

CONFIDENTIAL  
Release Date 12-8-68

P-W

BUTTES GAS & OIL #1-25 NAVAJO 461  
SE SE 25-35N-28E Apache County

sl

COUNTY Apache AREA 2 1/2 mi. S/Lukachuki LEASE NO. 14-20-0603-8904

WELL NAME Buttes Gas & Oil #1-25 Navajo

LOCATION SE SE SEC 25 TWP 35N RANGE 28E FOOTAGE 600' FSL - 550' FEL

ELEV 6000 GR 6354 KB SPUD DATE 5-24-68 STATUS 6-8-68 TOTAL DEPTH 3000'

CONTRACTOR Loffland Brothers Drilling Co.

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY
<u>9 5/8</u>	<u>271'</u>	<u>210</u>	<u>NA</u>	<u>x</u>
				DRILLED BY CABLE TOOL
				PRODUCTIVE RESERVOIR
				INITIAL PRODUCTION

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Shinarump	Surface		x	
DeChelly	203'			
Organ Rock	918'			
Hermosa	1838'			
Molas	2312'			
Leadville	2360'			
Ouray	2554'			
Elbert	2580'			
McCracken	2770'			
Aneth	2875'			
Tapeat	2970'			
Precambrian	2982'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG <u>Am Strat</u> SAMPLE DESCRP. SAMPLE NO. <u>1454*</u> CORE ANALYSIS DSTs <u>x</u> <u>*2539</u>
Schlumberger IES, GammaRay	NA	NA	
BHC Sonic Caliper			

REMARKS <u>Sample set in Tucson 1-30-69</u>	APP. TO PLUG <u>x</u>
	PLUGGING REP. <u>x</u>
	COMP. REPORT <u>x</u>

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

BOND CO. Pacific Indemity Co. BOND NO. 326383  
 BOND AMT. \$ 5,000 CANCELLED 7-24-68 DATE 5-8-68  
 FILING RECEIPT 9545 LOC. PLAT x WELL BOOK x PLAT BOOK x  
 API NO. 02-001-20078 DATE ISSUED 1-13-68 DEDICATION E/2 SE/4

PERMIT NUMBER 461

(over)

**CONFIDENTIAL**  
Release Date 12-8-68



## WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

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

DESCRIPTION OF WELL AND LEASE

Operator **BUTTES GAS & OIL CO.** Address **420 C. A. Johnson Building, Denver, Colorado 80202**

Federal, State or Indian Lease Number or name of lessor if fee lease **U. S. (Indian) 14-20-0603-8904** Well Number **1-25** Field & Reservoir **Wildcat**

Location **600' FSL and 550' FEL, Section 25** County **Apache**

Sec. TWP-Range or Block & Survey

**Section 25-35N-28E**

Date spudded	Date total depth reached	Date completed, ready to produce	Elevation Corrected (D.F. RT or Gr.)	Elevation of casing hd. flange
5/24/68	6/8/68	-----	6354' K.B. feet	----- 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.
3000' Driller	-----	-----	-----

Producing interval (s) for this completion	Rotary tools used (interval)	Cable tools used (interval)
None	0-3000'	None

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

Type of electrical or other logs run (check logs filed with the commission) **Schlumberger IES, Gamma Ray BHC Sonic Caliper** Date filed **6/10/68 by E. A. Riggs**

### 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 Casing	13 3/4"	9 5/8"		271'	210	None

### TUBING RECORD

### LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
in.	ft.	ft.	in.	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 **General Manager** of the **BUTTES GAS & 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.

Date **July 10, 1968**

*Robert W. Peterson*  
Signature **Robert W. Peterson**

Permit No. **461**

Form No. 4

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
Well Completion or Recompletion Report and Well Log  
File One Copy



**DETAIL OF FORMATIONS PENETRATED**

Formation	Top	Bottom	Description*
Shinarump	Surface		See attached data for formation descriptions and drill stem test. No cores were cut.
De Chelly	203		
Organ Rock	918		
Hermosa	1838		
Molas	2312		
Leadville	2360		
Ouray	2554		
Elbert	2580		
McCracken	2770		
Aneth	2875		
Tapeats (?)	2970		
Precambrian Metamorphics	2982		
T. D. (Log)	2996		

6354  
203  
—  
4151

\* 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



APPLICATION TO ABANDON AND PLUG

FIELD Wildcat  
 OPERATOR BUTTES GAS & OIL CO. ADDRESS 420 C. A. Johnson Building, Denver, Colorado  
 Federal, State, or Indian Lease Number or Lessor's Name if Fee Lease U. S. (Indian) 14-20-0603-8904 WELL NO. 1-25 Navajo  
 SURVEY \_\_\_\_\_ SECTION 25 COUNTY Apache  
 LOCATION 600' FSL and 550' FEL, Section 25, Township 35 North, Range 28 East

TYPE OF WELL Dry Hole (Oil, Gas or Dry Hole) TOTAL DEPTH 3000' (Driller)  
 ALLOWABLE (If Assigned) \_\_\_\_\_  
 LAST PRODUCTION TEST OIL None (Bbls.) WATER \_\_\_\_\_ (Bbls.)  
 GAS None (MCF) DATE OF TEST None  
 PRODUCING HORIZON \_\_\_\_\_ PRODUCING FROM \_\_\_\_\_ TO \_\_\_\_\_

1. COMPLETE CASING RECORD  
Ran 9 5/8" casing to 271' and cemented with 210 sacks, Class "A" cement with 2% CaCl<sub>2</sub>.

2. FULL DETAILS OF PROPOSED PLAN OF WORK Plan to set cement plugs as follows:

Surface	15 Sacks
140--240	20
1750-1850	30
2300-2400	30
2700-2850	55
	150 Sacks

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 June 8, 1968  
 NAME OF PERSON DOING WORK E. A. Riggs, Geologist ADDRESS P. O. Box 711, Farmington, N. M.  
Loffland Bros. Company ADDRESS P. O. Box 688, Farmington, N. M.  
 CORRESPONDENCE SHOULD BE SENT TO Robert W. Peterson  
 Name  
General Manager, Juniper Oil & Gas Co. Division  
 Title  
420 C. A. Johnson Building, Denver, Colorado 80202  
 Address  
June 28, 1968  
 Date

Date Approved 6-9-68  
 STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 By: John Bannister  
 Permit No. 461

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Application to Abandon and Plug  
 File This Copy  
 RECEIVED  
 STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 JUNE 11 1968  
 Form No. 9

Form 9-331  
(May 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE  
(Other instructions on reverse side)

Form approved  
Budget Bureau No. 42-R1424

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Buttes Gas & Oil Co.

3. ADDRESS OF OPERATOR  
420 G. A. Johnson Bldg., Denver, Colo. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
600' FSL, 550' FSL Section 25

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, ST, GR, etc.)  
6354' KB

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-0403-8904

6. IF INDIAN, ALLOTMENT OR TRUST NAME  
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Navajo

9. WELL NO.  
No. 125

10. FIELD AND TOOL OR WILDCAT  
Wildcat

11. SEC. T. R. OR R.M. AND SUBMERGEE AREA  
Sec. 25, T. 10N, R. 20E

12. COUNTY OR PARISH  
Apache Arizona

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

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

(NOTE: Report results of multiple completion or well completion or recompletion Report and Log form.)

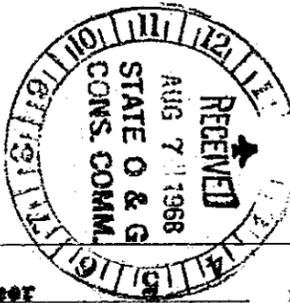
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to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

1. Cement plugs as shown:

- a. 2850' - 2700' - 55 ex.
- b. 2400' - 2300' - 30 ex.
- c. 1850' - 1750' - 30 ex.
- d. 240' - 140' - 20 ex.
- e. Surface - 15 ex.

2. Rig released and well abandoned @ 9:00 A.M., 6-8-68

3. Removed fence and cleaned location on 7-29-68. Ray L. Atchison, Com. Co. Drawer 0, Aztec, New Mexico



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

SIGNED [Signature] TITLE Engineer DATE 8-1-68

(This space for Federal or State office use)  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

cc: Arizona O & G Cons. Com.  
Navajo Agency

\*See Instructions on Reverse Side

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved  
Budget Bureau No. 42-R555.5

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP EN  PLUG BACK  DIFF. RESVR.  Other

2. NAME OF OPERATOR  
**BUTTES GAS & OIL CO.**

3. ADDRESS OF OPERATOR  
**420 C. A. Johnson Building, Denver, Colorado 80202**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface **600' FSL and 550' FEL, Section 25**  
At top prod. interval reported below **Same**  
At total depth **Same**

14. PERMIT NO. \_\_\_\_\_ DATE ISSUED \_\_\_\_\_

5. LEASE DESIGNATION AND SERIAL NO.  
**14-20-0603-8904**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**Navajo**

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
**U. S. (Navajo) as above**

9. WELL NO.  
**1-25**

10. FIELD AND POOL, OR WILDCAT  
**Wildcat**

11. SECTION, TWP. OR BLOCK AND SURVEY OR AREA  
**Section 25-35N-28E**

12. COUNTY OR PARISH  
**Apache**

13. STATE  
**Arizona**

15. DATE SPUDDED **5/24/68** 16. DATE T.D. REACHED **6/8/68** 17. DATE COMPL. (Ready to prod.) **6/8/68** 18. ELEVATIONS (OF RKB, RT, OR FC) **6354' x B**

20. TOTAL DEPTH, MD & TVD **3000' Driller** 21. PLUG BACK T.D., MD & TVD \_\_\_\_\_ 22. IF MULTIPLE COMPL. HOW MANY? \_\_\_\_\_ 23. INTERNALS DRILLED BY \_\_\_\_\_ ROTARY TOOLS **0-3000'** CABLE TOOLS **None**

24. PRODUCTION INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) \_\_\_\_\_ 25. DIRECTIONAL SURVEY MADE \_\_\_\_\_

26. TYPE ELECTRIC AND OTHER LOGS RUN **None** 27. WAS WELL CORED **No**

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH-SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
<b>9 5/8"</b>		<b>271'</b>	<b>13 3/4"</b>	<b>210 Sx Class "A" w/ 2% CaCl<sub>2</sub></b>	<b>None</b>

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH-SET (MD)	PACKER-SET (MD)
<b>None</b>							

31. PERFORATION RECORD (Interval, size and number):		32. AGID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
<b>None</b>		<b>None</b>	

33. PRODUCTION

DATE FIRST PRODUCTION \_\_\_\_\_ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) \_\_\_\_\_ WELL STATUS (Producing or shut-in) \_\_\_\_\_

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
<b>None</b>							

FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) \_\_\_\_\_ TEST WITNESSED BY \_\_\_\_\_

35. LIST OF ATTACHMENTS \_\_\_\_\_

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED **Robert W. Peterson** TITLE **Engineer** DATE **7/10/68**

\*(See Instructions and Spaces for Additional Data on Reverse Side)

cc: Arizona Oil and Gas Conservation Commission

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SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator BUTTES GAS & OIL CO.  
 2. OIL WELL  GAS WELL  OTHER  (Specify) Dry Hole  
 3. Well Name 1-25 Navajo  
 Location 600' FSL and 550' FEL  
 Sec. 25 Twp. 35N Rge. 28E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease U. S. (Indian) 14-20-0603-8904  
 5. Field or Pool Name Wildcat

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

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

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

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

Oral permission to plug and abandon given by James A. Scurlock to Elliott A. Riggs, for Buttes Gas & Oil Co.

Set the following plugs:	Surface	15 Sacks
	140--240	20
	1750-1850	30
	2300-2400	30
	2700-2850	55
		<u>150 Sacks</u>



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

Signed Robert W. Peterson Title Engineer Date 6/28/68

Permit No. 461

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

ELLIOTT A. RIGGS

Petroleum Geologist

STRUCTURAL TOPS

	<u>Buttes #1</u>	<u>Buttes #1-25</u>	<u>Gulf #1-4</u>
De Chelly	+5499	+6151	+6309
Leadville	3450	3994	4606
McCracken	3039	3584	4092
Precambrian	2825	3372	3883

ZONES OF INTEREST

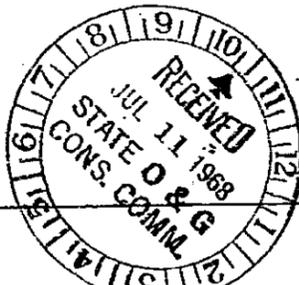
De Chelly Formation

The De Chelly Formation in the Buttes #1-25 well is about 715' thick. It is composed primarily of fine to medium grained sub-rounded sand grains. In general, it grades from white to shades of orange-tan and red brown near the base of the formation. In the lower portion of the De Chelly, non-magnetic dark mineral grains are common in the samples. Sample recovery throughout the De Chelly was as individual sand grains.

No shows were present in the samples or detected by the mud logger. No water flows were encountered.

Gutler Formation

Although the vertical limits of this formation are not well defined, white to pink to tan limestones are a consistent part of each sample 3-400 feet above the Hermosa top. The limestones are very fine grained, dense, and commonly carry dull to bright yellow fluorescence. No visible porosity is present and a hydrocarbon cut cannot be obtained from the sample. However, crushing the sample in the clorethane cut dish yields a very slight fluorescence in the solvent but not sufficiently strong to leave a fluorescent ring after evaporation. This fluorescence would probably be called mineral fluorescence by most people and cannot be considered a show of any consequence.



Alot

ELLIOTT A. RIGGS

Petroleum Geologist

Hermosa Formation

This formation consists primarily of dense fossiliferous white to grey limestones with occasional amounts of orange chert in the upper portion. Red to lavender shales are interbedded with the limestones. Many of the limestones are fluorescent in the manner described on the limestones of the Cutler formation.

No shows or visible porosity was present in the Hermosa in either the samples or on the mud logger.

A drilling break was encountered from 2183-93'. The drilling rate broke down from about 6"/ft. to 3"/ft. Circulated samples showed this interval to be a very fine grained soft silty-shaly grey limestone with no porosity or show in the samples or recorded on the mud logger. Examination of the log shows nothing of interest.

A second drilling break was encountered from 2232-41'. The drilling rate changed from about 6"/ft. to 3"/ft. Circulated samples showed this zone to be a white-cream very fine grained dense soft limestone. No show or porosity was present in the samples and no show was recorded on the mud logger. The electric logs show this interval to be tight and of no interest.

Leadville Formation

The Mississippian Leadville is a massive white-cream colored limestone with abundant amounts of milky chert in its upper portion. The middle Leadville is a massive oolite section with occasional very small amounts of inter-oolitic porosity between 2450-80'. This porosity was of the lowest grade and is almost undetectable on the log. The oolite zone carried no show in the samples or on the mud logger and drilled at the rate of 6-8"/ft. Examination of the logs show the entire Leadville interval to be non-prospective.

Elbert Formation

The Devonian Elbert formation is primarily fine to medium grained tan dolomite. A minor amount of intercrystalline porosity was noted in the samples between 2660 and 2680'. No drilling break accompanied this low grade porosity and no show was present in the samples or on the mud logger. This porosity can be seen slightly developed on the log.

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A-601

ELLIOTT A. RIGGS

Petroleum Geologist

McCracken ss Member of Elbert

The McCracken more closely resembles, in log character, the section encountered in the Gulf #1-1, than the section in the previously drilled Buttes #1 which had a very well developed porous sand interval.

The McCracken in the Buttes #1-25 can be divided easily into 3 general units. The upper unit has fine to medium grained sandstone with some of the porosity destroyed by secondary overgrowth of quartz on the sand grains. The middle unit is composed of a pink fine grained lithographic dolomite with abundant floating sand grains. The lower unit is a white and red brown alternating glauconitic sandstone sequence with lavender and green shales.

A drill stem test was conducted over the upper portion of the McCracken from 2748-2810'. The samples contained no show of hydrocarbons and the mud logger detected no shows of either hydrocarbons or helium. The good blow throughout the test period and the gas cut character of the 1200 feet of mud and salt water recovered indicated that some non-flammable gas had been made on the test. However, Mr. Dick Miller of the Amarillo, Texas, office of the Bureau of Mines Helium Activity, who expedited the analysis of the gas samples taken, reported that all the samples analysed air on the mass spectrometer, and in the proper elemental percentages for air. This corresponds to the well site results of the gas chromatograph detecting no helium in the samples immediately after the drill stem test.

The conclusion must be drawn that the McCracken formation yielded salt water on test with very little non-flammable gas. Had the formation given up significant amounts of non-flammable gas, it should have been present in 8 gas samples taken. If the drill pipe had not been completely purged, the non-flammable gas should have contaminated the atmosphere in the drill pipe and changed the percentages of normal atmospheric gases. Since the air in the drill pipe was not contaminated and since the DST flow period was apparently long enough to have purged the pipe if the formation was making gas, it is concluded that the blow was primarily due to the displacement of air in the drill pipe by salt water.

The high salinities of the water recovered are reminiscent of the Devonian water recovery in the Amerada #1 Black Mountain well to the southwest and indicates the absence of flushing of this unit on the Defiance Uplift. The salt water recovery in the Buttes #1-25 points up the prospectiveness

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ELLIOTT A. RIGGS

Petroleum Geologist

of this unit as a potential reservoir for hydrocarbons or non-flammable gas on the Defiance Uplift.

Aneth Formation

The Aneth Formation is a cream to pink to tan fine grained dense dolomite, becoming fine to coarse grained at the base. Good inter-crystalline porosity was present in the coarsely crystalline fraction of the dolomite in the lower 20 feet of the formation. No show was present in the samples or detected on the mud logger. The logs show the total interval of the porosity to be very small.

The lower Aneth porosity is also present in other wells in the area and should be considered a prospective reservoir for any wildcat drilled on the Defiance Uplift.

Alcl

Butler  
Permit 491

Removed:  
a good show that  
could have made a  
producer @ 2970 - 2990



*From the Desk of*

**JAMES R. SCURLOCK**

6-5-68

Bates

@ Telephone W.W. Whitley

Spud 5-24-68

Ø 2800

prep to DST McCracken

(Have taken no previous DST or Core)

#

Telephone: 222-7797  
Area Code: 303



**OIL & GAS COMPANY**  
A DIVISION OF BUTTES GAS & OIL CO.  
SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

68-76a

June 5, 1968

DRILLING REPORT

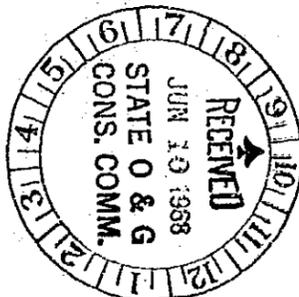
No. 1-25 Navajo, SE $\frac{1}{2}$  SE $\frac{1}{4}$  Section 25-35N-28E, Apache County, Arizona

June 5      Depth, 2800'.  
Mud: Weight 9.1, viscosity 45, water loss 5.7, filter cake 2/32,  
Ph 9.  
Preparing to run Drill Stem Test No. 1, waiting for tester.  
Proposed test interval, 2730-2800'.

**CONFIDENTIAL**

DISTRIBUTION

Blackburn (3)  
Kerr-McGee Oil



Telephone: 222-7197 222-4320  
Area Code: 303



**OIL & GAS COMPANY**  
A DIVISION OF BUTTES GAS & OIL CO.  
SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

68-74a

June 3, 1968

DRILLING REPORT

No. 1-25 Navajo, SE $\frac{1}{4}$  SE $\frac{1}{4}$  Section 25-35N-28E, Apache County, Arizona

- June 1      Drilling at 2241'; white to cream, fine grained, dense, limestone with minor amounts of calcareous sandstone and red and lavender-grey shale.  
              Deviation at 2120', 1 $^{\circ}$ .  
              Mud: Weight 9.1; viscosity 38; water loss 7.4, Ph 8.5.
- June 2      Drilling at 2395'; white to cream limestone with some chert and lavender and red shale.  
              Tops: Molas (Sample): 2320'  
              Deviation at 2277', 3/4 $^{\circ}$ .  
              Mud: Weight 9.3, viscosity 36.
- June 3      Drilling at 2544'.  
              Deviation at 2398', 1 $\frac{1}{2}$ '.  
              Mud: Weight 9.2, viscosity 44, water loss 6.2, Ph, 10, filter cake 2/32.

DISTRIBUTION

Blackburn (3)  
Kerr-McGee Oil

*Confidential*

Telephone: 222-7797  
Area Code: 303



**OIL & GAS COMPANY**  
A DIVISION OF BUTTES GAS & OIL CO.

SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

68-73a

May 31, 1968

DRILLING REPORT

No. 1-25 Navajo, SE $\frac{1}{4}$  SE $\frac{1}{4}$  Section 25-35N-28E, Apache County, Arizona

May 30  
May 31

Drilling at 1850'.  
Drilling at 2057'.  
Bit No. 4, S4TG, out at 1850', made 447 feet in 24 hours.  
5, M4NG, 1991 141 10 $\frac{1}{2}$   
6, M4NG on bottom.  
Mud: Weight 9.2, viscosity 34.  
Sample top, Hermosa, 1840'.

DISTRIBUTION

Blackburn (3)  
Kerr-McGee Oil

*Confidential*

Telephone: 222-7797 212-4333  
Area Code: 303



**OIL & GAS COMPANY**  
A DIVISION OF BUTTES GAS & OIL CO.  
SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

68-72a

May 29, 1968

DRILLING REPORT

No. 1-25 Navajo, SE $\frac{1}{4}$  SE $\frac{1}{4}$  Section 25-35N-28E, Apache County, Arizona

May 29

Drilling at 1448' with Bit No. 4, S4TG.  
Bit No. 2 (Correction) out at 1074', made 304' in 22 3/4 hours.  
3 1403' 329 12 3/4  
Mud: Weight 9.6, viscosity 42.  
Deviation: 1034', 30°; 1115, 2 3/4; 1240, 2 1/2, 1376', 2 3/4.  
Sample top: Organ Rock 990'.

DISTRIBUTION

Blackburn (3)  
Kerr-McGee Oil

*Confidential*

Telephone: 222-7797  
Area Code: 303



**OIL & GAS COMPANY**  
A DIVISION OF BUTTES GAS & OIL CO.  
SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

68-71a

May 28, 1968

DRILLING REPORT

No. 1-25 Navajo, SE $\frac{1}{4}$  SE $\frac{1}{4}$  Section 25-35N-28E, Apache County, Arizona

May 28

Tripping at 1066'  
Bit No. 2, DTH, out at 1066', made 296' in 21 3/4 hours.  
Mud: Weight 9.0, viscosity 36, water loss 8.8, Ph 10.0.

DISTRIBUTION

Blackburn (3)  
Kerr-McGee Oil

*Confidential*

Telephone: 222-7797  
Area Code: 303



**OIL & GAS COMPANY**  
A DIVISION OF BUTTES GAS & OIL CO.  
SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

68-70a

May 27, 1968

DRILLING REPORT

No. 1-25 Navajo, SE $\frac{1}{4}$  SE $\frac{1}{4}$  Section 25-35N-28E, Apache County, Arizona

May 25 Spudded well, 5/24 p.m.  
May 26 Drilled to 80', lost circulation.  
May 27 Drilled to 275'; set 9 5/8" casing at 271' with 210 sx regular with 2% CaCl<sub>2</sub>; good returns to surface.  
Prep to drill out plugs, 10:00 a.m., 5/26  
G. L. to K. B., 11'. Corrected Ground: 6348'; K. B. 6359'.  
Drilling at 770'.  
Bit No. 1, S3TS, out at 770, made 495 feet in 14 hours.  
2, DTH, in at 770'.  
Mud: Weight 8.8; viscosity 35.

DISTRIBUTION

Blackburn (3)  
Kerr-McGee Oil

*Confidential*

**APPLICATION FOR PERMIT TO DRILL OR RE-ENTER**

APPLICATION TO DRILL

RE-ENTER OLD WELL

**BUTTES GAS & OIL CO.**  
NAME OF COMPANY OR OPERATOR

420 C. A. Johnson Building, Denver, Colorado 80202  
Address City State

**Loffland Brothers Drilling Co.**  
Drilling Contractor  
1216 East Bloomfield Road, Farmington, New Mexico  
Address

**DESCRIPTION OF WELL AND LEASE**

Federal, State or Indian Lease Number, or if fee lease, name of lessor <b>U. S. (Indian) 14-20-0603-8904</b>	Well number <b>Navajo No. 1-25</b>	Elevation (ground) <b>6000' Est.</b>
Nearest distance from proposed location to property or lease line: <b>660</b> feet	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: ----- feet	
Number of acres in lease: <b>2560</b>	Number of wells on lease, including this well, completed in or drilling to this reservoir: <b>None</b>	
If lease, purchased with one or more wells drilled, from whom purchased: -----	Name	Address
Well location (give footage from section lines) <b>660' FSL and 550' FEL, Section 25</b>	Section—township—range or block and survey <b>25 35N 28E</b>	Dedication (Comply with Rule 106)
Field and reservoir (if wildcat, so state) <b>Wildcat</b>	County <b>Apache</b>	
Distance, in miles, and direction from nearest town or post office <b>2½ Miles west of Lukachuki Trading Post</b>		
Proposed depth: <b>2900'</b>	Rotary or cable tools <b>Rotary</b>	Approx. date work will start <b>5/10/68</b>
Bond Status <b>On File</b>	Organization Report On file <input checked="" type="checkbox"/> Or attached	Filing Fee of \$45.00 Attached <input checked="" type="checkbox"/>
Amount		
Remarks:		

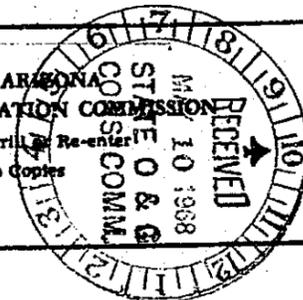
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the **General Manager** of the **BUTTES GAS & OIL CO., Juniper Oil & Gas Co., Division** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

*R. W. Peterson*  
Signature  
**R. W. Peterson**  
Date  
**May 7, 1968**

Permit Number: **461**  
Approval Date: **5-13-68**  
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

(Complete Reverse Side)

API No. 02-001-20078

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 XX
5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES XX NO \_\_\_\_\_ If answer is "yes," Type of Consolidation Operating Agreement, April 19, 1968.
6. If the answer to question four is "no," list all the owners and their respective interests below:

Owner <u>W. T. Blackburn 4/11</u> <u>BUTTES GAS &amp; OIL CO. 7/11</u>	Land Description <u>Sections 25, 26, 35 &amp; 36 (A11), 35N-28E</u>
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> </div> <div style="width: 50%; padding-left: 10px;"> <p style="text-align: center;"><b>CERTIFICATION</b></p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p style="text-align: center;"><i>W. R. Stroble</i> W. R. Stroble</p> <p>Name Division Landman</p> <p>Position Buttes Gas &amp; Oil Co.</p> <p>Company 5/7/68</p> <p>Date</p> </div> </div> <div style="margin-top: 10px;"> <p>I hereby certify that the location shown on the plat is plotted from the most recent surveys made by <u>ECHOHAWK</u> in supervision, and that the same is true and correct to the best of my knowledge and belief.</p> <p style="text-align: center;"><b>REGISTERED LAND SURVEYOR</b>  <b>STATE OF ARIZONA, U.S.A.</b></p> </div> <div style="margin-top: 10px;"> <p>Date Surveyed May 7, 1968</p> <p>Registered Professional Engineer and/or Land Surveyor <i>E. J. Campbell</i></p> <p>Certificate No. ARIZ. 2311</p> </div>	

**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
9 5/8"	32.30	H-40	0	250	250	100

# E R V A T I O N

50T

4033

4-69  
6190T

Bijaadiba

The Pillow

Creek

6392T TRANS LINE

STEEL TOWER

SAND WASH

Tohoiso

Creek

5473T

6348T

Tahshatoo

Lukachukai

CORILL HOLE

6336T

6372T

6377T

6385T

6452T

4-68  
VEDO

Supai Mesa

Bad Bug Butte

LANDING STRIP (DIRT)

CA-00

6438T

6447T

6418T

6439T

6443T

6439T

6461T

6496T

6538T

6526T

6537T

6538T



# PERMIT TO DRILL

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

To: BUTTES GAS & OIL CO.  
(OPERATOR)

to drill a well to be known as

BUTTES GAS & OIL #1-25 NAVAJO  
(WELL NAME)

located 600' FSL and 550' FEL (SE/4SE/4)

Section 25 Township 35N Range 28E, Apache County, Arizona.

The E/2 SE/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 13th day of May, 1968.

OIL AND GAS CONSERVATION COMMISSION  
By John Kinnester  
EXECUTIVE SECRETARY

PERMIT N<sup>o</sup> 461

RECEIPT NO. 9345  
API No. 02-001-20078

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

SAMPLES ARE REQUIRED

PHONE: 325-9232

641 WEST BROADWAY

## FOUR CORNERS SAMPLE CUT ASSOCIATION

P. O. BOX 899  
FARMINGTON, NEW MEXICO 87401

December 24, 1968

Oil & Gas Conservation Commission  
State Of Arizona  
Room 202  
1624 West Adams  
Phoenix, Arizona 85007

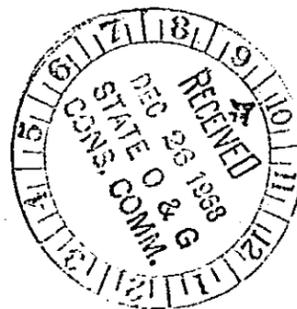
Dear Sir:

Samples from the following wells were shipped via Continental Trailways on Dec. 24, 1968

470 G.B. Cree #1 Hunt  
423 Skelly #1 Navajo Q  
461 ~~Buttes~~ Buttes Oil & Gas #1-25 Navajo  
448 Texaco #1 Navajo BF  
462 El Paso #1-B La Posa

Yours truly

*Jo Ratcliff*  
(Mrs.) Jo Ratcliff  
Manager



461

PERFORMANCE BOND

EXECUTED IN DUPLICATE

KNOW ALL MEN BY THESE PRESENTS

326383

Bond Serial No. 326383  
Premium: \$125.00 for 3 years.

That we: Buttes Gas & Oil Co.

of the County of Alameda in the State of California

as principal, and PACIFIC INDEMNITY COMPANY, A CALIFORNIA CORPORATION

of 100 SANSOME ST., SAN FRANCISCO, CALIFORNIA  
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) 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:  
All Sections 25, 26, 35 and 36, Township 35 North, Range 28 East, G & SRM, 2560 acres more or less, in Apache County, Arizona

(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 8th day of May, 1968

BUTTES GAS & OIL CO.

By: [Signature]  
By: Judith A Johnson  
Principal

WITNESS our hands and seals this 8th day of May, 1968

PACIFIC INDEMNITY COMPANY

By: [Signature]  
F. W. Trotter, Surety 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: 5-13-68  
STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
By: [Signature]

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
MAY 13 1968  
Form No. 2  
Two Copies

Permit No. 461

**CANCELLED**  
DATE 7-24-68

PACIFIC INDEMNITY COMPANY  
 HOME OFFICE: LOS ANGELES, CALIFORNIA  
 TEXAS PACIFIC INDEMNITY COMPANY  
 HOME OFFICE: DALLAS, TEXAS  
 NORTHWESTERN PACIFIC INDEMNITY COMPANY  
 HOME OFFICE: PORTLAND, OREGON

**Power of Attorney**

KNOW ALL MEN BY THESE PRESENTS, that the PACIFIC INDEMNITY COMPANY  
 a corporation of the State of California, by authority of a resolution adopted by its Board of  
 Directors at a meeting called and held on the 8th day of February, 1966, which said  
 resolution is still in full force and effect and of which the following is a true and complete copy:

"RESOLVED, that the President or any Vice-President may from time to time appoint Resident Vice-Presidents, Resident  
 Assistant Secretaries and Attorneys-in-Fact to represent and act for and on behalf of the Company, and either the President, or  
 any Vice-President, the Board of Directors or the Executive Committee may at any time remove any such Resident Vice-President  
 or Resident Assistant Secretaries and Attorneys-in-Fact and revoke the power and authority given him; and be it further

"RESOLVED, that Attorneys-in-Fact may be given full power and authority to execute for and in the name and on behalf of  
 the Company, any and all bonds, recognizances, contracts of indemnity and other writings obligatory in the nature of a bond,  
 recognizance or conditional undertaking, and any such instrument executed by any such Attorney-in-Fact shall be as binding  
 upon the Company as if signed by the President and sealed and attested by the Secretary; and be it further

"RESOLVED, that the Attorneys-in-Fact are hereby authorized to verify any affidavit required to be attached to bonds, recog-  
 nizances or contracts of indemnity, policies of insurance and all other writings obligatory in the nature thereof."

does hereby make, constitute and appoint

F. W. TROTTER, San Francisco, California

its true and lawful Attorney-in-Fact, with full power and authority to make, execute and deliver, for it, in its  
 name and in its behalf, as surety any and all bonds and undertakings of suretyship.

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

IN WITNESS WHEREOF, the PACIFIC INDEMNITY COMPANY  
 has caused these presents to be signed by its Vice-President and its corporate seal to be hereto affixed, duly  
 attested by its Assistant Secretary, this 6th day of March A. D. 1961

Attest: C. H. Lambertson Assistant Secretary. By: R. L. Traviss Vice-President.

STATE OF CALIFORNIA }  
 COUNTY OF LOS ANGELES } ss.:

On this 6th day of March A. D. 1961 before me personally came  
R. L. Traviss to me known, who, being by me duly

sworn, did depose and say, that he resides in the City of Los Angeles, California; that he is the Vice-President of the PACIFIC  
INDEMNITY COMPANY

the corporation described in and which executed the above instrument; that he knows the seal of said corporation, that the seal affixed  
 to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed  
 his name thereto by like order.

(Notarial Seal)

Marion F. Haire  
 Notary Public.

STATE OF CALIFORNIA }  
 COUNTY OF LOS ANGELES } ss.:

My Commission expires November 11, 1963.

I, Ruth C. Savage Assistant Secretary of the PACIFIC  
INDEMNITY COMPANY, do hereby certify that the above and foregoing is a true and

correct copy of a Power of Attorney, executed by said PACIFIC INDEMNITY COMPANY  
 which is still in force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Company, at the City  
 of Los Angeles, this 8th day of May A. D. 1968

Ruth C. Savage  
 Assistant Secretary.

August 7, 1968

Mr. Allan Newlands  
Fidelity & Surety Department  
Pacific Indemnity Group  
100 Sansome Street  
San Francisco 94106

Subject: Buttes Gas & Oil Co.  
Bond No. 326383  
#1-25 Navajo SE SE 25-35N-28E  
Apache County, Arizona  
Permit # 491

Dear Mr. Newlands:

Subject bond may terminate effective 7-30-68.

Yours truly,

James A. Lambert  
Administrative Assistant

JL:jf



**PACIFIC INDEMNITY GROUP**

PACIFIC INDEMNITY COMPANY | TEXAS PACIFIC INDEMNITY COMPANY  
NORTHWESTERN PACIFIC INDEMNITY COMPANY

100 SANSOME STREET • SAN FRANCISCO 94106

July 31, 1968

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

Atten: Mr. John Bannister, Executive Secretary

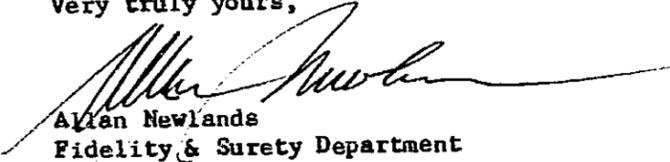
Subject: Buttes Gas & Oil Co.  
Bond No. 326383  
#1-25 Navajo SE SE 25-35N-28E  
Apache County, Arizona  
Permit 491

Gentlemen:

It is our understanding that the subject bond has served its purpose and may be terminated.

We would appreciate your advising the date that we may terminate our file.

Very truly yours,

  
Allan Newlands  
Fidelity & Surety Department

AN:cb

8-2-68  
mailed copy  
7-24-68  
461

July 24, 1968

Buttes Gas & Oil Company  
420 C.A. Johnson Building  
Denver, Colorado 80202

Re: Buttes Gas & Oil #1-25 Navajo  
SE SE 25-35N-28E Apache County, Arizona  
Permit 491

Pacific Indemnity Company Bond 326381

Gentlemen:

Obligations to this Commission covering your operations on captioned well have been fulfilled.

This letter then is authorization from this Commission to terminate captioned bond, should you so desire.

Very truly yours,

John Bannister  
Executive Secretary  
at

cc: M. Thompson & Co. Inc.  
Insurance Brokers  
311 California Street  
San Francisco, Calif. 94104

461

OFFICE: 325-9881  
RES.: 325-8194

ELLIOTT A. RIGGS  
Petroleum Geologist  
P. O. BOX 711  
FARMINGTON, NEW MEXICO 87401

July 22, 1968

Arizona Oil & Gas Conservation Commission  
Attn: Mr. James R. Scurlock  
1624 West Adams, Room 202  
Phoenix, Arizona 85007

Dear Jim:

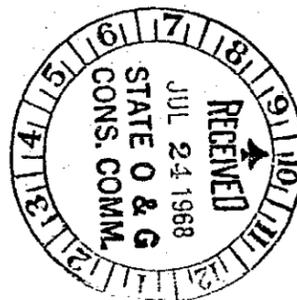
The samples of the Buttes #1-25 Navajo (25-35N-28E),  
Apache Co., Arizona, have been delivered to the  
Four Corners Sample Cut in Farmington, N. Mex.

Enclosed is a copy of the sample log on subject well.

I believe this takes care of the final details. If  
there is anything lacking, let me know and I'll work  
on it.

Best regards

*Elliott*  
Elliott A. Riggs



461

TELEPHONE: 292-4820  
AREA CODE: 303



SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

July 10, 1968

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

Gentlemen:

Enclosed, for your files, are form Nos. 4 and 10 for Buttes' No. 1-25 Navajo well in Section 25, Township 35 North, Range 28 East, Apache County. Also enclosed is a copy of the U. S. G. S. completion form.

The samples from this well are being sent to you, and no cores were cut.

Please hold the information on this well tight, and we understand that you will hold a well tight for a period of six months.

And, we will appreciate your terminating our bond on this well.

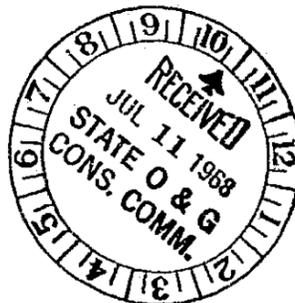
Sincerely,

*Robert W. Peterson*  
Robert W. Peterson

RWP:dwd

Enclosures

AGI



TELEPHONE: 292-4820  
AREA CODE: 303



SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

July 2, 1968

Mr. John Bannister  
Oil and Gas Conservation Commission  
Room 202  
1624 West Adams  
Phoenix, Arizona 85007

Dear Mr. Bannister:

In answer to your letter of June 21, Elliott Riggs did secure oral approval at 9:00 p.m., on June 7, 1968, to plug and abandon Buttes' No. 1-25 Navajo well according to the program we submitted previously. According to Mr. Riggs and our geologist, William W. Whitley, the pits were finished by Atchison Construction on June 10, 1968.

If you have any further questions on this well or location, let us know and we will attempt to answer them.

Sincerely,

Robert W. Peterson

RWP:dwd



461

July 2, 1968

Buttes Gas & Oil Company  
420 C.A. Johnson Building  
Denver, Colorado 80202

Re: Buttes Gas & Oil #1-25 Navajo  
SE SE 25-35N-28E Apache County, Arizona  
Permit 461

Gentlemen:

By our letter of June 21, 1968 your attention was directed to that fact that operations on captioned well were not in compliance with this Commission's rules and regulations. To date we have heard nothing from you.

You are urged to bring your operations into compliance and to submit the required reporting as quickly as possible.

Very truly yours,

John Bannister  
Executive Secretary  
mr

cc: Buttes Gas & Oil Company  
2150 Franklin Street  
Oakland, Calif.

June 21, 1968

Buttes Gas & Oil Company  
420 C. A. Johnson Building  
Denver, Colorado 80202

Re: Buttes Gas & Oil  
#1-25 Navajo  
SE SE 25-35N-28E  
Apache County  
Permit 491

Gentlemen:

As you were previously advised, this Commission must be currently informed as to the progress of operations on any well. We have been told that caption well has been plugged and abandoned. By attachment to your permit to drill, and according to Rule 201B, you are to contact this Commission prior to plugging.

It is requested that you file immediately a report of the progress of your operations from June 5, 1968 to current status.

Very truly yours,

John Bannister  
Executive Secretary  
jr

461

Telephone: 292-4820  
Area Code: 303



**OIL & GAS COMPANY**  
A DIVISION OF BUTTES GAS & OIL CO.  
SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

May 15, 1968

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

RE: Buttes Gas & Oil Co.  
Navajo No. 1-25  
Section 25, T35N, R28E  
Apache County, Arizona

Dear Sirs:

This is to advise you that Buttes Gas & Oil Co. intends to drill the above described well tight. We will appreciate your keeping confidential the well data that will be furnished to you in the future.

We will notify you immediately upon spudding of our well, which is anticipated early next week. Also, we will comply with your requirements relative to disposition of well samples and cores.

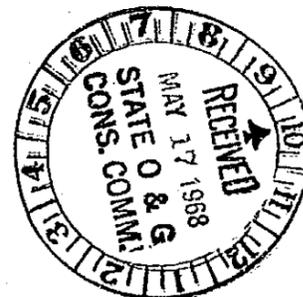
Very truly yours,

JUNIPER OIL & GAS COMPANY, A  
DIVISION OF BUTTES GAS & OIL CO.

*William W. Whitley*  
William W. Whitley

WW:re

461



**M. THOMPSON & Co.**

UNCL

**INSURANCE BROKERS**

311 CALIFORNIA STREET  
TELEPHONE 781-3811

SAN FRANCISCO 94104

May 9, 1968

**AIRMAIL**

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

Attention: Mr. John Bannister  
Executive Secretary

SUBJECT: BUTTES GAS & OIL CO.  
Lease No. 67-035-017  
North Defiance Block No. 1  
Apache County, Arizona

Gentlemen:

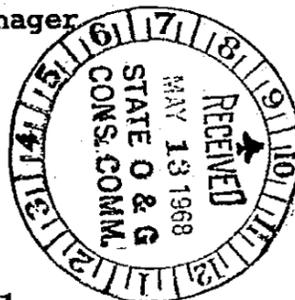
We enclose Pacific Indemnity Company Oil and Gas Drilling  
Bond No. 326383 signed and executed as required in reference  
to the captioned lease.

Yours very truly,

M. THOMPSON & CO., INC.

*Robert F. Ryan*  
Robert F. Ryan

CC: Mr. G. Hagerman, Assistant Land Manager  
Buttes Gas & Oil Co.  
2150 Franklin Street  
Oakland 94612



Telephone: 222-7197  
Area Code: 303



**OIL & GAS COMPANY**  
A DIVISION OF BUTTES GAS & OIL CO.  
SUITE 420, C. A. JOHNSON BUILDING, 509 SEVENTEENTH STREET, DENVER, COLORADO 80202

May 7, 1968

Mr. Ernest Echohawk  
Petroleum Club Plaza  
Farmington, New Mexico 87401

Dear Mr. Echohawk:

Enclosed is our application for permit to drill the No. 1-25 Navajo well, to be located 600' from the South Line and 550' from the East Line of Section 25, Township 35 North, Range 28 East, Apache County, Arizona. We will appreciate your filling in the information for the surveyor's plat on the reverse side of this form and forwarding the application to the State of Arizona, along with our check, which is also enclosed.

We are eager to commence operations on this well, so we will appreciate your taking care of this right away.

Sincerely,

Robert W. Peterson

RWP:dwd

Enclosures

