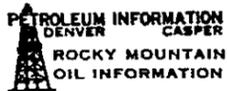


P-W

EASTERN PET. #14 SANTA FE 206
SE NW SEC. 5-19N-27E APACHE COUNTY

ARIZONA
APACHE CO.
PINTA DOME (D)



Twp 19n-27e
Section 5
se nw
1650 s/n 1650 e/w

OPR: Eastern Petroleum

WELL #: 14 Santa Fe

ELEV: 5806 DF.

DSTS. & CORES:

SPUD: 10-2-62 COMPL: 11-1-62

TOPS: Log-Summit

TD: 1175 PB: 1100

Coconino 1026

CSG: 8-5/8" @ 92 w/40
4 1/2" @ 1109 w/100

PERF: 1026-56 w/2 per ft. Acidized.

PROD. ZONE:

INIT. PROD:

Contr: Scott.

IPF 300 MCFGPD, 1" ck, TP 116#.

ARIZ 3-366230

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**

Lease Name **Santa Fe** Well Number **14** Field & Reservoir

Location **1650' S of NL; 1650' E of W.L.** Sec.—TWP-Range or Block & Survey **5-19N-27E**

County **Apache** Permit number **206** Date issued **8-10-62** Previous permit number Date issued

Date spudded **10-3-62** Date total depth reached **10-16-62** Date completed, ready to produce **10-16-62** Elevation (DF, RKB, RT or Gr.) **5801** feet Elevation of casing hd. flange feet

Total depth **1100** P.B.T.D. 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 **1026 - 1056** Rotary tools used (interval) **1100** Cable tools used (interval) ---

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

Type of electrical or other logs run (check logs filed with the commission) **Schlumberger Induction - electrical log** Date filed

CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Surface	10 3/4	8 5/8	24.0#	92'	40	-0-
Casing	6 3/4	4 1/2	9.5#	1100	100	-0-

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	Am't. & kind of material used	Depth interval
		1026-56		

INITIAL PRODUCTION

Date of first production **Shut-in 10-16-62** Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:) **Flowing**

Date of test **10-14-62** Hrs. tested **3 1/2 hrs** Choke size **1 1/4"** Oil prod. during test **-0-** bbls. Gas prod. during test **300** MCF Water prod. during test **-0-** bbls. Oil gravity *** API (Corr)**

Tubing pressure **110#** Casing pressure **-- 42** 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): **Shut-In**

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 **November 5, 1962** Signature **J. N. Edwards**

STATE OF ARIZONA OIL & GAS
CONSERVATION COMMISSION
Well Completion or Recompletion Report and Well Log
Form No. P-7 File two copies
Effective ~~January 1, 1962~~ **April 1, 1962**

15
906

PLUGGING RECORD

Operator Eastern Petroleum Company		Address Box 291, Carmi, Illinois 62821			
Federal, State, or Indian Lease Number, or lessor's name if fee lease. Santa Fe		Well No. 14	Field & Reservoir Navajo Springs Coconino Sand Unit		
Location of Well 1650' SNL; 1650' EWL		Sec-Twp-Rge or Block & Survey 5-19N-27E		County Apache	
Application to drill this well was filed in name of Eastern Petroleum Company	Has this well ever produced oil or gas No	Character of well at completion (initial production):			
		Oil (bbls/day) -	Gas (MCF/day) 300	Dry? -	
Date plugged: 10/12/77	Total depth 1100	Amount well producing when plugged:			
		Oil (bbls/day) -	Gas (MCF/day) TSTM	Water (bbls/day) -	
Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of plugging	Fluid content of each formation	Depth interval of each formation		Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement	
Coconino	Water	1026-56		Top to Bottom with 7 bbls. cement slurry	
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
8-5/8	92'	None	92'	-	-
2-7/8	1100'	"	1100'		
Was well filled with mud-laden fluid, according to regulations?			Indicate deepest formation containing fresh water.		
NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE					
Name	Address			Direction from this well:	
Spurlock Ranches	Navajo, Arizona			Land Owner	
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 <u>Secretary</u> of the <u>Eastern Petroleum Company</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.					
Date November 1, 1977		Signature <i>J. McDonald</i>			
COPY			STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Plugging Record File One Copy		
Permit No. 206			Form No. 10		

APPLICATION TO ABANDON AND PLUG

FIELD Navajo Springs Coconino Sand Unit
 OPERATOR Eastern Petroleum Company ADDRESS Box 291, Carmi, Illinois 62821
 Federal, State, or Indian Lease Number or Lessor's Name if Fee Lease Santa Fe WELL NO. 14
 LOCATION 1650' SNL; 1650' EWL Section 5-19N-27E, Apache County
 TYPE OF WELL Gas-Helium TOTAL DEPTH 1100
(Oil, Gas or Dry Hole)
 ALLOWABLE (If Assigned) _____
 LAST PRODUCTION TEST OIL -- (Bbls.) WATER -- (Bbls.)
 GAS 300 (MCF) DATE OF TEST 10/14/62
 PRODUCING HORIZON Coconino PRODUCING FROM 1026 TO 1056

1. COMPLETE CASING RECORD.

8 5/8" @ 92' w/40 sks.
 2 7/8" @ 1100' w/100 sks.

2. FULL DETAILS OF PROPOSED PLAN OF WORK

Plug top to bottom w/cement slurry

DATE COMMENCING OPERATIONS 10/12/77
 NAME OF PERSON DOING WORK Petroleum Consultants ADDRESS Denver, Colorado
 Signature _____
 Secretary
 Title _____
 P. O. Box 291, Carmi, Illinois 62821
 Address _____
 Date November 1, 1977

Date Approved _____
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: _____

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

All to _____

COPY

Permit No. 206, Santa Fe No. 14
3-27-74

Well shut-in. Good pressure on hole.



Santa Fe 14

206

206

10/14

Well: E.P.Co Navajo Springs #14
Sec 27, T20N, R27E
Apache County, Arizona

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

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

RECEIVED

FEB 18 1972

O & G CONS. COMM.

206

206

3

Well: E P C Navajo Springs No. 14 Eastern Petroleum Co.
Sec ~~27, T20N, R27E~~ 15-19-27 P. O. Box 226
Apache County, Arizona Farmington, New Mexico
87401

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

RECEIVED

JAN 20 1972

O & G CONS. COMM.

206

Well: E.P.Co Navajo Springs #14 Eastern Petroleum Company
Sec 27, T20N, R27E P. O. Box 226
Apache County, Arizona Farmington, New Mexico
87401

Status: Temporarily S.I.

RECEIVED

FEB 03 1972

O & G CONS. COMM.

206

Well: E.P.Co Navajo Springs #14 Eastern Petroleum Company
Sec 27, T20N, R27E P. O. Box 226
Apache County, Arizona Farmington, New Mexico
87401

Status: On stream - 1-31-72

RECEIVED

FEB 8 1972

O & G CONS. COMM.

206

4 206

WELL: Navajo Springs No. 14

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

206

(SUNDRY NOTICES AND REPORTS ON WELLS)

WA

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"/>	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.)

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

Permit No. 206

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

RECEIVED

JUN 18 1971

O & G CONS. COMM.

OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL OR GAS FROM LEASE

Federal, State or Indian Lease Number, or lessor's name if fee lease Santa Fe Fee #14	Field Navajo Springs	Reservoir Coconino
Survey or Sec-Twp-Rge 5-19N-27E	County Apache	State Arizona
Operator Eastern Petroleum Company		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street Box 291	City Carmi	State Illinois
Above named operator authorizes (name of transporter) Western Helium Corporation		
Transporter's street address Box 1358	City Scottsdale	State Arizona
Field address Oil, condensate, gas well gas, casinghead gas		
To transport 100	% of the helium bearing gas	from said lease.
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer None	% transported	Product transported
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change.		

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

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 December 16, 1970 Signature *J. McDonald*

Date approved: 12-21-70
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: *W. E. Allen*
 Permit No. 206

RECEIVED
DEC 21 1970

O & G CONG. COMM.
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Operator's Certificate of Compliance & Authorization to
 Transport Oil or Gas from Lease
 File Two Copies
 Form No. 3

ENGINEERING REPORT

of

Well Tests and Gas Flow Calculations
Shut-in Gas Wells, Navajo Springs Area
Apache County, Arizona

For

Western Helium Corporation

by

John W. Heller



206

8

JOHN M. HELLER

REGISTERED ENGINEER

P. O. Box 1507
1727 Forest Ave
DURANGO, COLORADO
81301

September 22, 1970

Phone 247-3846
AREA CODE (303)

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

Gentlemen:

Submitted herewith is an engineering report of well tests and flow rate calculations on shut-in gas wells in the Navajo Springs Unit area.

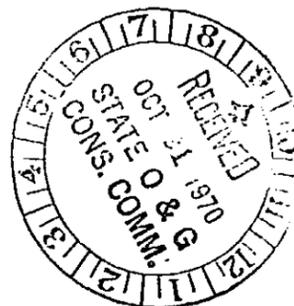
This report is made at the request of Mr. R. E. Lauth. I wish to express my appreciation to him and also Mr. Henry Fullop of Eastern Petroleum Corporation for their cooperation in obtaining the field information and the accommodations they furnished while obtaining the field information.

I believe the data shown herein is sufficient for your needs. Do not hesitate to contact me if there are any questions about this report.

Very truly yours,

John M. Heller
John M. Heller

Copies to:
Mr. Henry Fullop
Mr. R. E. Lauth



9
206

PURPOSE

To determine the productive capacity of shut-in gas wells in the Navajo Springs Unit and surrounding area, Apache County, Arizona.

To project flow rates at field gathering line pressures of 10, 20, 30, and 40 psig.

SUMMARY

Five wells, Santa Fe Nos. 14, 17, and 21-2; Reese No. 2; and Crest No. 7, were tested. These tests and calculated data indicate the wells are capable of producing at this time. A test was attempted on Santa Fe No. 35 but results are not valid because of fluid entry into the well bore during the flow periods. This well does have the capacity to produce some gas at limited rates before remedial work is necessary.

Calculated delivery rates at various back pressures are summarized by individual wells:

Lease and Well Number	Producing Zone	Delivery Rates @ - MCFD			
		10 psig.	20 psig.	30 psig.	40 psig.
Santa Fe No. 14	Coconino	935	940	845	725
Santa Fe No. 17	"	350	340	300	260
Santa Fe No. 21-2	Shinarump	525	510	500	490
Reese No. 2	Coconino	730	690	645	550
Crest No. 7	"	130	175	160	140
Total Volume - MCFD		2770	2655	2450	2165

Santa Fe No. 35 could possibly produce at a rate of 100 MCFD without much difficulty.

206

PROGRAM and PROCEDURE

Information and data required to make the flow rate projections were obtained by individual well tests. Gas flow measurements were taken through a 2" Critical Flow Prover and a 2" Orifice Well Tester at critical flow. Pressures were obtained by dead weight and test gauges to the nearest one pound increment. Assumptions were made on the gravity of the gas and the barometric pressure.

Calculations were made to a base pressure of 14.65 psia. @ 60° F. The back pressure curves are drawn on values of P_c and P_w , surface shut-in and working pressures, corrected for flow friction where it was significant.

Two four point tests were satisfactorily completed and the slope of the back pressure curve on these wells was applied to the other wells where one point tests were taken.

The projected delivery rates shown in this report were obtained by analyzing the back pressure curves, calculating the flow friction and adjusting the flow volume.

DISCUSSION

Santa Fe Wells No. 14, 17, and 21-2; Reese No. 2; and Crest No. 7, were favorably tested. Reese No. 2 did show a slight amount of moisture at the end of the test period but does not appear to effect the delivery potential at this time. Santa Fe No. 35 test is not considered valid because of the fluid entry into the well bore during the test period. This well can be produced to some extent and could show a sizable cumulative production before it becomes necessary to recondition. It is suggested that this well be produced at a rate of about 100 MCF per day initially and checked closely for the fluid build up in the well bore, unloading by blowing full open to the atmosphere for only short periods of time when necessary.

Other wells in the Navajo Springs Unit were checked but flow tests were not taken. They would not test in a satisfactory manner. Details of these wells are shown on page number 14 of this report.

The total CAOP of the five wells considered productive at this time is 3,173 MCFD. It would be prudent to start initial deliveries at approximately 25% of the CAOP or about 794 MCFD. This does not include the 100 MCFD that may be produced from Santa Fe No. 35. That individual wells be checked closely for performance and the producing rates adjusted accordingly.

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

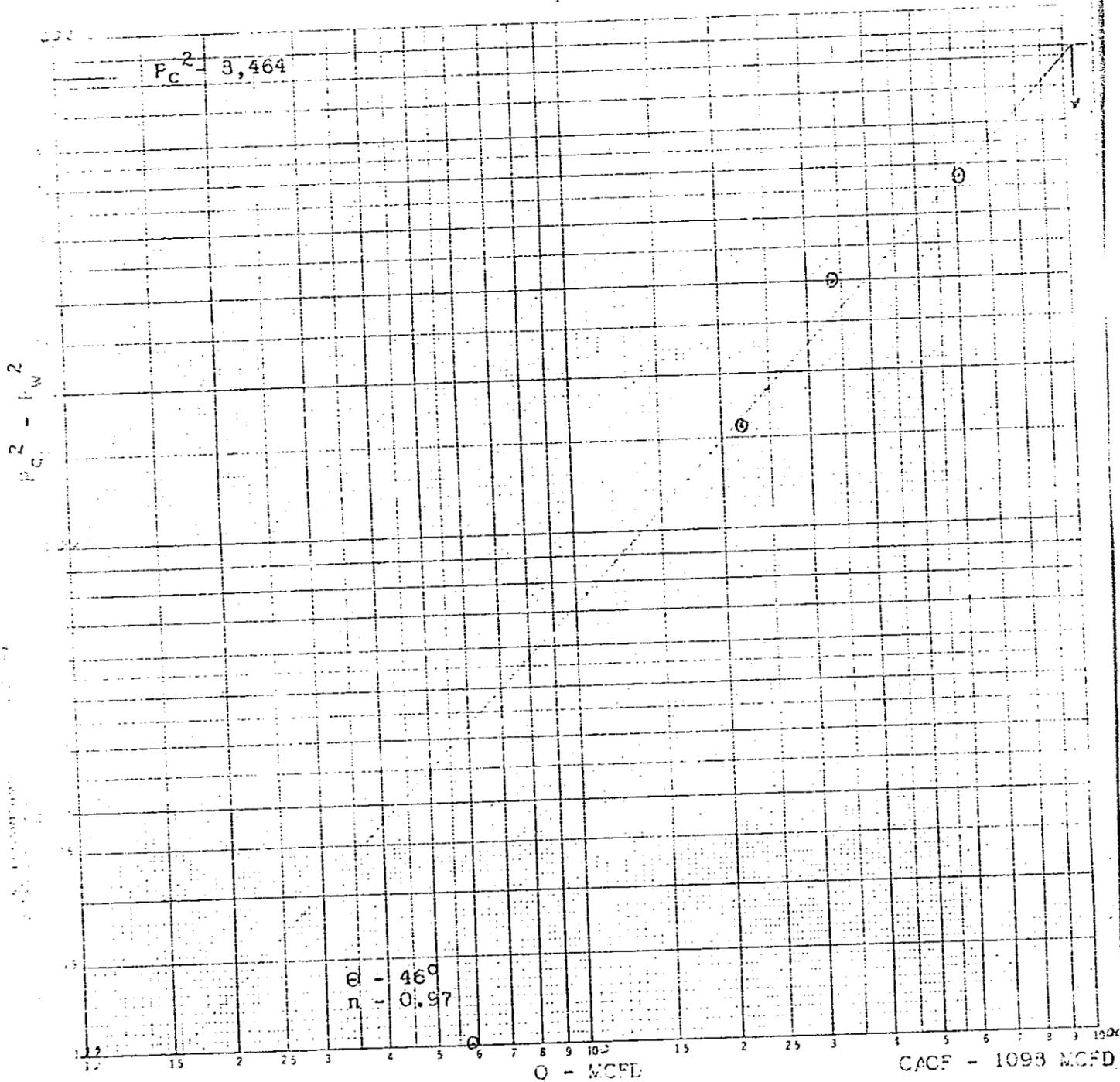
Form C-122
Revised 9-1-65

- 3 -

Type Test		<input type="checkbox"/> Initial		<input type="checkbox"/> Annual		<input checked="" type="checkbox"/> Special		Test Date		9/11/70					
Company				Connection				Unit							
Eastern Petroleum Co.				None											
Field				Formation				Well No.							
Navajo Springs				Coconino				14							
Completion Date		Total Depth		Packer TD		Elevation		Farm or Lease Name							
1962		1175		1100		5806		Santa Fe							
Well Size	Wt.	d	Set At	Perforations:		Well No.		Unit Sec. Twp. Rge.							
4-1/2	9.5?		1109	From 1026 To 1056		14		NW/4 5 19N 27E							
Well Size	Wt.	d	Set At	Perforations:		County		State							
None				From To		Apache		Arizona							
Type Well - Single - Bradenhead - G.G. or G.O. Multiple						Packer Set At		County							
Single								Apache							
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State							
Casing		89 ^o Est.		60 Est.		12.0 Assumed		Arizona							
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps							
		0.910	-	-	-	2"CFP	-	-							
FLOW DATA					TUBING DATA			CASING DATA			Duration of Flow				
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow				
SI	Static								79 *		0				
1.	2"CFP		1/8	79	-	91	-	-	-	-	1 1/2 hrs.				
2.	"		3/16	30	-	78	-	-	-	-	1 hr.				
3.	"		3/8	71	-	72	-	-	-	-	1 hr.				
4.	"		1/2	62	-	68	-	-	-	-	1 1/2 hrs.				
5.	"		3/4	49	-	63	-	-	-	-	1 hr.				
RATE OF FLOW CALCULATIONS															
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Prover Pressure psia P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{scv}	Rate of Flow Q, Mcf								
1	* Not calculated, rate too low for drawdown.		92	0.9831	0.812	-	59.91								
2	0.8035		83	0.9387	"	-	209								
3	3.142		74	0.9924	"	-	337								
4	5.653		61	0.9971	"	-	617								
5	12.490														
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.										
1	NA				A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.										
2					Specific Gravity Separator Gas _____ X X X X X X X X X										
3					Specific Gravity Flowing Fluid _____ X X X X X										
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.										
5					Critical Temperature _____ R _____ R										
1.	92				$P_c^2 = 8464$										
NO.	P _r	P _w	P _r ²	P _w ²	(1) $\frac{P_c^2}{P_r^2 - P_w^2} =$ _____ (2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n =$ _____										
1	92	0	8464	0	ACF = Q $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1099$										
2	8464	92	3464	0											
3	6389	33	6389	1575											
4	5476	74	5476	2938											
5	3721	61.4	3775	4699											
Absolute Open Flow		1099		Mcf @ 15.025		Angle of Slope @		46		Slope, n		0.97			
Remarks: *** An apparent gravity change in the flow string indicated by the 2nd. flow rate. Used the working pressure at this flow for static press.															
Approved By Commission:				Conducted By:				Calculated By:				Checked By:			

206

EASTERN PETROLEUM COMPANY
Santa Fe No. 14 Well
NW/4 Sec. 5-19N-27E
Apache County, Arizona



206

Wells Not Tested

Santa Fe No. 31 Sec. 29-20N-27E.

9/12/70 Shut-in well head pressure - 92 psig. Started flow test and well started dying. Dropped soap stick and shut-in overnight.

9/13/70 Shut-in 17½ hrs. Well head pressure - 90 psig. Opened well to blow. Fluid in 5 minutes. Blew well for 20 minutes. Making water at end of blow period. Too wet to test. Well head pressure 1½ hours after blowing was 60 psig.

Santa Fe No. 32 Sec. 28-20N-27E.

9/12/70 Shut-in well head pressure - 27 psig. Opened to blow. Dead. Dropped soap stick and shut-in overnight.

9/13/70 Shut-in well head pressure after 18 hours - TSTM
Opened well - Dead.

Crest No. 2 Sec. 33-20N-27E.

9/13/70 Shut-in well head pressure - 12 psig. Opened to blow. Very light blow - Dead.

Santa Fe No. 13 Sec. 31-20N-27E.

Producing into Kerr-McGee System. Well flowing with a well head pressure of 79 psig. Flow controlled by a pinched valve. Orifice Meter - American L-10-S chart; 50" X 250 psi. range; 4" X 2.50" plate; readings: L-3.9; P-3.6; T-6.8; Test gauge reads 27.5 psig. Flow had been fluctuating. Check readings indicate well was at that time flowing at approximately 538 MCFD. There was no indication of any water being produced at this rate.

Barfoot State No. 1 Sec. 32-20N-27E.

Producing into Kerr-McGee System. Well flowing with a well head pressure of 24 psig. Not restricted. Orifice Meter - American L-10-S chart; 50" X 250 psi. range; 4" X 0.50" plate; readings; D-2.5 to 4.0; P-3.7; T-7.2. Test gauge reads 24 psig. Flow had been fluctuating. Check readings indicate well was at that time flowing at a rate between 12.5 and 20 MCFD. The differential pen was sweeping in the range of 2.5 to 4.0 on the chart. This may have been an indication of some fluid being present in the well bore.

204

**OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL OR GAS FROM LEASE**

Federal, State or Indian Lease Number, or lessor's name if fee lease Santa Fe fee & State	Field Navajo Springs	Reservoir Coconino
Survey or Sec-Twp-Rge Navajo Springs Unit	County Apache	State Arizona
Operator Eastern Petroleum Company		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street Box 291	City Carmi	State Illinois
Above named operator authorizes (name of transporter) Kerr-McGee Oil Industries, Inc.		
Transporter's street address Kerr-McGee Building	City Oklahoma City	State Oklahoma
Field address Navajo, Arizona		
Oil, condensate, gas well gas, casinghead gas		
To transport 100	% of the	gas from the Navajo Springs Unit
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer	% transported	Product transported
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change.		
<p align="center">Certificate is to allow for the hookup of an additional well to the Kerr-McGee transmission line. Effective September 7, 1965.</p>		

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

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 27, 1965
 Signature [Signature]
 Date approved: Nov 1, 1965
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: John Bannister
 Permit No. Navajo Springs Unit



STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Operator's Certificate of Compliance & Authorization to Transport Oil or Gas from Lease
 File Two Copies

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1942 EAM 41 000
10410 DUFF 41 000

Prepared By	
Approved By	

FLOW RATES ON WELLS
IN NAVAJO SPRINGS FIELD, APACHE COUNTY, ARIZONA

RATES WITH PRESSURE CLOSE TO 1000

SIP PSIG	WELL NAME	ORIFICE	WELL	2"	HOURS TESTED	VOLUME MCFPD	
		SIZE	TUBING	PROVER			
		2" PROVER	PRESS-PSIG	PRESS - PSIG			
1	106.7 Santa Fe 35	7/16	96.0	91.5	15 1/2	365	1
2	106.7 " " 31	3/16	95.9	95.9	17 1/2	68	2
3	106.6 " " 32	1/8"	105.7	105.7	17 1/2	19	3
4	133.8 " " 21	1/16	59.5	59.5	18 1/2	4	4
5	105.6 " " 13		99.8	92.9	15	900	5
6	105.4 " " 7	1/8"	99.9	99.9	15 1/2	4	6
7	105.4 " " 14	3/8	97.4	97.4	15 1/2	270	7
8	105.5 " " 17	3/16	98.5	98.5	15 3/4	70	8
9	201.5 " " 8		91 + 93	12-13 1/2	18 1/2	7 bbls. salt water/hr.	9
10	105.5 " " 2		Well pulled down 1/2 small vol. water & gas, slightly salty.				10
11						1800 MCFPD	11
12		* Orifice well tester.					12
13							13
14	After Testing		MAXIMUM RATE OF FLOW				14
15	106.6 Santa Fe 35	3/4	80.1	55.1	1 1/2	540	15
16	106.6 " " 31	1/2	76	76	1 1/2	394	16
17	106.5 " " 32	1/2	Well slight pressure kept for hrs			35	17
18	133.9 " " 21		Same as No. 2 above.				18
19	105.6 " " 13		84.1	80.1	h	1800	19
20	105.4 " " 7	1/2	81.9	81.9	2 1/2	28	20
21	105.4 " " 14	7/8	77.6	80.7	3 1/2	700	21
22	105.5 " " 17	7/8	89.7	89.7	2	895	22
23	Not Taken " " 8		8	33	18 1/2	340	23
24	Not Taken " " 2		Same as No. 2 above.				24
25							25
26							26
27							27
28							28
29							29
30							30
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42							42
43							43
44							44

Richard B. Egan
August 13, 1964

Open Flow Test Record

Producers Name Eastern Petroleum Co. Date 10-10-63
 Lease Name Santa Fe Fee No. 11 Time 11:15 am
 Location Sec. 5-19N-27E Apache County, Arizona
 Shut-In Pressure 107.1 psig Unloading Period 10 Min.

Test Point	Time From	Time To	Flow Period	Orifice Size	Prover Press.	Wellhead Pressure	Flow Gas Temp.
1	11:35 am	11:50 am	15 min	2" Pitot Tube	20.2" H2O	88.7 psig	68°
2	11:50 am	12:10 pm	20 min	2" Pitot Tube	5.0" Mercury	66.0 psig	69°
3							

Remarks: It should be noted that a Pitot tube of 2" size was used at this location instead of the 2" orifice well tester.

Small traces of vapor were noted in flow stream of gas during blow down.

Due to probable higher volumes the orifice well tester was sub. ~~EXXIME~~ by the 2" pitot tube in order to lower wellhead pressures.

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INSTRUCTIONS FOR RUNNING AND REPORTING BOTTOM HOLE PRESSURES

This report shall be mailed, in duplicate, not later than the 15th day of the month immediately following the month in which the tests were made. All bottom hole pressure tests reported herein shall be made by a person qualified by both training and experience to make such tests.

1. Oil gradient shall be in pounds per square inch per foot.
2. Water gradient shall be in pounds per square inch per foot.
3. Datum plane shall be in feet plus or minus sea level.
4. Gas gravity shall be determined from an analysis of the casinghead gas.
5. Date Tested—Enter in this column the month and day on which the bottom hole pressure test was made.
6. Shut-In Time—Shall be reported accurately to nearest hour. The well tested shall have produced its normal daily rate of production or allowable within the 24-hour period immediately preceding the time at which it was shut in. (Any deviations shall be certified to on this report)
7. Test Depth—Shall be reported in feet as the lowest point to which the bomb was run and shall be reported in feet plus or minus sea level.
8. Bottom Hole Temperature—Shall be reported in degrees Fahrenheit as determined at test depth by either a recording or maximum reading thermometer.
9. Observed Pressure—Shall be reported as the pressure in pounds per square inch gauge observed at test depth before any necessary temperature correction has been made.
10. Production Test—The oil and water reported shall be from a representative production test immediately preceding the time at which the well was shut in.
11. Fluid Level—The fluid level reported shall be in feet above the datum plane.
12. Fluid Gradient—Shall be in pounds per square inch per foot and shall be representative of both the oil and water gradient where the well produces water as well as oil.
13. Weight of Oil Column shall be in pounds per square inch.
14. Weight of Gas Column shall be in pounds per square inch.
15. Casing Pressure—Shall be reported as the pressure in pounds per square inch gauge.
16. Datum Pressure—
 - (a) In the case of bomb measurements, this pressure shall be the observed pressure after the corrections for reservoir temperature and for the difference between test depth and datum plane have been made.
 - (b) In the case of sonic measurements, this pressure shall be determined from the weight of the fluid column plus the weight of any gas present above the fluid column plus casinghead pressure after proper corrections are made for temperature.

Calibration—The subsurface pressure instrument shall be calibrated against a dead weight tester both prior and subsequent to the dates at which all tests reported hereon are made, and in no case shall this time exceed a period of one month. The prior and subsequent calibrations shall not disagree by more than one per cent (1%). The dead-weight tester used for the calibration shall be approved by the State Land Commissioner.

GeoElectric, Inc.

P. O. Box 842 • AZTEC, NEW MEXICO

STATE

NEW MEXICO
COUNTY OF SANTA FE
CITY OF AZTEC

STATE OF NEW MEXICO

COUNTY OF SANTA FE

NOTARY PUBLIC

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BY: [Illegible]

DATE: [Illegible]

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GeoElectric, Inc.

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OPEN FLOW TEST DATA

Date: 6/20/52
 Operator: EASTERN PETRO. CO. Lease: SANTA FE No. 14
 Location: 5-19-77E County: _____ State: _____
 Formation: _____ Pool: _____
 Casing: _____ " Set @ _____ Tubing: _____ " Set @ _____
 Pay Zone: _____ To: _____ Total Depth: _____
 Choke Size: .750 " PROVEN Choke Constant = C = 12.2025
 Stimulation Method: _____ Flow Through: Casing _____ Tubing _____
 Shut-in Pressure Casing: 102.5 psig / 12 = 183.3 psia (Shut-in _____ days)
 Shut-in Pressure Tubing: _____ psig / 12 = _____ psia
 Flowing Pressure: P : _____ psig / 12 = _____ psia
 Working Pressure: P_w : 71.3 psig / 12 = 83.3 psia
 Temperature: T : 64 °F / 460 = _____ °Absolute
 F_{pv} (from tables) : 1.008 Gravity .900 n .85 API

Choke Volume = Q = C x P_t x F_t x F_g x F_{pv} $\frac{12.2025 \times 83.3 \times .9962 \times .0169 \times 1.008}{12} = 833$ MCF/D

Open Flow - Aof = Q $\frac{833}{1.442} = 578$

Aof = $\frac{833}{1.0153} = 820$

Aof = $\frac{1.442}{15.025 \text{ psia}}$ MCF/D

Tested By: D. H. Stiles
 Witnessed By: _____

Geolantic Inc
131 - [unclear]

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NAVAJO SPRINGS AREA WELLS EASTERN PETROLEUM COMPANY - OPERATOR

PERMIT NUMBER	WELL NAME	LOCATION	TOTAL DEPTH	FORMATION	INTERVAL PERFORATED	COMPLETION DATE	INITIAL POTENTIAL MCFD	12-31-73 CUMULATIVE PROD. (MCF)	DATE OF LAST PROD.	PROD. CSG. DEPTH & SIZE	HOLE SIZE	NO. CEMENT SACKS USED	ESTIMATED TOP OF CEMENT	OPERATORS EST. OF CSG. RECOVERABLE	REMARKS
✓ 110	Crest Santa Fe #2	NE/SW 33-20N-27E	1140 PBD 1105	Coconino	1062-72	6-24-60	12.75		Never Prod.	2 7/8" @ 1105	4 3/4"	50			
✓ 184	Eastern Santa Fe #13	NE/SW 31-20N-27E	980	Coconino	Open Hole	6-25-62	6290	1,400,623		4 1/2" @ 967	6 1/4"	50			Navajo Spring
✓ 204	Crest Santa Fe #7	SE/NE 6-19N-27E	1060	Coconino	1042-52	9-11-62	155		Never Prod.	2 7/8" @ 1060	4 3/4"	25			
✓ 206	Eastern Santa Fe #14	SE/NW 5-19N-27E	1100 1361	Coconino	1026-56	10-16-62	200	47,594	Oct. 1973	4 1/2" @ 1100	5 3/4"	140			
✓ 234*	Ancon Santa Fe Fee #21	SE/NW 31-20N-28E	PBD 1330	Shinarump	1173-94+	9-12-63	3.0	22,005	Sept. 1972	2 7/8" @ 1330	4 3/4"	45	730	1200	East Navajo Spring Shinarump Pool
✓ 236	Santa Fe Fee #17	SW/NW 4-19N-27E	1057	Coconino	1037-57	6-17-63	250	56,945	Dec. 1973	4 1/2" @ 1057	6 1/4"	65			
✓ 235	Kerr-McGee Barfoot #1	NE/SW 32-20N-27E	1087	Coconino	996-1008	7-30-63	1160	225,555		4 1/2" @ 1076	6 3/4"	140			Navajo Spring
✓ 255	Santa Fe Fee #31	NW/SE 29-20N-27E	1049	Coconino	992-1006	10-25-63	590		Never Prod.	2 7/8" @ 1049	4 3/4"	50			Navajo Spring (Remedial work between casing) (work not reported)
✓ 263	Santa Fe Fee #35	NE/SW 27-20N-27E	1072	Coconino	Open Hole	7-11-64	1370	25,421	Oct. 1973	4 1/2" @ 1092	6 1/4"	50			
✓ 348	Keece #1 Fee	SW/NE 1-19N-26E	1067	Coconino	1012-16	3-02-66	250-260 Est.		Never Prod.	2 7/8" @ 1063	4 3/4"	100			
✓ 471	Crest Santa Fe #1	SE/SE 25-20N-27E	1225 PBD 1140 1340	Shinarump	1046-1110	11-20-68	51	24,431	Dec. 1973	4 1/2" @ 1171	6 1/2"	70			Originally in East Navajo Spring Shinarump Pool
✓ 536*	Santa Fe Fee #24	SE/NW 24-20N-27E	PBD 1173	Shinarump	1145-73	9-30-71	Negligible		Never Prod.	2 7/8" @ 1104	4 3/4"	240	Enough cement to circulate	1200	
537*	Santa Fe Fee #21-1A	NW/NW 31-20N-26E	1232	Coconino	Open Hole	9-15-70	470	4,285	Oct. 1972	4 1/2" @ 1215	6 1/4"	100		1075	
560*	Kiya Santa Fe Fee #1	NE/SW 14-20N-25E	1230 PBD 1150	Shinarump	1028-56	12-09-71	No Gas Reported		Never Prod.	4 1/2" @ 1175	6 1/4"	100		1075	
565*	Santa Fe #6X-1	SE/NW 25-20N-25E	1261 PBD 1174	Shinarump	1126-60	1-06-72	No Gas Reported		Never Prod.	4 1/2" @ 1202	6 1/4"	100		1125	
568*	Santa Fe Fee Sanders #2	NE/SW 15-21N-25E	516	Coconino	406-420	4-20-72	TSM		Never Prod.	4 1/2" @ 516	6 1/4"	70	119	1075	
575*	Szar State #1	NW/NW 36-20N-27E	1215	Shinarump	1154-62	4-25-72	Well on Vacuum During Test		Never Prod.	4 1/2" @ 1215	6 1/4"	100	65	1075	East Navajo Spring Shinarump Pool
584*	Santa Fe Fee Dreck #1	SE/SW 25-20N-27E	1266	Shinarump		6-21-72	Not Tested		Never Prod.	4 1/2" @ 1266	6 3/4"	50	Circulated Surface	None	Remedial work reported 11/72
592*	Indian Allotted Merde #1	SE/SW 30-20N-25E	1200	Shinarump	1062-93	8-17-72	156	991	Oct. 1972	4 1/2" @ 1202	6 1/4"	100	Bottom 720**	1065	Hole in casing
596*	Indian Allotted Merde #2	SE/SE 30-20N-25E	13-2 PBD 1215	Shinarump	Completion Report Never Submitted				Never Prod.	2 7/8" @ 1197***	4 3/4"	No Report		1125	This well plugged between 11/72 and 1/73
599*	Kiya Santa Fe Fee #2	NE/SW 24-20N-25E	1230	Coconino	1155-1215	11-12-72	TSM		Never Prod.	4 1/2" @ 1215	6 1/4"	60	127	1075	
600*	Santa Fe Fee Beacon #1	NW/SE 29-20N-29E	1265	Coconino	No Perfs. Reported	2-25-72	No Test Reported		Never Prod.	4 1/2" @ 1265	6 1/4"	55	815	1125	
601*	Santa Fe Fee #1-11	NE/SE 11-20N-25E	1075	Coconino	Open Hole	11-10-72	TSM		Never Prod.	4 1/2" @ 1055	6 1/4"	65	710	1065	

Application to Plug have been approved.
 Cement bond log indicates bottom of cement at 726'
 From Application to Plug

NAVAJO SPRINGS AREA WELLS EASTERN PETROLEUM COMPANY - OPERATOR

TOTAL DEPTH	FORMATION	INTERVAL PERFORATED	COMPLETION DATE	INITIAL POTENTIAL MCFD	12-31-73 CUMULATIVE PROD. (MCF)	DATE OF LAST PROD.	PROD. CSG. DEPTH & SIZE	HOLE SIZE	NO. CEMENT SACKS USED	ESTIMATED TOP OF CEMENT	OPERATORS EST. OF CSG. RECOVERABLE	REMARKS
1140	PBTD 1105	Coconino	1062-72	6-24-60	12.75	Never Prod.	2 7/8" @ 1107	4 3/4"	50			
980	Coconino	Open Hole	6-25-62	6290	1,400,623		4 1/2" @ 967	6 1/8"	50			Navajo Springs Unit
1060	Coconino	1042-52	9-11-62	155	Never Prod.		2 7/8" @ 1060	4 3/4"	25			
1100 1361	Coconino	1026-56	10-16-62	300	47,594	Oct. 1973	4 1/2" @ 1100	6 3/4"	100			East Navajo Springs Shinarump Pool
PBTD 1330	Shinarump	1173-94+	9-13-63	3.0	22,005	Sept. 1972	2 7/8" @ 1330	4 3/4"	85	730	1300	
1057	Coconino	1037-57	6-17-63	250	56,945	Dec. 1973	4 1/2" @ 1057	6 1/4"	65			
1057	Coconino	986-1005	7-30-63	1160	225,555		4 1/2" @ 1076	6 3/4"	140			Navajo Springs Unit
1049	Coconino	992-1006	10-25-63	590	Never Prod.		2 7/8" @ 1049	4 3/4"	90			(Remedial work on this well between comp. date & test date) (work not reported.)
1133	Coconino	1090-1100	11-24-63	9-	Never Prod.		2 7/8" @ 1133	6 1/4"	75			
1072	Coconino	Open Hole	5-11-64	1370	27,421	Oct. 1971	4 1/2" @ 1062	6 1/4"	65			
1067 1225	Coconino	1012-16	3-02-66	250-260 Est.	Never Prod.		2 7/8" @ 1053	4 3/4"	100			
PBTD 1140 1340	Shinarump	1044-1110	11-20-65	51	33,481	Dec. 1973	4 1/2" @ 1171	6 1/8"	70			Originally completed in Coconino
PBTD 1173	Shinarump	1145-73	9-30-71	Negligible	Never Prod.		2 7/8" @ 1103	4 3/4"	220	Enough cement to circulate	1290	Fast Navajo Springs Shinarump Pool
1232	Coconino	Open Hole	9-15-70	470	5,299	Oct. 1972	4 1/2" @ 1215	6 1/4"	100	650	1075	
1230 PBTD 1150 1261	Shinarump	1040-56	12-06-71	No Gas Reported	Never Prod.		4 1/2" @ 1150	6 1/4"	100	650	1045	
PBTD 1174	Shinarump	1126-60	1-06-72	No Gas Reported	Never Prod.		4 1/2" @ 1263	6 1/4"	100	730	1125	
516	Coconino	406-420	4-20-72	TSM	Never Prod.		4 1/2" @ 516	6 1/4"	75	116	410	
1215	Shinarump	1154-62	4-25-72	Well On Vacuum During Test	Never Prod.		4 1/2" @ 1215	6 1/4"	100	65	1075	East Navajo Springs Shinarump Pool
1266	Shinarump		6-21-72	Not Tested	Never Prod.		7" @ 255	5 3/4"?	65	Circulated Surface	None	This well erroneously reported plugged.
1200	Shinarump	1062-93	5-17-72	156	591	Oct. 1972	4 1/2" @ 1200	6 1/4"	100	Bottom 726**	1060	Hole in case @ 730'
13-3 PBTD 1215	Shinarump	Completion Report	Never Submitted		Never Prod.		2 7/8" @ 1197***	4 3/4"	No Report		1154	This well flowing water between csg. & tbs.
1220	Coconino	1135-1215	11-12-72	TSM	Never Prod.		4 1/2" @ 1215	6 1/8"	60	577	1072	
1265	Coconino	No Perfs. Reported	2-25-72	No Test Reported	Never Prod.		4 1/2" @ 1265	6 1/8"	25	815	1125	
1075	Coconino	Open Hole	11-10-72	TSM	Never Prod.		4 1/2" @ 1055	6 1/8"	65	710	1005	

SE NW SEC. 5-19N-27E APACHE COUNTY



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 10/15/62
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CORE LABORATORIES, INC.
 Petroleum Reservoir Engineering
 DALLAS, TEXAS

Page No. 1

CORE ANALYSIS RESULTS

Company: EASTERN PETROLEUM Formation: GOCONINO File: RF-3-1685
 Well: SANTA FE # 11 Core Type: DIAMOND CONV. Date Report: 10/15/62
 Field: PINTA DOME AREA Drilling Fluid: WATER BASE MUD Analysts: DEPPE
 County: APACHE State: ARIZONA Elev: 5801 GR Location: SEC 5 T19N R27E

Lithological Abbreviations

SAND-SD SHALE-SH LIME-LM	COLOMITE-DOL CHERT-CH GYPSUM-GYP	ANHYDRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SAND-SND SHALE-SHY LIME-LMY	FINE-FN MEDIUM-MED COARSE-CSE	CRYSTALLINE-LLN GRANULAR-GRN GRANULAR-GRN	BROWN-BRN GRAY-GY VUGGY-VGY	FRACTURED-FRAC LAMINATION-LAM STYLOLITIC-STY	SLIGHTLY-SL VERY-VY WITHIN-W
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		HORIZ.	VERT.		OIL	TOTAL WATER	
1	1029-30	0.05		13.2	0.0	72.6	SANDSTONE
2	1030-31	56		12.8	0.0	63.4	SANDSTONE VERTICAL FRACTURE
3	1031-32	383		17.6	0.0	63.1	SANDSTONE VERTICAL FRACTURE
4	1032-33	210		15.9	0.0	59.7	SANDSTONE VERTICAL FRACTURE
5	1033-34	247		12.8	0.0	54.0	SANDSTONE VERTICAL FRACTURE
6	1034-35	182		13.6	0.0	47.0	SANDSTONE VERTICAL FRACTURE
7	1035-36	592		17.3	0.0	49.6	SANDSTONE VERTICAL FRACTURE
8	1036-37	82		12.2	0.0	46.6	SANDSTONE VERTICAL FRACTURE
9	1037-38	207		14.4	0.0	39.6	SANDSTONE VERTICAL FRACTURE
10	1038-39	396		11.2	0.0	34.7	SANDSTONE VERTICAL FRACTURE
11	1039-40	99		12.1	0.0	37.2	SANDSTONE
12	1040-41	31		6.7	0.0	71.9	SANDSTONE
13	1041-42	14		5.9	0.0	66.1	SANDSTONE
14	1042-43	43		9.6	0.0	35.4	SANDSTONE
15	1043-44	194		14.8	0.0	58.7	SANDSTONE
16	1044-45	232		14.7	0.0	54.4	SANDSTONE
17	1045-46	589		14.9	0.0	51.0	SANDSTONE
18	1046-47	405		15.0	0.0	49.2	SANDSTONE
19	1047-48	59		13.9	0.0	46.7	SANDSTONE
20	1048-49	326		12.7	0.0	37.8	SANDSTONE
21	1049-50	188		12.6	0.0	37.3	SANDSTONE
22	1050-51	0.46		10.2	0.0	57.7	SANDSTONE
23	1051-52	25		9.6	0.0	50.0	SANDSTONE
24	1052-53	114		10.9	0.0	45.7	SANDSTONE
25	1053-54	31		8.2	0.0	87.9	SANDSTONE
26	1054-55	111		13.0	0.0	50.0	SANDSTONE
27	1055-56	6.3		13.0	0.0	57.5	SANDSTONE
28	1056-57	37		14.1	0.0	47.5	SANDSTONE
29	1057-58	99		15.0	0.0	46.5	SANDSTONE
30	1058-59	137		14.5	0.0	50.4	SANDSTONE
31	1059-60	163		18.2	0.0	53.7	SANDSTONE
32	1060-61	108	40	14.5	0.0	87.6	SANDSTONE
33	1061-62	140	85	14.6	0.0	65.6	SANDSTONE
34	1062-63	26	16	15.8	0.0	67.6	SANDSTONE
35	1063-64	263	88	19.8	0.0	63.3	SANDSTONE
36	1064-65	163	36	17.9	0.0	58.6	SANDSTONE
37	1065-66	188	17	18.1	0.0	62.5	SANDSTONE
38	1066-67	188	117	16.2	0.0	63.0	SANDSTONE
39	1067-68	756	223	17.8	0.0	58.5	SANDSTONE
40	1068-69	260	29	17.4	0.0	66.2	SANDSTONE
41	1069-70	194	213	16.8	0.0	55.9	SANDSTONE

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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. full errors and omissions excepted. Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representation as to the productivity, permeability or porosity of any oil, gas or other mineral well or land in connection with which such report is used or relied upon.

CORE ANALYSIS RESULTS

Company: EASTERN PETROLEUM Formation: COCONINO File: RP-3-1685
Well: SANTA FE # 14 Core Type: DIAMOND COL V. Date Report: 10/15/62
Field: PINTA DOME AREA Drilling Fluid: WATER BASE MUD Analyst: DEPPE
County: APACHE State: ARIZONA Elev: 5801 GR Location: SEC 5 T13N R27E

Lithological Abbreviations

SANDY SH SHALE-SH LIME-LM	DOLOMITE-DOL CHERT-CH GYPSUM-GYP	ANHYDRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SANDY SILT SHALY SILT SILT-LMY	LIME FN MEDIUM MED SANDY CSE	CRYSTALLINE LK SILT-SH GRANULAR-GRAN	BEGAN BRN GRAY-GY YUGGY-LGY	FRACTURED FRAC LAMINATION-LAM STYLOLITHIC-STY	SLIGHTLY SILT VERT V WITH W
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARREYS		POROSITY PERCENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		VERT	HORIZ		OIL	TOTAL WATER	
42	1070-71	253	54	11.3	0.0	55.6	SANDSTONE
43	1071-72	210	157	18.7	0.0	66.4	SANDSTONE
44	1072-73	244	77	17.8	0.0	91.7	SANDSTONE
45	1073-74	315	3.7	21.6	0.0	69.0	SANDSTONE
46	1074-75	188		19.7	0.0	92.0	SANDSTONE
47	1075-76	315		17.8	0.0	89.4	SANDSTONE
48	1076-77	219		17.4	0.0	96.5	SANDSTONE
49	1077-78	149		17.3	0.0	94.3	SANDSTONE
50	1078-79	182		12.8	0.0	88.4	SANDSTONE
51	1080-81	247		23.0	0.0	94.1	SANDSTONE
52	1081-82	160		10.0	0.0	94.0	SANDSTONE
53	1082-83	232		13.1	0.0	97.2	SANDSTONE
54	1083-84	346		12.0	0.0	95.0	SANDSTONE
55	1084-85	225		14.3	0.0	89.4	SANDSTONE
56	1085-86	210		12.2	0.0	92.6	SANDSTONE
57	1086-87	114		14.4	0.0	89.6	SANDSTONE
58	1087-88	167		12.5	0.0	90.5	SANDSTONE
59	1088-89	97		13.4	0.0	91.9	SANDSTONE
60	1089-90	37		14.4	0.0	94.5	SANDSTONE
61	1090-91	88		15.1	0.0	92.1	SANDSTONE
62	1091-92	51		15.0	0.0	87.8	SANDSTONE
63	1092-93	108		16.5	0.0	90.4	SANDSTONE
64	1093-94	185		16.0	0.0	91.5	SANDSTONE
65	1094-95	125		15.9	0.0	91.2	SANDSTONE
66	1095-96	125		17.5	0.0	92.1	SANDSTONE
67	1096-97	746		18.6	0.0	88.6	SANDSTONE
68	1097-98	140		18.8	0.0	89.4	SANDSTONE
69	1098-99	64		12.1	0.0	96.0	SANDSTONE
70	1099-1100	109		12.2	0.0	91.0	SANDSTONE

Service No. 8 No interpretation of results.

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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.

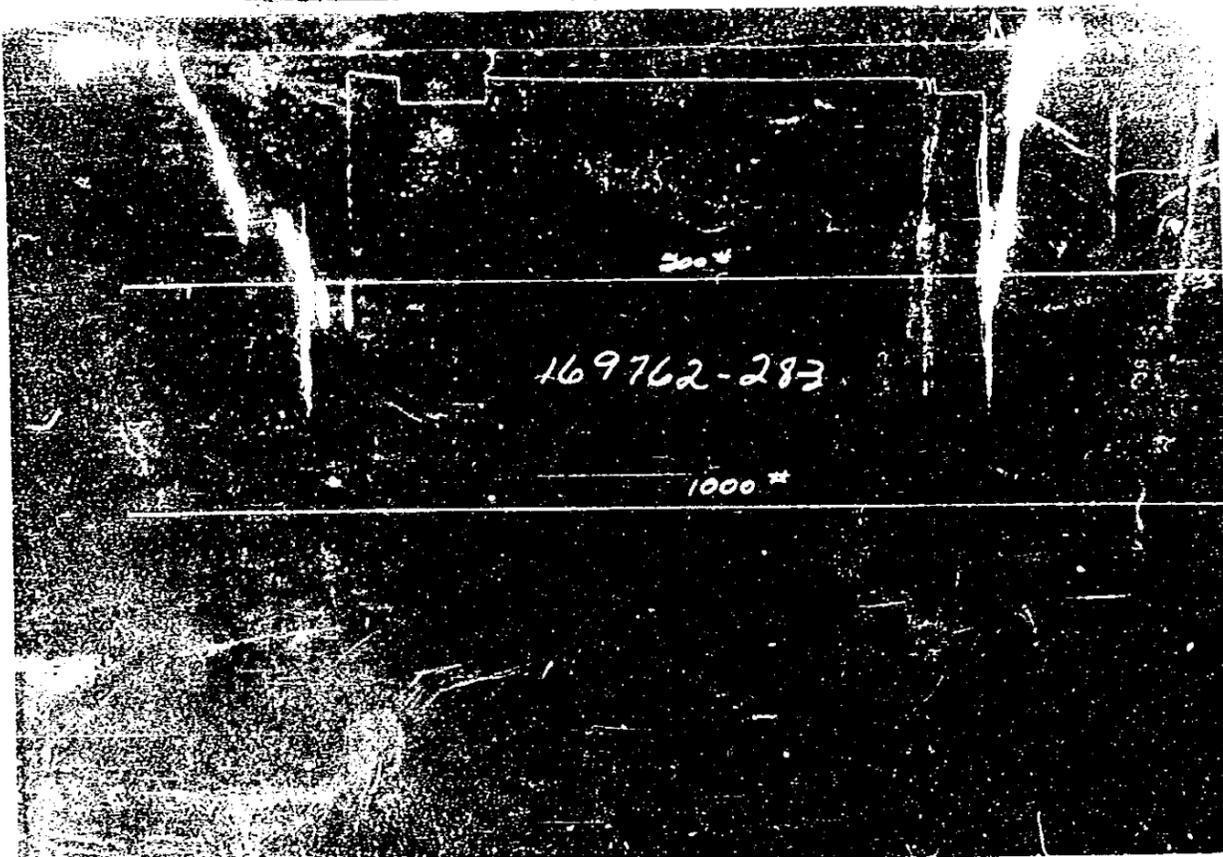
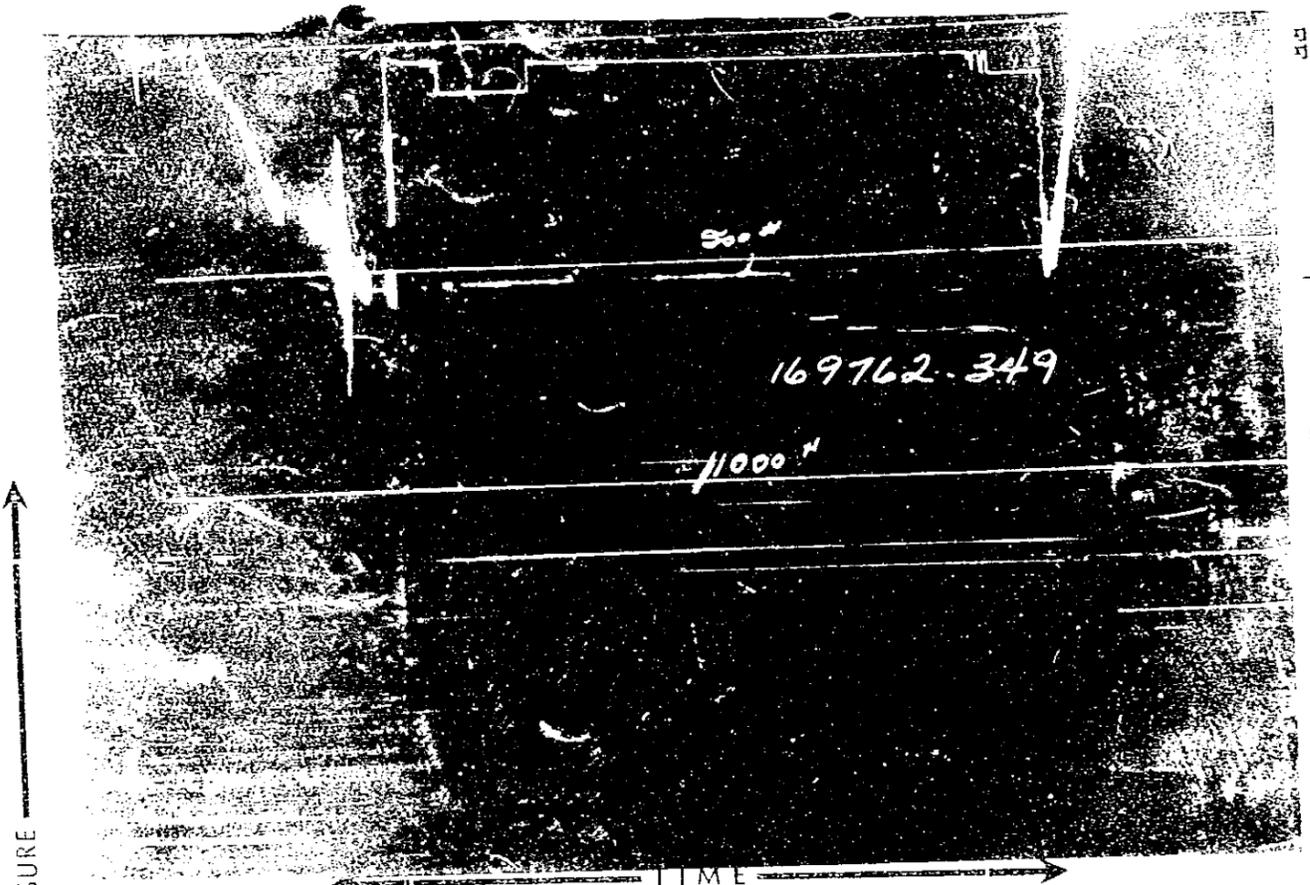
Flow Time	1st 31 Min.	2nd 40 mins.	4 hr. 30 Min.	Date	10-14-62	Ticket Number	169762 S
Closed In Press. Time	60	25		Kind of Job	OPEN HOLE	Halliburton District	FARMINGTON
Pressure Readings	Field	Office Corrected		Tester	PHILLIPS BRYAN	Witness	BLANTON
Depth Top Gauge	991 Ft.	Yes	Blanked Off	Drilling Contractor	SCOTT BROS.		
BT. P.R.D. No.	349	12	Hour Clock	Elevation	-	Top Packer	1025'
Initial Hydro Mud Pressure	590	539		Total Depth	1060'	Bottom Packer	-
Initial Closed in Pres.	110	111		Interval Tested	1025-1060'	Formation Tested	Cocoino
Initial Flow Pres.	32 41	1 2	34 42	Casing or Hole Size	6 1/2"	Casing Perfs.	Top Bot.
Final Flow Pres.	42 60	1 2	38 62	Surface Choke	1" - 1 1/4"	Bottom Choke	
Final Closed in Pres.	110	110		Size & Kind Drill Pipe	2 1/2" EUE	Drill Collars Above Tester	
Final Hydro Mud Pressure	522	528		Mud Weight	9.8	Mud Viscosity	48
Depth Cen. Gauge	1055 Ft.	-	Blanked Off	Temperature	100	Anchor Size & Length	ID 2 OD 3 1/2" X 35
BT. P.R.D. No.	283	12	Hour Clock	Depths Meas. From	Table	Depth of Tester Valve	1002 Ft.
Initial Hydro Mud Pres.	565	554		Cushion		Depth Back Pres. Valve	
Initial Closed in Pres.	110	111		Recovered	Feet of		
Initial Flow Pres.	42 48	1 2	47 53	Recovered	Feet of		
Final Flow Pres.	52 73	1 2	57 75	Recovered	Feet of		
Final Closed in Pres.	110	106		Recovered	Feet of		
Final Hydro Mud Pres.	535	550		Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge			Blanked Off	Gas Gravity		Surface Pressure	psi
BT. P.R.D. No.			Hour Clock	Tool Opened	9:59 AM	A.M. P.M.	Tool Closed 4:10 PM A.M. P.M.
Initial Hydro Mud Pres.				Remarks	Open at 10:30-1" choke, 90.88 MCF gas 14" water		
Initial Closed in Pres.					10 min. 50	171.1	
Initial Flow Pres.		1			16 min. 60	187.1	
Final Flow Pres.		2			21 min. 70	202.1	
Final Flow Pres.		1			28 min. 80	216.2	Closed in.
Final Closed in Pres.		2			Open 11:30 AM 1 1/4" choke		
Final Hydro Mud Pres.					40	259.9	MCF
					11:42 - 50	290.8	
					12:00 70	344.3	
					4:10 75	356.0	

Legal Location Sec. - Twp. - Rng. 5 19N 27E
 Lease Name SANTA FE
 Well No. 14
 Test No. 1
 Field Area NAVAJO
 Country APACHE
 State ARIZONA
 Eastern Petroleum Company
 Navajo District

FORMATION TEST DATA

Gauge No. 349		Depth 991			Clock 12 hour		Ticket No. 169762		
First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure		
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
P ₀	.000 34	.000		38	.000	42	.0 00		62
P ₁	.210 38	.378		111	1.915	62	.210		110
P ₂									
P ₃									
P ₄									
P ₅									
P ₆									
P ₇									
P ₈									
P ₉									
P ₁₀									
Gauge No. 283		Depth 1056			Clock 12 hour				
P ₀	.000 47	.000		57	.000	53	.000		75
P ₁	.210 57	.371		111	1.882	75	.210		106
P ₂									
P ₃									
P ₄									
P ₅									
P ₆									
P ₇									
P ₈									
P ₉									
P ₁₀									
Reading Interval									Minutes
REMARKS:									

SPECIAL PRESSURE DATA



5

INSTRUMENTS

QUANTITY



206

SF #14
5-19-77

1
Hank
Copies of tests
entered
SF #14
Special
Program



Your.....

Formation Testing Service Report





EASTERN PETROLEUM CO. #14
SANTA FE NW/4 Sec. 5-T19N-R27E
Completing now as a Coconino
sand helium well. Navajo Springs
Field, Apache County, 5 miles
SE Navajo. 10-1962

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APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL DEEPEN PLUG BACK

NAME OF COMPANY OR OPERATOR _____ DATE August 10, 1962

Eastern Petroleum Company, Box 291, Carmi _____ Illinois
Address City State

DESCRIPTION OF WELL AND LEASE

Name of lease Well number Elevation (ground)
Fu Santa Fe 14 5801

Well location (give footage from section lines) Section—township—range or block & survey
1650' S of NL; 1650' E of W1 5-19N-27E

Field & reservoir (If wildcat, so state) County
Navajo Springs Apache

Distance, in miles, and direction from nearest town or post office
5 Miles SE of Navajo

Nearest distance from proposed location to property or lease line: 1650 feet
Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: Approx. 5280 feet

Proposed depth: 1000' Rotary or cable tools Rotary Approx. date work will start August 16, 1962

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

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

Status of bond
Blanket

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

* Fill in Proposed Casing Program on other side

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the 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.

August 10, 1962 Date

Signature

Permit Number: 206
Approval Date: 8-14-62
Approved By: [Signature]

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

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION

Application to Drill, Deepen or Plug Back

Form No. P-1 File two copies

Effective 1-1-62

INSTRUCTIONS

READ CAREFULLY AND COMPLY FULLY

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

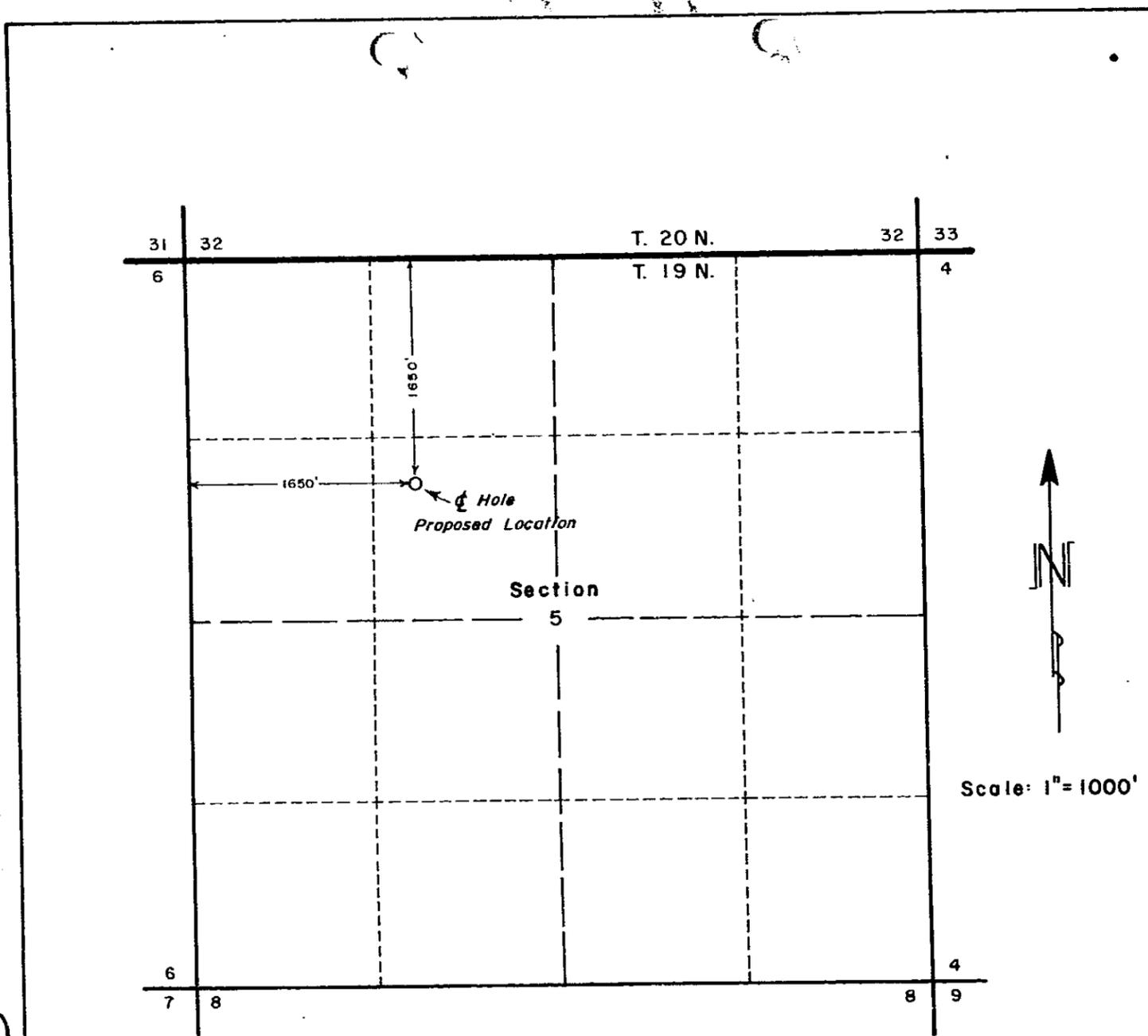
In event plat is filed for the purpose of designating the drilling and producing unit, or proration unit, on which the proposed well is to be drilled, the boundaries of such unit shall be shown, also the boundaries of all other such units attributed to other wells on the same lease completed in or drilling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

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

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

PROPOSED CASING PROGRAM

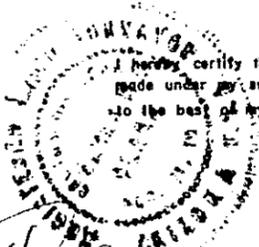
Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
8 5/8"		H.40		90'	90'	50



WELL LOCATION: Eastern Petroleum - Santa Fe # 14

Located 1650 feet South of the North line and 1650 feet East of the West line of Section 5,
 Township 19 North, Range 27 East, Gila & Salt River Meridian.
 Apache Co., Arizona

G.L. 5801



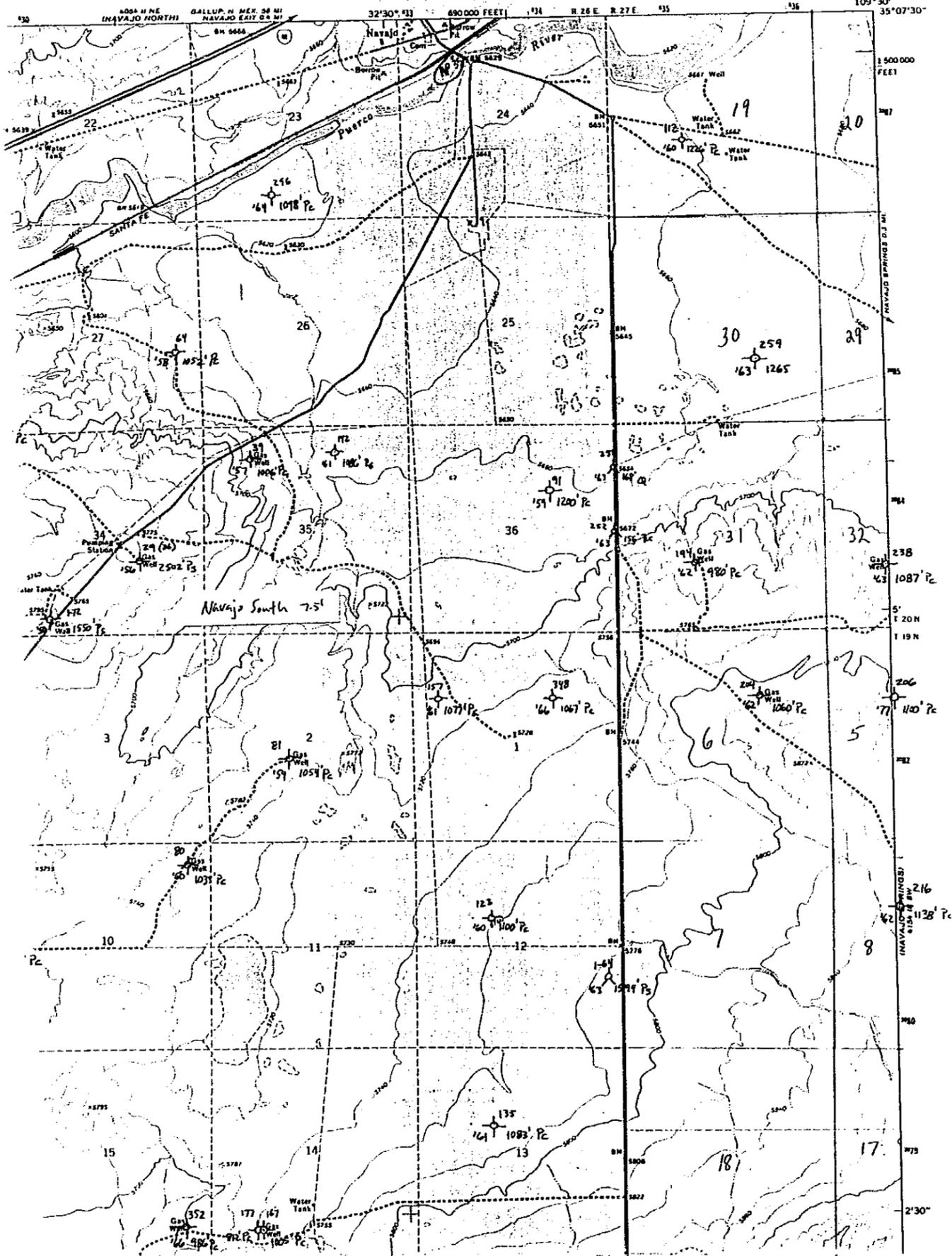
I hereby certify the above plat represents a survey made under my supervision and that it is accurate to the best of my knowledge and belief.

Elmer M. Clark

ELMER M. CLARK
 Registered Land Surveyor
 State of Arizona # 4973

EASTERN PETROLEUM	
WELL LOCATION PLAT Sec. 5, T. 19 N., R. 27 E. Apache Co., Arizona	
E.M. CLARK & ASSOC. Durango, Colorado	DATE: July 23, 1962 FILE NO: 62053

NAVAJO SOUTH QUADRANGLE
ARIZONA-APACHE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)





OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
1645 WEST JEFFERSON, SUITE 420
PHOENIX, ARIZONA 85007
PHONE: (602) 271-5161

June 26, 1978

United States Fidelity and
Guaranty Company
Surety Department
Foster and Messick, Managers
456 N. Meridian Street
Indianapolis, Indiana 46204

Re: Eastern Petroleum Company, Carmi, Illinois
Bond No. 27716 13 3983 65; \$25,000

Gentlemen:

Eastern Petroleum Company has complied with the rules and regulations of the Oil and Gas Conservation Commission of the State of Arizona.

This letter is to authorize your release of Eastern Petroleum Company's above referenced bond.

Very truly yours,


W. E. Allen
Director
Enforcement Section

WEA/vb

cc - Mr. Henry Fullop

LIABILITY UNDER THIS BOND MAY NOT
BE TERMINATED WITHOUT WRITTEN
PERMISSION OF THIS COMMISSION.

KNOW ALL MEN BY THESE PRESENTS

BOND SERIAL NO: 27716-13
3953-65

That we: EASTERN PETROLEUM COMPANY

of the County of: White in the State of: Illinois

as principal, UNITED STATES FIDELITY AND GUARANTY COMPANY
and

of Baltimore, Maryland
AUTHORIZED TO DO BUSINESS WITHIN the State of Arizona.

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

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

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

CANCELLED

DATE 6-26-78

NOW, THEREFORE, if the above bounden principal shall comply with all of the provisions of the laws of this State and the rules, regulations and orders of the Oil and Gas Conservation 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 & Gas Conservation Commission all notices and records required by said Commission, in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, then this obligation is void; otherwise, the same shall be and remain in full force and effect.

Penal sum of TWENTY FIVE THOUSAND AND NO/100 DOLLARS (\$25,000.00)

ATTORNEY-IN-FACT AFFIDAVIT

STATE OR COMMONWEALTH OF Indiana
COUNTY OR CITY OF Marion } ss:

Before me, a Notary Public, personally came Gary R. Peterson known to me, and known to be the Attorney-in-Fact of United States Fidelity and Guaranty Company, a Maryland Corporation, which executed the attached bond as surety, who deposed and said that his signature and the corporate seal of said United States Fidelity and Guaranty Company were affixed by order and authority of said Company's Board of Directors, and that the execution of the attached bond is the free act and deed of United States Fidelity and Guaranty Company.

Given under my hand and seal this 2nd day of November, 1965

DONALD RAY FOWLER
My commission expires May 4, 1969

Donald R. Fowler
Notary Public.

My Commission expires _____

Jud. 876 (9-57)

By: Gordon L. Gannister

Form No. 2

File Two Copies

Permit No. _____

Operator Eastern Petroleum Co.

Bond Company U.S. F & G Co Amount \$25,000

Bond No. ~~not shown~~ Date Approved 11-12-65

27716-13-3983-65

Permits covered by this bond:

48	348 shut-in	584
80 producing	365	586
88 producing	366 Not Drilled	587
107	464	592
108	504	594
109	505	595
150	523	596
152	536	599
155 - repaired 01/5/61	537	600
188	R-2/3	601
194 producing	547	
206 shut-in	561	
209	560	
218	565	
236 shut-in	567	
237	568	
239	569	
240	570	
234	576	
237	577	
268		
284		
276		
250		
282		
255 shut-in		
258 shut-in		
259		
273		
263 shut-in Prod		
264		
257		
284		
207		
207		
251		
252		
269		
81 producing		
289		
296		

CANCELLED

DATE 12-26-78



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

8686 NORTH CENTRAL, SUITE 106
PHOENIX, ARIZONA 85020

PHONE: (602) 271-5161

April 19, 1977

Mr. Warren E. Richardson
Kerr-McGee Corporation
Kerr-McGee Center
Oklahoma City, Oklahoma 73125

Dr. C. F. Swain
Crest Oil Company
Box 57
Alton, Illinois 62002

Mr. J. F. Schlafly
Crest Oil Company
Box 57
Alton, Illinois 62002

Re: Navajo Springs Unit, Apache County, Arizona

Gentlemen:

You are aware that Kerr-McGee Corporation suspended operations on their helium extraction plant located at Navajo, Arizona in February, 1976. This plant was supplied with raw helium from wells in the Pinta Dome Unit and also from two wells in the Navajo Springs Unit, namely: Eastern Petroleum Company's Santa Fe No. 13 located in the NE/4 SW/4 Section 31, T20N, R27E, and Kerr-McGee Barfoot No. 1 located in the NE/4 SW/4 Section 32, T20N, R27E.

Not only has Kerr-McGee Corporation suspended operations of its extraction plant, it has recently plugged all the remaining wells in the Pinta Dome Unit.

Records of the Oil and Gas Commission indicate there are ten wells in the Navajo Springs Unit that are classified as shut in helium wells. Only a few of these wells ever produced or were ever connected to the Kerr-McGee plant or the plant formerly operated by Western Helium.

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Mr. Warren E. Richardson
Dr. C. F. Swain
Mr. J. F. Schlafly
April 19, 1977
Page 2

In order to protect the fresh water zones in this area from any possibility of contamination and because there is no market now or in the foreseeable future for any raw helium gas that may remain within the Navajo Springs Unit, Coconino Formation, it is the opinion of this Commission that all remaining unplugged wells in this unit be properly plugged and abandoned.

Mr. Henry Fullop with Eastern Petroleum Company, the operator of the Navajo Springs Unit, has been advised of the Commission's position on this matter. He was first notified by letter and, more recently, by long distance telephone. A response to the letter was never received. Mr. Fullop did indicate by telephone that, at the present time, it would pose a severe financial strain on him to plug these wells.

Unless the Commission can receive some positive assurance within 60 days from the date of this letter that the remaining shut in wells in the Navajo Springs Unit will be properly plugged and abandoned, the Commission will find it necessary to request the bonding company to fulfill their obligations and plug the subject wells.

This letter is addressed to you only for the purpose of acquainting you, as working interest owners in the unit, with the situation as it presently exists and also to inform you of the Commission's position.

Very truly yours,



William E. Allen
Director
Enforcement Section

WEA/vb

cc - Mr. Henry Fullop
Eastern Petroleum Company



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

TELEPHONE 218-282-4104 • P.O. BOX 391 • CARMEL ILLINOIS 62832

September 10, 1974

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

Re: Navajo Springs Unit

Dear Mr. Allen:

Your letter of September 9 requested that we submit Form 9 for two wells, Crest-Santa Fe #2, Sec. 33-20N-27E and Kiva #1, Sec. 13-20N-28E.

iiC 560
Yesterday in your office I pencilled in an application for Kiva #1.

Crest #2 is in the Navajo Springs Unit along with these shut-in wells:

Santa Fe #14	-	Section 5-19-27	200
Santa Fe #17	-	Section 4-19-27	236
Crest #7	-	Section 6-19-27	204
Santa Fe #31	-	Section 29-20-27	255
Santa Fe #32	-	Section 28-20-27	258
Santa Fe #35	-	Section 27-20-27	263

As Unit Operator we feel it our obligation to seek approval of the various unit owners before proceeding to plug. You will recall that Nos. 14, 17 and 35 produced about 154,000 MCF before Western Helium Corporation shut down. The best well is #17. At this time it is not known whether Kerr would want to produce it.

I am notifying the several owners today of the Commission's request.

Yours very truly,

EASTERN PETROLEUM COMPANY

J. N. Edwards
J. N. Edwards

JNE:sjn

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

RECEIVED

SEP 18 1974

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EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

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

September 10, 1974

Kerr-McGee Corporation ✓
Kerr-McGee Center
Oklahoma City, Oklahoma 73102
Attn: John Fisher

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

Re: Navajo Springs Unit
Shut-in Wells

Gentlemen:

There are seven shut-in wells in the Unit; Eastern-Santa Fe Nos. 14, 17, 31, 32 and 35 and Crest-Santa Fe Nos. 2 and 7.

We have been advised by the Oil & Gas Conservation Commission that unless these wells are activated and produced the Commission will of necessity order all wells plugged and abandoned. The Commission is pressing this issue very hard. The best well, No. 17, produced around 70,000 MCF in 1972 and 1973.

On August 15 we notified the Commission that it was possible these wells may be required to sustain the normal take in the future. However, if arrangements are not made to produce it is our opinion that we will be forced to plug them.

Before proceeding further with the Commission we need to know your decision. Please give us your views or decision within seven days of receipt of this letter.

Yours very truly,

EASTERN PETROLEUM COMPANY
Unit Operator


Henry Fullóp

HF:sjn

20/6

RECEIVED

SEP 12 1974

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

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

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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

206



OFFICE OF
Oil and Gas Conservation Commission

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

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

234
471
537
238
194
206
236
263

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, Sundry 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, Carai, Illinois

206

March 10, 1971

Dr. C. F. Swain
Crest Oil Company
P. O. Box 57
Alton, Illinois 62002

Monthly Producer's Report

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

Eastern #17 Santa Fe
SW/4 NW/4 Sec. 4-T19N-R27E
Apache County
Our File #206

Eastern #35 Santa Fe Fee
NW/4 SW/4 Sec. 27-T20N-R27E
Apache County
Our File #263

Dear Dr. Swain:

Thank you for your letter of March 5, 1971, which has cleared up the misunderstanding that I had regarding production from the above referenced wells.

Since Eastern is the designated operator for the Navajo Springs Coconino Gas Unit, it will not be necessary for you to submit a Monthly Producer's Report.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA:jd

206

C.F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618 462-5346

RECEIVED

MAR 09 1971

O & G CONS. COMM.

March 5, 1971

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

Re: Navajo Springs Unit Wells #14, 17 & 35
Santa Fe, Apache Co., Ariz, Monthly
Producers Report

Dear Mr. Allen:

Please refer to your letter written to me dated March 2, 1971 in which you are confused because of the footnote on Crest's Monthly Producers Report; I will try to clarify.

Unit Wells captioned are the wells designated by Eastern Petroleum Company, Unit Operator, from which the Crest-Schlaflly percentage of ownership of the Unit gas is taken and sold to Western Helium Corporation. Thus all the gas produced from these wells belongs to Crest & Schlaflly, and likewise all the gas purchased from these wells is purchased by Western Helium Corporation to the account of Crest and Schlaflly. Thus the Crest Monthly Producer Report and the Eastern report will be identical. Likewise the Purchase report by Western Helium Corporation will show an identical quantity purchased as that shown by Crest and Eastern as produced and sold.

This is why I wrote you earlier about the necessity for Crest to file the Form (Monthly Producers Report), as it is simply a duplication of the Eastern Petroleum report and the Western Helium report.

If you think it necessary for Crest as an Operator to continue filing the report, I will be glad to do so, but will eliminate the confusing footnote. Please advise if further information is needed, and if we should continue to report.

Sincerely yours,

C. F. Swain
C. F. Swain
Crest Oil Company

Copy: Eastern Petroleum
Carmi, Ill.

206

March 2, 1971

Dr. C. F. Swain
Crest Oil Company
P. O. Box 57
Alton, Illinois 62002

Monthly Producer's Report

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

Eastern #17 Santa Fe
SW/4 NW/4 Sec. 4-T19N-R27E
Apache County
Our File #236

Eastern #35 Santa Fe Fee
NE/4 SW/4 Sec. 27-T20N-R27E
Apache County
Our File #263

Dear Dr. Swain:

Your footnote on the above referenced Monthly Producer's Report leaves us a little confused. You state that the production shown represents the Crest-Schlaflly percentage of Unit production plus a portion of the "back gas" due them. This indicates to us that the 4,941 MCF that you report as produced is only your percentage of the actual production from these wells. Eastern Petroleum on their Monthly Producer's Report indicates the same amount of production from the three wells as does your report. Western Helium's Gas Purchaser's Monthly Report indicates that they purchased a total of 4,941 MCF gas from the above three wells.

It would be appreciated if you would clarify this situation for us.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA:jd

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OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7th AVE.
PHOENIX, AZ. 85013

Phoenix, Arizona 85007

PHONE: 271-5161

234
537
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

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EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

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

November 30, 1970

W.A.

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

234
206
537

JNE:jsh

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

RECEIVED
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



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

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

14
Santa Fe

October 16, 1970

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

Attention: Mr. John Bannister
Executive Secretary

Dear John:

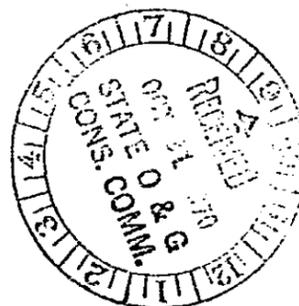
Enclosed please find the Engineering Report which I promised you.

Best regards,

EASTERN PETROLEUM CO.
By: Henry Fullop

HF:jsh

Enclosure



206

206

X-Chrono
X-Sambert
X-Navajo Springs
See Sambert log
for all X's

June 5, 1969

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

Re: Navajo Springs Unit Wells

Dear Mr. Edwards:

This letter constitutes permission from this Commission to suspend the annual testing for the captioned wells as provided by Rule 401 during June, 1969.

Sincerely,

John Bannister
Executive Secretary

JAL:jf

cc: Mr. Henry Fullop, Eastern Petroleum Company



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

TELEPHONE 26 2100 • P. O. BOX 191 • CARBON, ILLINOIS

X-Navajo Springs

*See Lambert Log
6-5-69 for all*

June 3, 1969

X's

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

Re: Capacity Tests of Gas Wells

Dear Mr. Bannister:

Reference is made to Mr. Lambert's letter of May 22 relative to annual testing of gas wells under Rule 401.

You will recall that last year this requirement was waived for Kerr-McGee's Pinta Dome Unit for various reasons and for Navajo Springs. Please refer to my letter of July 5, 1968 and yours of June 21.

Is there any particular reason why this cannot be waived this year. Please advise at an early date.

Didn't take long for you to get the Corporation Commission on the ball. Thanks.

Yours very truly,

EASTERN PETROLEUM COMPANY

J. N. Edwards
J. N. Edwards

JNE:sjn





OFFICE OF
Oil and Gas Conservation Commission
 STATE OF ARIZONA
 ROOM 202
 1624 WEST ADAMS
 Phoenix, Arizona 85007
 PHONE: 271-5161

X-Lambert
X-Chrono

May 22, 1969

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

Re: Eastern Santa Fe #13
 Eastern Santa Fe #14
 Eastern Santa Fe #17
 Eastern Santa Fe #31
 Eastern Santa Fe #32
 Eastern Santa Fe #35
 Eastern Ancon Santa Fe #21
 Eastern Reese #2
 Kerr-McGee Barfoot State #1
 Crest Santa Fe #2
 Crest Santa Fe #7

Permit #194^X
 Permit #206
 Permit #236
 Permit #255
 Permit #253
 Permit #263
 Permit #234
 Permit #348
 Permit #238
 Permit #110
 Permit #204

Dear Mr. Fullop:

In accordance with Rule 401 the Oil and Gas Conservation Commission, State of Arizona, has adopted procedures for the annual testing for all gas and/or helium wells.

The Commission's procedure is based upon and must be used in conjunction with the Manual of Back-pressure Testing of Gas Wells as issued by Interstate Oil Compact Commission, P. O. Box 53127, Oklahoma City, Oklahoma 73105.

The Commission has prepared, in addition, a supplement to the IOCC manual inasmuch as that manual is based upon a pressure base other than the 15.025 required by the State of Arizona. The supplement to the IOCC manual has made all necessary corrections to the IOCC manual to reflect the 15.025 pressure base.

Page 2
Mr. Henry Fullop
May 22, 1969

The tests as required by Rule 401 shall be conducted during the month of June each year and reported in duplicate by July 10th of each year. Forms 18 and 20 will be used for this purpose.

Yours truly,

James A. Lambert
Administrative Assistant

JB:jf
Enc.
copy to Mr. J. N. Edwards

June 21, 1968

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

Dear Mr. Edwards:

In reponse to your request of June 10, 1968, this letter constitutes permission from this commission to exempt annual gas Capacity Test on the Ancon Santa Fe #21 well and the following shut-in helium wells in Navajo Springs Unit:

<u>Well No.</u>	<u>Tract No.</u>	<u>Location</u>
Santa Fe #14	III	5-19-27
Santa Fe #17	IV	4-19-27
Santa Fe #31	X	29-20-27
Santa Fe #32	XI	28-20-27
Santa Fe #35	XII	27-20-27
Reese #2	VII	1-19-26
Crest S.F. #7	II	7-19-27
Crest S.F. #2	V	33-20-27

Very truly yours,

John Bannister
Executive Secretary
ir

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June 6, 1968

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

Attention: Mr. Henry Fullop

Gentlemen:

Your attention is referred to our letter of May 13, 1968 and Directive D-2-68 dated May 1, 1968, concerning capacity testing of all gas and/or helium wells.

As you are aware, you as operator of the Navajo Springs Unit are responsible for compliance on all wells in the Unit, both producing and non-producing (shut-in).

Should good and sufficient reasons be stated for deferment of this testing on specified wells, this Commission would give due consideration.

Very truly yours,

John Bannister
Executive Secretary
mr
enc

2067

Operator Eastern Petroleum Company

Bond Company U. S. Fidelity & Guaranty Co. Amount \$10,000

Bond No. 27716-13-3746-60 Date Approved 8-1-60

Permits covered by this bond:

SEE this
file

- | | |
|--------------|--------------|
| <u>269</u> ✓ | <u>234</u> ✓ |
| <u>81</u> ✓ | <u>230</u> ✓ |
| <u>252</u> ✓ | <u>229</u> ✓ |
| <u>251</u> ✓ | <u>237</u> ✓ |
| <u>107</u> ✓ | <u>236</u> ✓ |
| <u>207</u> ✓ | <u>218</u> ✓ |
| <u>157</u> ✓ | <u>209</u> ✓ |
| <u>88</u> ✓ | <u>206</u> ✓ |
| <u>80</u> ✓ | <u>194</u> ✓ |
| <u>78</u> ✓ | <u>188</u> ✓ |
| <u>264</u> ✓ | <u>155</u> ✓ |
| <u>263</u> ✓ | <u>150</u> ✓ |
| <u>273</u> ✓ | <u>152</u> ✓ |
| <u>259</u> ✓ | <u>109</u> ✓ |
| <u>258</u> ✓ | <u>108</u> ✓ |
| <u>255</u> ✓ | <u>107</u> ✓ |
| <u>282</u> ✓ | |
| <u>250</u> ✓ | |
| <u>276</u> ✓ | |
| <u>284</u> ✓ | |
| <u>227</u> ✓ | |

CANCELLED

DATE Jan 11-22-65

206/

C
O
P
Y

ARKANSAS LOUISIANA GAS COMPANY

Shreveport, Louisiana

August 14, 1964

Arizona Oil and Gas Commission
1624 West Adams
Phoenix, Arizona

Attention: Mr. John Bannister

Gentlemen:

In accordance with your request to receive the test results on the wells in the Navajo Springs Field, Apache County, Arizona, we are enclosing herewith, in duplicate, the results of these tests.

Each well was tested at what we speak of as a maximum rate of flow - that is, the maximum rate at which we produced the well; and the rates of flow where the wellhead pressure approached 100 pounds. This is indicated under Column 2 where it says, "Well Tubing Pressure-PSIG." You will note that a volume of 1800 MCFPD was measured from eight wells, testing these wells from 15 to 18 1/2 hours each. These are our field calculations, and there may be a slight change in the total volume when the final calculations are determined. The volumes of gas in MCFPD have

been corrected to indicate the standard conditions of measuring gas at 15.025 pressure base.

I would like to take this opportunity to express to you how much I appreciate you and your staff turning over the records of the Conservation Office and the assistance which was given to me on my two trips to Phoenix. If the volumes are any different on our final calculations, I will forward a copy to your office.

Yours very truly,

ARKANSAS LOUISIANA GAS COMPANY

(signed)
P.B. Emmons
Proration Engineer

PBE:kt
Enclosures

206

September 11, 1963

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

Re: Navajo Springs Wells, Apache County, Arizona

Dear Henry:

We were glad you came to the last meeting and congratulations on your unitization project.

Per our conversation in which you told me to ask you for items missing in our well files, I am writing this letter. Upon perusing the commission files, I find that we are lacking several items in the new area to be unitized. Later, I will ask for missing items on other wells.

Presently, the items mentioned are vital information as far as our part of your unitization is concerned so please send them as soon as possible, as the unitization hearing is only two weeks away.

1 - Eastern #13 Santa Fe, Sec. 31, T20N, R27E - we need a micro-log, drill stem test or pitot tube test records not on Completion forms, core analysis, Back Pressure Tests not on Completion forms and gas analysis.

2 - Also, I would like all the data on the other well you drilled in Section 31.

3 - Eastern #14 Santa Fe, Sec. 8, T18N, R27E - we need a micro-log, any additional drill stem test or pitot tube information to what is on completion forms, if any; core analysis, any back pressure test data not on completion form and gas analysis.

4 - Eastern #17 Santa Fe, Sec. 4, T18N, R27E - we need Completion Report, Electric Log and micro-log, core analysis and gas analysis.

2067

Page Two

Mr. Henry Fullop

I will surely appreciate any further information you will let us have, like sample descriptions, fracturing and acidizing details - preferably a copy of the company's (Halliburton, Western or Dowell, etc) description of the amount used, pumping in and breakdown pressures, etc. A copy run off on a machine will suffice.

As you can see, I am trying to build up our well records to compare with what New Mexico and other states require of the operators.

Of course, I am presently just asking for the information on the pertinent wells involved in your unitization in order that we have sufficient data to compare with what you present for reserve calculation.

This is why I mentioned to Mr. Davidson that if you show the commission a De Golyer, McNaughton Engineering reserve report while presenting your unitization project, no one can counteract what you wish as long as it conforms to their results. At least, that is what I believe.

Wishing you huge success on all your projects, I am

Sincerely,

John K. Petty
Acting Executive Secretary

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EASTERN PETROLEUM CO. #14
SANTA FE NW/4 Sec. 5-T19N-R27E
Completing now as a Coconino
sand helium well, Navajo Springs
Field, Apache County, 5 miles SE
Navajo. 10-1962

206

204

August 16, 1962

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

Re: Eastern Petroleum Co. Santa Fe No. 14 -
Sec. 5, 19N, 27E, Apache County, Arizona

Dear Mr. Edwards:

Enclosed is an approved copy of your application for
permit to drill the above described test.

Also enclosed is a receipt for your \$25.00 permit
fee.

We certainly want to wish you the best success in
this Arizona venture and please do not hesitate to
call upon us if we may be of any service.

Yours very truly,

John K. Petty
Petroleum Geologist

encs 2

2067

EASTERN PETROLEUM CO.
ACCOUNT NO. 2

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.
IF INCORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

INVOICE		DESCRIPTION	TOTAL AMOUNT	DEDUCTIONS		NET AMOUNT
DATE	NO.			DISCOUNT	FREIGHT	
		Application to drill Santa Fe #14 (Navajo Springs) located 1650' S of NL, 1650' E of W1 in Sec. 5-19N- 27E, Apache County, Arizona.				\$25.00

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