

P-W

EASTERN #21-1A SANTA FE 537  
NW NW 31-20N-28E APACHE CO.

COUNTY Apache AREA 7 mi SE/ Navajo LEASE NO. Santa Fe Fee

WELL NAME EASTERN PETROLEUM COMPANY #21-1A Santa Fe

LOCATION NW NW SEC 31 TWP 20N RANGE 28E FOOTAGE 660 FNL - 660 FWL

ELEV 5830 GR 5833 KB SPUD DATE 8-18-70 STATUS P.A. 1-9-75 TOTAL  
 COMP. DATE 9-15-70 DEPTH 1232

CONTRACTOR Eastern Petroleum Company

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY	
<u>4 1/2"</u>	<u>1218</u>	<u>100 sx</u>			<u>X</u>
<u>7 "</u>	<u>244</u>	<u>100 sx</u>		DRILLED BY CABLE TOOL	
				PRODUCTIVE RESERVOIR	<u>Coconino</u>
				INITIAL PRODUCTION	<u>39 MCF/ 2 hrs.</u>

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
<u>Shinarump</u>	<u>1060-90</u>	<u>X</u>	<u>X</u>	
<u>Moenkopi</u>	<u>1090-1216</u>			
<u>Coconino</u>	<u>1216-32</u>			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
<u>IES</u>		<u>1219-25'</u>	<u>Am Strat.</u>
			SAMPLE DESCRP. <u>None</u>
			SAMPLE NO. <u>#1626</u>
			CORE ANALYSIS <u>X</u>
			DSTs <u>None</u>

REMARKS Amended plat and application submitted August 3, 1970. APP. TO PLUG 8-30-74  
 PLUGGING REP. 4-15-75  
 COMP. REPORT 10-1-70

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

BOND CO. U.S.F. & G. BOND NO. 27716-13-3983-65

BOND AMT. \$ 25,000 CANCELLED \_\_\_\_\_ DATE \_\_\_\_\_ ORGANIZATION REPORT 9-15-69

FILING RECEIPT 2871 LOC. PLAT X WELL BOOK X PLAT BOOK X

API NO. 02-001-20131 DATE ISSUED 5-29-70 DEDICATION W/2 NW/4

PERMIT NUMBER 537



**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 **EASTERN PETROLEUM COMPANY** Address **Box 291, Carmi, Illinois**

Federal, State or Indian Lease Number or name of lessor if fee lease **SANTA FE FEE** Well Number **21-A** Field & Reservoir **East Navajo Springs**

Location **660' FNL; 660' FWL** County **APACHE**

Sec. TWP-Range or Block & Survey **NW NW - SEC 31-20N-28E**

Date spudded **8-18-70** Date total depth reached **9-1-70** Date completed, ready to produce **9-15-70** Elevation (DF, FKB, RT or Gr.) **5830 Gr.** Elevation of casing hd. **5833 KB**

Total depth **1232** P.B.T.D. **Single** Single, dual or triple completion? **Single** If this is a dual or triple completion, furnish separate report for each completion.

Producing interval (s) for this completion **1219-25** Rotary tools used (interval) **0-1232** Cable tools used (interval) **-0-**

Was this well directionally drilled? **NO** Was directional survey made? **NO** Was copy of directional survey filed? **NO** Date filed **10-1-70**

Type of electrical or other logs run (check logs filed with the commission) **Schlumberger Induction - Electrical** Date filed **10-1-70**

CASING RECORD

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
SEC	8 3/4	7" J.55		244	100	-0-
PROD	6 1/4	4 1/2"	9.5#	1218	100	-0-

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
2 7/8 in.	1225 ft.	1225 ft.	4 1/2 in.				

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 **9/29/70** Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:) **FLOWING**

Date of test **9/14/70** Hrs. tested **2** Choke size **1 3/4"** Oil prod. during test **-0-** Gas prod. during test **39** MCF Water prod. during test **Appx. 1** Oil gravity **API (Corr.)**

Tubing pressure **SIP 131** Casing pressure **NOT TESTED** Cal'd rate of Production per 24 hrs. **-0-** Oil **470** Gas **MCF** Water **10** Gas-oil ratio **---**

Disposition of gas (state whether vented, used for fuel or sold): **RUNNING TO PLANT FOR STARTUP TESTS**

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

Date **October 1, 1970**

Signature *J. N. Edwards*



Permit No. **537**

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

**DETAIL OF FORMATIONS PENETRATED**

Formation	Top	Bottom	Description*
SHINARUMP	1060	1090	<p>No Drill Stem Tests -                      Cored Shinarump 1075-1084 -                      Recovered 6' - 5' Sandstone White Gray,                      Medium Grained, much gray-white-green                      clay cement; poor to fair porosity and                      permeability. 1' shale gray green,                      finely Arenaceous, silty, very bentonitic.                      Core analysis gave the following averages:                      Permeability 6.4 millidarcies                      Porosity 17.30%                      Water Saturation 76.1 %</p> <p>SEE GEOLOGIST REPORT FOR FURTHER DETAILS.</p>
MOENKOPI	1090	1216	
COCONINO	1216	1232	

\* 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 Gas Conservation Commission not later than thirty days after project completion.

**PLUGGING RECORD**

Operator <b>Eastern Petroleum Company</b>		Address <b>P. O. Box 291, Carmi, Illinois 62821</b>	
Federal, State, or Indian Lease Number, or lessor's name if fee lease. <b>Santa Fe Fee</b>		Well No. <b>21A</b>	Field & Reservoir <b>East Navajo Springs</b>
Location of Well <b>660 FNL; 660 FWL</b>		Sec-Twp-Rge or Block & Survey <b>31-20N-28E</b>	County <b>Apache</b>
Application to drill this well was filed in name of <b>Eastern Petroleum Co.</b>	Has this well ever produced oil or gas <b>Yes</b>	Character of well at completion (initial production): Oil (bbls/day) <b>-0-</b> Gas (MCF/day) <b>-0-</b> Dry? <b>-</b>	
Date plugged: <b>1-9-75</b>	Total depth <b>1232'</b>	Amount well producing when plugged: Oil (bbls/day) <b>-0-</b> Gas (MCF/day) <b>-0-</b> Water (bbls/day) <b>Yes</b>	
Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement
			<b>30 sax from top to bottom</b>

**CASING RECORD**

Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, ripped, etc.)	Packers and shoes
<b>7"</b>	<b>244'</b>	<b>-0-</b>	<b>244'</b>		
<b>4½"</b>	<b>1218'</b>	<b>60'</b>	<b>1158'</b>	<b>Ripped</b>	

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

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

Name	Address	Direction from this well:
<b>Eastern Petroleum Co.</b>		<b>All</b>

In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.

Use reverse side for additional detail.

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

April 15, 1975  
Date

*J. Edwards*  
Signature

**RECEIVED**

**APR 16 1975**

Permit No. 537

**O & G CON. COMM.**

Form No. 10

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

Plugging Record  
File One Copy

APPLICATION TO ABANDON AND PLUG

FIELD East Navajo Springs-Shinarump  
 OPERATOR Eastern Petroleum Co. ADDRESS Box 291, Carmi, Illinois 62821  
 Federal, State, or Indian Lease Number Santa Fe Fee WELL NO. 21A  
 or Lessor's Name if Fee Lease  
 SURVEY 20N-28E SECTION 31 COUNTY Apache  
 LOCATION 660 FNL, 660 FWL

TYPE OF WELL gas TOTAL DEPTH 1232'  
 (Oil, Gas or Dry Hole)  
 ALLOWABLE (If Assigned)  
 LAST PRODUCTION TEST OIL \_\_\_\_\_ (Bbls.) WATER \_\_\_\_\_ (Bbls.)  
 GAS \_\_\_\_\_ (MCF) DATE OF TEST \_\_\_\_\_  
 PRODUCING HORIZON \_\_\_\_\_ PRODUCING FROM \_\_\_\_\_ TO \_\_\_\_\_

1. COMPLETE CASING RECORD

7" sfc. csg. @ 244'  
4 1/2" casing @ 1218'

2. FULL DETAILS OF PROPOSED PLAN OF WORK

Expect to recover 1078' 4 1/2" and no sfc. casing  
Cement plugs 1216-1156; 1060-1010; 244-194; 20-0  
Fill intervals with heavy mud & erect regulation dry hole marker

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 September  
 NAME OF PERSON DOING WORK Wayne Carr ADDRESS Wichita Falls, Texas  
 CORRESPONDENCE SHOULD BE SENT TO J. N. Edwards  
 Name  
Secretary  
 Title  
Box 291, Carmi, Illinois 62821  
 Address  
August 30, 1974  
 Date

Date Approved 8-9-74  
 STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 By: [Signature]

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

Permit No. 537

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SEP 03 1974

O & G CONS. COMM.

**SUNDRY NOTICES AND REPORTS ON WELLS**

1. Name of Operator Eastern Petroleum Company

2. Oil Well  GAS WELL  OTHER  (Specify) \_\_\_\_\_

3. Well Name Ancon 21-1A

Location NW NW

Sec. 31 Twp. 20N Rge. 28E County Apache Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease  
Santa Fe Pacific Railroad Co. fee

5. Field or Pool Name East Navajo Springs

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"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
(OTHER)		Shut-in	<input checked="" type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
				ALTERING CASING	<input type="checkbox"/>
				ABANDONMENT	<input type="checkbox"/>
				(OTHER)	<input 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.)

This well is part of East Navajo Springs and is shut-in for lack of market.

RECEIVED  
MAR 21 1974  
O & G CONS. COMM.

I hereby certify that the foregoing is true and correct.

Signed J. Edwards Title Secretary Date March 12, 1974

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

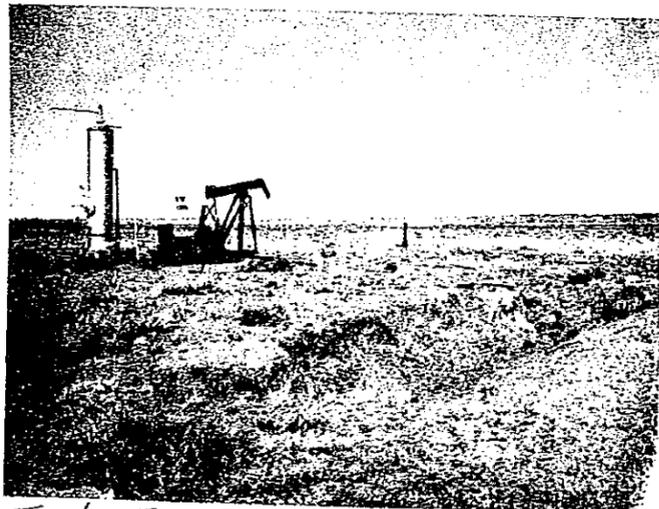
Permit No. 537

1 - State of Arizona ✓  
1 - File

Permit No. 557 Santa Fe 21-1A

3-27-78

Well has 4" csg. and 2" tbg. Both  
csg. and tbg. open. Skid mounted  
pump and separator on location.  
Also misc. junk and meter run.



Santa Fe 21-1A

537

F812527

F812527

LAB NO. 1-7-33 M.S. NO. N-51180 F.S. NO. ✓

EASTERN PET. COMP.

FURN #2 ✓

Ancora 21-1 Shinarump 1200

LAB NO. 1-7-33 M.S. NO. N-51181 F.S. NO. ✓

EASTERN PET. COMP.

FURN #1 ✓

WELL #21-A Coconino 1300

234

COMPONENTS	HEATING VALUES	%
METHANE (15)	1013	
ETHANE (30)	1792	
PROPANE (44)	2589	
N-BUTANE (58)	3401	
I-BUTANE (43)	3362	
N-PENTANE (72)	4256	
I-PENTANE (41)	4256	
CYCLO-PENTANE (70)	3771	
HEXANES PLUS (71)	5126	
NITROGEN (28)		89.5
OXYGEN (32)		2.25
ARGON (40)		2.2
HYDROGEN (2)	324	
HYDROGEN SULFIDE (34)	641	
CARBON DIOXIDE (44)		0.4
HELIUM**		2.0 ← 9.3%
19.23		1.25
0.77		1.1
CALCULATED TOTAL B.T.U.		

\*GROSS B.T.U./CU. FT.  
DRY AT 60° F. & 30" Hg  
\*\*FROM SEPARATE ANALYSIS

BY: \_\_\_\_\_  
DATE REPORTED: \_\_\_\_\_  
SULFUR ODOR: \_\_\_\_\_  
TRACE, IF INDICATED, IS LESS THAN 0.05%

537

COMPONENTS	HEATING VALUES	%
METHANE (15)	1013	
ETHANE (30)	1792	
PROPANE (44)	2589	
N-BUTANE (58)	3401	
I-BUTANE (43)	3362	
N-PENTANE (72)	4256	
I-PENTANE (41)	4256	
CYCLO-PENTANE (70)	3771	
HEXANES PLUS (71)	5126	
NITROGEN (28)		59.7
OXYGEN (32)		2.1
ARGON (40)		2.2
HYDROGEN (2)	324	
HYDROGEN SULFIDE (34)	641	
CARBON DIOXIDE (44)		0.7
HELIUM**		2.7 ← 8.7%
19.23		1.25
0.77		1.1
CALCULATED TOTAL B.T.U.		

\*GROSS B.T.U./CU. FT.  
DRY AT 60° F. & 30" Hg  
\*\*FROM SEPARATE ANALYSIS

BY: \_\_\_\_\_  
DATE REPORTED: \_\_\_\_\_  
SULFUR ODOR: \_\_\_\_\_  
TRACE, IF INDICATED, IS LESS THAN 0.05%

From Div. of Ge - Amarillo

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Eastern Petroleum Company  
 2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
 3. Well Name Ancon 21-A  
 Location \_\_\_\_\_  
 Sec 31 Twp 20N Rgc 28E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Santa Fe Lease  
 5. Field or Pool Name East Navajo Springs Coconino

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"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
(OTHER) <u>Semi Annual Report</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
				ALTERING CASING	<input type="checkbox"/>
				ABANDONMENT	<input 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.)

Status: Shut In

RECEIVED  
 JUL 02 1973  
 O & G CONS. COMM.

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

Signed Kahut C. Seelye Title Vice President Date June 25, 1973

Permit No. 537

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

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Eastern Petroleum Comapny

2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
Santa Fe # 21-A

3. Well Name \_\_\_\_\_

Location NW Nw  
Sec. 31 T20N R28E Apache  
 Sec. \_\_\_\_\_ Twp \_\_\_\_\_ Rge \_\_\_\_\_ County \_\_\_\_\_ Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease \_\_\_\_\_

5. Field or Pool Name East Navajo Springs

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 checked="" type="checkbox"/>	(OTHER) _____ <input type="checkbox"/>	ABANDONMENT <input 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.)

Depen well 50 ft. Will then run and set EUE 2 3/8 tubing.

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

By W. B. Doe  
 Date 10-13-72

**RECEIVED**  
 OCT 13 1972

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

Signed Robert C. Bullock Title Vice President Date 10-10-72

Permit No. 537

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

Well: E.P.Co Eastern 21-A  
Sec 31, T20N, R28E  
Apache County, Arizona

Eastern Petroleum Company  
P. O. Box 226  
Farmington, New Mexico  
87401

Status: Produced from 2-7-72 to 2-11-72

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FEB 18 1972

O & G CONS. COMM.

537

Well: E P C Eastern 21-A  
Sec 31, T20N, R28E  
Apache County, Arizona

Eastern Petroleum Co.  
P. O. Box 226  
Farmington, New Mexico  
87401

Status: Well produced from 1-16-72 to 1-21-72, presently  
S.I.

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JAN 20 1972

O & G CONS. COMM.

537?  
Well: E.P.Co Eastern 21-A  
Sec 31, T20N, R28E  
Apache County, Arizona

Eastern Petroleum Company  
P. O. Box 226  
Farmington, New Mexico  
87401

Status: Temporarily S.I.

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FEB 03 1972

O & G CONS. COMM.

#537  
Well: Eastern 21-A  
Sec 31, T20N, R28E  
Apache County, Arizona

Eastern Petroleum Company  
P. O. Box 226  
Farmington, New Mexico  
87401

Status: On stream - 1-31-72

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FEB 8 1972

O & G CONS. COMM.

537

NDRY NOTICES AND REPORTS ON WELLS

*WPA*

1. Name of Operator Eastern Petroleum Company

2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_

3. Well Name See Below

Location \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ Rge. \_\_\_\_\_ County Apache, Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease Santa Fe Fee

5. Field or Pool Name See Below

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"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
(OTHER)	<input type="checkbox"/>		(OTHER)	ABANDONMENT	<input 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.)

Shut-in wells - awaiting market - Shut-in May 21, 1971

Navajo Springs Unit

- Santa Fe #14 - 4-19-27 (Permit No. 206)
- Santa Fe #17 - 5-19-27 (Permit No. 236)
- Santa Fe #35 - 27-20-27 (Permit No. 263)

East Navajo Springs Coconino

- Santa Fe #21-A - 31-20-28 (Permit No. 537)

East Navajo Springs Shinarump

- Ancon Santa Fe #21 - 31-20-28 (Permit No. 234)
- Crest Santa Fe #1 - 25-20-27 (Permit No. 471)

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

Signed [Signature] Title Secretary Date June 16, 1971

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
Sundry Notices and Reports On Wells  
File Two Copies

Form No. 25

Permit No. \_\_\_\_\_

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JUN 18 1971  
O & G CONS. COMM.

WU  
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Telex

western union

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western union

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western union

Telex

western union

WU TELTEX PHX  
KERRMCGEE OKC B

537

1970 NOV 2 PM 5 27

6278

6000  
TELEX-THIS MESSAGE RECEIVED DIRECT FROM SENDER VIA W.U. TELEX

TLX PD OKLAHOMA CITY OKLAHOMA NOV 2 1970  
MR. W. E. ALLEN  
ARIZONA OIL & GAS CONSERVATION COMMISSION  
4515 NORTH 7TH AVENUE  
PHOENIX, ARIZONA

1970 OCT 2 PM 5 25

APPLICATION OF KERR-MCGEE CORPORATION  
PRODUCTION RESTRICTION  
EASTERN 21-1A WELL  
EAST NAVAJO SPRINGS FIELD  
APACHE COUNTY, ARIZONA

File


THE NOTICE WHICH KERR-MCGEE HAS PREPARED FOR ITS PROPOSED HEARING IS SUBMITTED BELOW AS PREVIOUSLY DISCUSSED:  
(QUOTE)

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

IN THE MATTER OF THE APPLICATION OF KERR-MCGEE CORPORATION FOR AN ORDER OF THE COMMISSION RESTRICTING PRODUCTION FROM THE EASTERN 21-1A SANTA FE FEE WELL LOCATED IN THE NW/4 OF SECTION 31, TOWNSHIP 20 NORTH, RANGE 28 EAST, APACHE COUNTY, ARIZONA ) CASE NO.-----

NOTICE OF HEARING

TO: ALL OPERATORS, PURCHASERS AND TAKERS OF OIL AND GAS IN ARIZONA AND ALL OTHER INTERESTED PERSONS, PARTICULARLY IN THE EAST NAVAJO SPRINGS FIELD,

NOTICE IS HEREBY GIVEN THAT THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF ARIZONA WILL HOLD A HEARING AT 10:00 O'CLOCK A.M. ON NOVEMBER 20, 1970 IN ROOM 205 (REGENCY ROOM) ALUMNI BUILDING, UNIVERSITY OF ARIZONA, TUSCON, ARIZONA, ON THE APPLICATION OF KERR-MCGEE CORPORATION FOR AN ORDER RESTRICTING PRODUCTION FROM THE EASTERN 21-1A SANTA FE FEE WELL LOCATED IN THE NW/4 NW/4 OF SECTION 31, TOWNSHIP 20 NORTH, RANGE 28 EAST, APACHE COUNTY, ARIZONA.

ALL PERSONS INTERESTED IN SUCH MATTER MAY APPEAR ON SAID DATE AND BE HEARD.



*WA*

Sept. 16, 1970

Samples of the following well have been received  
in this office :

Eastern Petroleum # 21A- Santa Fe Fee  
NW NW 31-20N-28E  
Apache, County, Arizona  
Permit # 537

FOUR CORNERS SAMPLE CUP  
P. O. BOX 899  
FARMINGTON, NEW MEXICO

*Jo Ratcliff*



537

WELL: Eastern 21-A  
S. 31, T20N, R28E  
Apache Co., Ariz.

Eastern Petroleum Co.  
P.O. Box 226  
FMN 87401

Status: Placed on Western Helium pipeline 1-08-72,  
S.I. pressure taken and flow rate.  
Waiting on continual operation of Helium  
plant.

RAF

537



537

### GEOLOGICAL WELL REPORT

OPERATOR Eastern Petroleum Company FARM Santa Fe WELL NO. 21-A  
Western Helium Corporation  
 LOCATION 660' FNL, 660' FWL NWNW STATE Arizona  
Sec. 31 T20N R28E COUNTY Apache  
 ELEV: 5833 KB; 5830GRD COMM. Aug. 18, 1970 COMP. Sept. 15, 1970 TOTAL DEPTH 1232 feet  
 SURFACE PIPE 7" @ 244' CEMENT 100 SX-CIRC. OIL STRING 1218' SIZE 4 1/2" CEMENT 100 SX  
 GAMMA RAY LOG None ran ELECTRICAL LOG Schlumberger I-ES 244 - 1217'  
 DRILLING TIME LOG 0 to 1230' in 5' increments CONTRACTOR Eastern Drilling Company

#### FORMATION DATA

SAMPLE TOPS	G. R. AND/OR ELECTRICAL LOG TOPS	
Sonsela ss mbr. "A" bed	280'	286' (+) 5544
Lower Petrified Forest Mbr.	320'	320' (+) 5510
Monitor Butte Mbr.	1020'	1018' (+) 4812
Shinarump Congl. ss Mbr.	1060'	1059' (+) 4771
Moenkopi Fm.	1090'	1082' (+) +4748
Coconino Sandstone	1216'	1216 (+) +4614

#### SHOWS OF OIL AND/OR GAS

DEPTH	DESCRIPTION	REMARKS (CIRCULATING, ETC.)
1219 - 1230	Inert gas-nitrogen-helium	Evident after pipe was run while drilling in open hole (1219 - 1232).
		Tested 470 MCFG/Day with estimated 10 bbls salt water per day through 2 1/2" tubing set on packer with perforation to formation from 1219 to 1225'.



DURANGO, COLORADO  
GEOLOGIST  
ROBERT E. LAUTH



CORING DATA: Cored Shinarump Congl. 1075 to 1084'. Cut 9 feet, recovered 6 feet; core barrel jammed - Coring time minutes per foot: 2-2-2-1-2-43-13-52-69

5' Sandstone white-gray, medium grained, much gray-white-green clay cement; poor to fair porosity and permeability.

1' Shale gray green, finely arenaceous, silty, very bentonitic.

Core analysis gave for interval 1075 - 1080 the following averages:

Permeability- 6.4 millidarcies; Porosity- 17.3%; Total water saturation-

76.1% The water saturation is much too high but was caused by considerable water-mud invasion in the small (2 1/8") cores.

DRILL-STEM TEST DATA: No drill-stem tests were taken. The well was tested on various choke sizes to determine a stable rate of flow.

The stable rates of flow were established through tubing with the casing shut-in; packer set @ 1225' and perforations open 1219 to 1225 feet.

Tested 15/32" choke - 25 psig, flow rate 155 MCFGPD.

Tested 1/4" choke - 54 psig, flow rate 79 MCFGPD.

Bottom hole shut-in pressure is 131 psig.

COMMENTS: This test was drilled to test the Shinarump stream channel sand for hydrocarbon potential on the high side of the fault and updip from the Ancon No. 21-2 well in SENW Sec 31 T20N R28E.

The Shinarump sand was cored from 1075 to 1080 and had good porosity but very poor permeability. It appeared it would contain a small amount of gas which core analysis indicated to be of an inert nature.

Since the well was running structurally high at this point, it was decided to drill an additional 140 feet and test the Coconino sandstone. As indicated under Drill-Stem Test Data this formation was found productive of inert gas.

DURANGO, COLORADO

GEOLOGIST

ROBERT E. LAUTH



RECOMMENDATION: It is recommended the well be completed in the Coconino sandstone as an Inert Gas well.

The Shinarump Conglomerate sand 1059 - 1082 should also be productive of inert gas when properly stimulated.

Production of gas from the Shinarump Conglomerate sand will have no effect whatsoever on Shinarump gas production from the Eastern Petr. No. 21-2 Ancon well in (SENW) Sec 31 T20N R28E; the same quarter section. Gas production will be from the same horizon but a different reservoir, separated by a fault with a displacement of approximately 65 feet.

DRILLING IN DATA: - Condensed Drilling Log -

8-18-70 Spud, drilling 8 3/4" hole to 245 feet. Set 244 feet of 7"-J-55 casing, cemented with 100 sacks. Top of Chinle shales at 220 feet.

8-21-70 Drilling 470 feet - Bit No. 1 - 245 - 455 - EMIV. 6 1/4" hole.

8-23-70 Pres. depth 570' - idler arm out on rig motor  
Bit No. 2 - 6 1/4" - 455 - 505 - EMIV.

8-30-70 Drilling 800 feet Bit No. 3 - 6 1/4" - 505 - 750 ES2G.

8-31-70 Drilling 1075' - Bit No. 4 - 6 1/4" - 750 - 875

Rerun EMIV, Bit No. 5 - 6 1/4" - 875 - 925

EH-3, Bit No. 6 - 6 1/4" - 925 - 1075 - ES2G

Minor lost circulation @ 975'

Core point Shinarump 1075 - 1084 Cut

9 feet recovered 6 feet - 5' ss & 1' sh.

9-1-70 Bit No. 7 - 6 1/4" - 1084 - 1220 - Smith

Top Coconino by smpls. @ 1216

Logged with Schlumberger - Electrical Induction log, 244 - 1217'

DURANGO, COLORADO

GEOLOGIST

ROBERT E. LAUTH



- 9-2-70 Ran 39 joints 4½" K5 new smls J & L casing with 4 centralizers spaced over bottom 316 feet. Total pipe 1219.70 feet, set at 1218.70 feet ground level. Also ran a Baker solid nose shoe and a 4½" Larkin packer with ports 5 feet above packer.
- 9-3-70 Cemented (Halliburton) with 100 sacks. Class "C" cement and 12½ lbs of gilsonite per sack of cement plus 12% Salt; all premixed. Good circulation throughout entire job; plug down at 1 AM; left set until Sept. 10, 1970.
- 9-10-70 Went in hole 3 7/8" bit, found 92 feet cement. Drilled to 1213 hit packer and then shoe at 1218. Drilled to 1230 with no returns, lost 120 bbls of water in formation. Started blowing 285 feet off bottom; blew about 3 hours and hole started making gas.
- 9-11-70 Blew total water of 140 bbls back, well making gas and water - out of hole with drill pipe.
- 9-12-70 Tested on dead weight for shut-in pressure 131 psig. Tried to test; much water.
- 9-13-70 Ran 39 jt of 2½" regular tubing, set on packer at 1225 - Perforation open to formation 1219 to 1225 feet.
- 9-14-70 Tested on various rates of flow and various choke sizes. Initial Potential 470 MCFGPD plus 10 bbls water per day. SIP 131 psig.

DURANGO, COLORADO

GEOLOGIST

ROBERT E. LAUTH



This well adequately tested all formations penetrated.  
It is capable of commercial inert gas production from the Coconino  
sandstone.

By cores and log analysis plus experience in the area, the  
Shinarump Conglomerate sand is also capable of inert gas production.

Respectfully submitted,

*Robert E. Lauth*

Robert E. Lauth  
AIPG 1366 - AAPG 707

Durango, Colorado  
September 24, 1970

DURANGO, COLORADO  
GEOLOGIST  
ROBERT E. LAUTH

RECORD OF SAMPLE DESCRIPTION

PAGE NO. 1

SEC. 31 TWP. 20N RGE. 28E LOCATION. NWNW-660 FNL E 660 FWL  
 FARM Santa Fe NO. 21-A ELEVATION 5830 Grd.  
 OWNER Eastern Petroleum Company STATE ARIZONA COUNTY Apache  
 Western Helium Corp.  
 SAMPLES FROM 0 TO 340 EXAMINED BY R. LAUTH DATE 8-20-70

FROM	TO	DR LG. TIME Min per 5ft	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
0	10	1/1	100 Ss tan f-mg rnd much clay
10	20	1/5	100 Ss ditto
20	30	3/2	100 Ss ✓
30	40	1/1	40 Ss ✓ 60 Clay tan bentonitic
40	50	3/1	60 Ss ✓ 40 Clay ditto
50	60	1/2	100 Ss tan mg rnd good p&k
60	70	2/2	100 Ss ✓
70	80	2/2	100 Ss - coarse gr. some clay
80	90	2/2	100 Ss ✓ ✓
90	100	1/1	100 Ss ✓ ✓
100	10	2/2	100 Ss ✓ ✓ much clay
10	20	1/1	100 Ss ✓ ✓
20	30	1/1	100 Ss clean good p&k
30	40	1/2	50 Ss ditto poor p&k clay cont. 50 Sh. tan. bent.
40	50	1/1	100 Ss - crs grs loose good p&k
50	60	1/1	100 Ss ✓
60	70	3/1	100 Ss ✓
70	80	1/1	100 Ss ✓
80	90	1/1	100 Ss ✓
90	200	5/1	100 Ss ✓ v crs gr w/cht frags etc.
200	10	6/2	100 Ss ✓ ✓
10	20	2/10	100 Ss ✓ pebbles v. end. good p&k
20	30	10/12	20 red vfg micaceous poor p&k 80 Sh. lt. red
30	40	23/24	100 siltst lt. red, low faren
40	50	46/24	100 siltst ✓ ✓ some lt. grn.
50	60	15/6	100 siltst ✓ ✓
60	70	15/10	100 siltst ✓ ✓
70	80	12/12	100 siltst ✓ ✓
80	90	18/15	50 Ss. lt. red vfg ang-firm clay cont. hd. 50 Sh. lt. red
90	300	18/19	50 Ss. ditto poor p&k 50 Sh. ditto
300	10	16/15	30 Ss wht vfg clean fair p&k 70 Sh. dk red tan
10	20	11/13	40 Ss ditto 60 Sh. ditto
20	30	8/6	100 Shale v. light red & grn & gry
30	40	9/10	100 Shale ditto

GEOLOGICAL CONSULTANT DURANGO, COLORADO ROBERT E. LAUTH

Bit No. 1  
@ 245-6 1/4"  
EMIV

RECORD OF SAMPLE DESCRIPTION

PAGE NO. 2

SEC 31 TWP 20N RGE 28E LOCATION NWNW-660 FNL & 660 FWL  
 FARM Santa Fe NO 21-A ELEVATION 5830 Grd  
 OWNER Eastern Petroleum Company WESTERN Helium Corp. STATE ARIZONA COUNTY Apache  
 SAMPLES FROM 340 TO 680 EXAMINED BY R.E. Lauth DATE 8-21-70

31T 455  
 DURANGO, COLORADO  
 EMIL  
 GEOLOGICAL CONSULTANT  
 ROBERT E. LAUTH  
 31T 505  
 ES26

FROM	TO	DRLG. TIME Min per. Sft.	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
340	50	10/18	100 Sh lt. red very bentonitic
50	60	25/26	100 Sh ditto
60	70	23/23	40 Ss gry vfg firm hd poor pdk 60 Sh lt. red
70	80	22/15	40 Ss ditto 60 Sh ✓
80	90	11/13	100 Sh lt. red v bent.
90	400	31/30	100 Sh ✓ ✓
400	10	13/15	100 Sh ✓ faren
10	20	15/14	100 Sh ✓ ✓
20	30	27/31	20 Ss wht. hd. tite clayey p-pdk f.g. 80 Sh ditto
30	40	24/40	TR 100 Sh ✓
40	50	32/35	TR 100 Sh ✓
50	60	18/10	60 Ss wht. qn vfg hd-tite p-pdk 40 Sh lt. grn & gry
60	70	10/10	50 Ss ditto 10 ls wht-red 40 Sh some brn-red
70	80	125/6	40 Ss ✓ 60 Sh red & gry
80	90	223/55	80 Ss ✓ loose vfg 20 Sh ditto
90	500	85/7	TR ✓ 100 Sh. grn-gry-red
500	10	7/7	TR Ls nod. 100 Sh ✓
10	20	7/6	10 Ss red vfg micaceous hd. p-pdk 90 Sh ditto
20	30	12/10	10 Ls. nod. f.x.ln red 90 Sh ✓
30	40	4/9	TR Ss gry f.g. hd. tite 100 Sh ✓
40	50	8/8	100 Sh lt. red, dk red gry & grn
50	60	9/9	10 Ss wht vfg p-pdk 10 Ls gry-red xln 80 Sh ditto
60	70	9/9	100 Sh lt. gry & lt. red
70	80	9/10	TR Ss 100 Sh ✓
80	90	15/10	100 Sh ✓ faren
90	600	7/10	100 Sh ✓ ✓
600	10	10/7	10 Ss gry vfg stly hd-tite 10 Ls wht f.x.ln 80 Sh ditto
10	20	10/13	100 Sh lt. gry
20	30	11/13	TR Ss & Ls 100 Sh ✓
30	40	11/6	100 Sh ✓
40	50	6/11	100 Sh ✓
50	60	17/15	100 Sh ✓
60	70	15/12	100 Sh brn, dk red
70	80	13/23	100 Sh lt. gry, purp

RECORD OF SAMPLE DESCRIPTION

PAGE NO. 3

SEC 31 TWP 20N RGE 28E LOCATION NWNW-660 FNL E660 FNL  
 FARM SANTA FE NO. 21-A ELEVATION 5830 Grd  
 OWNER Eastern Petroleum Co. Western Helium Corp STATE ARIZONA COUNTY Apache  
 SAMPLES FROM 680 TO 1020 EXAMINED BY R.E. LAUTH DATE Aug. 30, 1970

FROM	TO	DRLLG. TIME Min per S.F.	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
680	90	15/20	30 Ss loose clear med-crs gr. rnd 70 sh lt. gry & purp.
90	700	20/7	10 Ss ditto - much red & yellow chert. 90 sh ditto
700	10	7/17	10 Ss - loose 90 Sh. purp.-red
10	20	18/20	50 Ss - crs, rnd frosted much chert approx 30%. 20 Sh ditto
20	30	19/22	20 Ss - " " approx 20%. 60 Sh red purp
30	40	17/15	10 ls mod fine gry-grn 90 Sh gry grn - purp
40	50	14/15	TPLS & yell chert 100 Sh ditto
50	60	26/9	10 Ss ufg red-gry hd tite p-pdk 90 Sh -
60	70	17/16	TR Ss & LS 100 Sh purp.
70	80	18/16	✓ 100 Sh ✓
80	90	9/12	✓ 100 Sh ✓
90	800	11/16	✓ 100 Sh ✓
800	10	18/16	10 Ss loose mg sr-r 90 Sh ditto lt. gry - purp
10	20	14/29	TR 100 Sh
20	30	15/18	✓ 100 Sh
30	40	19/20	✓ 100 Sh
40	50	18/18	- 100 Sh purp & red brn
50	60	37/28	10 Ss clear ufg hd tite p-pdk 90 Sh ✓ -
60	70	28/30	TR 100 Sh ✓
70	80	110/16	✓ 100 Sh ✓
80	90	14/20	✓ 100 Sh ✓
90	900	18/15	✓ 100 Sh ✓
900	10	126/20	BIT Balled. 100 Sh gry grn mica & slty
10	20	22/27	100 Sh dk grn - gry
20	30	8/14	100 Sh grn & red
30	40	18/21	30 Ss wht ufg rnd clear f-pdk 70 Sh - ✓
40	50	20/16	40 Ss lt. grn ufg hd tite p-pdk 60 - -
50	60	20/19	50 Ss - ✓ 50 - - v bent
60	70	23/34	10 Ss - ✓ 90 - - -
70	80	34/40	10 @ 975' TR Ss loose clear frosted crs gr 100 Sh grn - gry - red no bent
80	90	30/50	30 Ss ditto f-pdk 70 Sh red & gry
90	1000	58/26	20 Ss - ✓ 80 Sh - -
1000	10	30/52	40 Ss - ✓ 60 Sh gry - purp & lt red
10	20	72/58	30 Ss fg. occas crs gr 70 Sh - ✓

Bit No 4  
 750  
 EMIV  
 RERUN  
 DURANGO, COLORADO  
 GEOLOGICAL CONSULTANT  
 ROBERT E. LAUTH  
 Bit No 5  
 875  
 EH-3  
 Bit No 6  
 925  
 ES26



CA-20

CORE LABORATORIES, INC.  
 Petroleum Reservoir Engineering  
 DALLAS, TEXAS

PN 537  
 Page No. 1

**CORE ANALYSIS RESULTS**

Company Western Helium Corporation-  
Eastern Petroleum Corporation Formation Shinarump File RP-3-2434  
 Well Santa Fe # 21-A Core Type Dia. Conv. 2 1/8" Date Report 9-3-70  
 Field E. Navajo Springs Drilling Fluid Fresh Water Gel Analysts Mohl  
 County Apache State Arizona Elev. 5830 GL Location NW NW Sec 31- T20N- R 28E

**Lithological Abbreviations**

SAND-SD SHALE-SH LIME-LU	DOLDRITE-DOL CHERT-CH GYPSUM-GYP	ANKHYRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SANDY-SDY SHALY-SHY LIMY-LMY	FINE-FN MEDIUM-MED COARSE-CSE	CRYSTALLINE-XLN GRAIN-GRN GRANULAR-GRNL	BROWN-BRN GRAY-GY YUGGY-YGY	FRACTURED-FRAC LAMINATION-LAM STYLOLITIC-STY	SLIGHTLY-SL/ VERY-V/ WITH-W/
--------------------------------	----------------------------------------	-----------------------------------------------------------	------------------------------------	-------------------------------------	-----------------------------------------------	-----------------------------------	----------------------------------------------------	------------------------------------

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS	POROSITY PERCENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
1	1075-76	* 7.2	18.6	0.0	86.6	Ss, gry, med, cly cem
2	1076-77	7.2	17.6	0.0	71.6	Ss, gry, med, cly cem
3	1077-78	6.2	18.6	0.0	69.8	Ss, gry, med, cly cem
4	1078-79	4.5	21.6	0.0	76.0	Ss, gry, med, cly cem
5	1079-80	7.8	19.9	0.0	76.8	Ss, gry, med, cly cem

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

SUNDRY NOTICES AND REPORTS ON WELLS

WP

1. Name of Operator Eastern Petroleum Company  
 2. OIL WELL  GAS WELL  OTHER  (Specify) \_\_\_\_\_  
 3. Well Name Eastern Santa Fe Fee #21-1A  
 Location NW NW  
 Sec. 31 Twp. 20N Rge. 28E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease  
Santa Fe Pacific Railroad Co.  
 5. Field or Pool Name East Navajo Springs Shinarump

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) _____	ABANDONMENT <input type="checkbox"/>
(OTHER) _____			

(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.)

Well spudded 8/20/70  
 Coring Shinarump at approximately 1035' on 8/31/70



8. I hereby certify that the foregoing is true and correct.  
 Signed [Signature] Title Secretary Date Sept. 2, 1970

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Sundry Notices and Reports On Wells  
 File ~~XXX~~ Copies  
 1

Permit No. 537

Form No. 25

AMENDED

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL

RE-ENTER OLD WELL

EASTERN PETROLEUM COMPANY

NAME OF COMPANY OR OPERATOR

P.O. Box 291 Carmi, Illinois

Drilling Contractor: EASTERN PETROLEUM COMPANY, P.O. Box 291 Carmi, Illinois

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor: EASTERN-SANTA FE FEE; Well number: 21-1A; Elevation (ground): 5830; Nearest distance from proposed location to property or lease line: 660 feet; Number of acres in lease: 640; Number of wells on lease, including this well, completed in or drilling to this reservoir: 2

Well location (give footage from section lines): 660' FNL; 660' FWL; Section-township-range or block and survey: 31-20N-28E; Dedication (Comply with Rule 105): 160 80 w/2; Field and reservoir (if wildcat, so state): WILDCAT; County: APACHE

Distance, in miles, and direction from nearest town or post office: Approximately 8 miles SE of Navajo; Proposed depth: 1200; Rotary or cable tools: Rotary; Approx. date work will start: August 5, 1970; Bond Status: Blanket; Amount: \$25,000.00; Organization Report: On file YES; Filing Fee of \$25.00: Attached

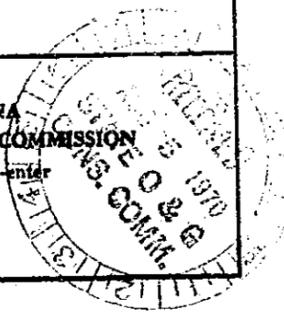
Remarks: OIL PERMIT APPLICATION

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

Signature: [Handwritten Signature]; Date: AUGUST 3, 1970

Permit Number: 537; Approval Date: 8-6-70; Approved By: [Handwritten Signature]

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



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	Land Description

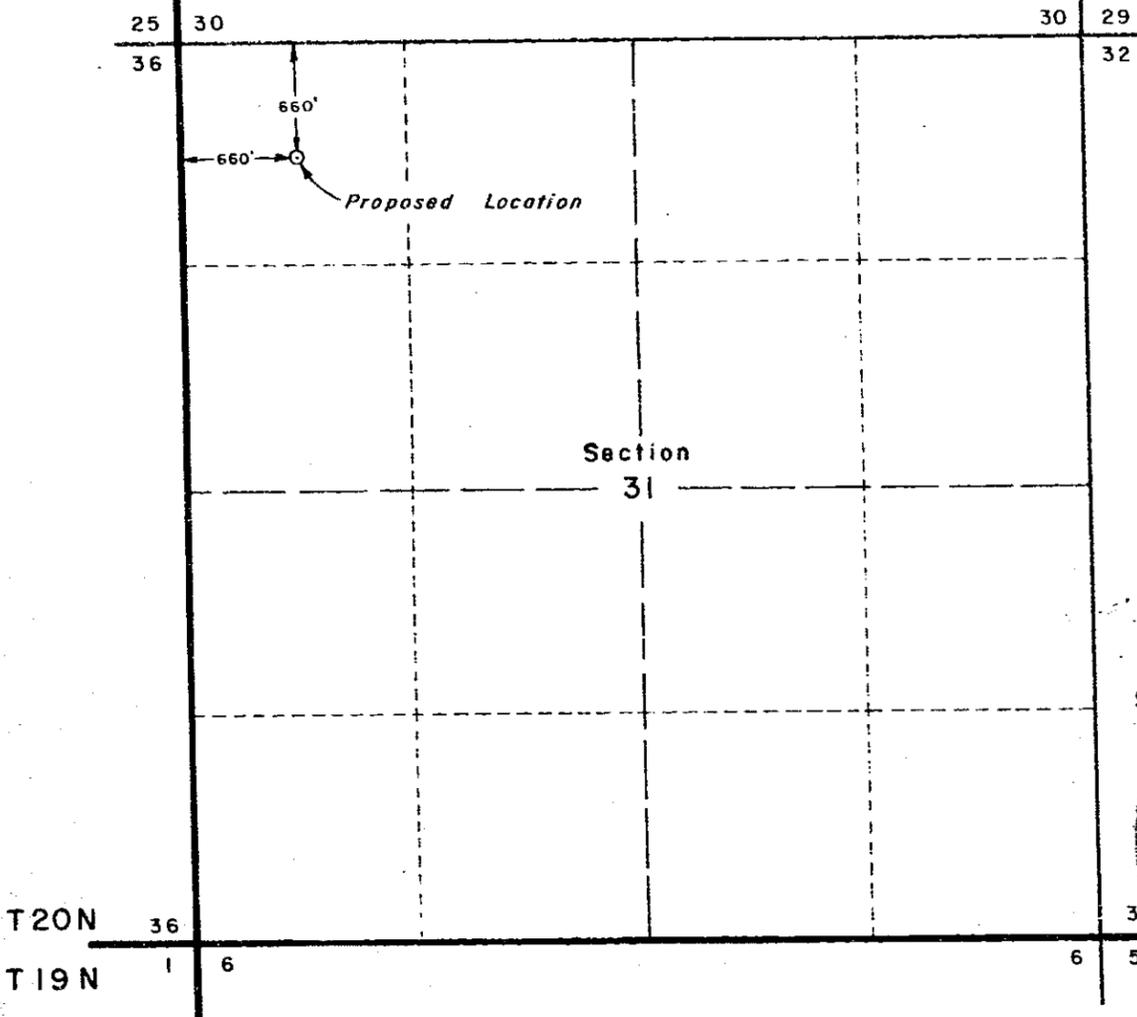
  

	<p style="text-align: center;"><b>CERTIFICATION</b></p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p>Name <u>J. N. EDWARDS</u></p> <p>Position <u>SECRETARY</u></p> <p>Company <u>EASTERN PETROLEUM COMPANY</u></p> <p>Date <u>8/3/70</u></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>
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

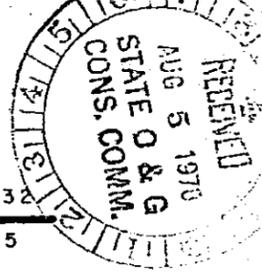
**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
sfc 7"			0	90	90	6

R 27 E R 28 E



Scale: 1" = 1000'



**WELL LOCATION: Eastern Petroleum Co.—Western Helium Corp. No.21-1A Santa Fe**

Located 660 feet South of the North line and 660 feet East of the West line of Section 31,  
 Township 20 North, Range 28 East Gila & Salt River Meridian,  
 Apache County, Arizona  
 Existing ground elevation determined at 5830 feet based on adjoining wells.

I hereby certify the above plat represents a survey made under my supervision and that it is accurate to the best of my knowledge and belief.

*Frederick H. Reed*

FREDERICK H. REED  
 Registered Land Surveyor  
 State of Arizona #5313



WESTERN HELIUM CORPORATION Scottsdale, Arizona	
AMENDED WELL LOCATION PLAT SEC. 31, T20N, R28E Apache Co., Arizona	
CLARK-REED & ASSOC. Durango, Colorado	DATE: July 30, 1970 FILE NO: 70021



# PERMIT TO DRILL

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

To: EASTERN PETROLEUM COMPANY  
(OPERATOR)

to drill a well to be known as

EASTERN PETROLEUM COMPANY #21-1A SANTA FE FEE

located 660 FNL - 660' FWL *see amended plat & application submitted 8-3-70*  
1188' FNL - 1056' FNL

Section 31 Township 20N Range 28E APACHE County, Arizona.

The W/2 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 29TH day of MAY, 19 70.

OIL AND GAS CONSERVATION COMMISSION

PRIOR TO BEING ALLOWED TO PRODUCE THIS WELL YOU MUST BE IN FULL COMPLIANCE WITH RULE 105, SECTION A THRU G (SPACING), WITH RESPECT TO THE PRODUCT TO BE PRODUCED.

By \_\_\_\_\_ EXECUTIVE SECRETARY

PERMIT No 537

RECEIPT NO. 2871  
API NO. 02-001-20131

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

SAMPLES ARE REQUIRED



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA

4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013

PHONE: (602) 271-5161

April 7, 1975

Mr. J. N. Edwards  
Eastern Petroleum Co.  
P. O. Box 291  
Carmi, Illinois 62821

Re: Commission Ordered Plugged Wells  
Navajo Springs Area

Dear Mr. Edwards:

In reply to your letter of April 3, 1975 regarding the wells that Mr. C. G. Wallace has indicated interest in acquiring in order to convert to water wells, this office has had no word from Wallace regarding his intentions. We did, at Mr. Wallace's request furnish him with copies of electric logs of these wells, however, that has been the extent of our communications with him.

On March 13, 1975 we wrote you regarding Plugging Reports on the wells you have recently plugged in the Navajo Springs area. We also requested this information from Mr. Fullop in a telephone conversation on February 20, 1975. As of this date, neither of you have seen fit to furnish this information. I would call your attention to Rule 202, C., Plugging Methods and Procedures of our Rules and Regulations. I would also call your attention to ARS Section 27-527, Penalties, copies of each are attached. The mood of the Commission is such that they could easily decide to enforce these penalties should you continue to fail to respond to our request.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/r1b

cc Mr. Fullop

Encs.



EASTERN PETROLEUM CO.  
EASTERN DRILLING, INC.

TELEPHONE (618) 382-4104 • P. O. BOX 281 • CARMEL, ILLINOIS 62821

April 3, 1975

Mr. W. E. Allen  
Oil & Gas Conservation Comm.  
4515 North 7th Avenue  
Phoenix, Arizona 85013

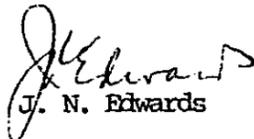
Dear Mr. Allen:

Please refer to our letter of January 24 to C. G. Wallace concerning transfer and acceptance of five wells for water wells.

We've had no response from Mr. Wallace. If he did formally accept these wells or any of them will you please mail us photocopies.

Yours very truly,

EASTERN PETROLEUM COMPANY

  
J. N. Edwards

JNE:sjn

RECEIVED  
APR 07 1975  
O & G CONS. COMM.



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

March 13, 1975

Mr. J. N. Edwards  
Eastern Petroleum Co.  
P. O. Box 291  
Carmi, Illinois 62821

Re: Commission Ordered Plugged Wells  
Navajo Springs Area

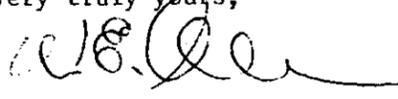
Dear Mr. Edwards:

Your letter of March 10, 1975, requesting approved plugging forms for each well has been received. Prior to approving the applications to abandon and plug these wells, it will be necessary for you or some member of your firm to submit these copies detailing the manner in which the wells were plugged and the depth at which they were placed.

In a telephone conversation with Mr. Fullop several days ago we requested that these forms be submitted.

Please submit these forms as quickly as possible.

Very truly yours,

  
W. E. Allen, Director  
Enforcement Section

WEA/rlb

Encs.



EASTERN PETROLEUM CO.  
EASTERN DRILLING, INC.

TELEPHONE (815) 385-4104 • P.O. BOX 291 • CARM, ILLINOIS 62921

March 10, 1975

Mr. W. E. Allen  
Arizona Oil & Gas Cons. Comm.  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Re: Commission Ordered Plugged Wells

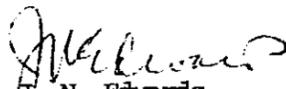
Dear Mr. Allen:

We are informed the wells ordered by the Commission to be plugged have been plugged.

Would you please send approved plugging copies of each well. I would presume the bond on these wells could be released.

Yours very truly,

EASTERN PETROLEUM COMPANY

  
J. N. Edwards

JNE:sjn

RECEIVED

MAR 13 1975

O & G CONS. COMM.

DATE: February 20, 1975  
SUBJECT: Eastern Petroleum Company Wells  
TO: 13 Eastern Files  
FROM: W. E. Allen, Director, Enforcement Section

Called Henry Fullop this date requesting plugging reports on all wells plugged and completion report on the Merde No. 2 well. Also asked him to find out status of the placement of dry hole markers and cleanups.

January 20, 1975

Mr. Henry Fullop  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

Re: Eastern and Crest wells in the general area of Navajo Springs

Dear Mr. Fullop:

Attached is a list of wells drilled by Eastern and Crest in Apache County. According to our files this list reflects all wells that have been drilled by Eastern in this area. You will note that the list indicated the wells that have reportedly been plugged and abandoned, shut-in helium wells, production helium wells, some strat tests and also wells for which a permit was issued but were never drilled and the permits cancelled.

We have previously supplied you with lists of all the unplugged wells in this area and also the wells that have been ordered plugged by the Commission.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb

Enc.

December 24, 1974

Memo to Eastern Petroleum File

Memo from W. E. Allen, Director, Enforcement Section

Henry Fullop called December 20th. At that time he said that they planned on starting plugging operations on the 24th of December. Fullop called again this morning and asked for a brief extension in time. He said his father was seriously ill in the hospital and that he felt he could not leave him at that time. He also said he felt it was necessary that he be here during the plugging operations since he was familiar with the well locations and the completion method. Fullop asked John Bannister and myself if he could have his equipment in the Navajo Springs area and ready to start plugging immediately after the first of the year if not before. We agreed to grant Fullop this additional time due to the illness of his father.

After talking with Fullop I checked with the contractor who is to do the work, Albert Gentles. Gentles assured me that they were going to do the plugging for Eastern and had already dispatched some equipment to the area. The other equipment along with the personnel would be leaving Carmi, Illinois, within the next few days.



UNITED STATES FIDELITY AND GUARANTY COMPANY  
INDIANAPOLIS OFFICE  
456 N. MERIDIAN ST., INDIANAPOLIS, IND. 46204  
FOSTER & MESSICK, MANAGERS

December 23, 1974

~~Attorney General's Office  
State of Illinois  
Phoenix, Arizona~~

ATTENTION: Mr. Mousel

RE: Bond No. 27716-13-3983-65 - Eastern Petroleum Company -  
State of Arizona

Dear Mr. Mousel:

This will confirm our telephone conversation on December 19, 1974 in regard to the plugging of the oil wells for the Eastern Petroleum Company in reference to the order of the Oil and Gas Commission, Case No. 48, Order No. 47.

We are attaching hereto a copy of the letter from Mr. Henry Phullop of the Eastern Petroleum Company concerning the plugging of the 13 wells listed in the order.

Very truly yours,

FOSTER & MESSICK, MGRS.

Harold E. Uhrig  
Claim Supervisor

HEU:ja

Enc.

cc: Oil and Gas Conservation Commission  
State of Arizona  
4515 North Seventh Avenue  
Phoenix, Arizona 85013  
ATTN: Mr. W. E. Ellen, Director

RECEIVED  
DEC 23 1974  
O & G CONS. COMM.



EASTERN PETROLEUM CO.  
EASTERN DRILLING, INC.

TELEPHONE (618) 382-4104 - P. O. BOX 291 - CARMI, ILLINOIS 62821

December 20, 1974

Mr. Harold E. Uhrig  
Foster & Messick, Mgrs.  
456 N. Meridian Street  
Indianapolis, Indiana 46209

Re: Case No. 48  
Arizona O & G Comm.

Dear Mr. Uhrig:

We intend to commence plugging the thirteen wells this coming week as ordered by the Commission and expect to have at least one, if not two, plugged by December 25, 1974.

We've had difficulty in engaging contractors. All have been afraid to tackle the job without definite assurance they would be free of possible suits. The action of the state should minimize this possibility.

Yours very truly,

EASTERN PETROLEUM COMPANY

Henry Fullop

HF:sjn

cc: Mr. Glenn Becker  
McCallister, Becker & Hall  
Carmi, Illinois

DATE: December 19, 1974  
MEMO: Eastern Petroleum Company File  
FROM: W. E. Allen, Director, Enforcement Section  
SUBJECT: Plugging - Eastern Petroleum Company's wells

Craig Mousel from the Attorney General's Office called this date to tell me that he had talked with Mr. Uhrig of U.S.F.&G. regarding the Commission's order to plug certain of Eastern's wells. Mr. Uhrig told Craig that Fullop had told him he was leaving Carmi either the 20th or the 21st to come down here and make arrangements for these wells to be plugged. Uhrig said that Fullop would call the Attorney General's Office when he was in town, however, since Craig will be out of town for the holidays, he will leave word for him to contact me. Uhrig also told Craig that it was his opinion that Eastern Petroleum was solvent in that there would be no trouble in them plugging these wells.

If work has not started by December 30, Craig is to contact Uhrig again.

DATE: December 9, 1974  
MEMO: John Bannister, Executive Secretary  
FROM: W. E. Allen, Director, Enforcement Section  
SUBJECT: Eastern Petroleum Company - Navajo Springs

I contacted Dan Leavell this morning regarding his intentions to plug Eastern's wells in the Navajo Springs area. Mr. Leavell had previously contacted me regarding this operation. When I talked with him this morning, he told me that Henry Fullop had changed his mind in regards to using Mr. Leavell and he thought that Eastern was considering a fellow by the name of Red Gentles to perform this work.

Gentles is the fourth person that has been mentioned as the contractor for the plugging of these wells. After talking with Leavell, I wrote a letter to U.S.F. & G. reminding them that if Eastern had not started plugging the wells by December 25, this Commission would expect U.S.F. & G. to initiate the plugging of these wells.

/rlb



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA

4515 NORTH 7TH AVE.

PHOENIX, ARIZONA 85013

PHONE: (602) 271-5161

CERTIFIED MAIL

December 9, 1974

Mr. Harold E. Uhrig  
U. S. F. & G. Company  
456 Meridian Street  
Indianapolis, Indiana 46209

Re: Oil & Gas Conservation Commission, State of Arizona  
Order No. 47, Eastern Petroleum Company

Dear Mr. Uhrig:

The above referenced order names U. S. F. & G. Company as surety under Bond No. 27716-13-3983-65. This bond guarantees Eastern's compliance with the Commission's orders, rules and regulations.

This order stipulates that work required to bring Eastern Petroleum Company into compliance with this Commission's orders shall be started by December 25, 1974. Since the issuance of this order, this Commission has had no direct communication with Eastern. The purpose of this letter is to remind you that if Eastern has not started positive action by the compliance date; this Commission will expect U. S. F. & G. to initiate plugging operations on the various wells listed in the order. Enclosed for your information is a copy of this order.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb

Enc.

cc - Mr. Henry Fullop and Jess Edwards



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA

4515 NORTH 7TH AVE.

PHOENIX, ARIZONA 85013

PHONE: (602) 271-5161

December 2, 1974

The Prentice-Hall Corporation System, Inc.  
521 Fifth Avenue  
New York, New York 10017

Attention: Mr. John F. Byrne, Jr.  
Vice President

Re: IN THE MATTER OF THE HEARING CALLED BY THE  
OIL AND GAS CONSERVATION COMMISSION OF THE  
STATE OF ARIZONA FOR THE PURPOSE OF CON-  
SIDERING:

CASE NO. 48

ORDER NO. 47

THE MOTION OF THE OIL AND GAS CONSERVATION  
COMMISSION THAT EASTERN PETROLEUM COMPANY,  
UNITED STATES FIDELITY AND GUARANTY COMPANY,  
AND THE PRENTICE-HALL CORPORATION SYSTEM  
SHOW CAUSE WHY THEY SHOULD NOT BE ORDERED  
TO PLUG CERTAIN WELLS AS BELOW LISTED

Gentlemen:

In reply to your letter of November 26, 1974, please be advised that the Oil and Gas Conservation Commission realizes that the position of The Prentice-Hall Corporation System, Inc. is merely that of statutory agent. The Commission has no intent to call upon Prentice-Hall for any reason whatsoever under our Order No. 47. You will note that in the body of the order, wherein Eastern Petroleum Corporation is required to perform certain tasks, no mention is made of Prentice-Hall.

Consequently, let us assure you that the Commission is aware

The Prentice-Hall  
Corporation System, Inc.  
December 2, 1974  
Page 2

of your position and realizes that you are not involved in any  
manner in the performance of the requirements of this Order.

Sincerely,

*John J. Bannister*  
John Bannister  
Executive Secretary

JB/vb

cc - Mr. Hubert E. Kelly  
Kelly & Corbin  
550 W. Washington Street  
Phoenix, Arizona 85003

Mr. Henry Fullop  
Eastern Petroleum Company  
P.O. Box 291  
Carmi, Illinois 62821

The Attorney General  
State Capitol  
Phoenix, Arizona 85007

THE PRENTICE-HALL CORPORATION SYSTEM, INC.

212-687-7660

521 FIFTH AVENUE, NEW YORK, NEW YORK 10017

CABLE PRENSYSTEM

AIR MAIL =  
CERTIFIED MAIL NO. 170186

November 26, 1974

Hon. Ralph W. Bilby, Chairman  
Oil And Gas Conservation Commission  
State of Arizona  
Phoenix, Arizona 85003

RE: IN THE MATTER OF THE HEARING CALLED  
BY THE OIL AND GAS CONSERVATION  
COMMISSION OF THE STATE OF ARIZONA  
FOR THE PURPOSE OF CONSIDERING:

THE MOTION OF THE OIL AND GAS  
CONSERVATION COMMISSION THAT EASTERN  
PETROLEUM COMPANY, UNITED STATES  
FIDELITY AND GUARANTY COMPANY, AND  
THE PRENTICE-HALL CORPORATION SYSTEM  
SHOW CAUSE WHY THEY SHOULD NOT BE  
ORDERED TO PLUG CERTAIN WELLS AS  
BELOW LISTED

CASE NO. 48

ORDER NO. 47

Dear Sir:

Enclosed is a copy of the Order of your Commission, referred to  
above, which we have just received, indirectly, through our  
correspondents, Messrs. Kelly & Corbin of Phoenix, Arizona.

It is noted that "THE PRENTICE-HALL CORPORATION SYSTEM" has been,  
by this Order, directed to show cause why it, together with certain  
other corporations, including EASTERN PETROLEUM COMPANY, should  
not be ordered to "Plug Certain Wells."

According to our records, our company, THE PRENTICE-HALL CORPORATION  
SYSTEM, INC. is and has been serving as the "Statutory Agent" (see

Hon. Ralph W. Bilby, Chairman

-2-

November 26, 1974

Section 10-127, ARIZONA GENERAL CORPORATION LAW) since the date that the corporation so represented was qualified as a foreign corporation in Arizona, to wit: October 16, 1959.

Our relationship with said EASTERN PETROLEUM COMPANY is, and has been during that entire period, limited to the duties and responsibilities of a "Statutory Agent" under your law and never, in any way, involved in the business affairs or corporate objectives of said EASTERN PETROLEUM COMPANY.

Therefore, as it was error on the part of your Commission to designate THE PRENTICE-HALL CORPORATION SYSTEM, INC. in the above Order as a party thereto, we respectfully request that your Commission take immediate action to qualify or amend such Order to the extent necessary and appropriate to eliminate THE PRENTICE-HALL CORPORATION SYSTEM, INC. from the force and effect of the Order and, indeed, to eliminate our company from any involvement whatsoever in the proceedings underlying or resulting in the issuance of said Order.

To reiterate, our company does not, in any way, participate in the business activities of any of the corporations for which it acts as statutory process agent, its function being to merely provide the Registered Office as a place where process against corporations represented may be served and the forwarding of such process to the person or law firm which has been designated by the corporation or corporations so represented.

Please take immediate action in this matter and provide us with a copy of your amended Order.

Respectfully yours,

THE PRENTICE-HALL CORPORATION SYSTEM, INC.

  
John F. Byrne, Jr.  
Vice-President

JFB:es

cc: Hubert E. Kelly, Esq.  
Kelly And Corbin, Esqs.  
550 West Washington Street  
Phoenix, Arizona 85003  
Henry Fullop, Esq.  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

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

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

CASE NO. 48

ORDER NO. 47

THE MOTION OF THE OIL AND GAS  
CONSERVATION COMMISSION THAT EASTERN  
PETROLEUM COMPANY, UNITED STATES  
FIDELITY AND GUARANTY COMPANY, AND  
THE PRENTICE-HALL CORPORATION SYSTEM  
SHOW CAUSE WHY THEY SHOULD NOT BE  
ORDERED TO PLUG CERTAIN WELLS AS  
BELOW LISTED

ORDER OF THE COMMISSION

BY THE COMMISSION

This cause was considered at 10:00 a.m. on November 15, 1974  
at Phoenix, Arizona, by the OIL AND GAS CONSERVATION COMMISSION of  
the STATE OF ARIZONA, hereinafter referred to as the COMMISSION.

The COMMISSION, a quorum being present, having considered the  
facts presented and being fully advised in the premises, finds as  
follows:

FINDINGS:

(1) THAT the COMMISSION has jurisdiction of the subject  
matter thereof.

(2) THAT the COMMISSION did order EASTERN PETROLEUM COMPANY,  
as operator of the below-listed wells and as principal under Bond  
Number 27716-13-3983-65, to plug the below-listed wells:

<u>PERMIT NUMBER</u>	<u>WELL NAME</u>	<u>LOCATION</u>
234	Ancon Santa Fe Fee #21	SE/NW Sec 31-20N-28E
536	Santa Fe Fee #24	1650 FNL-2640 FWL SE/NW Sec 24-20N-27E
537	Santa Fe Fee #21-1A	NW/NW Sec 31-20N-28E
560	Kiva Santa Fe Fee #1	NE/SW Sec 13-20N-28E
565	Santa Fe #6X-1	SE/NW Sec 25-20N-28E
568	Santa Fe Fee Sanders #2	NE/SW Sec 15-21N-28E
578	Szar State #1	NE/NW Sec 36-20N-27E
584	Santa Fe Fee Dreck #1	SE/SW Sec 25-20N-27E
592	Indian Allotted Merde #1	SW/SW Sec 30-20N-28E
596	Indian Allotted Mdrde #2	SW/SE Sec 30-20N-28E
599	Kiva Santa Fe Fee #2	NE/SW Sec 24-20N-28E
600	Santa Fe Fee Beacon #1	NW/SE Sec 29-20N-29E
601	Santa Fe Fee #1-11	NW/SE Sec 11-20N-28E

(3) THAT EASTERN PETROLEUM COMPANY has failed to comply with the orders of the COMMISSION.

(4) THAT UNITED STATES FIDELITY AND GUARANTY COMPANY is surety under United States Fidelity and Guaranty Bond No. 27716-13-3983-65 and, as such, guarantees compliance of EASTERN PETROLEUM COMPANY with the COMMISSION'S orders, rules and regulations.

(5) THAT, in order to prevent waste and to protect underground water stratas which have been penetrated by the above-identified wells, EASTERN PETROLEUM COMPANY should plug said wells in accordance with the Application to Plug as filed by EASTERN

PETROLEUM COMPANY with this COMMISSION as to each of the above-identified wells.

IT IS THEREFORE ORDERED:

(1) THAT EASTERN PETROLEUM COMPANY plug the following wells:

<u>PERMIT NUMBER</u>	<u>WELL NAME</u>	<u>LOCATION</u>
234	Ancon Santa Fe Fee #21	SE/NW Sec 31-20N-28E
536	Santa Fe Fee #24	1650 FNL-2640 FWL SE/NW Sec 24-20N-27E
537	Santa Fe Fee #21-1A	NW/NW Sec 31-20N-28E
560	Kiva Santa Fe Fee #1	NE/SW Sec 13-20N-28E
565	Santa Fe #6X-1	SE/NW Sec 25-20N-28E
568	Santa Fe Fee Sanders #2	NE/SW Sec 15-21N-28E
578	Szar State #1	NE/NW Sec 36-20N-27E
584	Santa Fe Fee Dreck #1	SE/SW Sec 25-20N-27E
592	Indian Allotted Merde #1	SW/SW Sec 30-20N-28E
596	Indian Allotted Merde #2	SW/SE Sec 30-20N-28E
599	Kiva Santa Fe Fee #2	NE/SW Sec 24-20N-28E
600	Santa Fe Fee Beacon #1	NW/SE Sec 29-20N-29E
601	Santa Fe Fee #1-11	NW/SE Sec 11-20N-28E

(2) THAT EASTERN PETROLEUM COMPANY commence the plugging operations on or before the 25th day of December, 1974 and complete said plugging operations as soon thereafter as is possible in accordance with reasonable and acceptable standards of the oil and gas industry.

(3) THAT any Certificate of Clearance or Certificate of Compliance which may have been issued to Eastern Petroleum Company

comply with this order, THE UNITED STATES FIDELITY AND GUARANTY COMPANY is to bring the above-identified wells into compliance with this order and with the rules and regulations of this COMMISSION

DONE at Phoenix, Arizona, on the 15th day of November, 1974.

OIL AND GAS CONSERVATION COMMISSION  
STATE OF ARIZONA

By (Original signed)  
Ralph W. Bilby, Chairman

( S E A L )

ATTEST:

(Original signed)  
John Bannister  
Executive Secretary

APPROVED AS TO FORM  
Craig Myrdal  
Assistant Attorney General  
Date Nov. 19, 1974

*I would suggest that maybe within the order part a reference be made to the possibility of revoking a certificate of compliance; the order, however, is fine on its face without the above suggestion.*



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

NOTICE OF HEARING

CASE NO. 48

Notice is hereby given to all interested parties, and specifically but not limited to EASTERN PETROLEUM COMPANY, Post Office Box 291, Carmi, Illinois 62821, as operator of the below listed wells and as principal under United States Fidelity and Guaranty Company Bond Number 27716-13-3983-65, to UNITED STATES FIDELITY AND GUARANTY COMPANY of 456 North Meridian Street, Indianapolis, Indiana 46209, as surety under the above specified bond, and to THE PRENTICE-HALL CORPORATION SYSTEM, 550 West Washington, Phoenix, Arizona 85003, as statutory agent for the above identified Eastern Petroleum Company, that the OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF ARIZONA, pursuant to the authority granted in ARS 27-516.B, will hold a hearing on its own motion, at its offices at 4515 North 7th Avenue, Phoenix, Arizona 85013, at 10:00 a.m. on November 15, 1974 to ~~consider~~ <sup>show cause</sup> why EASTERN PETROLEUM COMPANY as operator of the below listed wells, and as principal under USF&G bond, above identified, and UNITED STATES FIDELITY AND GUARANTY COMPANY as surety under USF&G bond, above identified, should not be ordered to plug the below identified wells for violations of the Commission's rules and regulations, and the applicable statutes of the State of Arizona, to wit, but not limited,



November 22, 1974

Mr. Dan LaBell  
300 South Walnut  
Carmi, Illinois 62821

Re: Eastern Petroleum Company Wells - Navajo Springs Area

Dear Mr. LaBell:

Attached are copies of Form 9, Application to Abandon and Plug, for Eastern's 13 wells in the Navajo Springs area. You will note that these applications were submitted by Eastern and approved by this office. Also attached are completion reports on 12 of the 13 subject wells. A completion report was never filed on one well.

We are also attaching tabulations on 24 of Eastern's 26 unplugged wells in this area. The remaining two wells, Eastern Santa Fe No. 13 located in Section 31-T20N-R27E and Barfoot No. 1 in Section 32-T20N-R27E are currently producing into Kerr-McGee's helium extraction plant. All figures and estimates on the tabulation were either submitted by Eastern or derived from information submitted by Eastern to this office.

Please notify this office prior to commencing any plugging operations. A representative from this office will witness the plugging of all wells.

Please advise if we can be of any further assistance.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb

Encs.

November 18, 1974

Office of the Attorney General  
State Capitol  
Phoenix, Arizona 85007

Attention: Mr. Craig Mousel

Re: Case No. 48

Gentlemen:

Attached please find the order the Oil and Gas Conservation Commission intends to issue on the captioned case. You are requested to approve this order as to form and content. I would appreciate your earliest comments, inasmuch as we have established a deadline of December 25th and want ample time to notify the people responsible.

Should you have any questions, please advise.

Yours truly,

John Bannister  
Executive Secretary

JB/vb

Enc.

November 1, 1974

REGISTERED, RETURN  
RECEIPT REQUESTED

Eastern Petroleum Company  
P.O. Box 291  
Carmi, Illinois 62821

U.S. Fidelity & Guaranty Company  
456 N. Meridian St.  
Indianapolis, Indiana 46209

The Prentice-Hall Corporation System  
550 W. Washington  
Phoenix, Arizona 85003

Gentlemen:

Attached please find a copy of Notice of Hearing wherein each of you is involved. Eastern Petroleum Company has been ordered to plug the wells listed in the Notice of Hearing and have failed to comply with the Oil and Gas Commission's orders.

Should Eastern Petroleum Company be ordered after the hearing to plug these wells and fail to do so, it will be necessary for the United States Fidelity and Guaranty Company to make good on their bond and see that the requested plugging is accomplished.

The hearings before this Commission are informal by nature and it is not necessary that appearance before this Commission be made by an attorney. Of course, you are free to use an attorney should you so desire.

Should you have any questions, please advise.

Sincerely,

John Bannister  
Executive Secretary

JB/vb

Enc.

October 29, 1974

The Attorney General  
State Capitol  
Phoenix, Arizona 85007

Attention: Mr. John McGowan  
Special Assistant Attorney General

Dear Sir:

You are well aware that it has been necessary for this Commission to repeatedly request Eastern Petroleum Company to comply with our rules and regulations. Several times this Commission has found it necessary to request aid from your office to force Eastern to comply with certain of our rules.

Eastern has some 26 known unplugged wells in the Navajo Springs helium area that have been drilled over the past several years. Some of these wells have never produced and tests indicate them to be incapable of production. Other wells have produced but are presently shut-in for various reasons. Eastern has only two wells producing in this area at the present time.

On February 1, 1974 we advised Eastern and their bonding company, United States Fidelity and Guaranty, 456 North Meridian Street, Indianapolis, Indiana, that unless positive steps were taken to activate these wells, the Commission would of necessity order the wells plugged. A brief reply to the above letter was received by this office on February 19, 1974. It stated that the nonproducers would probably be plugged. After receiving this reply, Eastern was notified to submit Form 9, application to abandon and plug, certain of these wells for our approval. Following this interchange of correspondence, no further communication was received from Eastern. On April 12, 1974 Eastern, the bonding company and certain other interested partners were notified by registered mail of the necessity to plug a number of these wells. We received no response to this letter. On June 21, 1974, Eastern and the bonding company were notified by registered mail that a plugging program must be started by August 31, 1974. The original of this letter addressed to Mr. Henry Fullop, president of Eastern, was returned "unclaimed". Following the return of this letter, a copy was submitted to Eastern's Arizona statutory agent, the Prentice Hall Corporation, 550 West Washington, Phoenix, Arizona. On August 15, 1974, Mr. Fullop submitted a list of 13 wells that he proposed to plug. Our reply to this letter stated

Mr. John McGowan  
October 29, 1974  
Page 2

August 22, 1974, requested that application to abandon and plug the suggested wells be submitted immediately and plugging operations commence by September 30, 1974. We received these forms on September 3, 1974. After studying the suggested plugging program, the applications were approved and copies returned to Eastern on September 9, 1974. Following the return of these approved applications to abandon and plug, Mr. Fullop brought to this office a contractor he had supposedly engaged to perform the plugging operations. On September 19, 1974, Mr. Jess Edwards and an Eastern representative called and told me that the contractor that had been engaged was hesitant to do the work for fear of legal conflicts with Eastern's partners. Mr. Edwards was informed during this conversation that insofar as the Commission was concerned, Eastern and Eastern alone was responsible and the wells must be plugged by either Eastern or the bonding company. Since this conversation, we have had no further contact concerning this subject with Eastern. Eastern has, however, submitted copies of three letters that they have written to their alleged partners informing these people of the Commission's stand on this matter.

The above is a brief summary of our attempts to have Eastern Petroleum plug certain wells drilled for helium that are incapable of production in their present condition. The letter from Mr. Bannister that I left with you this morning states the desire of this Commission regarding the action that the Commission wishes to be taken.

We would appreciate a written reply informing us of the action you plan to take concerning this matter. If you need any further information, please call me at 271-5161.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb

October 18, 1974

The Attorney General  
State Capitol  
Phoenix, Arizona 85007

Attention: Mr. John McGowan, II  
Special Assistant Attorney General

Re: Eastern Petroleum Company, Navajo Springs Area

Dear Sir:

Attached please find a schedule setting forth a list of wells by permit number, location, etc. All of these wells were drilled by Eastern Petroleum Company under U.S. Fidelity and Guaranty Company Bond No. 27716-13-3953-65. Also attached is the original bond, as captioned.

Eastern Petroleum Company has failed to comply with the Commission's request to plug thirteen wells, said wells being indicated by an asterisk on the schedule. At the regular Commission meeting of October 18, 1974, the Commission instructed me to request the Attorney General to institute a show-cause proceeding against Eastern Petroleum Company and their bonding company to accomplish plugging of these wells.

There are, in all likelihood, unknown principals, and the proceedings should be to such end to force disclosure of said principals and force their compliance with our regulations.

Should you need anything further, please advise.

Respectfully,

John Bannister  
Executive Secretary

JB/vb

Enc.



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA

4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

October 11, 1974

MEMO: John Bannister, Executive Secretary  
FROM: W. E. Allen, Director, Enforcement Section  
SUBJECT: Eastern Petroleum Company Operations - Navajo Springs Area

Mr. Fullop has informed me that prior to plugging certain wells in the Navajo Springs area, he needs approval from his partners. We have information that indicates his partners to be John F. Staver, Daniel L. Schwetz, Western Helium Corporation, Dr. C. F. Swain--operating as Crest Oil Company and, of course, Kerr-McGee is involved in the Navajo Springs Unit (Coconino). Eastern has two wells in the Navajo Springs Unit producing into Kerr-McGee's helium extraction plant. These two wells are Eastern Santa Fe No. 13 and Kerr-McGee Baifoot #1.

Of the 13 wells for which Eastern has submitted Applications to Plug and Abandon, none of these are in the Navajo Springs Unit and only three of these wells have ever produced. These wells produced into Western Helium's plant. This plant shutdown December 31, 1973 and no gas has been taken from any wells in this area since that date. The above mentioned partners with the exception of Kerr-McGee and Swain apparently have no interest in the Navajo Springs Unit.

The land owners or lessees of acreage on which these wells are located are Wayne Wallace, Spurlocks, Reece, Santa Fe Railroad and the State of Arizona. I have no knowledge of any other lessees or land owners.

Prentice Hall Corporation System is the statutory agent.

United States Fidelity and Guaranty Company is the surety.

Western Helium Corporation has been advised of the necessity to plug their Connelly #1 KM State, Permit #553, NE/NE Section 36-T20N-R27E, Apache County. This well is covered under Western Helium's bond of \$25,000. Travelers Indemnity Company is surety.

*Mr Allen*

*Rec'd 9/26/74*



September 23, 1974

Mr. Henry Fullop  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

ABANDONMENT OF SHUT-IN WELLS  
NAVAJO SPRINGS UNIT  
APACHE COUNTY, ARIZONA

This is in response to your letter dated September 10, 1974, which advised that the Arizona Oil and Gas Conservation Commission had requested abandonment of all shut-in wells within the subject unit. Kerr-McGee is of the opinion that these wells should not be abandoned at this time as they may be needed in the future as producing wells or for reservoir performance monitoring.

Mr. Bill Allen, with Arizona Oil and Gas Conservation Commission, indicated by telephone on September 23, 1974, that the Commission has given additional consideration to its request that the shut-in unit wells be abandoned, and will not require abandonment of these wells at this time. It is therefore recommended that abandonment of the shut-in unit wells be deferred indefinitely.

Very truly yours,

KERR-McGEE CORPORATION

*John I. Fisher*  
John I. Fisher, Manager  
Outside Operations  
Oil & Gas Production Division

JIF/IDG/kb

cc: Crest Oil Company  
P. O. Box 57  
Alton, Illinois 62002

Mr. J. F. Schlafly  
First National Bank Bldg.  
Alton, Illinois 62002

Estate of G. R. Barfoot  
Ehmann, Olsen & Lane  
2500 First Federal Savings Bldg.  
3003 N. Central Avenue  
Phoenix, Arizona 85013



EASTERN PETROLEUM CO.  
EASTERN DRILLING, INC.

TELEPHONE (818) 382-4104 • P. O. BOX 291 • CARMEL, ILLINOIS 62821

September 20, 1974

Mr. John F. Staver  
P. O. Box 950  
Virginia, Minnesota 55792

Dear Mr. Staver:

Mr. W. E. Allen, Director, Enforcement Section, Oil and Gas Conservation Commission, has notified us that he has been instructed by motion of the full Commission to order the plugging of all inactive wells, producible and non-producible, in the Navajo Springs-Sanders area, with actual plugging operations to begin by September 30, 1974. This order also applies to shut-in wells in the Navajo Springs Unit. We have no alternative other than to comply.

However, since you are an owner in the below listed wells we would like your permission to proceed. On the other hand, if you prefer, we will transfer to you any remaining interest that we may own. This would mean, of course, you would have to place these wells under your own bond, and become liable for their eventual plugging, unless you make an attempt to produce them. Western Helium's withdrawal would appear to preclude any probability of a market, however.

Santa Fe #21-A	-	Section 31-20N-28E 537
Santa Fe #21	-	Section 31-20N-28E 234
Szar-State #1	-	Section 36-20N-27E 578
Merde Indian #1	-	Section 30-20N-28E 592
Merde Indian #2	-	Section 30-20N-28E 594
Santa Fe #24	-	Section 24-20N-27E (Western Hel.) 534

Please give this your immediate attention and advise accordingly.

Yours very truly,

EASTERN PETROLEUM COMPANY

*Henry Fullop*  
Henry Fullop

RECEIVED

SEP 22 1974

O & G CONS. COMM.

HF:sjn

CERTIFIED MAIL NO. 62410  
RETURN RECEIPT REQUESTED

September 19, 1974

Memo from W. E. Allen, Director  
Enforcement Section

Memo to file  
Eastern wells in Navajo Springs area

Jess Edwards called this date to say that he had run into some difficulty with the contractors that were to plug these wells. He said that Wayne Carr was hesitant to start plugging the subject wells without receiving an OK from all of Eastern's partners. Edwards said he was also contacting the partners to advise them that this Commission had ordered the wells plugged. He wanted to know if we could jointly order Eastern and partners to plug the wells. I was not sure about this and so informed him. I also told him that insofar as the Commission was concerned, Eastern was the owner of these wells and this Commission would hold Eastern and the bonding company responsible for the plugging, not the partners. I also told him that in my opinion if the Commission should continue to insist that the wells be plugged, their only recourse was to call a hearing and attempt to convince the majority of the Commission that this action was not necessary. If unable to do this, they could appeal the Commission's order to the Supreme Court. Eastern said they would attempt to get an agreement from the partners. He also promised to keep me informed.

August 22, 1974

CERTIFIED MAIL

Mr. Henry Fullop  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

Re: Apache County Wells

Dear Mr. Fullop:

We have your letter of August 15, 1974 together with a list of wells you propose to plug immediately. It is my opinion that if the list of wells, as submitted by you, are plugged very quickly that this operation will probably satisfy the Commission for the near future. Especially if there are plans to produce the remaining wells in the Navajo Springs area. The above statement cannot be taken as absolute, for I have been instructed by motion of the full Commission to order the plugging of all inactive wells in the Navajo Springs--Sanders area.

I talked with Mr. Noah Reynolds this morning. Mr. Reynolds informs me that final arrangements have not been made for him to undertake the plugging and abandonment of the 13 listed wells. As you know, prior to plugging a well the operator must submit Form 9, Application to Abandon and Plug, for the Commission's approval. Enclosed is a supply of these forms.

We will expect to receive a completed Form 9 for our approval on each of the 13 wells by September 4, 1974; and furthermore, the actual plugging operations must begin by September 30, 1974. If the above instructions are not complied with on a timely basis, this Commission will order the bonding company to plug all wells not now producing and operated by Eastern Petroleum Company in Apache County.

Mr. Henry Fullop  
August 22, 1974  
Page 2

This Commission must be notified prior to any plugging operations so we may have a representative present to witness the plugging. Your cooperation in this matter is urgently requested.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

Encs.

cc: Mr. Noah Reynolds  
Mr. Jess Edwards, certified mail  
Prentice-Hall Corporation System, certified mail  
Mr. Harold E. Uhrig, U.S.F.&G., certified mail

*Form 9 mailed under separate cover*



EASTERN PETROLEUM CO.  
EASTERN DRILLING, INC.

TELEPHONE (618) 282-4104 P.O. BOX 2811 CARMI ILLINOIS 62821

August 15, 1974

Mr. W. E. Allen  
Oil & Gas Conservation Comm.  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Re: Apache County Wells

334-2867

Dear Mr. Allen:

We have made arrangements with Mr. Noah <sup>Reynolds</sup> ~~Richards~~, Aztec, New Mexico, to salvage and plug the wells listed on the attached schedule.

Mr. <sup>Reynolds</sup> ~~Richards~~ has to fit this into his busy work schedule and it is possible that he may be unable to start until after the 31st. I understand that he will contact you in this regard.

The shut-in wells in the Navajo Springs Unit are not scheduled. I am sure the various owners of the Unit would not want to take such action now. It is entirely possible these wells may be required to sustain the normal take in the future. As you know the Spurlock case has cast, temporarily at least, a shadow over future operations, with the trial scheduled for 1975.

Yours very truly,

EASTERN PETROLEUM COMPANY

  
Henry Fullop

HF:sjn

Enc.

cc: Mr. Noah <sup>Reynolds</sup> ~~Richards~~

Mr. Harold E. Uhrig  
Foster & Messick, Mgrs.  
456 N. Meridian Street  
Indianapolis, Indiana 46209

RECEIVED

AUG 19 1974

O & G CONS. COMM.

7 PACIFIC UNITY WELLS SCHEDULED FOR PLUGGING

PERMIT #	WELL NO & LOCATION	PIPE IN HOLE
110	1- SF*24 - 1650 FNL, 2640 FNL, 24-20N-27E	1303 - 2 7/8" 315 - 7"
536	2- SF 21-1A - 660 FNL, 660 FNL, 31-20N-28E	1718 - 4 1/2" 244 - 7"
234	3- SF*21 - 1650 FNL, 1650 FNL - 31-20N-28E	1230 - 2 7/8" 278 - 7"
565	4- KIVA 6X-1 - 2378 FNL, 2364 FNL, 25-20N-28E	1262 - 4 1/2" 309 - 7"
560	5- KIVA-SF*1 - 1980 FNL, 1966 FSL, 13-20N-28E	- 551' 7" - SFC NO PIPE
549	6- KIVA-SF*2 - 1658 FNL, 1651 FSL - 24-20N-28E	- 1212 - 4 1/2" 616 - 7"
568	7- SANDERS-SF*Y - 1650 FSL, 2310 FNL, 15-21N-28E	- 516' - 4 1/2" NO SFC CSG.
600	8- BEACON-SF*1 - 1980 FNL, 1980 FSL - 29-20N-28E	- 1265 - 4 1/2" 640 - 7"
578	9- SZAR-STATE*1 - 660' FNL, 1980 FNL, 36-20N-27E	1215 - 4 1/2" 300 - 7"
542	10- MERAS INDIAN*1 - 660 FSL, 660 FNL - 30-20N-28E	1700 - 4 1/2" 282 - 7"
576	11- MERAS INDIAN*2 - 660 FSL, 1980 FNL, 30-20N-28E	1197 - 2 7/8" 268 - 7"
601	12- SF*1-11, 1650 FSL, 1650 FNL, 11-20N-28E	1055 - 4 1/2" 622 - 7"
	13- DRECK-SF*1 - 1980 FNL, 660 FSL - 25-20N-27E - THIS WELL IS PARTIALLY PLUGGED, BUT THERE IS NO PLUG IN TOP OF 7" SFC (285' N/75)	



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

July 18, 1974

CERTIFIED MAIL

The Prentice-Hall Corp. System  
550 West Washington  
Phoenix, Arizona 85003

Re: The Prentice-Hall Corporation System, Statutory Agent for  
Eastern Petroleum Company, P. O. Box 291, Carmi, Illinois

Gentlemen:

This Commission has requested several times to be advised of your plans for further operations on your unplugged wells in the Navajo Springs area.

Mr. Edwards submitted some Sundry Notices and Reports on Wells, Form 25, indicating that you planned to plug some of the wells. Some others were to be transferred to Dan Schwetz. Still others, some of which have never produced commercially, apparently were to maintain their present status.

You are aware that several wells in this area have never indicated any ability to produce and others that are carried as shut-in helium wells have never produced commercially and no attempt to produce some of these wells was ever made.

At a meeting of the Commission on this date we were instructed to direct you to properly plug, by August 31, 1974, all wells in this area not now producing. Prior to plugging any well, the plugging program must be approved by the Commission and all operations relating to the plugging and abandonment will be witnessed by a member of the Commission staff.

Within this time frame, this Commission will consider any feasible plan that you might have to place whatever wells that are capable of producing back on production.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb

cc - Mr. Henry Fullop



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

June 21, 1974

CERTIFIED MAIL

Mr. Henry Fullop  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

Re: Navajo Springs Area

Dear Mr. Fullop:

This Commission has requested several times to be advised of your plans for further operations on your unplugged wells in the Navajo Springs area.

Mr. Edwards submitted some Sundry Notices and Reports on Wells, Form 25, indicating that you planned to plug some of the wells. Some others were to be transferred to Dan Schwetz. Still others, some of which have never produced commercially, apparently were to maintain their present status.

You are aware that several wells in this area have never indicated any ability to produce and others that are carried as shut-in helium wells have never produced commercially and no attempt to produce some of these wells was ever made.

At a meeting of the Commission on this date we were instructed to direct you to properly plug, by August 31, 1974, all wells in this area not now producing. Prior to plugging any well, the plugging program must be approved by the Commission and all operations relating to the plugging and abandonment will be witnessed by a member of the Commission staff.

Within this time frame, this Commission will consider any feasible plan that you might have to place whatever wells that are capable of producing back on production.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb

cc - J. N. Edwards and U.S.F. & G.



OFFICE OF  
**Oil and Gas Conservation Commission**

STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

April 12, 1974

CERTIFIED MAIL

Mr. Henry Fullop  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

Re: Navajo Springs Area

Dear Mr. Fullop:

We have received Mr. Edward's letter dated March 12, 1974 together with Form 25, Sundry Notice and Reports, on 16 wells in the Navajo Springs area. We are aware that a number of your wells are in the Navajo Springs Coconino Unit. According to our records, several of the wells that are in the Unit have never produced except during testing and are being carried as shut-in helium wells. A number of wells outside the Unit have never produced, and your completion reports indicate the production on the potential test to be zero or TSM. Other wells have been taken off production for various reasons.

The possibility of some of these wells ever being produced commercially again appears negligible. As you know, Western Helium has not taken gas from your wells since December 31, 1973. This company is now in the process of dismantling and moving their plant out of the area. There is a possibility that Kerr-McGee might arrange to take gas from some of the wells in the Navajo Springs Unit as they are now doing from your Santa Fe No. 13 and Barfoot.

It is the opinion of this Commission that all non-commercial wells in the Navajo Springs area, whether in the Unit or not, should be permanently plugged and abandoned as quickly as possible. These wells would include, within the Navajo Springs Coconino Unit, the Crest Santa Fe No. 2, Santa Fe Nos. 31 and 32, and the Reese No. 2. No production has been reported from any of these wells. Also to be plugged should be your Ancon Santa Fe Nos. 21 and 21-1A, Connelly KM State No. 1, Merde No. 1 and all the non-producers that have been drilled within the past three years. Your Merde No. 2 must be plugged immediately. The hole in the casing at approximately 750' has never been repaired and the well is flowing water. Also your Dreck No. 1 has been reported plugged and abandoned, a copy of your plugging report is attached. It is possible that this well has been partially plugged, however there is definitely no plug in the top of the casing and fluid is several hundred feet from the surface. The dry hole marker was never installed. It is on

Mr. Henry Fullop  
April 12, 1974  
Page 2

location but the casing had a bucket inverted over the open end. The hole you drilled on the original location for the Chambers No. 1 for a "water well" is open with wire line and other junk around the open hole. Mr. Tom Pelton, the owner or holder of the surface rights of the land on which the two Chamber holes are located has expressed the desire to assume responsibility of both the holes for water wells. Mr. Pelton's address is P. O. Box 7, Sanders, Arizona 86512, phone: (602) 688-2930. Our Form No. 24, when executed by Mr. Pelton, will satisfy our requirements. Also Wayne Wallace has some interest in some of the holes on his place for use as water wells.

Recently we found a well some 700' + in a northerly direction of the Merde No. 2, a copy of a photograph is attached. We have no records of a well being drilled at this location. Any information that you could give us on this well would be appreciated. It is being used as a water well.

Either Mr. Bannister or myself will be happy to discuss the above mentioned situation with you. However, we are determined to have the existing conditions in the area brought into complete compliance with the rules and regulations of the Oil and Gas Conservation Commission in the very near future.

We would appreciate your thoughts on the above.

Very truly yours,



W. E. Allen, Director  
Enforcement Section

WEA/rlb

Encs.

cc John Fisher, Kerr-McGee, Oklahoma  
Richard J. Gasdaska, Western Helium, Pennsylvania  
C. F. Swain, Crest Oil, Illinois  
Jess Edwards, Eastern, Illinois  
U.S.F. &G., Indiana



EASTERN PETROLEUM CO.  
EASTERN DRILLING, INC.

TELEPHONE 39-2404 - P. O. BOX 281 - CARMI, ILLINOIS

March 12, 1974

Mr. W. E. Allen  
Oil & Gas Conservation Comm.  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Re: Bond No. 27716-13-3983-65  
Arizona

Dear Mr. Allen:

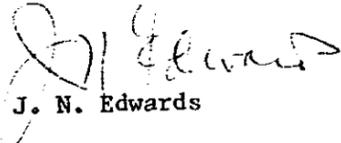
Pursuant to your recent letters to us and to U.S.F.&G. Company, I have enclosed Sundry Notices and Reports and other data concerning the wells in question.

You will note a number of these are in the producing Navajo Springs Unit; others are to be plugged and some will probably be transferred and assigned to another party for possible rework.

Trusting these reports adequately fulfill your requirements, I remain

Yours very truly,

EASTERN PETROLEUM COMPANY

  
J. N. Edwards

JNE:sjn

Encs.

cc: Mr. Harold E. Uhrig  
Foster & Messick, Mgrs.  
456 N. Meridian Street  
Indianapolis, Indiana 46209

McCallister, Becker & Hall  
Carmi, Illinois 62821

RECEIVED

MAR 13 1974

O & G CONSV. COMM.



UNITED STATES FIDELITY AND GUARANTY COMPANY  
INDIANAPOLIS OFFICE  
456 N. MERIDIAN ST., INDIANAPOLIS, IND. 46209

FOSTER & MESSICK  
MANAGERS

March 1, 1974

TELEPHONE:  
317/MELROSE 5-9431

Mr. W. E. Allen  
Director, Enforcement Section  
Oil and Gas Conservation Commission  
State of Arizona  
4515 North 7th Avenue  
Phoenix, Arizona 85013

RE: Lond No. 27716-13-3983-65 - Eastern Petroleum Company -  
State of Arizona

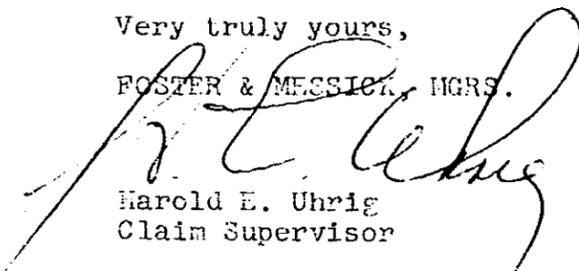
Dear Mr. Allen:

We are forwarding a copy of your letter of February 19, 1974 to this office to Mr. J. W. Edwards of the Eastern Petroleum Company, and we are requesting that he forward a copy of his response to your letter of February 1, 1974 which he indicated he would do in his letter of February 14, 1974.

We are sure that Mr. Edwards will do whatever he deems necessary insofar as the oil well violations are concerned.

Very truly yours,

FOSTER & MESSICK, MGRS.

  
Harold E. Uhrig  
Claim Supervisor

HEU:JE

cc: Mr. J. W. Edwards  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

cc: McCallister, Becker & Hall  
Carmi, Illinois

RECEIVED

283 072 0311

U. S. F. & G.

February 19, 1974

Bond Department  
U.S.F.&G.  
456 N. Meridian Street  
Indianapolis, Indiana 46204

Re: Eastern Petroleum Company - Blanket Off Well Bond 27716-13-3983-65

Gentlemen:

On February 1, 1974 we sent you a copy of our letter to Eastern Petroleum requesting information on their shut-in wells covered by the above bond. A copy of Eastern's reply is attached for your information, (we inadvertently sent this information to your Phoenix office). A copy of all letters addressed to the Phoenix office are enclosed.

Unless Eastern takes immediate action to bring their operations into complete compliance with the Rules and Regulations of the Oil and Gas Conservation Commission and the laws of the State of Arizona, this Commission will have no alternative other than to request the surety to fulfill their obligations to this Commission.

Any assistance that you might give to this Commission to encourage Eastern Petroleum to discharge their obligations will be appreciated.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/r1b

Encs.



EASTERN PETROLEUM CO.  
EASTERN DRILLING, INC.

TELEPHONE 36-24104 • P O BOX 281 • CASPER, ILLINOIS

February 14, 1974

Mr. W. E. Allen  
Oil & Gas Conservation Comm.  
4515 N. 7th Avenue  
Phoenix, Arizona 85013

Dear Mr. Allen:

Your letters of January 8 and February 1 addressed to Robert Fullop have been referred to me for answer.

I've just been through a month of tax work, am worn out and am leaving tomorrow for a short vacation, a week to ten days. After I return I will answer in detail as well as I can.

At least five of the wells are in the Navajo Springs and East Navajo Springs Units and they are shut-in. The balance will probably be plugged.

Yours very truly,

EASTERN PETROLEUM COMPANY

*J. N. Edwards*  
J. N. Edwards

JNE: sjn

RECEIVED

FEB 14 1974

O & G CON. COMM.

February 1, 1974

Bond Department  
U.S.F. & G.  
3605 N. 7th Avenue  
Phoenix, Arizona 85013

Re: ~~Eastern Petroleum Company~~ Bond No. 27716-13-3983-65, \$25,000

Gentlemen:

We are attaching for your information a copy of a letter to Eastern Petroleum Company. Since you are the surety for this bond, we take this measure to advise you that it may be necessary for this Commission to order all the wells properly plugged and abandoned.

If you need any further information, please advise.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/r1b

February 1, 1974

Mr. Robert Fullop  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

~~Re: All Wells Covered Under U.S.F.&G. Bond No. 2716-13-3983-65, \$25,000~~

Dear Mr. Fullop:

This office has just learned that as of January 1, 1974, Western Helium Corporation is no longer taking field gas from any of your wells in the Navajo Springs area. A recent check of wells that have been producing reveals all of the wells operated by you were shut-in except your Santa Fe Fee #13. The gas from this well is taken by Kerr-McGee.

Since all wells operated by you except the above mentioned Santa Fe Fee #13 are shut-in, it is necessary that you inform this Commission immediately of your plans for the future concerning all the non-plugged wells in this area. According to our records and information submitted to this Commission by your company, many of these non-plugged wells have never produced and several that have been completed in the past couple of years are presently not capable of producing. Unless you have plans to reactivate the wells in this area, this Commission will of necessity order all wells plugged and abandoned.

Again we urge you to advise this office of your plans for this area immediately.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/r1b

cc - U.S.F.&G.



OFFICE OF  
**Oil and Gas Conservation Commission**

STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

January 8, 1974

Mr. Robert Fullop  
Eastern Petroleum Company  
P. O. Box 226  
Farmington, New Mexico 87401

Re: Crest Oil Santa Fe No. 2  
NE/SW Sec 33-20N-27E  
Permit #110

Santa Fe Fee No. 24  
SE/NW Sec 24-20N-27E  
Permit #536

Ancon 21-1A  
Sec 31-20N-28E  
Permit #537

Santa Fe Fee Kiva No. 1  
NE/SW Sec 13-20N-28E  
Permit #560

Santa Fe Fee 6x-1  
SE/NW Sec 25-20N-28E  
Permit #565

Chambers Santa Fe No. 1  
NE/SW Sec 21-21N-28E  
Permit #567

Sanders No. 2 Santa Fe Fee  
NE/SW Sec 15-21N-28E  
Permit #568

Szar State No. 1  
NE/NW Sec 36-20N-27E  
Permit #578

Merde Indian #1  
Sec 30-20N-28E  
Permit #592

Merde No. 2  
SW/SE Sec 30-20N-28E  
Permit #596

Santa Fe Kiva #2  
NE/SW Sec 24-20N-28E  
Permit #599

Beacon No. 1  
Sec 29-20N-29E  
Permit #600

Santa Fe Fee No. 1-11  
NW/SE Sec 11-20N-28E  
Permit #601

Crest Oil Company #7 Santa Fe  
SW/NE Sec 6-19N-27E  
Permit #204  
Santa Fe Fee #31  
C N/2 SE/4 Sec 29-20N-27E  
Permit #255

Santa Fe Fee #32  
SW/NE/SW Sec 28-20N-27E  
Permit #258

Dear Mr. Fullop:

As we have previously advised, semi-annual status reports are required on the above referenced wells. This report was due in this office

Page 2  
Mr. Robert Fullop  
January 8, 1974

January 1, 1974. Please forward these reports as quickly as possible,  
and indicate any work that you anticipate performing on these wells  
within the next six months.

Please submit Completion Reports for your Indian Allotted Merde No. 1  
and Santa Fe Beacon No. 1.

Very truly yours,



W. E. Allen, Director  
Enforcement Section

WEA/rlb

Encs.

September 18, 1973

Mr. Robert Fullop  
Eastern Petroleum Company  
P. O. Box 226  
Farmington, New Mexico 87401

Dear Mr. Fullop:

Will you please supply this Commission with any information that you might have regarding the recoverable reserves in the Navajo Springs Field?

This information will be considered confidential if you so desire.

Thank you for your cooperation.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

June 13, 1973

Mr. Robert Fullop  
Eastern Petroleum Company  
P. O. Box 226  
Farmington, New Mexico 87401

Re: Crest Oil Santa Fe No. 2  
NE/SW Sec 33-T20N-R27E  
Permit No. 110

Santa Fe Fee No. 24  
SE/NW Sec 24-T20N-R27E  
Permit No. 536

Ancon 21-A  
Sec 31-T20N-R28E  
Permit No. 537

Santa Fe Fee Kiva No. 1  
NE/SW Sec 13-T20N-R28E  
Permit No. 560

Santa Fe Fee 6X-1  
SE/NW Sec 25-T20N-R28E  
Permit No. 565

Chambers Santa Fe No. 1  
NE/SW Sec 21-T21N-R28E  
Permit No. 567

Sanders No. 2 Santa Fe Fee  
NE/SW Sec 15-T21N-R28E  
Permit No. 568

Szar State No. 1  
NE/NW Sec 36-T20N-R27E  
Permit No. 578

Merde Indian #1  
Sec 30-T20N-R28E  
Permit No. 592

Merde No. 2  
SW/SE Sec 30-T20N-R28E  
Permit No. 596

Santa Fe Kiva #2  
NE/SW Sec 24-T20N-R28E  
Permit No. 599

Beacon No. 1  
Sec 29-T20N-R29E  
Permit No. 600

Santa Fe Fee No. 1-11  
NW/SE Sec 11-T20N-R28E  
Permit No. 601

Dear Mr. Fullop:

No action of any kind has been reported on the above referenced wells for quite some time. We have completion reports for some of these wells, but no production has been indicated. Others are carried in a temporarily abandoned status.

Page 2  
Robert Fullop  
June 13, 1973

Please refer to our letter of October 26, 1972 by which you were advised that the Commission would require a semi-annual report listing the present status of subject wells and also any plans that you might have to complete, re-complete, workover, or plug said wells. Also note that the previously mentioned letter indicated the first semi-annual report would be due June 1, 1973. Please submit this report on form 25, Sundry Notices and Reports on Wells, immediately.

Very truly yours,



W. E. Allen, Director  
Enforcement Section

WEA/rlb

Encs.



EASTERN PETROLEUM CO.

P. O. BOX 291 • CARM, ILLINOIS 62821  
POST OFFICE BOX 226  
FARMINGTON, NEW MEXICO 87401

January 25, 1973

Oil and Gas Conservation Commission  
State of Arizona  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Re: Beacon No. 1  
Sec 29-T20N-R29E  
Apache County  
Permit No. 600

Merde Indian #1  
Sec 30-T20N-R28E  
Apache County  
Permit No. 592

Ancon 21-A  
Sec 31-T20N-R28E  
Apache County  
Permit No. 537

Merde Indian #2  
Sec 30-T20N-R28E  
Apache County  
Permit No. 596

Dear Bill:

In response to your letter November 15, 1972 the completion work on the above referred to well has been postponed until such time as Eastern reactivates their operation in the Navajo area. We anticipate to begin operation work around April 1, 1973.

Sincerely,

Robert A. Fullop

GSC

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JAN 29 1973

O & G CONS. COMM.



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

January 22, 1973

Mr. Robert Fullop  
Eastern Petroleum Company  
P. O. Box 226  
Farmington, New Mexico 87401

Re: Beacon No. 1  
Sec 29-T20N-R29E  
Apache County  
Permit No. 600

Ancon 21-A  
Sec 31-T20N-R28E  
Apache County  
Permit No. 537

Merde Indian #1  
Sec 30-T20N-R28E  
Apache County  
Permit No. 592

Merde Indian #2  
Sec 30-T20N-R28E  
Apache County  
Permit No. 596

Dear Mr. Fullop:

Your letter of November 15, 1972, advising this office of cessation of drilling activities in the Navajo-Arizona area indicated that completion operations would be continued on the above referenced wells. If these wells have been completed, please submit the necessary Completion or Recompletion Reports and if they have not been completed, advise this Commission of their present status.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/r1b

December 1, 1972

Mr. Robert Fullop  
Eastern Petroleum Company  
P. O. Box 226  
Farmington, New Mexico 87401

Re: Eastern #21-1A Santa Fe Fee  
NW/NW Sec 31-T20N-R28E  
Apache County  
Permit No. 537

Dear Mr. Fullop:

Please refer to Rule 120 of the Oil and Gas Conservation Commission's Rules and Regulations pertaining to the reworking and re-completion of an existing well. Please submit Sundry Notices and Reports on Wells, Form 25, on this well outlining the procedure for the workover proposed on the above referenced well.

In the future, submit this application prior to commencing any workover operations.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb

Enc.



EASTERN PETROLEUM CO.

P. O. BOX 291 • CARMI, ILLINOIS 62821  
POST OFFICE BOX 226  
FARMINGTON, NEW MEXICO 87401

November 22, 1972

Bill Allen  
Oil and Gas Conservation Commission  
State of Arizona  
4515 North 7th Ave.  
Phoenix, Arizona 85013

RE: #1-Eastern Santa Fe Kiva #2  
NE/SW Sec.24-T20N-R28E  
Apache County  
Permit No. 599

RE: Eastern #21-A Santa Fe Fee  
NW/NW Sec.31-T20N-R28E  
Apache County  
Permit No. 537

Dear Mr. Allen:

In response to your letter of Nov. 17, 1972 and in regards to reference #1, Eastern Petroleum Company has completed this well on an open hole basis as indicated on our well report filed with your office. Eastern's first intention was to perforate said well from 1176 to 1212; however, upon review of the geological structure and location of said well, it was decided to open hole complete the well and therefore get a more accurate and more responsive production test.

In regard to reference #2 above, Eastern Petroleum Company began remedial work on said well on Oct. 10, 1972, and will complete said work after the New Year.

If any further information may be required, please feel free to call on me.

Sincerely,

*Robert A. Fullop*  
Robert A. Fullop  
Vice President

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NOV 22 1972

O & G CONS. COMM.

November 17, 1972

Mr. Robert Fullop  
Eastern Petroleum Company  
P. O. Box 226  
Farmington, New Mexico 87401

Re: Eastern Santa Fe Kiva No. 2  
NE/SW Sec 24-T20N-R28E  
Apache County  
Permit No. 599

Eastern #21-1A Santa Fe Fee  
NW/NW Sec 31-T20N-R28E  
Apache County  
Permit No. 537

Dear Mr. Fullop:

Your Completion Report on the Kiva No. 2 indicates this well to be an open hole completion. Our records indicate that this well has been perforated with two holes per foot from 1176' to 1212'. Please advise this office if this is correct. If so, we will add this information to your Completion Report.

Your letter dated November 15, 1972 indicates that you plan some sort of operation on your Ancon 21-A. Since this well is currently a producing well, please advise us of just what operations you plan.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/r1b



EASTERN PETROLEUM CO.

P. O. BOX 291 • CARM, ILLINOIS 62821  
POST OFFICE BOX 226  
FARMINGTON, NEW MEXICO 87401

November 15, 1972

Mr. Bill Allen  
Enforcement Department  
Oil & Gas Conservation Commission - Arizona  
4515 North 7th Ave.  
Phoenix, Arizona 85013

Re: Eastern Petroleum Company's drilling operations in the  
Navajo, Arizona area.

Dear Mr. Allen:

In regard to the above referred to area, Eastern Petroleum  
Company is halting any further operations in said area until  
after the first of the year. Therefore, the only drilling or  
completion operations that will be done, will be on the following  
wells:

1. Beacon #1  
1980 FSL, 1980 FEL  
Sec. 29, T20N, R29E  
6167 GL  
Apache, Arizona *600*

2. Ancon 21-A  
660 FNL, 660 FWL  
Sec. 31, T20N, R28E  
Apache County, Arizona *537*

3. Merde Indian #1  
650 FSL, 660 FWL  
Sec. 30, T20N, R28E  
5859 GL  
Apache County, Arizona *592*

4. Merde Indian #2  
2080 FEL, 660 FSL  
Sec. 30, T20N, R28E  
5839 GL  
Apache County, Arizona *596*

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O & G CONS. COMM.

Sincerely,

*Robert A. Fullop*

Robert A. Fullop  
Vice President

June 11, 1971

Mr. J. N. Edwards  
Eastern Petroleum Corporation  
P. O. Box 1358  
Scottsdale, Arizona 85052

Re: Wells formerly producing into Western Helium's helium extraction plant.

Dear Mr. Edwards:

As soon as practicable please furnish this office with copies of the production report for the above referenced wells. Since Western Helium has temporarily shut down this plant necessitating the closing in of your wells, please furnish us with Form 25, Summary Notices and Reports on Wells, indicating your wells shut in awaiting market. We need this information in order to document our files.

Thank you for your cooperation.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA:jd  
Enc.  
cc: Mr. Henry Fullop, Carrai, Illinois

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OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA

4515 NORTH 7TH AVE.

PHOENIX, ARIZONA 85013

PHONE: (602) 271-5161

April 2, 1971

Mr. Raymond L. Kysar, Jr.  
Kysar Insurance Agency, Incorporated  
The Travelers Indemnity Company  
2604 East Main  
Farmington, New Mexico 87401

Re: Eastern #21 Ancon Santa Fe      Eastern #21-1A Santa Fe Fee  
SE/4 NW/4 Sec. 31-T20N-R28E      NW/4 NW/4 Sec. 31-T20N-R28E  
Apache County                      Apache County  
Our File #234                      Our File #537

Dear Ray:

As of this date we have not received the serial number of the performance bond that has been issued to Western Helium Corporation. It is imperative that we receive the serial number as quickly as possible.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA:jd

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APR 08 1971

O & G CONS. COMM.

April 2, 1971

Mr. Raymond L. Kysar, Jr.  
Kysar Insurance Agency, Incorporated  
The Travelers Indemnity Company  
2604 East Main  
Farmington, New Mexico 87401

Re: Eastern #21 Ancon Santa Fe	Eastern #21-1A Santa Fe Fee
SE/4 NW/4 Sec. 31-T20N-R28E	NW/4 NW/4 Sec. 31-T20N-R28E
Apache County	Apache County
Our File #234	Our File #537

Dear Ray:

As of this date we have not received the serial number of the performance bond that has been issued to Western Helium Corporation. It is imperative that we receive the serial number as quickly as possible.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA:jd



EASTERN PETROLEUM CO.  
EASTERN DRILLING, INC.

TELEPHONE 38-24104 · P. O. BOX 291 · CARMEL, ILLINOIS

March 19, 1971

Mr. W. E. Allen  
Oil & Gas Conservation Comm.  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Dear Mr. Allen:

With reference to your letter of March 16, 1971, concerning responsibility for the operation of wells #21-1A and #21, please be advised that Eastern is not delegating operations to Western Helium and that Eastern will continue to operate these wells.

Yours very truly,

EASTERN PETROLEUM COMPANY

*Henry Fullop*  
Henry Fullop

HF:sjn

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MAR 22 1971

O & G CONS. COMM.

March 16, 1971

Mr. Raymond L. Kysar, Jr.  
Kysar Insurance Agency, Incorporated  
The Travelers Indemnity Company  
2604 East Main  
Farmington, New Mexico 87401

Re: Eastern #21 Ancon Santa Fe  
SE/4 NW/4 Sec. 31-T20N-R28E  
Apache County  
Our File #234

Eastern #21-1A Santa Fe Fee  
NW/4 NW/4 Sec. 31-T20N-R28E  
Apache County  
Our File #537

Dear Ray:

We are in receipt of a performance bond in the amount of \$25,000 naming Western Helium Corporation as principal. Please advise us the serial number of this bond; and, we will add it to our file copy.

As of this date we consider the above wells covered by this bond.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA:jd

March 16, 1971

Mr. Henry Fullop  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

Re: Eastern #21-1A Santa Fe Fee  
NW/4 NW/4 Sec. 31-T20N-R28E  
Apache County  
Our File #537

Eastern #21 Ancon Santa Fe  
SE/4 NW/4 Sec. 31-T20N-R28E  
Apache County  
Our File #234

Dear Mr. Fullop:

It is our understanding that Western Helium is assuming responsibility for the operation of the above referenced wells.

We will need a Designation of Operator executed by an officer of your company before this office can look to Western Helium for future reports and so forth on the above wells.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA:jd  
Enc.

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206

December 28, 1970

Mr. J. N. Edwards  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois

Re: Monthly Producers Report

Dear Mr. Edwards:

Thank you for your amended report on the October production and for your November production report on wells producing from the Navajo Springs and East Navajo Springs Unit.

In the future please file a separate report for wells producing from separate units. In other words please place wells producing from the Navajo Springs Gas Pool on one Form 16. Wells producing from East Navajo Springs Spacing Unit will also require a Form 16. Any wells producing outside of these units will require an additional Form 16.

Thank you for your cooperation.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA:jd



EASTERN PETROLEUM CO.  
EASTERN DRILLING, INC.

TELEPHONE 38-24104 • P. O. BOX 291 • CARMIL, ILLINOIS

November 30, 1970

WA

Mr. W. E. Allen  
Oil & Gas Conservation Commission  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Dear Mr. Allen:

Reference is made to your letter of November 25, 1970,  
relative to gas production from SF #21, #21-A and #14.

As near as we can determine, without availability of well  
charts, 10,045 MCF of raw gas entered the Arizona Helium  
Plant in October, 1970. You understand this figure is  
subject to adjustment and to individual well quantities  
when the charts have been calculated and returned. At  
that time an amended report will be forthcoming.

Yours very truly,

*J. N. Edwards*  
EASTERN PETROLEUM COMPANY  
BY: J. N. Edwards

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JNE:jsh

cc: Western Helium Corporation  
P. O. Box 1358  
Scottsdale, Arizona 85252

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DEC 1 1970  
O & G CONS. COMM.

OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7th AVE.  
PHOENIX, AZ. 85013  
Phoenix, Arizona 85007  
PHONE: 271-5161

November 25, 1970

Mr. Henry Fullop  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

Re: Eastern #21 Ancon Santa Fe      Eastern #21-1A Santa Fe Fee  
SE/4 NW/4 Sec. 31-T20N-R28E      NW/4 NW/4 Sec. 31-T20N-R28E  
Apache County      Apache County  
Our File #234      Our File #537

Eastern #14 Santa Fe  
SE/4 NW/4 Sec. 5-T19N-R27E  
Apache County  
Our File #206

Dear Mr. Fullop:

Your Monthly Producers Report, our Form 16, for the month of October, 1970, fails to indicate any production from the above three wells. We have been informed that the above referenced wells were produced during the month of October, 1970.

Will you please submit a revised Monthly Producers Report indicating the amount of production from each of these wells. We need to receive this report by return mail in order not to hold up the production reports that we circulate to all interested parties.

In the future please have your Monthly Production Report reach this office by the tenth (10th) of the following month.

Very truly yours,

W. E. Allen  
Director, Enforcement Section

WEA:jd

cc: Mr. J. N. Edwards, Scottsdale, Arizona  
Mr. J. N. Edwards, Carmi, Illinois



November 3, 1970

REGISTERED AIR-MAIL  
RETURN RECEIPT REQUESTED

Mr. W. E. Allen  
Arizona Oil and Gas Conservation Commission  
4515 North 7th Avenue  
Phoenix, Arizona 85013

APPLICATION OF KERR-McGEE CORPORATION  
PRODUCTION RESTRICTION  
EASTERN 21-1A SANTA FE FEE WELL  
EAST NAVAJO SPRINGS FIELD  
APACHE COUNTY, ARIZONA

You will find enclosed four copies of Kerr-McGee's application for a production restriction on the Eastern 21-1A Santa Fe Fee Well located in the NW/4 NW/4 Section 31, T 20 N, R 28 E, Apache County, Arizona. Four copies of a Notice of Hearing which you may desire to use are also enclosed.

Please set this matter for hearing before the Commission on November 20, 1970.

KERR-McGEE CORPORATION

*Ivan D. Geddie*  
Ivan D. Geddie  
Oil and Gas Production Division

IDG/jk  
Enclosures

cc: Francis Irvine, Kerr-Davis, 15th flr. Kerr-Mc Building

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NOV 5 1970

O & G CONS. COMM.

537

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

IN THE MATTER OF THE APPLICATION OF KERR-McGEE )  
CORPORATION FOR AN ORDER OF THE COMMISSION )  
RESTRICTING PRODUCTION FROM THE EASTERN 21-1A ) CASE No. \_\_\_\_\_  
SANTA FE FEE WELL LOCATED IN THE NW/4 OF SECTION )  
31, TOWNSHIP 20 NORTH, RANGE 28 EAST, APACHE )  
COUNTY, ARIZONA )

NOTICE OF HEARING

TO: All operators, purchasers and takers of oil and gas in Arizona  
and all other interested persons, particularly in the East Navajo  
Springs Field,

NOTICE IS HEREBY GIVEN that the Oil and Gas Conservation  
Commission of the State of Arizona will hold a hearing at 10:00  
o'clock a.m. on November 20, 1970 in Room 205 (Regency Room) Alumni  
Building, University of Arizona, Tuscon, Arizona, on the application  
of Kerr-McGee Corporation for an order restricting production from  
the Eastern 21-1A Santa Fe Fee Well located in the NW/4 NW/4 of  
Section 31, Township 20 North, Range 28 East, Apache County, Arizona.

All persons interested in such matter may appear on said  
date and be heard.

DONE AND PERFORMED this \_\_\_\_\_ day of November, 1970.

OIL AND GAS CONSERVATION  
COMMISSION OF ARIZONA

By \_\_\_\_\_  
Chairman

ATTEST:

\_\_\_\_\_  
Executive Secretary

RECEIVED  
NOV 5 1970  
O & G CONS. COMM.

537

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

IN THE MATTER OF THE APPLICATION OF )  
KERR-McGEE CORPORATION FOR AN ORDER )  
OF THE COMMISSION RESTRICTING PRODUCTION )  
FROM THE EASTERN 21-1A SANTA FE FEE )  
WELL LOCATED IN THE NW/4 OF SECTION )  
31, TOWNSHIP 20 NORTH, RANGE 28 EAST, )  
APACHE COUNTY, ARIZONA )

CASE No. \_\_\_\_\_

A P P L I C A T I O N

Applicant avers the following:

1. That it is the owner of valid oil and gas leases covering a portion of Section 36, Township 20 North, Range 27 East, Apache County, Arizona.

2. That the Eastern 21-1A Santa Fe Fee Well has been drilled in the NW/4 NW/4 of Section 31, Township 20 North, Range 28 East, Apache County, Arizona.

3. That the Eastern 21-1A Santa Fe Fee Well was granted an exception to Rule 105 B of the Rules and Regulations of the Oil and Gas Conservation Commission of the State of Arizona by Commission Order No. 42 dated October 16, 1970, which said order permitted a location exception in the Coconino Formation for said well.

4. That the Eastern 21-1A Santa Fe Fee Well is located only 660' from the Kerr-McGee leases in Section 36 and will drain these leases unless the Commission restricts the production from this well as permitted by Rule 105 E.

5. That granting this application will protect correlative rights.

WHEREFORE, applicant prays that this application be set for hearing, that notice of such hearing be given as required by law, and that this Commission, after hearing the evidence thereon, enter its order restricting production of helium gas from the Eastern 21-1A Santa Fe Fee Well located in the NW/4 NW/4 of Section 31, Township 20 North, Range 28 East, Apache County, Arizona

KERR-McGEE CORPORATION

By

*Francis S. Brown*  
Its Attorney

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NOV 5 1970  
O & G CONS. COMM.



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

October 27, 1970

Mr. Ewell N. Walsh  
Walsh Engineering & Production Corp.  
P.O. Box 254  
Farmington, New Mexico

Dear Mr. Walsh:

You are requested to represent this Commission at a hearing to be held on November 20, 1970 in Tucson, Arizona. This hearing will commence at 10:00 a.m.

For your information, I am enclosing a packet containing logs, three transcripts of hearings, etc., as per our conversation of October 26th. When you are finished with the transcripts, please return them to the Commission. Should you need further background information, please advise us at your earliest convenience.

I will see that a room is reserved for you at the Flamingo on the evening of the 19th. As usual at out of town meetings, the Commission will have supper together sometime between 6 and 6:30 on the evening of the 19th and, if possible, we would appreciate you joining us.

Will you please submit your bill in the usual form.

We appreciate your cooperation.

Sincerely,

*John Bannister*  
John Bannister  
Executive Secretary

JB/vb

Enc.

537  
234

206 CENTURY BLDG.

OFFICE 247-0025  
RESIDENCE 247-3190

ROBERT E. LAUTH  
GEOLOGICAL CONSULTANT  
P. O. BOX 776  
DURANGO, COLORADO  
81301

September 17, 1970

*wa*

Mrs. Jo Ratcliff  
Four Corners Sample Cut Assoc.  
641 West Broadway  
Farmington, New Mexico 87401

Re: Samples: Surface to 1230'  
Eastern Petr. Co.-  
Western Helium Corp.  
No. 21A Santa Fe  
NW/4 Sec. 31 T20N R28E  
Apache County, Arizona

Dear Jo:

Certainly enjoyed seeing you again after all these years.  
Thanks again for the excellent hospitality you and Jody  
extended to me.

Please make the necessary sample cuts as required by the  
Arizona Oil & Gas Conservation Commission. Send the in-  
voice to Western Helium Corporation, P. O. Box 1358,  
Scottsdale, Arizona 85252.

The total depth of the hole is 1230 feet.

Thank you.

*R. E. Lauth*  
Robert E. Lauth

cc. Arizona Oil & Gas Conservation Commission  
1624 West Adams Rm 202  
Phoenix, Arizona 85007

Western Helium Corporation  
P. O. Box 1358  
Scottsdale, Arizona 85252



OFFICE OF  
**Oil and Gas Conservation Commission**

STATE OF ARIZONA  
ROOM 202  
1624 WEST ADAMS  
Phoenix, Arizona 85007  
PHONE: 271-5161

September 15, 1970

Memo to the Commissioners

Memo from John Bannister  
Executive Secretary

This Commission has just received a request for an emergency hearing from Western Helium Corporation. This corporation seeks emergency authority to produce the Eastern #21-1A Santa Fe Fee well located in the NW/4 NW/4 Section 31, Township 20 north, Range 28 east. This well is capable of producing from the Coconino formation. There is currently a well in the same section capable of producing from the Shinarump formation being the Eastern Ancon #21 well. This well has been a shut-in helium gas well for some time; however, it did, for a period of time, produce into the Arizona Helium Plant.

The well which will be the subject of the hearing is our Permit No. 537 and was drilled as an oil well on an 80-acre spacing pattern. Of course, our permit was issued with the usual instructions that prior to producing the well, it must be able to comply with the Rule 105, our spacing regulations. Section 31, Township 20 north, Range 28 east was subject to our Order No. 41 recently issued to Eastern Petroleum granting them permission to drill as many as four wells per section to the Shinarump formation. Inasmuch as the Coconino formation is not a part of that Order, we need not consider it. The prime question here is that the well's location is totally unorthodox for a gas well to the Coconino. This well is located in the extreme NW/4 of the section rather than being centered.

I have this date granted permission for Western Helium Corporation to appear before the Commission on Friday, September 18, between 10 and 10:30 a.m. to present its case.

September 15, 1970

Western Helium Corporation  
Suite 3  
Box 1358  
Scottsdale Square  
44 East Indian School Road  
Scottsdale, Arizona 85252

Attention: Mr. O. R. Thoureen

Re: Eastern #21-1A Santa Fe Fee  
Our File #537

Gentlemen:

Your request for an emergency hearing to be allowed to produce the subject well is acknowledged. Please be advised that you may appear before this Commission on Friday, September 18, 1970, at between 10 and 10:30 a.m. at the Commission's offices located in Room 204, 1624 West Adams, Phoenix.

Sincerely,

John Bannister  
Executive Secretary

JB:jd

W-0000000000

**western helium corporation**

suite 3, box 1358 / scottsdale square / 44 east indian school road / scottsdale, arizona 85012

PRODUCERS  
OF HELIUM

September 14, 1970

*Case #42  
Order #1*

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

Attention: Mr. John Bannister, Executive Secretary

Re: Eastern Petroleum Company  
Western Helium Corporation  
Santa Fe No. 21-A Well  
Apache County, Arizona

Gentlemen:

Emergency Authorization is requested to produce the subject well from the Coconino Sandstone Formation. Its location is 660 feet from the north boundary line and 660 feet from the west line of Section 31 in Township 20 North and Range 23 East.

This well was drilled to a total depth of 1232.19 feet and casing was set and cemented at 1219 feet.

It is also requested that we be permitted to appear at the meeting of the Oil & Gas Conservation Commission which is scheduled for September 18, 1970.

Your cooperation in this matter will be greatly appreciated.

Very truly yours,

*[Signature]*  
WESTERN HELIUM CORPORATION  
BY: O. B. THAWLEY  
President

OTW:jsh



537

September 4, 1970

Mr. J. N. Edwards  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois

Re: Eastern #21-1 Santa Fe Fee  
NW/4 NW/4 Sec. 31-T20N-R28E  
Apache County  
Our File #537

Dear Mr. Edwards:

Unless drilling operations were started on the above well prior to August 27, 1970, Permit #537 has expired. Before drilling operations can be started, it will be necessary to file a new Form 3, Application to Drill, and submit a \$25 filing fee. The plat that we presently have on file will suffice providing this well is drilled at the location as indicated.

Should this well have been started prior to August 27, 1970, please advise this office; and, also we would appreciate knowing the progress that has been made.

Very truly yours,

W. E. Allen  
Director, Enforcement Section

WEA:jd

August 29, 1970

Memo to Eastern #21-1A Santa Fe Fee  
NW/4 NW/4 Sec. 31-T20N-R28E  
Apache County  
Our File #537

Memo from W. E. Allen

Henry Fullop called this date requesting permission to move this location from 1188' FNL & 1056' FWL of Section 31, T20N, R28E, to 660' FNL & 660' FWL of Section 31. He said this would be a test for oil in the Coconino. I told him that the well could not be produced as a gas well without special dispensation by the Commission. He said he was aware of this fact. I told him to send a corrected certified plat and Application to drill ; and, we would give him permission to change the location.

August 31

Jess Edwards called this date regarding this same situation. He was unaware that Mr. Fullop had called this office.

August 25, 1970

Mr. J. N. Edwards  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

Re: Eastern #24 Santa Fe Fee  
SE/4 NW/4 Sec. 24-T20N-R27E  
Apache County  
Our File #536

Eastern #21-1A Santa Fe Fee  
NW/4 NW/4 Sec. 31-T20N-R28E  
Apache County  
Our File #537

Dear Mr. Edwards:

This is to remind you that your Permit #536, Eastern #24 Santa Fe Fee was due to expire on August 20, 1970; and your Permit #537, Eastern #21-1A Santa Fe Fee is to expire on August 27, 1970. We must have a written request for extension on these permits immediately or these two permits will be cancelled and wells may not be drilled on these locations until a new permit, plat, and filing fee are submitted. Please attend to this matter as soon as possible.

Very truly yours,

W. E. Allen  
Director, Enforcement Section

jd

July 8, 1970

Mr. J. N. Edwards  
Eastern Petroleum Company  
P. O. Box 291  
Carmi, Illinois 62821

Re: Eastern #1 Navajo (2601)  
NE/4 SW/4 Sec. 30-T20N-R28E  
Apache County  
Our File #523

Eastern #24 Santa Fe Fee  
SE/4 NW/4 Sec. 24-T20N-R27E  
Apache County  
Our File #536

Eastern #21-1A Santa Fe Fee  
NW/4 NW/4 Sec. 31-T20N-R28E  
Apache County  
Our File #537

Dear Mr. Edwards:

This is to remind you that the sixty-day extension granted to you on your Eastern #1 Navajo, Permit #523, will expire on July 17, 1970. If you wish a further extension on this permit, please advise this office immediately; otherwise, your permit will be allowed to expire on the above date.

Your permit on your Eastern #24 Santa Fe Fee, Permit #536, will expire August 20, 1970; and, the permit on the Eastern #21-1A Santa Fe Fee, Permit #537, will expire on August 27, 1970.

If you do not plan to start drilling operations on these locations by the above dates and wish an extension, please let us know. Thank you for your cooperation.

Very truly yours,

W. E. Allen  
Director of Enforcement Section

WEA'jd

EASTERN PETROLEUM CO.  
ACCOUNT NO. 2  
CARM, ILL.

DETACH AND RETAIN THIS STATEMENT  
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.  
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

INVOICE		DESCRIPTION	TOTAL AMOUNT	DEDUCTIONS		NET AMOUNT
DATE	NO.			DISCOUNT	FREIGHT	
		Permit to drill Santa Fe Fee #21-1A, Sec. 31-20N-28E, Apache County, Arizona				25.00

sl

COUNTY Apache AREA 9 mi NE/Round Rock Trading Post EASE NO. 14-20-0603-1588

WELL NAME Curtis J. Little #1 Aircodessa-Navajo Pete's Nose ~~Navajo~~

LOCATION NW NE SEC 32 TWP 37N RANGE 28E FOOTAGE 750' FNL - 1930' FEL  
ELEV 6192' GR 6205 KB SPUD DATE 6-10-70 STATUS P&A TOTAL           
COMP. DATE 6-24-70 DEPTH 3949'

CONTRACTOR Loffland Brothers

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY	<u>X</u>
<u>9 5/8"</u>	<u>169</u>	<u>100 SKS</u>	<u>NA</u>	DRILLED BY CABLE TOOL	<u>        </u>
				PRODUCTIVE RESERVOIR	<u>        </u>
				INITIAL PRODUCTION	<u>Dry Hole</u>

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
DeChelly	1288'	X	X	See AM Strat Log
Cutler	1988'			
Supai	2350'			
Hermosa	3029'			
Black Shale	3616'			
Tucito Reef	3664'			
Lower Hermosa	3691'			
Molas	3854'			
Mississippian	3926'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG <u>Am Strat</u>
Es Induction, Gamma Ray	<u>NA</u>	<u>NA</u>	SAMPLE DESCRP. <u>Four Corners</u>
Sonic Caliper			SAMPLE NO. <u>1624*</u>
			CORE ANALYSIS <u>1</u>
			DSTs <u>1</u>
			*Tucson 3027

REMARKS          APP. TO PLUG           
         PLUGGING REP.           
         COMP. REPORT         

WATER WELL ACCEPTED BY           
BOND CO. United States Fidelity & Guaranty BOND NO. 01-0130-553-70  
DATE           
BOND AMT. \$ 5,000 CANCELLED 8-6-70 ORGANIZATION REPORT 2-5-68  
FILING RECEIPT 2872 LOC. PLAT X WELL BOOK X PLAT BOOK X  
API NO. 02-001-20132 DATE ISSUED 6-15-70 DEDICATION W/2 NE/4  
PERMIT NUMBER 538

DRILL STEM TEST

NO.	FROM	TO	RESULTS
1	3645	3675	#1 3645-3675' Recovered 1230' salt water - no show of oil

CORE RECORD

NO.	FROM	TO	RECOVERY	REMARKS
1	3644	3675	37' limestone	slight odor and scattered oil stain in interval 3656-3657½

REMEDIAL HISTORY

DATE STARTED - COMPLETED	WORK PERFORMED	NEW PERFORATIONS

ADDITIONAL INFORMATION

## WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

WA

DESIGNATE TYPE OF COMPLETION:

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

DESCRIPTION OF WELL AND LEASE

Operator **Curtis Little** Address **P.O. Box 8976, Albuquerque, N.M. 87108**

Federal, State or Indian Lease Number or name of lessor if fee lease **Navajo Tribal 14-20-0603-1588** Well Number **1** Field & Reservoir **Wildcat**

Location **750' FNL, 1930' FEL** County **Apache**

Sec. TWP-Range or Block & Survey **Section 32, T 37 N, R 28 E**

Date spudded **6-10-70** Date total depth reached **6-23-70** Date completed, ready to produce **6-23-70** Elevation (DF, RKB, RT or Gr.) **6205 feet** Elevation of casing hd. flange **feet**

Total depth **3949** P.B.T.D. **Single, dual or triple completion?** If this is a dual or triple completion, furnish separate report for each completion.

Producing interval (s) for this completion **0-3949** Rotary tools used (interval) **0-3949** Cable tools used (interval)

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

Type of electrical or other logs run (check logs filed with the commission) **Es Induction, Gamma-Ray-Sonic-Caliper** Date filed **6-23-70**

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	12 1/4	9 5/8	32.3	169	100	none

TUBING RECORD

LINER RECORD

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

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt't. & kind of material used	Depth Interval

INITIAL PRODUCTION

Date of first production **P&A** Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)

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

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

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

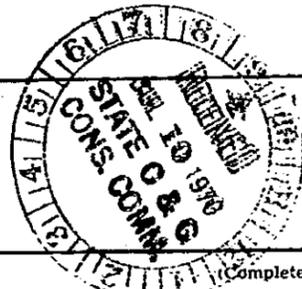
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the operator of the \_\_\_\_\_ (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct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

Date **July 8, 1970**

Signature *Curtis Little*

WA

Permit No. 538



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

Form No. 4

File One Copy

(Complete Reverse Side)

**DETAIL OF FORMATIONS PENETRATED**

Formation	Top	Bottom	Description*
Triassic Chinle	Surface	1288	Shale
Permian DeChelly	1288	1988	Sandstone, porous, fresh water
Cutler (Organ Rock)	1988	2350	Siltstone
Cutler (Evapo- rite) Supai	2350	3029	Siltstone, shale, anhydrite
Pennsylvanian Hermosa	3029	3616	Limestone, sandstone, shale
Black Shale Marker	3616	3621	Black Shale
Tocito Reef	3664	3691	Porous algal limestone, salt water
Lower Hermosa	3691	3854	Limestone, shale
Molas	3854	3926	Shale
Mississippian	3926	3949 (TD)	Limestone
DST	3645	3675	Open 15" good blow. Closed in for 59", open 78" w/good blow. Closed in for 88". Recovered 1230' muddy salt water. Ca 7,200 ppm, Cl 39,000 ppm, NaCl 64,350 ppm. IHP - 1763, FHP - 1745, IFP - 80, FFP - 591, ISIP - 1069, FSIP - 1060.
Core No. 1	3634	3675	Cut 41', recovered 37'. Core description & analysis enclosed.

Note: Samples & core delivered to Four Corners Sample Cut for delivery to Arizona Bureau of Mines and Museum of Northern Arizona.

THIS IS NOT A TIGHT HOLE.

\* 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.

August 12, 1970

Memo from W. E. Allen

Memo to Little #1 Aircodessa Navajo  
NW/4 NE/4 Sec. 32-T37N, R28E  
Apache County  
Our File #538

Had a discussion with Curtis Little concerning drilling costs in the State of Arizona generally, in the Four Corners area in particular. Curtis told me since Hughes Tool Company had brought out their J series bits, it was now possible to drill a well in this area with a total of four bits of this series. He further told me that the total cost involved in drilling the above well was \$44,260.

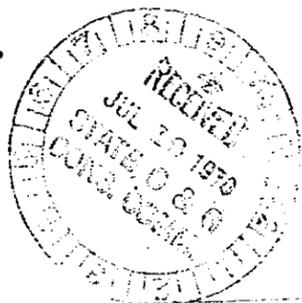
June 29, 1970

Samples from the Curtis Little, #1 Pete  
Sec. 32-37N-28E  
Apache Co. Arizona

have been received by the Cut.

*Jo Ratchiff*

*WR*



527

## CORE ANALYSIS RESULTS

Company Curtis Little Formation Barker Creek File RP-3-2420  
 Well # 1 Pete's Nose Core Type Dia. Conv. 4" Date Report 6-21-70  
 Field Wildcat Drilling Fluid Chem Gel Analysts Mohl  
 County Apache State Arizona Elev. 6205 KB Location NW NE Sec 32- T 37N - R 28E

## Lithological Abbreviations

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs Max. 900	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
3655-56	0.3	<0.1	1.6	0.0	61.5	Ls, gry, suc, shly
3656-57	<0.1	<0.1	4.3	8.4	57.4	Ls, gry, suc
3657-58	<0.1 *		4.2	11.9	54.3	Ls, gry, suc
3659-60	11.0	10.3	1.6	0.0	69.1	Ls, gry, suc, Perm thru shale ptng
3661-62	<0.1 *		3.1	0.0	79.1	Ls, gry, suc, shly
3663-64	1.6	<0.1	1.2	0.0	66.9	Ls, gry, suc Perm thru shale ptng
3665-66	<0.1	<0.1	1.4	0.0	70.3	Ls, gry, suc, shly
3667-68	1.4	0.3	8.4	0.0	59.7	Ls, gry, suc, vgy
3668-69	19.		7.6			Ls, gry, suc, vgy
3669-70	54.		7.2			Ls, gry, suc, vgy
3670-71	3.2		10.9?			Ls, gry, suc, vgy

\* Denotes plug permeability

CORE LABORATORIES, INC.

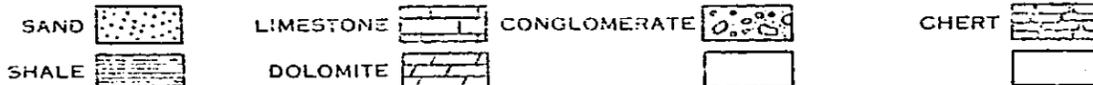


Petroleum Reservoir Engineering

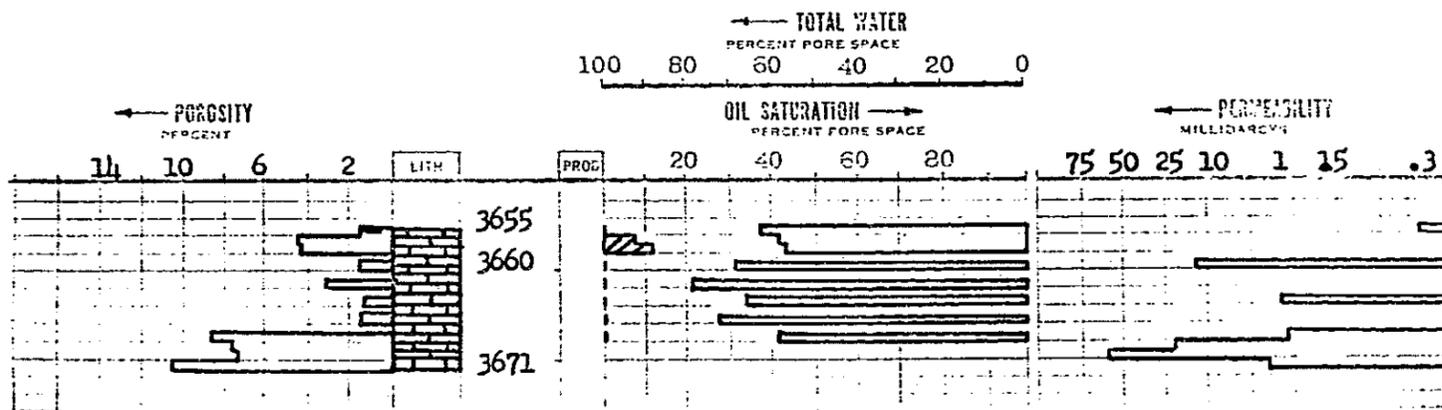
COMPANY Curtis Little DATE ON 6-20-70 FILE NO. RP-3-2420  
 WELL # 1 Pete's Nose DATE OFF 6-22-70 ENGRS. Mohl  
 FLD Wildcat FORMATION Barker Creek ELEV. 6205 KB  
 COUNTY Apache STATE Arizona DRLG. FLD. Chem Gel CORES Dia. Conv. 4"  
 LOCATION NW NE Sec 32-T37N- R28E REMARKS Whole Core Analysis

**COMPANION COREGRAPH**

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.



VERTICAL SCALE: 5" = 100'



**INTERPRETATION OF DATA**

3655.0 - 3671.0 feet - Primarily low capacity water productive.

*These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.*

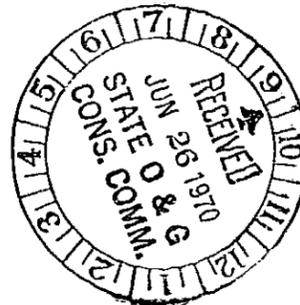
These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CURTIS J. LITTLE  
CONSULTING GEOLOGIST  
TELEPHONE (505) 268-8741  
POST OFFICE BOX 8976  
4300 SILVER AVENUE, S. E.  
ALBUQUERQUE, NEW MEXICO 87108

NO. 1 AIRCODESSA-PETE'S NOSE  
750' FNL & 1930' FEL  
SECTION 32, TOWNSHIP 37 NORTH, RANGE 28 EAST  
APACHE COUNTY, ARIZONA

Elevation: 6192 GR

Drilling Contractor: Loffland Bros. Co.  
Rig 20



TIME	DATE	DEPTH	
	1970		
8:00AM	6-9		Moving in & rigging up
8:00AM	6-10		Prep to spud
8:00AM	6-11	185'	Spudded 2:30 P.M., June 10. WOC. Set 5 jts 9 5/8" csg (167.56') @ 169.16' w/100 sx reg cmt w/2% CaCl. Dev. 3/4° @ 185'.
8:00AM	6-12	550'	Drl'd plug @ 11 P.M. Drlg Triassic red shale w/ Bit #2 - Smith DGTH. Drlg w/clear water. Dev. 1/2° @ 510.
8:00 AM	6-13	1490'	Drlg sds w/Bit #3 - Smith DGTH. Bit #2 made 1380'. Mud 9.1, vis 31, wtr ls 10.4, fltr cke 2/32. Dev. 1/2° @ 806, 3/4° @ 1350. Top Triassic Mossbach sds 913, Permian DeChelly 1300. Running 40' low to well prognosis, 207' high to Buttes 1-23, 138' low to Blackburn 6-1.
8:00AM	6-14	2064'	Drlg rd slts & sh w/ bit #4 - Sec. S 44. Bit #3 made 565'. Dev. 1/2° @ 1534, 1/2° @ 1746, 1 1/2° @ 1927. Sample top Permian Cutler (Organ Rock) @ 1980. Mud 9.4, vis 33, Wtr ls 10.2, Fltr cke 2/32.
8:00AM	6-15	2324'	Drlg rd sh w/ Bit #5, Security M4N. Bit #4 made 222'. Mud 9.3, vis 35, wtr ls 10.4, fltr cke 2/32. Dev. 1° @ 2150. Smpl tp Cutler Evaporites (Supai) 2300.
8:00AM	6-16	2606'	Drlg Rd sh w/ Bit #6, S-44. Mud 9.2, vis 34, wtr ls 12.8, fltr cke 2/32. Dev. 1° @ 2535. Bit #5 made 387'.
8:00AM	6-17	2976'	Drlg rd slts w/bit #6. Mud 9.4, vis 33, wtr ls 10.4, fltr cke 2/32. Running 20' high to well prognosis.
8:00AM	6-18	3214'	Drlg lms w/ bit #7, Security S-88. Bit #6 made 477'. Dev. 1 1/4° @ Mud 9.5, vis 33, wtr ls 10.4, fltr cke 2/32. Smpl tp Hermosa 3025. Running 259' hi to Buttes 1-23, 75' lo to Blackburn 6-1.
8:00AM	6-19	3442'	Drlg lms w/bit #7. Mud 9.2, vis 35, wtr ls 10.8, fltr cke 2/32.
8:00AM	6-20	3604'	Drlg slts & lms w/ Bit #8, Security H 7SG. Bit #7 made 531'. Dev. 1 1/2° @ 3536. Mud 9.1, vis 40, wtr ls 5.8, fltr cke 2/32. Had 10% brn, live oil stn w/good yellow fluorescence & cut in a very fine grn tite sds. Had film of oil on mud filtrate. Strapped drill pipe -- depth correction

538  
13

NO. 1 AIRCODESSA-PETE'S NOSE  
Page two

6-21

7' downward.  
Core 3634-75  
Cut 41', rec 37'.  
3634 - 3656 dnse lms  
3656 - 3657 1/2 dnse lms w/sli odor & scattered  
oil stain  
3657 1/2 - 3667 dnse lms  
3667 - 3671 lms, gd algal, vuggy, por -  
no shows

DST - 3645-75  
Open 15" - weak blow becmg gd  
SI 1hr  
Open 75" w/wk blow incr to gd blow in 10". remained steady  
thruout.  
SI 90"  
rec'd 1230' muddy slt wtr.  
Chlorides 39,000 ppm  
NaCl 64,350 ppm

	Top bomb	Bottom bomb
IHP	1722	1751
FHP	1722	1751
1st IFP	53	80
1st FFP	186	213
2nd IFP	239	240
2nd FFP	558	586
ISIP	1006	1036
FSIP	558	1035

No shows.

8:00AM 6-22 3785 Drlg lms & sh w/Bit #9, Security H-7SG. Bit #8 made 72'.  
Dev. 1° @ 3601. Mud 9.1, vis 38, wtr ls 8.0, fltr cke 2/32.  
Smple top Black Shale Marker 3616 - 11' lo to prognosis.  
Cut 9' w/gd por below core. No shows.  
Expected TD 3995. 3955.

8:00AM 6-23 3904' Drlg sh w/Bit #10, Security H-7SG. Bit #9 made 151'.  
Mud 9.4, vis 34, wtr ls 11.6, fltr cke 2/32.

10:00AM 6-24 3949' Prep to plug & abandon.

538  
12

NO. 1 AIRCODESSA-PETE'S NOSE

Page three

Log Tops:	Subsea	Subsurface
Permian		
DeChelly	+ 4917	1288
Cutler (Organ Rock)	+ 4207	1998
Cutler Evaporites (Supai)+	3855	2350
Pennsylvanian		
Hermosa	+ 3176	3029
Black Shale Marker	+ 2589	3616
Reef Zone	+ 2550-2515	3655-3690
Molas	+ 2351	3854
Mississippian	+ 2279	3926
8'	56 micro-sec/ft (7% por)	
14'	54 micro-sec/ft	
31'	20 MV of SP	
22'	60 MV of SP	
9 1/2'	100 MV of SP	

Rig released 8:00P.M., June 24, 1970.

538  
11

CORE NO. 1 3634 - 3675

Cut 41 feet. Recovered 37'. 6 hours on bottom coring.  
 Bit size: 7 27/32" x 4".

<u>Depth</u>	<u>Thickness</u>	<u>Coring time (min./ft)</u>	<u>Porosity</u>	<u>Permeability</u>	<u>Lithologic Description</u>
3634-3634	2 feet	5, 14			Mudstone: gn-h-gy, soft, v sli calc w/irreg Limestone nodules & pellets (talus) less than 1/4" (Pelletal Mud-Facies of G. Elias, Four Corners Geo. Soc., 1963): crm, micro xln, pure, algal, frag-foss, some calcite infilling, tr forams, tr pyrite
3636-3641	5 feet	9, 9, 9, 8, 8			Limestone: bh-h-crm, micro-f xln, vitr, hd, brt, algal, crinoidal. Tr vertical micro fractures, occ small irreg inclusions dolic, bn, f suc-xln Limestone.
3641-3643	2 feet	8, 8			Limestone & Mudstone with Limestone nodules (Pelletal Mud Facies). Limestone: crm, micro xln, abundant fusilinids, approaching a coquina. Mudstone: grn, sft, warpy bedding.
3643-3645	2 feet	8, 9			As above except no fusilirids. Sli foss w/algae. Sli bn oil staining.

81  
 PCC

<u>Depth</u>	<u>Thickness</u>	<u>Coring time (min/ft)</u>	<u>Porosity</u>	<u>Permeability</u>	<u>Lithologic Description</u>
3645-3647	2 feet	8, 7			Limestone: crm-bn, micro xln common fusulinids, algae, crinoids. Tr secondary calcite. Laminae of of bn calc. Siltstone on bedding planes.
3647-3648	1 foot	7			Limestone: crm-bn, micro - c xln, foss, frag, spotty bn oil stm w/odor, bright yellow-gold fluor, gd cut, volatile.
3648-3649	1 foot	7			Limestone: as above, ex no oil stns. Occ specks gn mineralization.
3649-3650	1 foot	7			Limestone: crm to bnh-crm, crypto xln, sl foss (fus), occ vertical micro fracs (healed) w/dead oil.
3650-3653	3 feet	9, 6, 8			Limestone: crm, micro to c xln, frag in part, sm algae, abun fusulinids, rare gastropods & crinoids, warped, crinkly beds 1/4 - 2" w/intrbds 1/32 - 1/2" gyh-gn soft Mudstone.
3653-3655	2 feet	14, 15			Mudstone: gyh-gn, non-calc to v sli calc, occ dk gy fltn gns of v f - m calc carb Siltstone.
3655-3656	1 foot	13	1.6	.3	Limestone: fos, frag, bn, c xln, brecciated in part, predom crinoids & algae. Occ to common bk dead oil on bedding planes & on frac, dull fluor. Sli bn oil bled on outside of core.

ES

<u>Depth</u>	<u>Thickness</u>	<u>Coring time (min/ft)</u>	<u>Porosity</u>	<u>Permeability</u>	<u>Lithologic Description</u>
3658-3659	1 foot	6			Limestone: as abe, occ stylolites w/ dead oil, tr bn oil stm, only rare tr pinpoint por.
3659-3660	1 foot	7	1.6	N.R.	Limestone: crm-bn, micro xln, algal, v foss, common fus, tr crinoids & gastropods, gy Mudstone partings on warpy bedding planes.
3660-3662	2 feet	7, 8	3.1	.1	Limestone: crm-bn, micro xln, abun fus, algal in part, frag to almost brachiopods, warpy bedding planes w/ gn Mudstone in top foot, gy Mudstone in lower ft.
3662-3663	1 foot	8			Limestone: crm, micro xln & bn foss, frag w/ occ gy Mudstone: warpy partings to 1/4". Occ fus (pyritized), moderate algae.
3663-3664	1 foot	8	1.2	N.R.	Limestone: lt bnh-crm, micro xln, v foss, abun algae
3664-3665	1 foot	7			Limestone: wh, micro - m xln, v foss w/ algae & tr crinoids, fus, gastropods. Occ calc xlns replacing vugs.
3665-3667	2 feet	7, 7	1.4	.1	Limestone: crm, chalky, crypto xln, mod algal, occ bk carb mud partings, occ stylolite w/ dead oil.

225

<u>Depth</u>	<u>Thickness</u>	<u>Coring time (min/ft)</u>	<u>Porosity</u>	<u>Permeability</u>	<u>Lithologic Description</u>
3667-3670	3 feet	4, 4, 4	7.2/8.4	1/54	Limestone: crm, algal, micro xln & sucr - c xln, fair to gd vuglet & vug por, common calc xln lining vugs, spotty mud penetration thru core. Tr spotty fluor, rare forams, Tr Chaetetetes.
3670-3671	1 foot	3	11.0	3.2	Limestone: Algal, as abve w/abum fus & Chaetetetes occupying 1/2 of 4" diameter core.

SES

Form 9-331  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1421.

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-0603-1588

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Aircodessa-Pete's Nose

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA  
Sec. 32, T 37N, R 28 E

12. COUNTY OR PARISH 13. STATE  
Apache Arizona

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  Wildcat

2. NAME OF OPERATOR  
Curtis Little

3. ADDRESS OF OPERATOR  
P.O. Box 8976, Albuquerque, New Mexico 87108

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface  
750' FNL & 1930' FEL

14. PERMIT NO. Arizona 538 15. ELEVATIONS (Show whether DF, HT, GR, etc.) 6192 gr

16. 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"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input type="checkbox"/>		(Note: Report results of multiple completion on 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.)\*

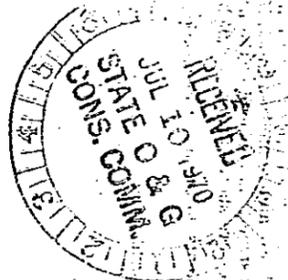
Total depth - ~~3945~~ feet. 3949 feet

Plugged and abandoned June 24, 1970 as follows:

3750 - 3600	50 sx
3050 - 2950	35 sx
1350 - 1200	50 sx
Surface	10 sx

Rig released 8:00 P.M., June 24, 1970

Regulation dry hole marker installed. Reserve pit fenced to be sheep-proof, awaiting evaporation and final clean-up.



18. I hereby certify that the foregoing is true and correct  
SIGNED Curtis Little TITLE Operator DATE 6-26-70  
(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

538

6

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

5. LEASE DESIGNATION AND SERIAL NO.  
**14-20-0603-1588**

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

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
**Aircodessa-Pete's Nose**

9. WELL NO.  
**1**

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

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
**Sec. 32, T 37-N, R 28 E**

14. PERMIT NO.  
**Arizona 538**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**6192 gr**

12. COUNTY OR PARISH  
**Apache**

13. STATE  
**Arizona**

16. 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"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input checked="" type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

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.)\*

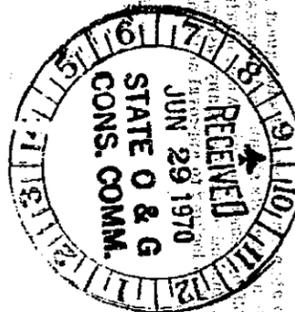
Total depth - 3945 feet.

Plugged and abandoned June 24, 1970 as follows:

3750 - 3600  
3050 - 2950  
1350 - 1200  
Surface

10 ex

Rig released 8:00 P.M., June 24, 1970



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

SIGNED Curtis Little  
(This space for Federal or State office use)

TITLE **Operator**

DATE **6-26-70**

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

\*See Instructions on Reverse Side

538

June 24, 1970

Memo to File #538

Little #1 Aircodessa Navajo  
Sec. 32-T37N-R28E (NW/4 NE/4)  
Apache County

Telephone call taken by Jamie Deppey.

Mr. Curtis Little telephoned this office today. He wanted verbal permission to plug and abandon the captioned well. He had already contacted the U.S.G.S., Phil McGrath, and received their permission.

The proposed plugging program is as follows:

150' plug from 3750' to 3600'  
100' plug from 3050' to 2950'  
150' plug from 1350' to 1200'  
10 sacks of cement were to be put in the surface pipe.

Formation tops:

De Chelly	1288'
Hermosa	3029'
Barker Creek Reef	3655'
Molas	3854'
Mississippian	3926'
Total depth	3949'

He indicated that all of the proper forms would be placed in the mail to us in a very short time.

138  
10

### DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Window Rock, Arizona  
SERIAL NO.: 14-20-0603-1588 Navajo Lands

and hereby designates

NAME: Curtis Little  
ADDRESS: P. O. Box 9976  
Albuquerque, New Mexico

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 37 North, Range 26 East, G.S.N.M.  
Section 32: 411

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

*Robert M. Peterson*  
Robert M. Peterson, Vice President  
Buttes Gas & Oil Co.  
1776 Lincoln Street  
Denver, Colo. 80263

June 11, 1970  
(Date)



538

Form 9-331  
(May 1968)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN THIS MANNER\*  
(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.)

5. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-1588

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Aircodessa-Pete's Nose

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA

Sec. 32, T 37 N, R 28 E

12. COUNTY OR PARISH

Apache

13. STATE

Arizona

1. OIL WELL  GAS WELL  OTHER  Wildcat

2. NAME OF OPERATOR  
Curtis Little

3. ADDRESS OF OPERATOR  
P. O. Box 8976, Albuquerque, New Mexico 87108

4. LOCATION OF WELL\* (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface  
750' FNL & 1930' FEL

14. PERMIT NO.

15. ELEVATIONS (Show whether DP, RT, GR, etc.)  
6192 GR

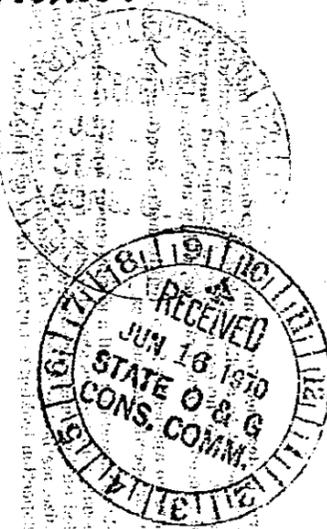
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

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 checked="" type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(Note: Report results of multiple completion on 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.)\*

Spudded test at 2:30 P.M., June 10, 1970  
Ran 5 joints (167.56') of 9 5/8", 32.3#, H-40 casing. Set at 169.16'.  
Cemented with 100 sz regular cement with 2% CaCl.  
Pressure tested casing to 1200# for 30 minutes, held OK.



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

SIGNED

*Curtis Little*

TITLE Operator

DATE June 12, 1970

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

\*See instructions on Reverse Side

338  
15

Directions to No. 1 Pet Nose:

General Directions:

From ROUND ROCK TRADING POST take road northeast towards Buttes 1-23 dry hole drilled 2000' north east of the easternmost butte (Los Gigantes Buttes). One half mile before reaching Buttes dry hole, turn southeast 3 miles to location in box canyon.

Specific Directions:

Leave front of Round Rock Trading Post - Go east 3.2 miles. Take right fork of road.

Go .6 mile. Take left fork.

Go 2.4 miles to top of Mesa and take left fork.

Go 1.5 miles to Los Gigantes Buttes and turn right (east).

Go 1 mile to windmill - continue ahead.

Go 1.5 miles by hogans to dam across arroyo.

Go .4 mile east up arroyo to location.



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  Wildcat      SINGLE ZONE       MULTIPLE ZONE

2. NAME OF OPERATOR  
 Curtis Little

3. ADDRESS OF OPERATOR  
 P.O. Box 8976, Albuquerque, New Mexico 87108

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface: 750' FNL & 1930' FEL  
 At proposed prod. zone: Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 9 mi NE from Round Rock Trading Post

10. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)      750'

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.      None

21. ELEVATIONS (Show whether DF, RT, GR, etc.)      6192 GR

5. LEASE DESIGNATION AND SERIAL NO.  
 14-20-0603-1588

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
 Aircodessa-Pete's Nose

9. WELL NO.  
 1

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA  
 Sec. 32, T 37 N, R 28 E

12. COUNTY OR PARISH      13. STATE  
 Apache      Arizona

16. NO. OF ACRES IN LEASE      640

19. PROPOSED DEPTH      3900'

17. NO. OF ACRES ASSIGNED TO THIS WELL      80

20. ROTARY OR CABLE TOOLS  
 Rotary

22. APPROX. DATE WORK WILL START\*  
 June 10, 1970

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	32.3	150'	125 sx
* 7 7/8"	5 1/2"	15.5	3700'	150 sx

\* If productive

It is proposed to drill with rotary tools using mud as circulating medium to the Mississippian and to test all zones possibly productive of hydrocarbons. Estimated formation tops are:

Triassic	Chinle	Surface
Permian	DeChelly	1260
	Supai	2335
Pennsylvanian	Hermosa	3045
	Molas	3845
Mississippian		3920
TD		3945

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.

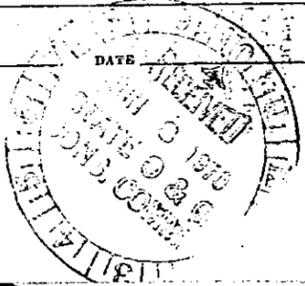
24. SIGNED Curtis Little TITLE Operator DATE June 3, 1970

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



\*See Instructions On Reverse Side

19 538



WELL PROGNOSIS

AIRCODESSA NO. 1 PETE'S NOSE

Location: 750' FNL, 1930' FEL, Section 32  
T 37 N, R 28 E  
Apache County, Arizona

Elevation: 6192 Gr  
6205 KB

Est. Formation Tops	Subsea	Thickness	Subsurface
Triassic			
Chinle	+ 6205	1260	Spud
Permian			
DeChelly	+ 4945	1075	1260
Cutler Evaporites (Supai)	+ 3870	710	2335
Pennsylvanian			
Hermosa	+ 3160	560	3045
Black Shale Marker	+ 2600	30	3605
Core Point	+ 2570		3635
Reef Top	+ 2560		3645
Base of Core	+ 2510		3695
Molas	+ 2360	75	3845
Mississippian	+ 2285	25	3920
TD			3945

Hole Size: Surface 12 1/4"  
Below Surface 7 7/8"

Coring: Full hole core 3590-3650.  
Core analysis of all porosity &/or shows

Drill Stem Tests: All significant shows

Mud: Low solids gel 8.8-9#, vis 32-38

Samples: Catch, wash and sack one complete set of samples  
from surface to TD to be delivered to Four Corners  
Sample Cut Association. Tie in 100 ft. bundles with  
well name on each tag. 10 ft. samples from surface  
to 3000' - 5 ft. samples from 3000-3900'.

538  
16

Aircodessa No. 1 Pete's Nose - Page two

Logs: Schlumberger  
Induction-Electrical - TD to surface casing  
Borehole Compensated Sonic-Gamma Ray-Caliper  
TD to Top Hermosa (3000')

Mud Logging: None

Strap pipe: At core point

Casing: Surface: 5 jts (150') 9 5/8" w/125 sx w/2% CaCl,  
H-40, 32.3#  
Log String: 3700' 5 1/2" if productive

Bit Program: No. 1 Smith DGTH  
No. 2 Smith DGTH or Security S4TG  
No. 3 Security S4TG or Security M4NG  
No. 4 Security M4NG  
No. 5 Security S-44  
No. 6 Security S-88

Deviation: Less than 5°, not to exceed 2° in any 100' interval

Water: To be trucked from surface lake



538

17

### DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Farmington, New Mexico  
SERIAL NO.: Nav. 14-20-0603-1588

and hereby designates

NAME: Curtis J. Little  
ADDRESS: P.O. Box 8976  
Albuquerque, New Mexico 87108

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 37 North, Range 28 East, G.S.R.M. (P.D. #37 approved 2-11-60)

Section 32: All

Containing 640 acres, more or less

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

*W. T. Blackburn*

W. T. Blackburn (Signature of lessee)

1650 Denver Club Building  
Denver, Colorado 80202

May 12, 1970

(Date)

(Address)



76 538

Lease number  
14-70-0603-1588

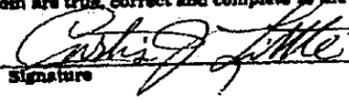
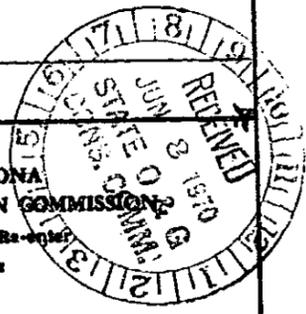
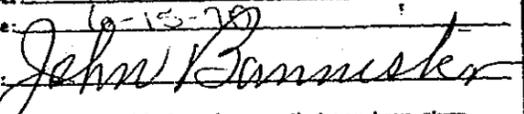
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per telephone with  
Anne Little 6-10-70.

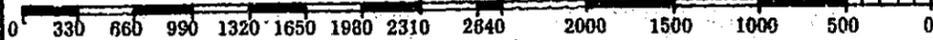
## APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL

RE-ENTER OLD WELL

NAME OF COMPANY OR OPERATOR <b>Curtis Little</b>		
Address <b>P.O. Box 8976 Albuquerque New Mexico 87108</b>		
Drilling Contractor <b>Loffland Bros. Co. Rig 20</b>		
Address <b>Farmington, New Mexico</b>		
DESCRIPTION OF WELL AND LEASE		
Federal, State or Indian Lease Number, or if fee lease, name of lessor <b>Navajo Tribal 14-20-0603 -</b>	Well number   Aircodessa   Elevation (ground) <b>Pete's Nose   6192</b>	
Nearest distance from proposed location to property or lease line: <b>750 feet</b>	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: <b>None feet</b>	
Number of acres in lease: <b>640</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: <b>Not applicable</b>		
Well location (give footage from section lines) <b>750' FNL &amp; 1930' FEL</b>	Section—township—range or block and survey <b>32-37N-28E, G.S.R.M.</b>	Dedication (Comply with Rule 103) <b>See survey plat</b>
Field and reservoir (if wildcat, so state) <b>Wildcat</b>	County <b>Apache</b>	<b>W/2 NE/4</b>
Distance, in miles, and direction from nearest town or post office <b>9 mi NE of Round Rock Trading Post</b>		
Proposed depth: <b>3900'</b>	Rotary or cable tools <b>Rotary</b>	Approx. date work will start <b>June 10, 1970</b>
Bond Status <b>Applied for</b>	Organization Report <b>On file Yes Or attached</b>	Filing Fee of \$25.00 <b>Attached Yes</b>
Remarks: <b>It is proposed to drill with rotary tools using mud as circulating medium to the Mississippian and to test all zones possibly productive of hydrocarbons. Estimated formation tops are: Chinle - Surface; DeChelly - 1260; Supai - 2335; Hermose - 3045; Molas - 3845; Mississippian - 3920; TD - 3945.</b>		
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>operator</u> of the <u>individual</u> (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.		
 Signature		
June 3, 1970 Date		
Permit Number: <b>538</b>	STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Application to Drill or Re-enter File Two Copies	
Approval Date: <b>6-15-70</b>		
Approved By: 	Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.	
Form No. 1		

- Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
- 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.
- All distances shown on the plat must be from the outer boundaries of the Section.
- Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES  NO
- 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 \_\_\_\_\_
- If the answer to question four is "no," list all the owners and their respective interests below:

Owner	Land Description
SEE ATTACHED SURVEY PLAT	<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>Curtis J. Little</i></p> <p>Name <b>Curtis J. Little</b></p> <p>Position <b>Operator</b></p> <p>Company <b>Aircodessa</b></p> <p>Date <b>June 3, 1970</b></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 <b>June 1, 1970</b></p> <p>Registered Professional Engineer and/or Land Surveyor</p> <p style="text-align: center;"><b>Ernest V. Echohawk</b></p> <p>Certificate No. <b>2311</b></p>
	

**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
9 5/8"	32.3	H-40	Sur.	150'	Surface	125 sx
* 5 1/2"	15.5	J-55	Sur.	3700'	2800	150 sx
* If productive						

22

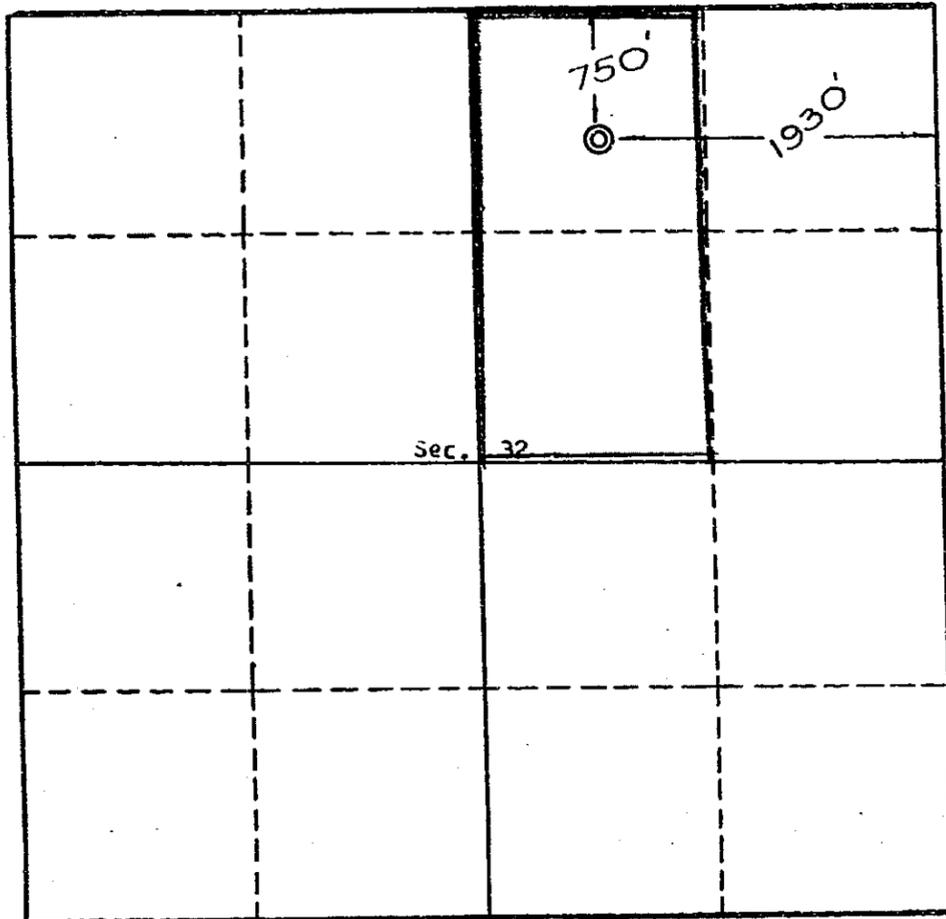
Company CURTIS LITTLE

Well Name & No. No. 1 Pete's Nose

Location 750 feet from the North line and 1930 feet from the East line.

Sec. 32, T. 37 N., R. 28 E., G. & S. R. M., County Apache, Arizona

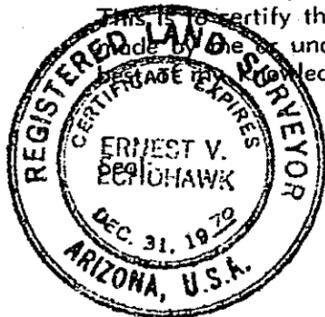
Ground Elevation 6192



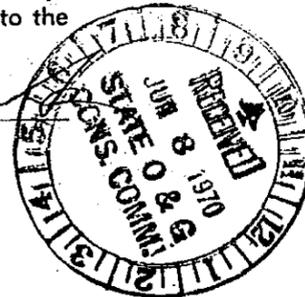
Scale, 1 inch = 1,000 feet

Surveyed June 1, 19 70

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.



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





# PERMIT TO DRILL

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

To: CURTIS J. LITTLE  
(OPERATOR)

to drill a well to be known as

LITTLE #1 AIRCODESSA NAVAJO (1588)  
(WELL NAME)

located 750' FNL - 1930' FNL

Section 32 Township 37N Range 28E, APACHE County, Arizona.

The W/2 NE/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 15th day of JUNE, 19 70.

OIL AND GAS CONSERVATION COMMISSION

By John Bannister  
EXECUTIVE SECRETARY

PRIOR TO BEING ALLOWED TO PRODUCE THIS WELL  
YOU MUST BE IN FULL COMPLIANCE WITH RULES  
105, SECTION A THRU G (SPACING), WITH RESPECT  
TO THE PRODUCT TO BE PRODUCED.

PERMIT No. 538

RECEIPT NO. 2872  
API NO. 02-001-20132

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

SAMPLES ARE REQUIRED

CORE ANALYSIS FOR  
CURTIS LITTLE  
NO. 1 PETE'S NOSE  
WILDCAT  
APACHE COUNTY, ARIZONA

WA



538  
5

**CORE ANALYSIS RESULTS**

Company Curtis Little Formation Barker Creek File RP-3-2420  
Well # 1 Pete's Nose Core Type Dia. Conv. 4" Date Report 6-21-70  
Field Wildcat Drilling Fluid Chem Gel Analysts Mohl  
County Apache State Arizona Elev. 6205 KB Location NW NE Sec 32- T 37N - R 28E

**Lithological Abbreviations**

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY'S	POROSITY PER CENT	RESIDUAL SATURATION PER CENT		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
1	3655-56	0.3	<0.1	1.6	0.0	61.5 Ls, gry, suc, shly
2	3656-57	<0.1	<0.1	4.3	8.4	57.4 Ls, gry, suc
3	3657-58	<0.1 *		4.2	11.9	54.3 Ls, gry, suc
4	3659-60	11.0	10.3	1.6	0.0	69.1 Ls, gry, suc, Perm thru shale ptng
5	3661-62	<0.1 *		3.1	0.0	79.1 Ls, gry, suc, shly
6	3663-64	1.6	<0.1	1.2	0.0	66.9 Ls, gry, suc Perm thru shale ptng
7	3665-66	<0.1	<0.1	1.4	0.0	70.3 Ls, gry, suc, shly
8	3667-68	1.4	0.3	8.4	0.0	59.7 Ls, gry, suc, vgy
9	3668-69	19.		7.6		Ls, gry, suc, vgy
10	3669-70	54.		7.2		Ls, gry, suc, vgy
11	3670-71	3.2		10.99		Ls, gry, suc, vgy

\* Denotes plug permeability

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representation, as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.



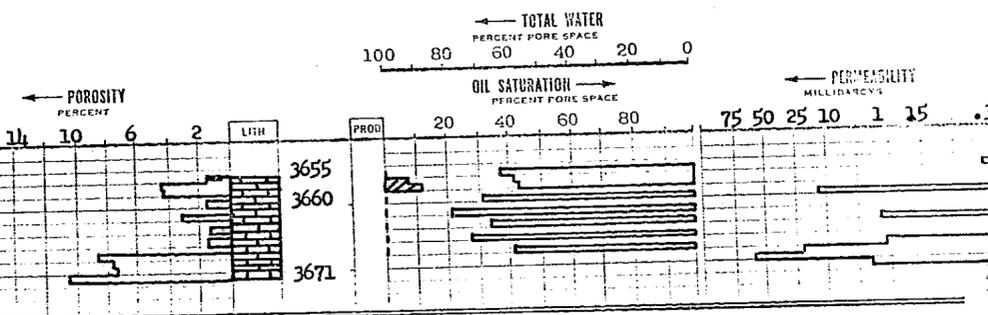
COMPANY Curtis Little DATE ON 6-20-70 FILE NO. RP-3-2420  
WELL # 1 Pete's Nose DATE OFF 6-22-70 ENGRS. Mohl  
FIELD Wildcat FORMATION Barker Creek ELEV. 6205 KB  
COUNTY Apache STATE Arizona DRG. FLD. Chem Gel CORES Dia. Conv. 4"  
LOCATION NW NE Sec 32-T37N-R28E REMARKS Whole Core Analysis

**COMPLETION COREGRAPH**

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representation, as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.



VERTICAL SCALE: 5" = 100'



**INTERPRETATION OF DATA**

3655.0 - 3671.0 feet - Primarily low capacity water productive.

These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

August 6, 1970

United States Fidelity & Guaranty Company  
Fidelity-Surety Department  
301 San Mateo Boulevard S. E.  
Albuquerque, New Mexico 87108

Attention: Ms. Kathy Bouffard

Re: Little #1 Aircodessa Navajo (1588)  
NW/4 NE/4 Sec. 32-T37N-R28E  
Apache County  
Our File #538

U. S. F. & G. Bond No. 01-0130-533-70  
(S5,000)

Gentlemen:

Records of this office indicate that on 8-6-70 Mr. Curtis Little fulfilled his obligations to the State of Arizona as to the requirements pertaining to the captioned well. We authorize termination of the subject bond effective this date.

Very truly yours,

W. E. Allen  
Director of Enforcement Section

jd  
cc: Mr. Curtis J. Little



WR

**UNITED STATES FIDELITY AND GUARANTY COMPANY**  
ALBUQUERQUE BRANCH OFFICE  
PETER DIGANGI, JR., CPCU, MANAGER  
301 SAN MATEO BLVD., S.E.  
ALBUQUERQUE, NEW MEXICO 87108  
TELEPHONE: 505/265-7854

July 28, 1970

JAMES A. LYONS  
SUPT. OF CLAIMS

Oil & Gas Conservation Commission  
State of Arizona  
Phoenix, Arizona

RE: #01-0130-533-70 - LITTLE, CURTIS J.  
\$5,000. - One well plugging bond

Gentlemen:

Please accept this letter as our notice of cancellation in accordance with the terms of the captioned bond.

May we please have your letter confirming the effective date of cancellation. Thank you for your assistance.

Sincerely,

*Kathy Bouffard*

Kathy Bouffard  
Fidelity-Surety Department

538



538

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS

Bond Serial No. 01-0130-533-70

That we: Curtis J. Little  
of the County of Bernalillo in the State of New Mexico  
as principal, and United States Fidelity and Guaranty Company  
of Baltimore, Maryland

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 and no/100 (\$5,000.00) dollars 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:

N. E. 1/4 of Sec. 32 Township 37 N. Range 28 E GSEM 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 June, 19 70

WITNESS our hands and seals this 8th day of June, 19 70

United States Fidelity and Guaranty Company  
Surety

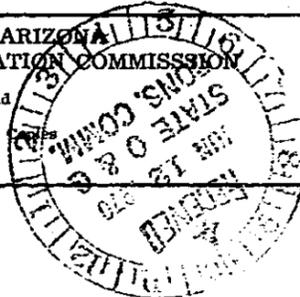
Cecile H. Bowers  
Surety, Resident Arizona Agent  
If issued in a state other than Arizona)

(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: 6-15-70  
STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
By: John Connors

Permit No. 538

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



CERTIFIED COPY

GENERAL POWER OF ATTORNEY

No. 79188

Know all Men by these Presents:

That UNITED STATES FIDELITY AND GUARANTY COMPANY, a corporation organized and existing under the laws of the State of Maryland, and having its principal office at the City of Baltimore, in the State of Maryland, does hereby constitute and appoint Cecile H. Bowers

of the City of Albuquerque, State of New Mexico its true and lawful attorney

for the following purposes, to wit:

To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said UNITED STATES FIDELITY AND GUARANTY COMPANY, a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said UNITED STATES FIDELITY AND GUARANTY COMPANY, through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said Cecile H. Bowers

may lawfully do in the premises by virtue of these presents.

In Witness Whereof, the said UNITED STATES FIDELITY AND GUARANTY COMPANY has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its Vice-President and Assistant Secretary, this 24th day of May, A. D. 1968

UNITED STATES FIDELITY AND GUARANTY COMPANY.

(Signed) By John T. West Vice-President.

(SEAL)

(Signed) E. D. Bangs Assistant Secretary.

STATE OF MARYLAND, BALTIMORE CITY, ss:

On this 24th day of May, 1968 before me personally came John T. West, Vice-President of the UNITED STATES FIDELITY AND GUARANTY COMPANY and E. D. Bangs, Assistant Secretary of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said that they resided in the City of Baltimore, Maryland; that they, the said John T. West and E. D. Bangs were respectively the Vice-President and the Assistant Secretary of the said UNITED STATES FIDELITY AND GUARANTY COMPANY, the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so fixed by order of the Board of Directors of said corporation, and that they signed their names thereto by like order as Vice-President and Assistant Secretary, respectively, of the Company. My commission expires the first day in July, A. D. 1969.

(SEAL) (Signed) Louis Rohd Notary Public.

STATE OF MARYLAND BALTIMORE CITY, Sci.

I, Robert H. Bouse, Clerk of the Superior Court of Baltimore City, which Court is a Court of Record, and has a seal, do hereby certify that Louis Rohd, Esquire, before whom the annexed affidavits were made, and who has thereto subscribed his name, was at the time of so doing a Notary Public of the State of Maryland, in and for the City of Baltimore, duly commissioned and sworn and authorized by law to administer oaths and take acknowledgments, or proof of deeds to be recorded therein. I further certify that I am acquainted with the handwriting of the said Notary, and verily believe the signature to be his genuine signature.

In Testimony Whereof, I hereto set my hand and affix the seal of the Superior Court of Baltimore City, the same being a Court of Record, this 24th day of May, A. D. 1968

(SEAL) (Signed) Robert H. Bouse Clerk of the Superior Court of Baltimore City.

COPY OF RESOLUTION

*That Whereas*, it is necessary for the effectual transaction of business that this Company appoint agents and attorneys with power and authority to act for it and in its name in States other than Maryland, and in the Territories of the United States and in the Provinces of the Dominion of Canada and in the Colony of Newfoundland.

*Therefore, be it Resolved*, that this Company do, and it hereby does, authorize and empower its President or either of its Vice-Presidents in conjunction with its Secretary or one of its Assistant Secretaries, under its corporate seal, to appoint any person or persons as attorney or attorneys-in-fact, or agent or agents of said Company, in its name and as its act, to execute and deliver any and all contracts guaranteeing the fidelity of persons holding positions of public or private trust, guaranteeing the performances of contracts other than insurance policies and executing or guaranteeing bonds and undertakings, required or permitted in all actions or proceedings, or by law allowed, and

*Also*, in its name and as its attorney or attorneys-in-fact, or agent or agents to execute and guarantee the conditions of any and all bonds, recognizances, obligations, stipulations, undertakings or anything in the nature of either of the same, which are or may be by law, municipal or otherwise, or by any Statute of the United States or of any State or Territory of the United States or of the Provinces of the Dominion of Canada or of the Colony of Newfoundland, or by the rules, regulations, orders, customs, practice or discretion of any board, body, organization, office or officer, local, municipal or otherwise, be allowed, required or permitted to be executed, made, taken, given, tendered, accepted, filed or recorded for the security or protection of, by or for any person or persons, corporation, body, office, interest, municipality or other association or organization whatsoever, in any and all capacities whatsoever, conditioned for the doing or not doing of anything or any conditions which may be provided for in any such bond, recognizance, obligation, stipulation, or undertaking, or anything in the nature of either of the same.

I, **R. H. Bland, Jr.**, an Assistant Secretary of the UNITED STATES FIDELITY AND GUARANTY COMPANY, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney given by said Company to **Cecile H. Bowers**

of **Albuquerque, New Mexico**, authorizing and empowering **her** to sign bonds as therein set forth, which power of attorney has never been revoked and is still in full force and effect.

And I do further certify that said Power of Attorney was given in pursuance of a resolution adopted at a regular meeting of the Board of Directors of said Company, duly called and held at the office of the Company in the City of Baltimore, on the 11th day of July, 1910, at which meeting a quorum of the Board of Directors was present, and that the foregoing is a true and correct copy of said resolution, and the whole thereof as recorded in the minutes of said meeting.

*In Testimony Whereof*, I have hereunto set my hand and the seal of the UNITED STATES FIDELITY AND GUARANTY COMPANY on **June 8, 1970**.  
(Date)

*R. H. Bland Jr.*  
Assistant Secretary.

June 15, 1970

Mr. Curtis Little  
P. O. Box 8976  
Albuquerque, New Mexico 87108

Re: Little #1 Aircodessa Navajo (1588)  
NW/4 NE/4 Sec. 32-T37N-R28E  
Apache County  
Our File #538

Dear Mr. Little:

Enclosed is the approved Application for Permit to Drill, Receipt No. 2872 covering the \$25 filing fee, an approved copy of the bond, a copy of the plat, and Permit To Drill No. 538. You have been furnished instructions concerning samples and reports required by this office. Thank you for your cooperation in the past.

Sincerely,

John Bannister  
Executive Secretary

jd  
Enc.



UNITED STATES FIDELITY AND GUARANTY COMPANY  
PHOENIX OFFICE  
3605 N. 7TH AVENUE, PHOENIX, ARIZONA 85013  
TELEPHONE: 602/277-4411

T. D. GIBSON  
MANAGER

June 11, 1970

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

Re: Bond No. 01-0130-533-70  
Principal: Curtis J. Little  
Amount: \$5,000.  
Effective Date: June 8, 1970

Gentlemen:

At the request of our Albuquerque Branch Office,  
we are attaching herewith original of the above captioned  
bond, properly executed and countersigned, for filing.  
We trust you will find same to be in proper order.

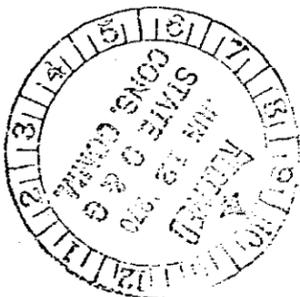
Thank you for your assistance in this matter.

Yours Sincerely,

Glenna Crum  
Bond Department

Enclosure

CC:



538

June 8, 1970

Mr. Curtis Little  
P. O. Box 8976  
Albuquerque, New Mexico 87108

Re: Little #1 Aircodessa Navajo  
NW/4 NE/4 Sec.32-T37N-R28E  
Apache County

Dear Mr. Little:

We are in receipt of your Application for Permit to Drill, the survey plats, the \$25 filing fee, and other miscellaneous information for our records. We notice, however, on the Application to Drill you do not designate the number of the Navajo Tribal lease on which the subject well is to be drilled. We do need this lease number for our files. Everything else seems to be in order, so as soon as we receive the bond covering this well we will be in position to issue the permit.

Sincerely,

John Bannister  
Executive Secretary

jd

CURTIS J. LITTLE  
CONSULTING GEOLOGIST  
TELEPHONE (505) 268-8741  
POST OFFICE BOX 8976  
4300 SILVER AVENUE, S. E.  
ALBUQUERQUE, NEW MEXICO 87108

June 4, 1970

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

Re: No. 1 Aircodessa-Pete's Nose  
Sec. 32, T 37 N, R 28 E  
Apache County, Arizona

Dear John:

Enclosed are two copies Application for Permit to Drill with Survey Plats  
attached along with our check in the amount of \$25.00 to cover filing fee.

Yours very truly,

  
Curtis J. Little

abl  
encls



AIRCOIL GAS VENTURES  
ALBUQUERQUE, N. M.

DETACH AND RETAIN THIS STATEMENT  
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.  
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

Filing Fee - Permit to Drill  
No. 1 Aircodessa-Pete's Nose

\$ 25.00

