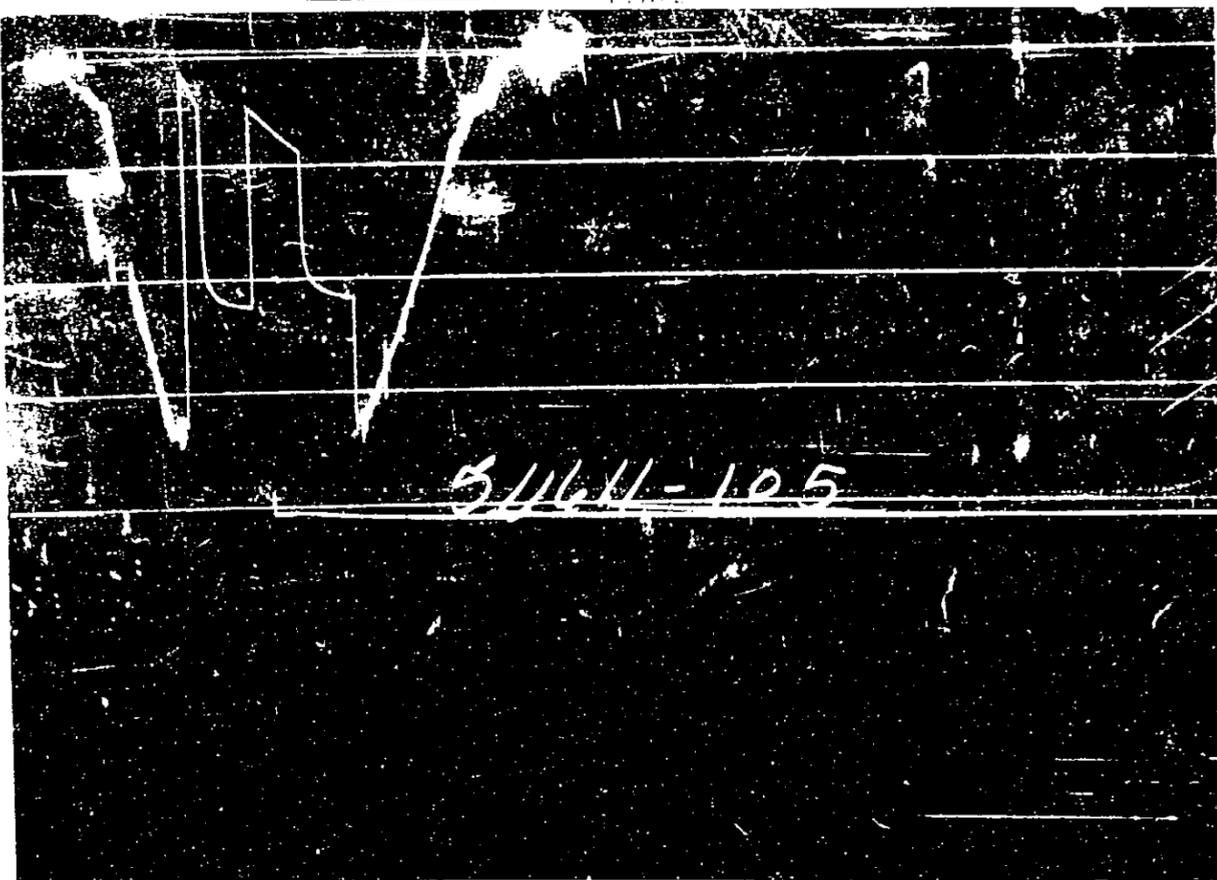
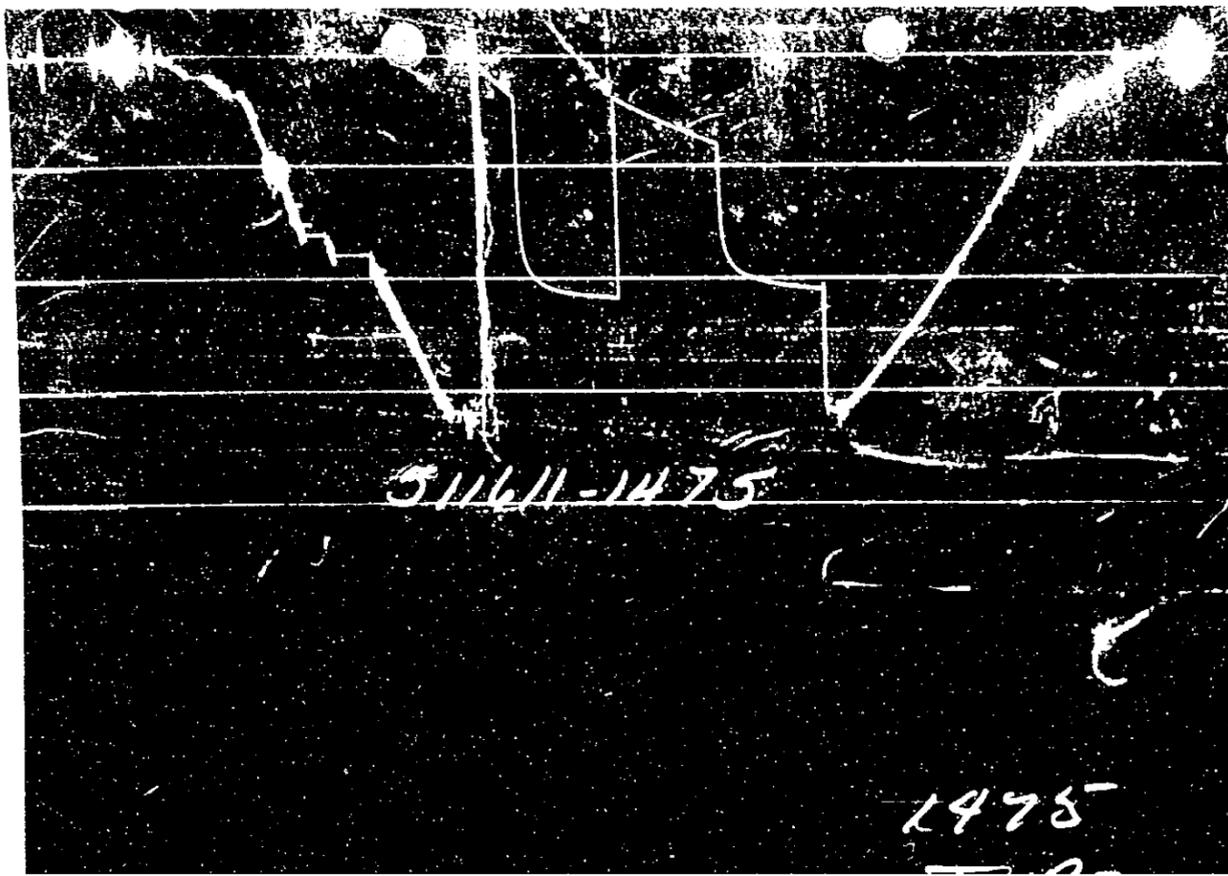


Flow Time	1st Min. 22	2nd Min. 60	Date	11-21-68	Ticket Number	511611 S
Closed In Press. Time	1st Min. 60	2nd Min. 60	Kind of Job	OPEN HOLE	Halliburton District	FARMINGTON
Pressure Readings	Field	Office Corrected	Tester	E. SMITH D. JOHNSON	Witness	MR. SWINEA
Depth Top Gauge	6741 Ft.	Blanked Off	Drilling Contractor	CACTUS DRILLING COMPANY RIG #18		dh
BT. P.R.D. No.	1475	12 Hour Clock	Elevation	5263' KB	Top Packer	6763'
Initial Hydro Mud Pressure	3174.8	3201	Total Depth	6944'	Bottom Packer	6768'
Initial Closed in Pres.	2158.0	2167	Interval Tested	6768'-6944'	Formation Tested	
Initial Flow Pres.	43.9	1 31	Casing or Hole Size	7 7/8"	Casing { Top	
	328.9	2 384			Perfs. { Bot.	
Final Flow Pres.	350.9	1 364	Surface Choke	3/4"	Bottom Choke	
	767.5	2 798			3/4"	
Final Closed in Pres.	2093.0	2093	Size & Kind Drill Pipe	4"	Drill Collars Above Tester I.D. - LENGTH 2 1/2" x 782'	
Final Hydro Mud Pressure	3175.8	3175	Mud Weight	9	Mud Viscosity	60
Depth Cen. Gauge	Pt.	Blanked Off	Temperature	140	Anchor Size ID	2 1/2"
BT. P.R.D. No.		Hour Clock	Depths Meas. From	Rotary Kelly Bush	Depth of Tester Valve	6706' Ft.
Initial Hydro Mud Pres.			Cushion	-	Depth Back Pres. Valve	6736' Ft.
Initial Closed in Pres.			Recovered	700'	Feet of water cut drilling mud	
Initial Flow Pres.			Recovered	1190'	Feet of mud cut salt water	
					1	
Final Flow Pres.			Recovered		Feet of	
					2	
Final Closed in Pres.			Recovered		Feet of	
Final Hydro Mud Pres.			Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge	6940' Ft.	Yes	Gas Gravity		Surface Pressure	
BT. P.R.D. No.	105	24 Hour Clock	Tool Opened	8:50 AM	A.M. Tool Closed	12:13 AM
Initial Hydro Mud Pres.	3335.4	3274	Remarks Opened tool for 22 minute first flow with a very			
Initial Closed in Pres.	2178.9	2233	weak blow. Closed tool for 60 minute initial close			
Initial Flow Pres.	65.8	1 129	in pressure. Reopened tool for 60 minute second			
	394.7	2 463				
Final Flow Pres.	438.6	1 430	flow with a very weak blow. Closed tool for 60			
	833.3	2 862	minute final closed in pressure.			
Final Closed in Pres.	2174.5	2157				
Final Hydro Mud Pres.	3292.6	3244	474			

Legal Location Sec. - Twp. - Range: 11-29N-14E
 Lease Name: HOPI #1111
 Well No.: 1
 Test No.:
 Field Area: WILD CAT
 County: COCONINO
 State: ARIZONA
 Operator's Name: PENNZOIL UNITED, INCORPORATED
 Operator's District: MIDLAND

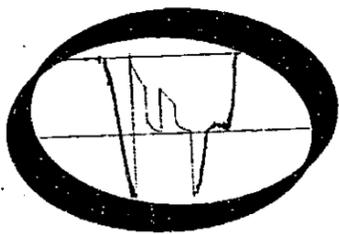
FORMATION TEST DATA





Each Horizontal Line Equal to 1000 p.s.i.

Formation Testing Service Report



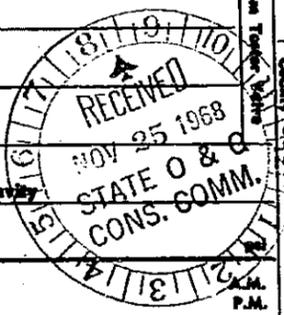
HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

474

Flow Time	1st 10 Min.	2nd 15 Min.	Date	11-17-68	Ticket Number	511609 S
Closed In Press. Time	1st 60 Min.	2nd 120 Min.	Kind of Job	OPEN HOLE	Halliburton District	FARMINGTON
Pressure Readings	Field	Office Corrected	Tester	E. J. SMITH	Witness	SWINEA
Depth Top Gauge	6390' Ft.	No Blanked Off	Drilling Contractor	CACTUS DRILLING COMPANY	DH	
BT. P.R.D. No.	1475	12 Hour Clock	Elevation	5650' KB	Top Packer	6405'
Initial Hydro Mud Pressure	3088.5	3086	Total Depth	6443'	Bottom Packer	6410'
Initial Closed in Pres.	1963.1	2037	Interval Tested	6443'-6410'	Formation Tested	Supai
Initial Flow Pres.	21.9	1 18	Casing or Hole Size	7 7/8"	Casing Perfs. Top Bot.	
	21.9	2 26				
Final Flow Pres.	21.9	1 24	Surface Choke	1/4"	Bottom Choke	3/4"
Final Closed in Pres.	2006.5	2028	Size & Kind Drill Pipe	4" Fh - 4" 90	Drill Collars Above Tester	2 1/2" x 894'
Final Hydro Mud Pressure	3045.3	3056	Mud Weight	9.1 #	Mud Viscosity	46'
Depth Cen. Gauge		Blanked Off	Temperature	90 °F Est. °F Actual	Anchor Size ID & Length	2 1/2" OD 5 3/4" 33'
BT. P.R.D. No.		Hour Clock	Depth Meas. From	Kelly Bushing	Depth of Tester Valve	6377' Ft.
Initial Hydro Mud Pres.			Cushion		Depth Back Pres. Valve	- Ft.
Initial Closed in Pres.			Recovered	45	Feet of drilling mud	
Initial Flow Pres.		1	Recovered		Feet of	
		2	Recovered		Feet of	
Final Flow Pres.		1	Recovered		Feet of	
		2	Recovered		Feet of	
Final Closed in Pres.			Recovered		Feet of	
Final Hydro Mud Pres.			Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge	6440' Ft.	Yes Blanked Off	Gas Gravity		Surface Pressure	
BT. P.R.D. No.	105	24 Hour Clock	Tool Opened	5:15 AM	A.M. P.M. Tool Closed	
Initial Hydro Mud Pres.	3121.7	3115	Remarks Opened tool for 10 minute first flow with a			
Initial Closed in Pres.	2088.3	2056	very weak blow, decreasing in 1/2 minute. Closed			
Initial Flow Pres.	21.9	1 44	tool for 60 minute initial closed in pressure.			
	21.9	2 50				
Final Flow Pres.	65.8	1 48	Reopened tool for 15 minute second flow with a weak			
	65.8	2 61	blow. Closed tool for 120 minute final closed			
Final Closed in Pres.	2056.8	2054	in pressure.			
Final Hydro Mud Pres.	3079.0	3085				

FORMATION TEST DATA

474 9



Legal Location: 11-29N-14E
 Well No.:
 Test No.:
 Pennzoil - United, Incorporated
 Lease Owner/Company Name:
 MIDLAND
 County/County Name: WILDCAT
 State: ARIZONA

Gauge No.		Depth		Clock		Ticket No.			
1475		6390'		12 hour		511609			
First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure		
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\phi}{\phi}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\phi}{\phi}$	PSIG Temp. Corr.
P ₀	.000 18	.000		24	.000	26	.000		33
P ₁	.079 24	.0487		1827	.115	33	.0840		1905
P ₂		.0974		1885			.1680		1957
P ₃		.1461		1974			.2520		1983
P ₄		.1948		1991			.3360		1998
P ₅		.2435		2002			.4200		2015
P ₆		.2922		2013			.5040		1998 *
P ₇		.3409		2017			.5880		2015
P ₈		.3896		2024			.6720		2024
P ₉		.4383		2030			.7560		2028
P ₁₀		.3870		2037			.8400		2028
Gauge No. 105		Depth 6440'		Clock 24 hour					
P ₀	.000 44	.000		48	.000	50	.000		61
P ₁	.036 48	.0241		1890	.056	61	.0413		1924
P ₂		.0482		1961			.0826		1981
P ₃		.0723		1996			.1239		2004
P ₄		.0964		2013			.1652		2022
P ₅		.1205		2028			.2065		2041
P ₆		.1446		2043			.2478		2017 *
P ₇		.1687		2047			.2891		2041
P ₈		.1928		2056			.3304		2045
P ₉		.2169		2056			.3717		2050
P ₁₀		.2410		2056			.4130		2054
Reading Interval		6					12		Minutes
REMARKS:		* AFTER BY PASSING							

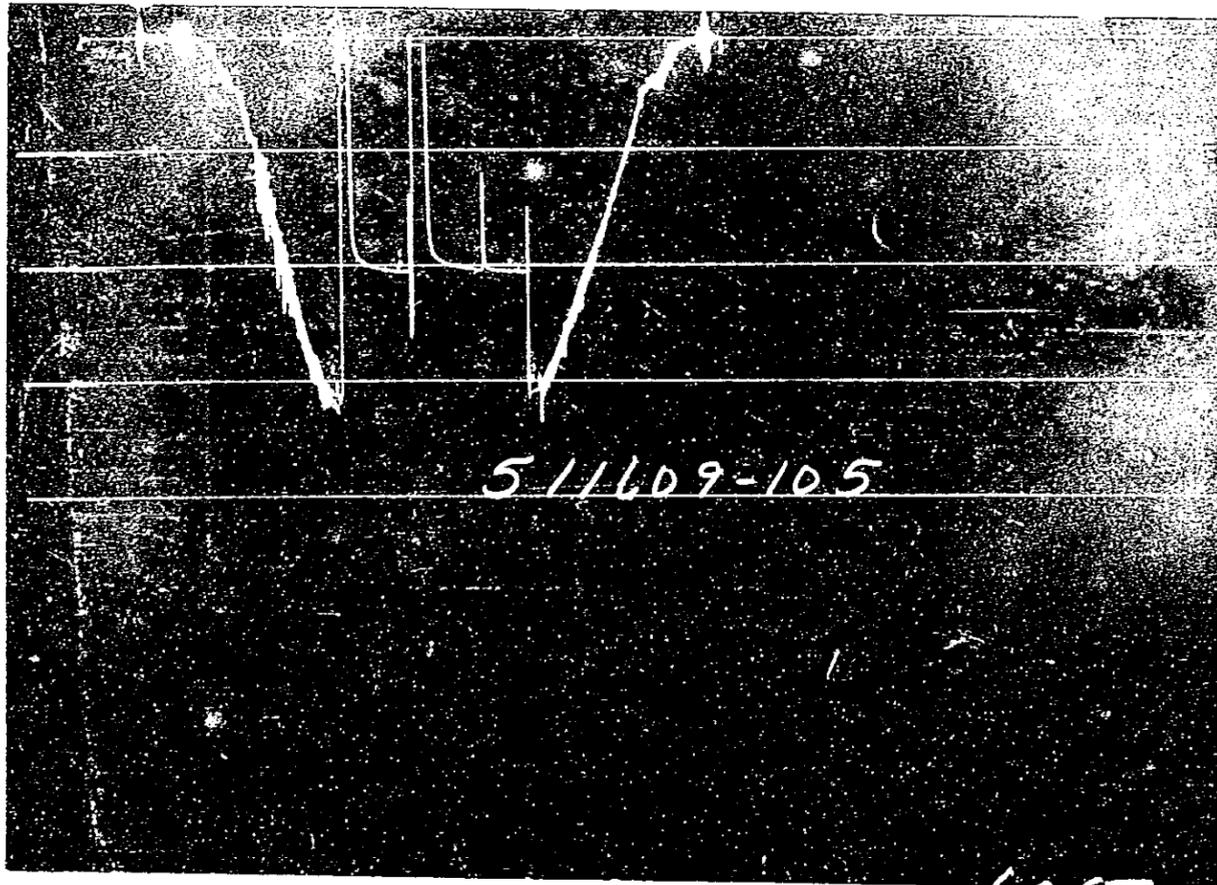
SPECIAL PRESSURE DATA

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PRESSURE

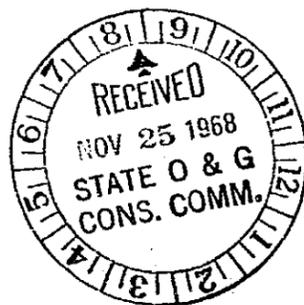
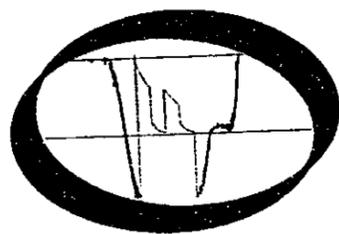
TIME



511609-105

Each Horizontal Line Equal to 1000 p.s.i.

Formation Testing Service Report



HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

474

WELL SITE CHECK

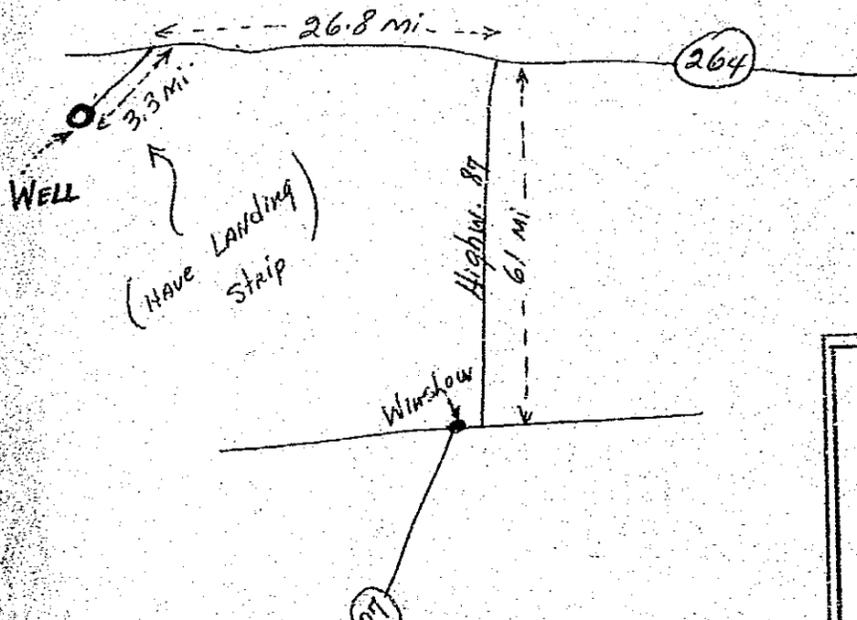
Contractor Cactus Person(s) Contacted J.D. SWINEA
 Spud date _____ Date 11-13-68
 Type Rig _____ Rotary Cable Present Operations Drilling 6080
 Samples _____
 Pipe Set 11 3/4 @ 902 w/ 710 SX Drilling with Air _____ Mud
 Water Zones _____ Size Hole 7 7/8
 Lost Circ. Zones _____ Size Drill Pipe _____
 Formation Tops _____ Type Bit 588 Tutton bit
 Cores, Logs, DST _____ No. Bit # 20 Drilling Rate _____
 Crews _____ Formation MISS
 Lithology Limestone - Dolomite

REMARKS, PHOTO, MAP

(Baroid mud logger on location)

Elev 56386R
 5649DF
 5650KB

LOCATION MAP:



Formation Tops

- Chinle 1650 (+4000)
- Shinarump 2870 (+2780)
- Moenkapi 2960 (+2690)
- Coconino 3247 (+2402)
- Supai 4715 (+935)
- Naco 5545 (+105)
- Miss 5860 (-210) ?

Running structurally 207' low to Atlantic Napi & 143' HIGH TO MOORE MOORE & Miller

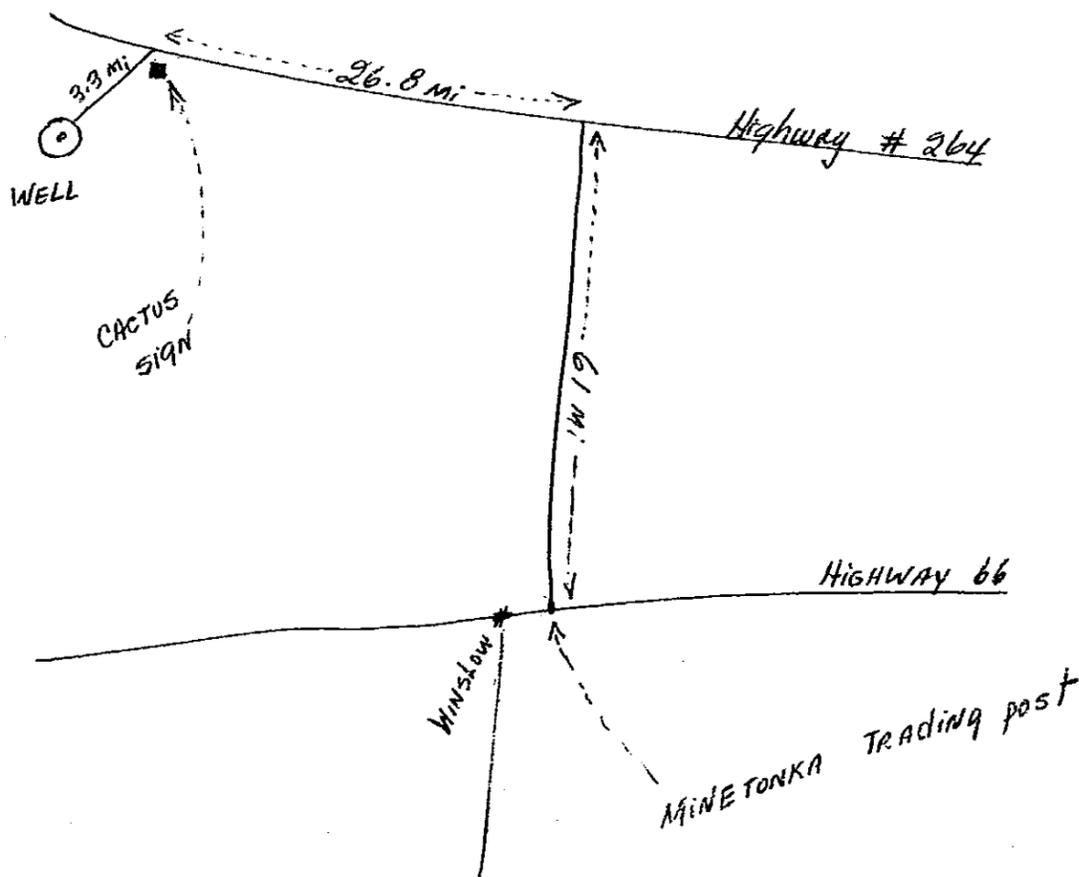
WELL NAME

PENNZOIL #1-11 Hopi

Permit No. 474

Confidential: Yes No

Pennzoil



Spud 10-24-68
10-25-68

Drilling 15" hole @ 640'. Will drill to approx.
1000-1400' --- and set pipe in top Chinle

Geologist BILL AMMENTORP. Well is not tight.

Baroid mud logging unit on
Location.

#474

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL DEEPEN PLUG BACK

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

2. NAME OF OPERATOR Pennzoil United, Inc.

3. ADDRESS OF OPERATOR P. O. Drawer 1828 - Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 660 FNL & 660 FWL of Sec. 11, T-29-N, R-14-E
At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
35 mi SE/Tuba City

19. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660

16. NO. OF ACRES IN LEASE 640

17. NO. OF ACRES ASSIGNED TO THIS WELL 80

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 7,000

19. PROPOSED DEPTH 7,000

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5638' GL

22. APPROX. DATE WORK WILL START*

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	11 3/4"	42#	1,000	750 sx (Circulate)
7 7/8"	5 1/2"	15.5#	7,000	500 sx



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

24. SIGNATURE *J. P. ...* TITLE Drilling Superintendent DATE 10-15-68

(This space for Federal or State office use)

PERMIT NO. 474 APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL

RE-ENTER OLD WELL

Pennzoil United, Inc.

NAME OF COMPANY OR OPERATOR

P. O. Drawer 1828 Midland Texas 79701
 Address City State

Cactus Drilling Corporation
 Drilling Contractor
 P. O. Box 2146 - Lovington, New Mexico
 Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor	Well number	Elevation (ground)
Hopi "11" Use # 14-20-0450-5094	1	5638

Nearest distance from proposed location to property or lease line:	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease:
660 feet	1st well feet

Number of acres in lease:	Number of wells on lease, including this well, completed in or drilling to this reservoir:
640	1st well

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

Well location (give footage from section lines)	Section—township—range or block and survey	Dedication (Comply with Rule 105)
660 ENL & 660 FWL	Sec. 11, T-29-N, R-14-E	W/2 NW/4

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

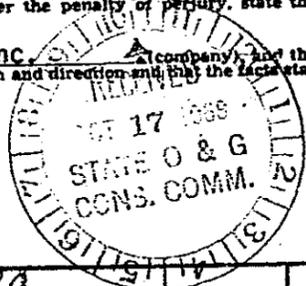
Distance, in miles, and direction from nearest town or post office
 Approx. 35 mi SE/Tuba City, Arizona

Proposed depth:	Rotary or cable tools	Approx. date work will start
7,000	Rotary	On approval
Bond Status	Organization Report	Filing Fee of \$25.00
Filed 9-20-68	On file <input checked="" type="checkbox"/> Or attached	Attached

Amount \$5,000.00

Remarks:

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Drilling Superintendent of the Pennzoil United, 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.



J. P. Padgett
 Signature
 10/16/68
 Date

Permit Number: 474
 Approval Date: 10/17/68
 Approved By: *John Bannister*
 Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

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

Form No. 3

API No. 02-005-30003

(Complete Reverse Side)

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

Owner Hopi Indian Tribe	Land Description Sec. 11, T-29-N, R-14-E
Coconino County, Arizona	
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <div style="display: flex; justify-content: space-between;"> 66° 660 </div> </div>	<p style="text-align: center;">CERTIFICATION</p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p>Name: <i>J.P. Goodrich</i></p> <p>Position Drilling Superintendent</p> <p>Company Pennzoil United, Inc.</p> <p>Date October 15, 1968</p> <p>I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.</p> <p>Date Surveyed _____</p> <p>Registered Professional Engineer and/or Land Surveyor _____</p> <p>Certificate No. _____</p>

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
11 3/4" OD	42#	H-40 Smls	0	1100	0 - 1100	750 sx
5 1/2" OD	15.5#	J-55 Smls	0	7000	4500-7000	500 sx

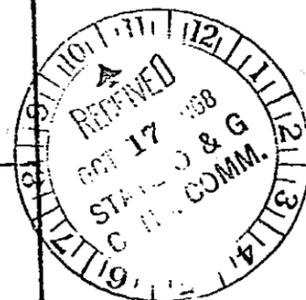
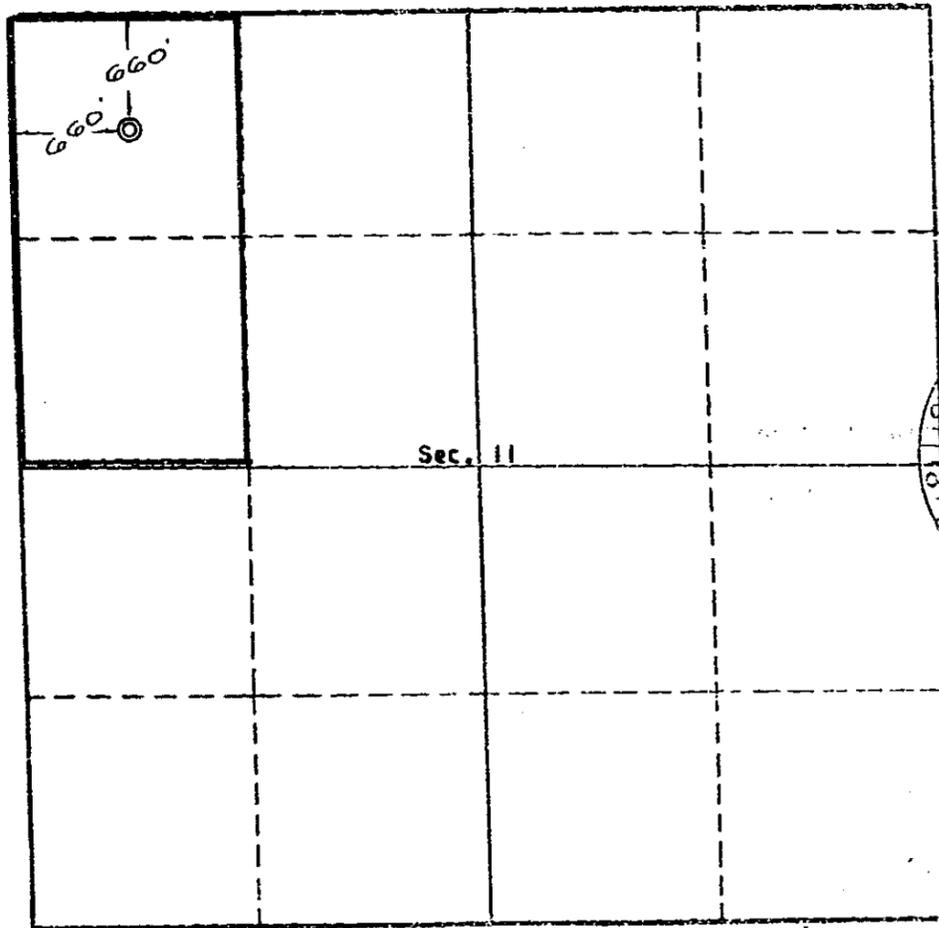
Company PENNZOIL UNITED, INC.

Well Name & No. Hopi "11" No. 1

Location 660 feet from the North line and 660 feet from the West line.

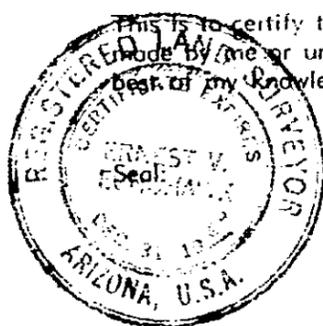
Sec 11 T 29 N. R. 14 E. G. & S. R. M., County Coconino, Arizona

Ground Elevation 5638, Est.



Scale, 1 inch = 1,000 feet

Surveyed September 20, 19 68



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

Ernest V. Echohawk

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

474



PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION,
STATE OF ARIZONA,

To: Pennsoil United, Incorporated
(OPERATOR)

to drill a well to be known as

Pennsoil #1-11 Kopi
(WELL NAME)

located 660' FWL - 660' FWL (NW/4 NW/4)

Section 11 Township 29N Range 14E, Coconino County, Arizona.

The W/2 of the NW/4 of said
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 17 day of October, 19 68.

OIL AND GAS CONSERVATION COMMISSION

By John Bannister
EXECUTIVE SECRETARY

PERMIT No 474

RECEIPT NO. 9556
API 02-005-20003

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill
FORM NO. 27

SAMPLES ARE REQUIRED

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS

Bond Serial No. 8036-99-07

That we: Pennzoil United, Inc.

of the County of Harris in the State of Texas

as principal, and Federal Insurance Company

of New York, New York

AUTHORIZED TO DO BUSINESS WITHIN the State of Arizona.

as surety, are held and firmly bound unto the State of Arizona and the Oil and Gas Conservation Commission, hereinafter referred to as the "Commission", in the penal sum of five thousand dollars (\$5,000.00) 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 conditions of this obligation are 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)

NOW, THEREFORE, if the above bounden principal shall comply with all the provisions of the Laws of this State and the rules, regulations and orders of the Commission, 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 Oil and Gas Conservation Commission all notices and records required by said Commission, then 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, this obligation is void; otherwise it shall remain in full force and effect.

Whenever the principal shall be, and declared by the Oil and Gas Conservation Commission in violation of the Laws of this State and the rules, regulations and orders of the Commission, the surety shall promptly:

1. Remedy the violation by its own efforts, or
2. Obtain a bid or bids for submission to the Commission to remedy the violation, and upon determination by the Commission and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the Commission, and make available as work progresses sufficient funds to pay the cost of remedying the violation; but not exceeding, including other costs and damages for which the surety may be liable hereunder, the amount set forth in the first paragraph hereof.

Liability under this bond may not be terminated without written permission of this Commission.

WITNESS our hands and seals, this 23 day of April, 1968

PENNZOIL UNITED, INC.

By J. H. Young, Vice President

By H. B. Gardner, Asst. Secretary

WITNESS our hands and seals this 25th day of April, 1968

FEDERAL INSURANCE COMPANY

By N. Carothers, Attorney-in-Fact

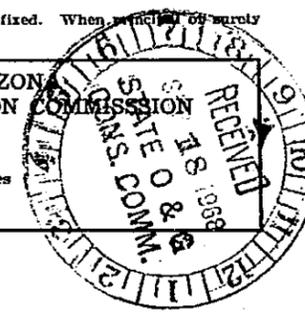
Surety, Resident Arizona Agent
If issued in a state other than Arizona)

(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 10/17/68
 46 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: John J. Dannerles

Permit No. 474

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Bond
 File Two Copies
 Form No. 2



Certificate of
POWER OF ATTORNEY

Know all Men by these Presents, That the FEDERAL INSURANCE COMPANY, 90 John Street, New York, New York, a New Jersey Corporation, has constituted and appointed, and does hereby constitute and appoint

Gus S. Wortham, Albert W. Smith, T. F. Smith, E. R. Barrow, H. M. Stewart,
Gerald D. Andrews and N. Carothers of Houston, Texas - - - - -

each its true and lawful Attorney-in-Fact to execute designation in its name and to affix its corporate seal to and deliver for and on its behalf as surety thereon or otherwise, bonds of either of the following classes, to-wit:

1. Bonds on behalf of contractors in connection with bids, proposals or contracts to or with the United States of America, any State or political subdivision thereof or any person, firm or corporation.
2. Surety Bonds to the United States of America or any agency thereof, including those required or permitted under the laws or regulations relating to Customs or Internal Revenue; License and Permit bonds or other indemnity bonds under the laws, ordinances or regulations of any State, City, Town, Village, Board or other body or organization, public or private; bonds to Transportation Companies, Lost Instrument bonds, Lease bonds, Workmen's Compensation bonds, Miscellaneous Surety bonds and bonds on behalf of Notaries Public, Sheriffs, Deputy Sheriffs and similar public officials.
3. Bonds and Undertakings required or permitted by law to be given or filed in any suit, matter or proceeding in any Court of the United States, or any State or other Court, or given to or filed with any Sheriff or Magistrate within any State, for the doing or not doing of anything specified in such Bond or Undertaking, in which the penalty of the bond or liability incurred under such undertaking does not exceed with respect to Fiduciary Bonds the sum of - - - - - Nil - - - - - Dollars (\$ Nil), and with respect to all other types of Court Bonds the sum of Five Hundred Thousand - - - - - Dollars (\$ 500,000.00).

In Witness Whereof, the said FEDERAL INSURANCE COMPANY has, pursuant to its By-Laws, caused these presents to be signed by its Vice President and Assistant Secretary and its corporate seal to be hereto affixed this 21st day of September 19 66

FEDERAL INSURANCE COMPANY
By

Frederick C. Gardner

Frederick C. Gardner
Vice-President

Davis Quinn

Davis Quinn
Assistant Secretary



STATE OF NEW YORK }
County of New York } ss.:

On this 21st day of September 19 66 before me personally came Davis Quinn, to me known and by me known to be Assistant Secretary of the FEDERAL INSURANCE COMPANY, the corporation described in and which executed the foregoing Power of Attorney and the said Davis Quinn being by me duly sworn, did depose and say that he resides in the City of New York, in the State of New York; that he is Assistant Secretary of the FEDERAL INSURANCE COMPANY and knows the corporate seal thereof; that the seal affixed to the foregoing Power of Attorney is such corporate seal and was thereto affixed by authority of the By-Laws of said Company and that he signed said Power of Attorney as Assistant Secretary of said Company by like authority; that he is acquainted with Frederick C. Gardner and knows him to be Vice President of said Company, and that the signature of said Frederick C. Gardner subscribed to said Power of Attorney is in the genuine handwriting of said Frederick C. Gardner and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Acknowledged and Sworn to before me
on the date above written.

Marion J. McGrath

Notary Public
MARION J. McGRATH
NOTARY PUBLIC, State of New York
No. 24-7837850
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1968



CITY AND COUNTY OF NEW YORK: ss

I, the undersigned, Assistant Secretary of the FEDERAL INSURANCE COMPANY, do hereby certify that the following is a true excerpt from the By-Laws of the said Company as adopted by its Board of Directors on March 11, 1953 and amended January 2, 1964 and that this By-Law is in full force and effect.

"ARTICLE XIX.

Section 2. All bonds, undertakings, contracts, powers of attorney, and other instruments other than as above, for and on behalf of the Company which it is authorized by law or its charter to execute, may and shall be executed in the name and on behalf of the Company either by the Chairman or the Vice-Chairman or the President or a Vice-President, jointly with the Secretary or an Assistant Secretary, under their respective designations, except that any one or more officers or attorneys-in-fact designated in any resolution of the Board of Directors or the Executive Committee, or in any power of attorney executed as provided for in this section, may execute any such bond, undertaking or other obligation as provided in such resolution or power of attorney."

And I further certify that I have compared the foregoing copy of the POWER OF ATTORNEY with the original thereof and the same is a correct and true copy of the whole of said original Power of Attorney and that said Power of Attorney has not been revoked.

And I further certify that said FEDERAL INSURANCE COMPANY is duly licensed to transact fidelity and surety business in each of the States of the United States of America, Puerto Rico, and each of the Provinces of the Dominion of Canada with the exception of Prince Edward Island; and is also duly licensed to become sole surety on bonds, undertakings, etc., permitted or required by the laws of the United States.

Given under my hand and seal of said Company at New York, N. Y., this 25th day of

April, 19 68

H. J. Kaul
Assistant Secretary

December 16, 1968

Mr. H. P. Goodrich
Pennzoil United, Incorporated
P. O. Drawer 1828
Midland, Texas 79701

Re: Pennzoil #1-11 Hopi
T29N, R14E, G & SRM
Sec. 11: NW/4 NW/4
Coconino County, Arizona
Permit #474

Dear Mr. Goodrich:

Our records indicate that verbal permission was given on 11-21-68 by our geologist, James Scurlock, to plug the captioned well. In addition to this verbal permission, a written Application To Plug, our form #9, is needed to make our file on this well complete. We would appreciate receiving this form at your earliest convenience. It is enclosed in duplicate for your use.

Yours truly,

James A. Lambert
Administrative Assistant

jf
Enc.

474

PHONE: 325-9232

641 WEST BROADWAY

FOUR CORNERS SAMPLE CUT ASSOCIATION

P. O. BOX 899
FARMINGTON, NEW MEXICO 87401

December 3, 1968

Hello Jim:

This is a list of the Arizona wells which we have in the cut at present time.

Arkla Core test # 56 ✓
No Location

El Paso #1-B La Posa
10-7N-19W
Yuma Co.

Skelly #1 Navajo Q
18-38N-30E
Apache Co

Texaco #1 Navajo BF
26-6N-7W
Apache Co.

Apache #1 Santa Fe Crest
25-20N-27E
Apache Co.

Pennzoil #1 Hopi-11
11-29N-14W
Coconino Co.

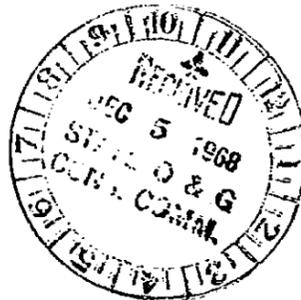
Buttes Oil & Gas #1-14 Navajo Tite
14-7N-9W
Apache Co.

Buttes Oil & Gas #1-23 Navajo Tite
23-37N-27E
Apache Co.

The following two wells have been cut or in the process

Buttes Oil & Gas #1-25 Navajo
25-35N-28E
Apache Co.

G.B. Cree #1 Hunt
31-18N-20W
Navajo Co.



ONEA 325-9232

641 WEST BROADWAY

FOUR CORNERS SAMPLE CUT ASSOCIATION

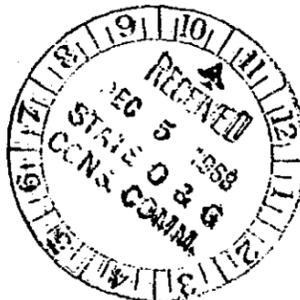
P. O. BOX 899
FARMINGTON, NEW MEXICO 87401

As for the list of wells which have been cut through the years I will see what I can come up with as soon as possible and send to you.

Again, let me say will appreciate any help you can give me in getting the Arizona wells to the cut, and if I can be of assistance to you let me know.

Sincerely,


Jo Ratcliff



Memo: File
From: J. Scurlock

11-21-68

Penzoil #1-11 Hopi
Permit #474

Telephone with Brian Kerby 11-2-168. Kerby
just returned from well. Total depth 6940'.
Formation tops:

Naco 5545
Mississippian 5860
Devonian 6200
Petroliferous Sandy Dolomite at 6413
Sand 6610 (Age questionable)
Granite Wash 6865

DST 6410 to 6430

Initial tool opened 10 minutes; shut in 60
minutes; open 15 minutes; shut in 2 hours,
initial shut-in pressure 1963, final shut-
in pressure 2006. FP 22-44; H 3089-3045.
Will log and test. 6420-30 Sandy Dolomite
had florescence and cut, but no show on
mud logging machine.

Telephone rig

General Com. 774-7317 Flag

Unit #16

Telephone 11-21-68 → Mr. J.D. Swinea

TD 6944

Proposed: Will set plugs:

*850-950
3000-3100
6200-6300
6550-6650
6800-6944*

474

Gave verbal permission to plug. ALL OK J.S.

Memo: File
From: J. Scurlock

10-31-68

Pennzoil #1-11 Hopi
T29N, R14 E, G & SRM
Sec. 11: NW/4 NW/4
Coconino County, Arizona
Permit #474

Elevation derrick floor 5649'. Drilling at 3175'. Geologist, Bill Ammentorp being relieved and will return to Midland. Relieved by Bob Berger. Top of Chinle at 1650'. Top of Chinarump at 2870'. Top of Moenkopi at 2960'. Expect top of Coconino at approximately 3275' or 3300'. Running structurally 140' high to the Moore, Moore, Miller and 207' low to the Atlantic Hopi.

11-4-68 Has Baroid gas sniffer on well.
Well supported by: Kerr McLee, by Jenneco, and by Craig Scott ?? (or Scott Craig ??) — Denver

{ Top Coconino 3247
Top Supai 4720
Currently drilling @ 4735.

Last circulation @ 3361, 3761

474

48
PENNZOIL UNITED, Inc.

WESTERN DIVISION OFFICE • 1007 MIDLAND SAVINGS BUILDING - MIDLAND, TEXAS • PHONE (915) 682-7316
MAILING ADDRESS: P. O. DRAWER 1828 MIDLAND, TEXAS 79701

October 25, 1968

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

Attention: Mr. John Bannister

Dear Sir:

Pennzoil United, Inc. spudded the Hopi "11"
No. 1 well in Coconino County, Arizona at 6:00 P.M.
October 24, 1968.

It is our desire to drill the well as a
~~confidential~~ project and request that all information
relative to the drilling of this well be handled ac-
cordingly.

I hope to meet you soon on the drill site.

Yours very truly,

PENNZOIL UNITED, INC.
Western Division

H. P. Goodrich

H. P. Goodrich
Drilling Superintendent

40
HPG:tb



474

October 18, 1968

Mr. H. P. Goodrich
Pennzoil United, Incorporated
P. O. Drawer 1828
Midland, Texas 79701

Re: Pennzoil #1-11 Hopi
T29N, R14E, G & SRM
Sec. 11: NW/4 NW/4
Coconino County, Arizona
Permit #474

Dear Mr. Goodrich:

Enclosed is Permit To Drill, Receipt No. 9556 issued by this office, an approved Application To Drill, an approved performance bond, and a copy of the Organization Report you submitted to this office. We request that you report to the Commission any change occurring in the Organization Report. We enclose miscellaneous instruction sheets pertaining to well samples and reports required by this office. We furnish Well Completion Report Forms for your use.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf
Enclosures

474

October 16, 1968

Mr. Phil McGrath
District Engineer
U. S. Department of the Interior
Geological Survey
P. O. Box 959
Farmington, New Mexico 87401

Dear Sir:

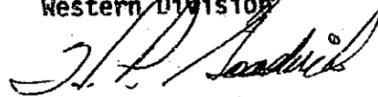
Enclosed is application for Pennzoil United, Inc. to drill the Hopi "11" No. 1, located on the Hopi Reservation in Coconino Co., Arizona.

Our Federal Qualification file is located in the Eastern States Land Office, Silver Springs, Maryland under file # 066100; Our Federal Bond # 8023-29-91.

If there are any questions concerning this application, I would appreciate your calling me collect, as we plan on spudding immediately upon approval.

Yours very truly,

PENNZOIL UNITED, INC.
Western Division



H. P. Goodrich
Drilling Superintendent

HPG:tb

cc: Oil & Gas Conservation Commission
State of Arizona
1624 West Adams
Phoenix, Arizona 85007



474

September 20, 1968

Mr. H. P. Goodrich
Pennzoil United, Incorporated
P. O. Drawer 1828
Midland, Texas 79701

Dear Mr. Goodrich:

We acknowledge receipt of our Form #1, Organization Report, and performance bond No. 8036-99-07, Pennzoil United, Incorporated, principal, Federal Insurance Company, surety. We look forward to receiving our Form #4, Application for Permit to Drill; a filing fee; and the survey plat certified by a registered surveyor.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf



474

 **PENNZOIL UNITED, Inc.**

WESTERN DIVISION OFFICE • 1007 MIDLAND SAVINGS BUILDING - MIDLAND, TEXAS • PHONE (915) 682-7316
MAILING ADDRESS: P. O. DRAWER 1828 MIDLAND, TEXAS 79701

September 17, 1968

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

Attention: Mr. John Bannister

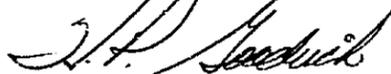
Dear Sir:

Enclosed please find the Organization Report and Performance Bond for Pennzoil United, Inc. These are being forwarded prior to filing our Application to Drill so that we may be sure all is in order. We plan now to try to start our well on the Hopi reservation within the next two weeks. When we have selected our exact location, we will again be in contact with you and at that time will file for our permit.

If you need additional information, please do not hesitate to call me here in Midland.

Yours very truly,

PENNZOIL UNITED, INC.
Western Division



H. P. Goodrich
Drilling Superintendent

HPG/tb
Encls.



April 9, 1968

Pennzoil United, Inc.
P.O. Drawer 1828
Midland Texas 79701

Attention: Mr. H.P. Goodrich, Drilling Superintendent

Gentlemen:

This will acknowledge receipt of your letter of April 3, 1968.

Inasmuch as you are intending to drill upon the Hopi Indian Reservation within this State it is necessary that you comply with the rules and regulations of this Commission, as well as those of U.S. Geological Survey (P.O. Box 959, Farmington, New Mexico 87401, Mr. Phil McGrath, District Engineer), who of course are the advisors to the Hopi Indians. The Indians themselves may have some requirements.

Briefly, any well drilled within the State of Arizona must be under the auspice of this Commission. You will need to post with the Commission a \$5,000 bond per single well, or a \$25,000 state-wide (or blanket) bond. An application to drill for each well will have to be filed. The application must be accompanied by a \$25.00 filing fee and a survey plat of the well location.

It is also necessary that you file our Form #1, Organization Report, covering your company. This need be filed only one time; however it should be kept current should there be any significant change in company organization.

The Commission requires that you advise it immediately upon spud and keep it currently advised of your progress. This may be done on Form 25, Sundry Report. However, in order to cut down on paper work, in lieu of this Form 25 we accept a copy of the reports to U.S. Geological Survey. In any event, you must file a copy of any report to U.S. Geological Survey with this Commission.

The well completion report (Form 4) is required in addition to a copy of the well completion report filed with U.S. Geological Survey.

The enclosed material will contain instructions as to the handling

Pennzoil United, Inc.
April 9, 1968
Page 2

of the samples requested by the Commission.

Should you desire any well to be drilled as a tight hole, so notify the Commission in writing. All information subsequent to the application to drill will be confidential and will remain so until six months following date of completion.

Please rest assured of the desire of this Commission to cooperate in any possible manner. If you have any questions, do not hesitate to contact us.

Very truly yours,

John Bannister
Executive Secretary
mr
encs

PENNZOIL  COMPANY

1007 MIDLAND SAVINGS BUILDING • MIDLAND, TEXAS • TELEPHONE 915 MUTUAL 2-7316
MAILING ADDRESS: P. O. DRAWER 1828 • MIDLAND, TEXAS 79701

April 3, 1968

Arizona Oil & Gas Conservation Commission
3500 North Central Avenue
Phoenix, Arizona

Gentlemen:

Within the next few weeks, Pennzoil United, Inc., successor firm of Pennzoil Company, plan to drill a wild-cat well to the Pre-Cambrian formation at a location on the Hopi Indian reservation. The exact location has not yet been selected, but it is on our Beautiful Mountain prospect.

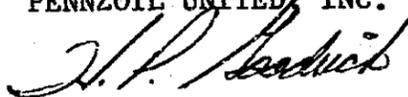
Since this will be our first venture in Arizona, we would appreciate your advice as to what requirements must be met prior to starting this operation. If you could give us this information plus a supply of the forms that must be completed it would be greatly appreciated.

As a side note, Duval Corporation, who has extensive operations in Arizona, is a part of the Pennzoil United family, being owned 75% by our company.

Thank you for any and all assistance you can give us.

Yours very truly,

PENNZOIL UNITED, INC.



H. P. Goodrich
Drilling Superintendent

HPG/tb

