

P-W

EASTERN #17 SANTA FE
SW NW 4-19N-27E APACHE CO. 236

s1

COUNTY Apache AREA 5 mi SE/Navajo Sprgs LEASE NO. Santa Fe Fee

WELL NAME Navajo Springs Drilled
Eastern Petroleum Company #17 Santa Fe

LOCATION S/Line of SW NW SEC 4 TWP 19N RANGE 27E FOOTAGE 990' FWL - 2640' FNL

ELEV 5775 GR KB SPUD DATE 6-11-63 STATUS H.P. TOTAL DEPTH 1057'
5780 GL from HGSG - 7 1/2' COMP. DATE 6-17-63
Quad = per JNC

CONTRACTOR _____

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY
<u>8 5/8"</u>	<u>67'</u>	<u>10 sx</u>	<u>NA</u>	<u>x</u>
<u>4 1/2</u>	<u>1057'</u>	<u>65 sx</u>		

DRILLED BY CABLE TOOL _____
PRODUCTIVE RESERVOIR _____
INITIAL PRODUCTION 250 MCFPD

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
				<u>Shut-in Helium well. Certificate of Compliance approved 11-1-65. Well drilled under U.S.F. & G. Company Bond 27716-13-3746-60 in amount of \$10,000</u>

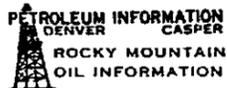
ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
<u>Induction Electrical Log</u>	<u>1037-57</u>	<u>1038-57</u>	<u>SAMPLE DESCRP.</u>
			<u>SAMPLE NO. 1247*</u>
			<u>CORE ANALYSIS</u>
			<u>DSTs x</u>
			<u>Tucson 1680</u>
<u>REMARKS</u>			<u>APP. TO PLUG</u> <input checked="" type="checkbox"/>
			<u>PLUGGING REP.</u> <input checked="" type="checkbox"/>
			<u>COMP. REPORT</u> <input checked="" type="checkbox"/>

WATER WELL ACCEPTED BY _____

BOND CO. U. S. Fidelity & Guaranty Company BOND NO. 27716-13-3983-65
 BOND AMT. \$ 25,000 CANCELLED 6-26-78 DATE _____
 FILING RECEIPT 9336 LOC. PLAT x WELL BOOK x PLAT BOOK x
 API NO. none DATE ISSUED 6-18-63 DEDICATION all of 4-19N-27E

PERMIT NUMBER 236

ARIZONA
APACHE CO.
NAVAJO SPRINGS (D)



Twp 19n-27e
Section 4
nw sw
2640 s/n 990 e/w

OPR: Eastern Pet

WELL #:

17 Eastern-Santa Fe-Fee

ELEV: 5775 Gr.

DSTS. & CORES:

SPUD: 6-11-63 COMPL: 6-17-63

TOPS: Log-Sample
No tops reported

No cores or tests.

TD: 1057 PB:
CSG: 8-5/8" @ 67 w/10
4 1/2" @ 1057 w/65

PERF: 1037-57.

PROD. ZONE:
Coconino 1037-57

INIT. PROD:
IPF 250 MCFGPD, 1" ck, TP
112#.

Contr: Own

ARIZ 1-464020

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 Eastern-Santa Fe Fee		Well Number #17	Field & Reservoir Wildcat		
Location 2640' S of N. L. & 990' E of W.L.					Sec.-TWP-Range or Block & Survey 4-19N-27E
County Apache	Permit number 236	Date Issued 6-29-63	Previous permit number	Date Issued	
Date spudded 6-11-63	Date total depth reached 6-17-63	Date completed, ready to produce 6-17-63	Elevation (DF, RKB, RT or Gr.) 5775 gr	Elevation of casing hd. flange -- feet	
Total depth 1057	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 1038-57		Rotary tools used (interval) Total depth		Cable tools used (interval) --	
Was this well directionally drilled? No	Was directional survey made? No	Was copy of directional survey filed?		Date filed --	
Type of electrical or other logs run (check logs filed with the commission) Schlumberger - Induction, Electrical				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#	0-67	10	None
Casing	6 1/4"	4 1/2	9.5#	0-1057	65	None

TUBING RECORD

LINER RECORD

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

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Am't. & kind of material used	Depth Interval
		1037-57		

INITIAL PRODUCTION

Date of first production Shut-in		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): Flowing				
Date of test 6-17-63	Hrs. tested 0 1/2	Choke size SFC - 1"	Oil prod. during test -0- bbls.	Gas prod. during test 250 MCF	Water prod. during test -0- bbls.	Oil gravity * API (Corr)
Tubing pressure 112	Casing pressure	Cal'ed rate of Production per 24 hrs. 250 M	Oil bbls.	Gas 250 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.

September 16, 1963
Date

Signature

STATE OF ARIZONA OIL & GAS
CONSERVATION COMMISSION

Well Completion or Recompletion Report and Well Log
Form No. P-7
File two copies

Authorized by Order No. **4440**
Effective **April 6, 1960**

John Peth

236

J. N. Edward

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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. 17	Field & Reservoir Navajo Springs, Coconino Sand Unit
Location of Well 2640' SNL; 990' EWL		Sec-Twp-Rge or Block & Survey 4-19N-27E	County Apache
Application to drill this well was filed in name of Eastern Petroleum Company	Has this well ever produced oil or gas Yes	Character of well at completion (initial production): Oil (bbls/day) - Gas (MCF/day) 250 Dry? -	
Date plugged: 10/12/77	Total depth 1057	Amount well producing when plugged: Oil (bbls/day) - Gas (MCF/day) 151M 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	1037-57	Top to Bottom with 15 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	67	None	67	-	-
4-1/2	1057	"	1057	-	-

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 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 1, 1977

Signature *J. McKeown*

COPY

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Plugging Record
File One Copy

Permit No. 236

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. 17
LOCATION 2640' SNL; 990' EWL Section 4-19N-27E, Apache County

TYPE OF WELL Gas-Helium TOTAL DEPTH 1057
(Oil, Gas or Dry Hole)

ALLOWABLE (If Assigned)

LAST PRODUCTION TEST OIL -- (Bbls.) WATER -- (Bbls.)
GAS 250 (MCF) DATE OF TEST 6/16/63

PRODUCING HORIZON Coconino PRODUCING FROM 1037 TO 1057

1. COMPLETE CASING RECORD.

8 5/8" @ 67' w/10 sks.
4 1/2" @ 1057' w/65 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
November 1, 1977
Date

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

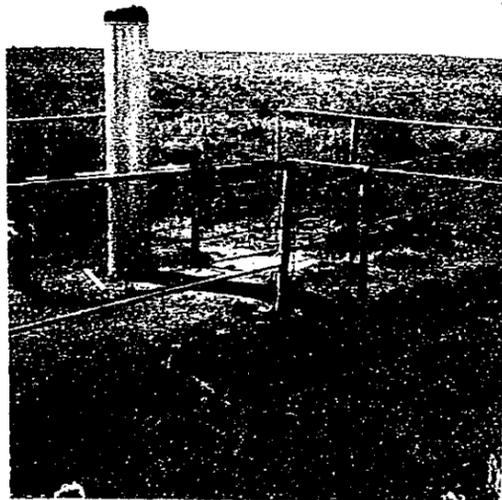
236

COPY

Permit No. 236, Santa Fe No. 17

3-27-74

Well shut-in. This well has in the past produced through 4" csg. No tbg. in hole. Well now disconnected from gathering line.



Santa Fe 17

236

SANTA FE

17

1

EASTERN PETROLEUM COMPANY

CARMI

28

SF#17
4-19-27

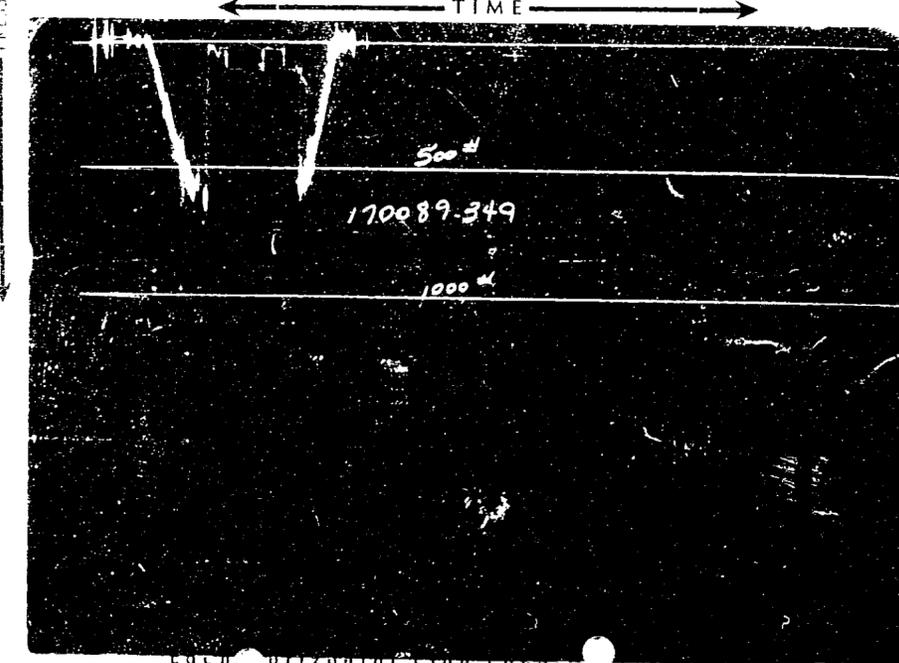
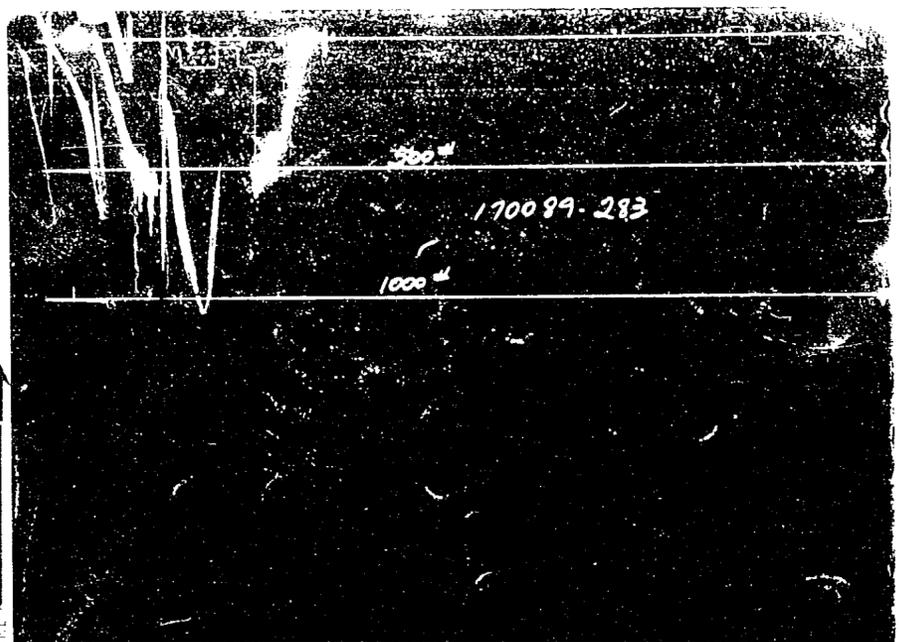
236 ~~# 17~~



Your.....

Formation Testing Service Report





Time	Min	Unit	AP	Dist	Remarks
Initial Hydro Mud Pres					
Initial Closed in Pres					
Initial Flow Pres	1				
Final Flow Pres	2				
Final Closed in Pres					
Final Hydro Mud Pres					
Depth Bot Gauge	ft		Block Off	Gas Gravity	
ST P. E. D. No.			Min. Clock	Turn Opined	
Initial Hydro Mud Pres					
Initial Closed in Pres					
Initial Flow Pres	1				
Final Flow Pres	2				
Final Closed in Pres					
Final Hydro Mud Pres					

FORMATION TEST DATA
SPECIAL PRESSURE DATA

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 PBTID 1105	Coconino	1062-72	6-24-60	12,75	Never Prod.		2 7/8" @ 1107	4 3/4"	50			
✓ 195	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 Springs
✓ 204	Crest Santa Fe #7	SE/NE 6-19N-27E	1060	Coconino	1042-52	9-11-62	185	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	300	47,794	Oct, 1973	4 1/2" @ 1100	6 3/4"	190			
✓ 234*	Ancon Santa Fe Fee #21	SE/NW 31-20N-28E	PBTID 1330	Shinarump	1173-94+	9-13-63	2.0	22,005	Sept. 1972	2 7/8" @ 1330	4 3/4"	5	730	1300	East Navajo Shinarump
✓ 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	1057	Coconino	996-1008	7-30-63	1160	225,555		4 1/2" @ 1076	6 3/4"	140			Navajo Springs
✓ 235	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 Springs (Refract. log)
✓ 235	Santa Fe Fee #32	NE/SW 28-20N-27E	1133	Coconino	1090-1190	11-24-63	95	Never Prod.		2 7/8" @ 1133	6 1/4"	55			Navajo Springs
✓ 235	Santa Fe Fee #35	NE/SW 27-20N-27E	1072	Coconino	Open Hole	7-11-64	179	41,211	Oct. 1972	4 1/2" @ 1092	6 1/4"	67			
✓ 235	Reece #2 Fee	SW/NE 1-19N-26E	1067 1225	Coconino	1012-16	3-9-66	250-300 Est.	Never Prod.		2 7/8" @ 1063	4 3/4"	100			
✓ 271	Crest Santa Fe #1	SE/SE 25-20N-27E	PBTID 1140 1340	Shinarump	1046-1110	11-20-65	51	24,421	Jan. 1973	4 1/2" @ 1171	6 1/2"	70			Original
✓ 276*	Santa Fe Fee #24	SE/NW 24-20N-27E	PBTID 1173	Shinarump	1145-73	9-30-71	Negligible	Never Prod.		2 7/8" @ 1103	4 3/4"	220	Enough cement to circulate	1290	East Navajo Shinarump
✓ 537*	Santa Fe Fee #21-1A	NW/NW 31-20N-28E	1232	Coconino	Open Hole	9-15-70	470	2,299	Oct. 1972	4 1/2" @ 1115	4 1/4"	100	450	1075	
✓ 560*	Kiya Santa Fe Fee #1	NE/SW 14-20N-25E	1230 PBTID 1150	Shinarump	1040-56	12-22-71	No Gas Reported	Never Prod.		4 1/2" @ 1152	6 1/4"	104	450	1025	
✓ 565*	Santa Fe #6X-1	SE/NW 25-20N-25E	1261 PBTID 1174	Shinarump	1126-60	1-06-72	No Gas Reported	Never Prod.		4 1/2" @ 1165	6 1/4"	160	700	1122	
✓ 565*	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"	72	110	410	
✓ 576*	Szar State #1	NW/NW 36-20N-27E	1215	Shinarump	1154-62	4-28-72	Well On Vacuum During Test	Never Prod.		4 1/2" @ 1215	6 1/4"	100	102	1072	East Navajo Shinarump
✓ 584*	Santa Fe Fee Dreck #1	SE/SW 25-20N-27E	1266	Shinarump		6-21-72	Not Tested	Never Prod.		" @ 242	6 1/4"	67	102	1072	East Navajo Shinarump
✓ 592*	Indian Allotted Merde #1	SW/SW 30-20N-28E	1200 1343	Shinarump	1062-93	8-17-72	156	991	Oct. 1972	4 1/2" @ 1200	6 1/4"	100	Bottom 2000'	1060	Well in 100' hole
✓ 596*	Indian Allotted Merde #2	SW/SE 30-20N-28E	PBTID 1215	Shinarump	Completion Report Never Submitted			Never Prod.		2 7/8" @ 1167	6 1/4"	No Report		1125	Well in 100' hole
✓ 599*	Kiya Santa Fe Fee #2	NE/SW 24-20N-25E	1230	Coconino	1155-1215	11-13-72	TSM	Never Prod.		4 1/2" @ 1215	6 1/4"	60	577	1072	
✓ 600*	Santa Fe Fee Beacon #1	NW/SE 29-20N-29E	1265	Coconino	No Perfs. Reported	2-13-72	No Test Reported	Never Prod.		4 1/2" @ 1265	6 1/4"	35	515	1125	
✓ 601*	Santa Fe Fee #1-11	NE/SE 11-20N-28E	1075	Coconino	Open Hole	11-10-72	TSM	Never Prod.		4 1/2" @ 1055	6 1/4"	65	710	1065	

* Applications to Plus have been approved.

Cement bond log indicates bottom of cement at 726'

From Application to Plus

236

NAVAJO SPRINGS AREA WELLS EASTERN PETROLEUM COMPANY - OPERATOR

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
NE/SW 33-20N-27E	1140 PBTID 1105	Coconino	1062-72	6-24-60	12.75	Never Prod.		2 7/8" @ 1107	4 3/4"	50			
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 Springs Unit
SE/NE 6-19N-27E	1060	Coconino	1042-52	9-11-62	185	Never Prod.		2 7/8" @ 1060	4 3/4"	28			
SE/NW 5-19N-27E	1100 1361	Coconino	1026-56	10-16-62	300	47,394	Oct. 1973	4 1/2" @ 1100	6 3/4"	100			
SE/NW 31-20N-28E	PBTID 1330	Shinarump	1173-94+	9-13-63	3.0	22,005	Sept. 1972	2 7/8" @ 1330	4 3/4"	85	730	1300	East Navajo Springs Shinarump Pool
SW/NW 4-19N-27E	1057	Coconino	1037-57	6-17-63	250	56,948	Dec. 1973	4 1/2" @ 1057	6 1/4"	65			
NE/SW 32-20N-27E	1057	Coconino	986-1005	7-30-63	1160	225,555		4 1/2" @ 1076	6 3/4"	140			Navajo Springs Unit
NW/SE 29-20N-27E	1049	Coconino	992-1006	10-25-63	590	Never Prod.		2 7/8" @ 1049	4 3/4"	90			(Remedial work on this well between 10/25/63 & 11/24/63 work not reported.)
NE/SW 28-20N-27E	1133	Coconino	1090-1190	11-24-63	98	Never Prod.		2 7/8" @ 1133	6 1/4"	75			
NE/SW 27-20N-27E	1072	Coconino	Open Hole	2-11-64	1370	27,421	Oct. 1973	4 1/2" @ 1062	6 1/4"	65			
SW/NE 1-19N-26E	1067 1225	Coconino	1012-16	3-0-66	250-300 Est.	Never Prod.		2 7/8" @ 1053	4 3/4"	100			
SE/SE 25-20N-27E	PBTID 1140 1340	Shinarump	1046-1110	11-20-65	51	34,481	Dec. 1973	4 1/2" @ 1171	6 1/4"	70			Originally completed in Coconino East Navajo Springs Shinarump Pool
SE/NW 24-20N-27E	PBTID 1173	Shinarump	1145-73	9-30-71	Negligible	Never Prod.		2 7/8" @ 1103	4 3/4"	220	Enough cement to circulate	1290	
NW/NW 31-20N-28E	1232	Coconino	Open Hole	9-15-70	470	2,299	Oct. 1972	4 1/2" @ 1215	6 1/4"	100	653	1075	
NE/SW 14-20N-28E	1230 PBTID 1150 1261	Shinarump	1040-56	12-09-71	No Gas Reported	Never Prod.		4 1/2" @ 1175	6 1/4"	100	440	1025	
SE/NW 25-20N-28E	PBTID 1174	Shinarump	1126-60	1-06-72	No Gas Reported	Never Prod.		4 1/2" @ 1265	6 1/4"	100	730	1122	
NE/SW 15-21N-28E	516	Coconino	406-420	4-26-72	TSM	Never Prod.		4 1/2" @ 516	6 1/4"	75	116	419	
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	62	1075	East Navajo Springs Shinarump Pool
SE/SW 25-20N-27E	1266	Shinarump		6-21-72	Not Tested	Never Prod.		" @ 255	6 3/4"	65	Circulated Surface	None	This well erroneously reported plugged.
#1 SW/SW 30-20N-25E	1200 1343	Shinarump	1062-93	8-17-72	156	991	Oct. 1972	4 1/2" @ 1200	6 1/4"	100	Bottom 72688	1060	Hole in 12-1-72
#2 SW/SE 30-20N-25E	PBTID 1215	Shinarump	Completion Report Never Submitted			Never Prod.		2 7/8" @ 1197***	4 3/4"	No Report		1154	This well flowing water between 10/25/63 & 11/24/63.
NE/SW 24-20N-25E	1230	Coconino	1145-1215	11-12-72	TSM	Never Prod.		4 1/2" @ 1215	6 1/4"	60	577	1072	
NW/SE 29-20N-29E	1265	Coconino	No Perfs. Reported	2-15-72	No Test Reported	Never Prod.		4 1/2" @ 1265	6 1/4"	85	815	1125	
NE/SE 11-20N-28E	1075	Coconino	Open Hole	11-10-72	TSM	Never Prod.		4 1/2" @ 1055	6 1/4"	65	710	1065	

have been approved.
 dates Bottom of cement at 726'

236

SW NW 4-19N-27E APACHE CO #17 SANTA FE

Well: E.P.Co Navajo Springs #17
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.

236

Well: EPC Navajo Springs No. 17 Eastern Petroleum Company
Sec 27, T20N, R27E 4-19-27 P. O. Box 226
Apache County, Arizona Farmington, New Mexico
87401

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

RECEIVED

JAN 20 1972

O & G CONS. COMM.

#236
Well: E.P.Co Navajo Springs #17 Eastern Petroleum Company
Sec 27, T20N, R27E P. O. Box 226
Apache County, Arizona Farmington, New Mexico
87401

Status: Temporarily S.I.

RECEIVED

FEB 0 1972

O & G CONS. COMM.

#236
Well: E.P.CO Navajo Springs No. 17 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.

#236

WELL: Navajo Springs No. 17

Eastern Petroleum Co.
P.O. Box 226
FHM 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

Rec'd 1-18-72
236

NDRY NOTICES AND REPORTS ON WELLS

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"/>	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"/>	(OTHER)	<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.)

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. 236

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.

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

Form C-122
Revised 9-1-65

- 5 -

Type Test		<input type="checkbox"/> Initial		<input type="checkbox"/> Annual		<input checked="" type="checkbox"/> Special		Test Date		9/13/70					
Company				Connection				Unit							
Eastern Petroleum Co.				None											
Field				Formation				Well No.							
Navajo Springs				Coconino				17							
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name							
1963		1057		-		5775		Santa Fe							
No. Size		Wt.		Set At		Perforations:		Unit Sec. Twp. Rge.							
4-1/2		9.5 ?		1057		From 1037 To 1057		SW/4 4 19N 27E							
No. Size		Wt.		Set At		Perforations:		County							
None								Apache							
Type Well - Single - Brodenhead - G.G. or G.O. Multiple						Packer Set At		State							
Single						-		Arizona							
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _g		County							
Casing		89 # Est.		60 Est.		12.0 Est.		Apache							
L		H		G _g		% CO ₂		% N ₂		% H ₂ S					
				0.910 Est.		-		-		2" CFP					
Prover		Meter Run		Taps											
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				
1	Static								80		0				
1	2" CFP		1/2	42		66					2 hrs.				
2															
3															
4															
5															
RATE OF FLOW CALCULATIONS															
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Prover Pressure p _{sm} psia	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mscf/d								
1	5.653		54	0.9943	0.812		246.5								
2															
3															
4															
5															
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		Mcf/bbl.								
1	NA														
2															
3															
4															
5															
P _r 92		P _c ² 8464													
NO.	P _r ²	P _w	R _w ²	P _c ² - R _w ²	(1) $\frac{P_c^2}{P_c^2 - R_w^2} =$		(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n =$								
1	2916	54	2916	5548											
2															
3															
4															
5															
Absolute Open Flow		372		Mcf/d @ 15.025		Angle of Slope @		46		Slope, n					
										0.97					
Remarks: Slope determined by four point test on Santa Fe No. 14 well. No fluid appearing during test.															
Approved By Commission:				Conducted By:				Calculated By:				Checked By:			
230															



EASTERN PETROLEUM CO.
 EASTERN DRILLING, INC.
 TELEPHONE 35-2404 - P.O. BOX 29 - FARMVILLE, N.C.

17
Data file

October 16, 1977

Arizona Oil & Gas Conservation Commission
 1114 West Adams
 Room 112
 Phoenix, Arizona 85007

Attention: Mr. John Bannister
 Executive Secretary

Dear John:

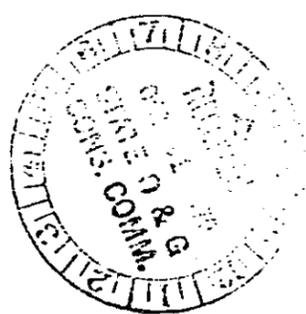
Enclosed please find the Engineering Report which I promised
 you.

Best regards,

Henry Fullop
 EASTERN PETROLEUM CO.
 By: Henry Fullop

HF:jsh

Enclosure



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



236

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



236

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	Cocconino	935	940	945	925
Santa Fe No. 17	"	350	340	300	280
Santa Fe No. 21-2	Shinarump	525	510	500	480
Reese No. 2	Cocconino	730	690	645	560
Crest No. 7	"	130	175	180	140
Total Volume - MCFD		2770	2655	2450	2125

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

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. The back pressure curves are drawn on values of P_c and P_w . The 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

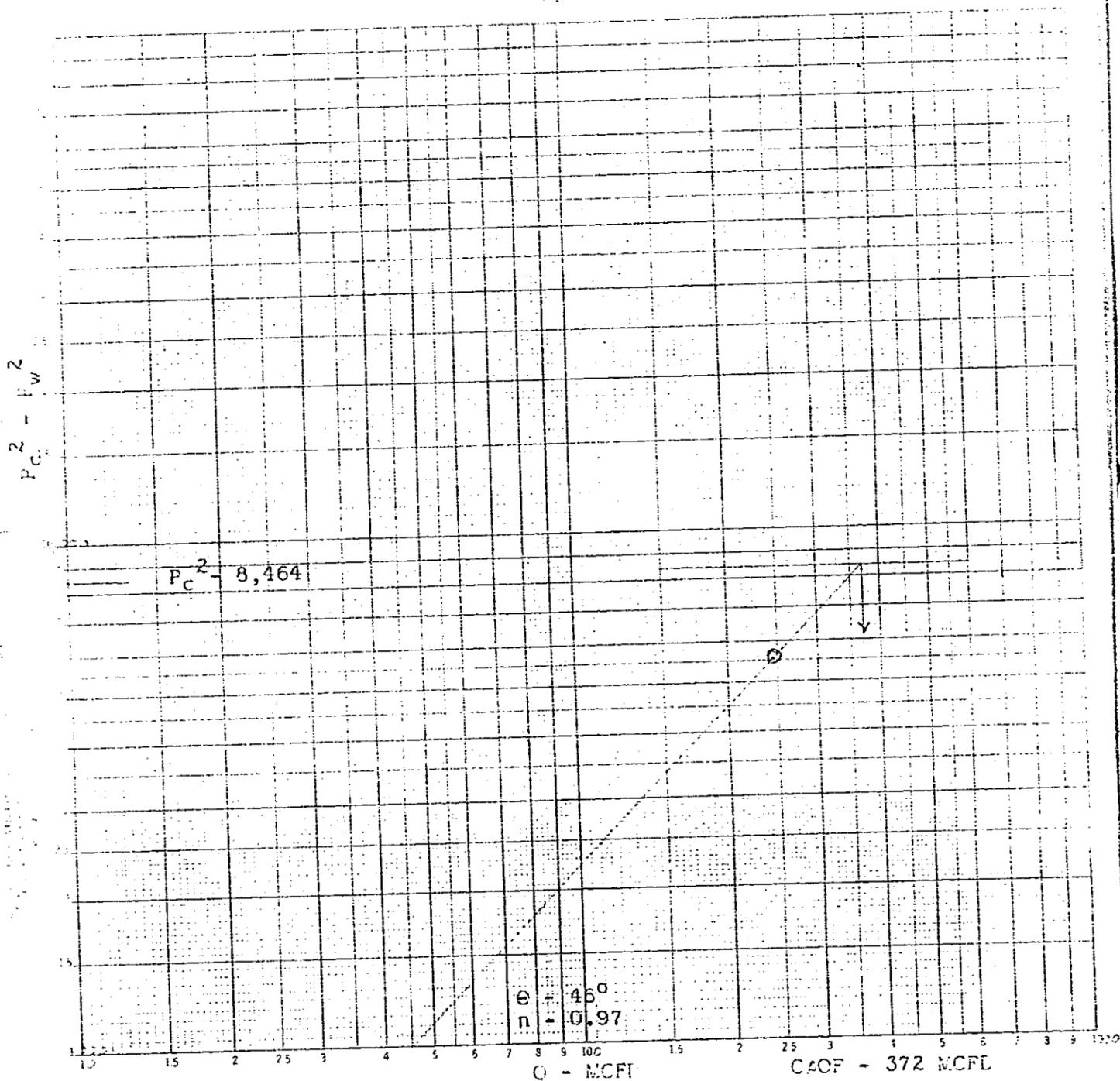
Santa Fe Wells No. 14, 17, and 21-2; Reese No. 2; and Crest No. 7, were favorably tested. Reese No. 2 did show a slight amount of moisture at the end of the test period but does not appear to affect the delivery potential at this time. Santa Fe No. 35 test is not considered valid because of the fluid 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 GCF of the five wells considered productive at this time is 3,173 MCF. It would be prudent to start initial deliveries at approximately 25% of the GCF or about 794 MCF. This does not include the 100 MCF that may be produced from Santa Fe No. 35. That individual wells be checked closely for performance and the producing rates adjusted accordingly.

- 6 -

EASTERN PETROLEUM COMPANY
Santa Fe No. 17 Well
SW/4 Sec. 4-19N-27E
Apache County, Arizona



**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 #17	Field Navajo Springs	Reservoir Coconino
Survey or Sec-Twp-Rge 4-19N-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. Edwards*

Date approved: 12-21-70
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: *W. C. Allen*
 Permit No. 236

RECEIVED
 DEC 21 1970
 O & G CONS. 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. 8

**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 XXXXXXXXXX
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 *J. Edwards*

Date approved: Nov 1, 1965

By: *John Bonmister*

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

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 Bennister

Gentleman:

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
Production Engineer

6
23
2
PBE:kt
Enclosures

Prepared By	
Approved By	

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

RATES WITH PRESSURE CLOSE TO 100#

SIP PSID	WELL NAME	ORIFICE	WELL	2"	HOURS TESTED	VOLUME MCFPD		
		SIZE	TUBING	PROVER				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		99.5	92.9	15	380	5	
6	105.4 " " 7	1/8"	99.5	99.5	25 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	94.5	94.5	16 1/2	70	8	
9	201.5 " " 8		91 - 93	12 - 1 1/2	18 1/2	2 bbls. salt water/hr.	9	
10	105.5 " " 2		Well pulled down 1/4 small vol. water & gas, slightly salty.				10	
11						1000 MCFPD	11	
12	* Orifice well sector.						12	
13	AFTER TESTING MAXIMUM RATE OF FLOW							13
14	106.6 Santa Fe 35	3/4	84.1	85.1	1 1/2	648	14	
15	106.6 " " 31	1/2	76	76	7 1/2	534	15	
16	106.5 " " 32	1/2	Well slight pressure lost fall in			79	16	
17	133.9 " " 21		Same as No. 2 above.				17	
18	105.6 " " 13		94.1	94.1	6	1000	18	
19	105.4 " " 7	1/2	81.9	81.9	2 1/2	28	19	
20	105.4 " " 14	7/8	71.6	69.7	3 1/2	200	20	
21	105.5 " " 17	7/8	69.7	69.7	2	635	21	
22	NOT TAKEN " " 8		9	9	18 1/2	146	22	
23	NOT TAKEN " " 2		Same as No. 2 above.				23	
24							24	
25							25	
26							26	
27							27	
28							28	
29							29	
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44							44	
45							45	
46							46	
47							47	
48							48	
49							49	
50							50	

*R. M. A. ...
August 13, 1964*

3-2-64



Open Flow Test Record

Producers Name Eastern Petroleum Co. Date 10-9-63
 Lease Name Santa Fe No. 17 Time 1:30 pm
 Location Sec. 4-19N-27E Apache County, Arizona

Shut-In Pressure 70.5 psig Unloading Period 30 min.

This well showed no sign of water spray during blowdown.

Test Point	Time From	Time To	Flow Period	Orifice Size	Prover Press.	Wellhead Pressure	Flow Gas Temp.
1	2:00 pm	2:20 pm	20 min.	3/8"	14" H2O	67.9 psig	84°
2	2:20 pm	2:40 pm	20 min.	1/2"	13" H2O	65.2 psig	80°
3	2:40 pm	3:00 pm	20 min	3/4"	14.2" H2O	58.1 psig	74°

Remarks: Due to low shut in pressure recorded at this location it will be shut in for a second 24 hour period and double checked on 10-10-63. After shut in pressure was taken, snap open and closing of valve indicated rocking back and forth of test guage pressure. Sample gas was taken after final test flow period.

Shut in pressure checked at 3:30 pm 10-10-63 recorded 71.1 psig via dead weight.

12 236

CORE ANALYSIS RESULTS

Company EASTERN PETROLEUM COMPANY Formation COCONINO File RP-3-1767
Well SANTA FE # 17 Core Type DIAMOND CONV. Date Report 6-17-63
Field NAVAJO SPRINGS Drilling Fluid WATER BASE MUD Analysts McCOMAS
County APACHE State ARIZONA Elev. _____ Location SEC 4 T19N R27E

Lithological Abbreviations

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

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
1	1030-31	123	16.4			SANDSTONE
2	1031-32	108	16.5			SANDSTONE
3	1032-33	82	14.7			SANDSTONE
4	1033-34	18	13.6			SANDSTONE
5	1034-35	6.1	13.5			SANDSTONE
6	1035-36	9.3	12.8			SANDSTONE
7	1036-37	21	14.8			SANDSTONE
8	1037-38	81	15.2			SANDSTONE
9	1038-39	125	17.6			SANDSTONE
10	1039-40	42	15.1			SANDSTONE
11	1040-41	46	17.6			SANDSTONE
12	1041-42	3.7	10.4			SANDSTONE
13	1042-43	1.2	9.0			SANDSTONE
14	1043-44	19	13.4			SANDSTONE
15	1044-45	198	19.2			SANDSTONE
16	1045-46	36	15.2			SANDSTONE
17	1046-47	49	18.1			SANDSTONE
18	1047-48	94	17.8			SANDSTONE
19	1048-49	191	19.2			SANDSTONE
20	1049-50	71	17.1			SANDSTONE
21	1050-51	68	18.3			SANDSTONE
22	1051-52	40	16.4			SANDSTONE VERTICAL FRACTURE
23	1052-53	123	15.1			SANDSTONE
24	1053-54	62	17.1			SANDSTONE
25	1054-55	10	13.6			SANDSTONE
26	1055-56	18	12.3			SANDSTONE
27	1056-57	14	12.4			SANDSTONE
28	1057-58	88	19.1			SANDSTONE
29	1058-59	120	21.0			SANDSTONE
30	1059-60	97	17.3			SANDSTONE

SERVICE NO. 8 NO INTERPRETATION OF RESULTS

POROSITY MEASUREMENTS MADE BY BOYLES LAW GAS EXPANSION METHOD.

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.

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL DEEPEN PLUG BACK

NAME OF COMPANY OR OPERATOR **Eastern Petroleum Company** DATE **June 11, 1963**
P. O. Box 291 **Carmi** **Illinois**
 Address City State

DESCRIPTION OF WELL AND LEASE

Name of lease Eastern-Santa Fe Fee	Well number 17	Elevation (ground) 5775
Well location (give footage from section lines) 2640' S of N.L. & 990' E of W.L.	Section—township—range or block & survey 4-19N-27E	
Field & reservoir (if wildcat, so state) Wildcat	County Apache	
Distance, in miles, and direction from nearest town or post office Approx. 5 miles southeast of Navajo		
Nearest distance from proposed location to property or lease line: 990'	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: feet	feet
Proposed depth: 1100	Rotary or cable tools Rotary	Approx. date work will start 6-15-63
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.

June 11, 1963
Date

J. N. Edwards
Signature

Permit Number: **236**
 Approval Date: **6-19-63**
 Approved By: *R. N. Edwards*
 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
 Authorized by Order No. **4-659**
 Effective **April 6, 1959**

OK
 14
 236



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.

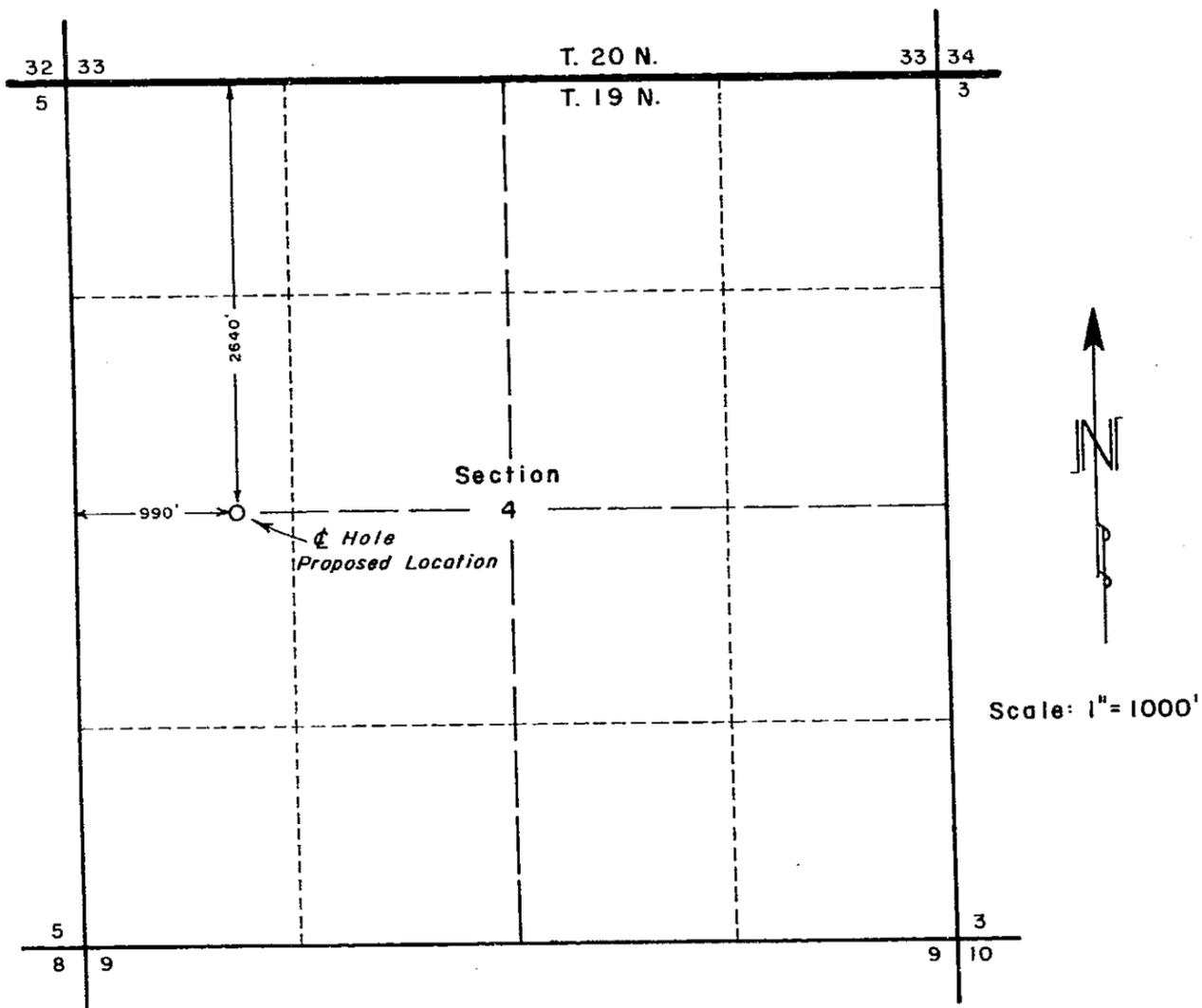
Do not confuse survey lines with lease lines. The sketch or plat should show your entire lease if possible. If it is not practical to show the entire lease and the plat shows only a section, block or lot out of your lease, you should clearly show that same is only a part of the lease.

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
Surface 8 5/8"		H-40	-0-	90	90	40





WELL LOCATION: Eastern Petroleum - Santa Fe # 17

Located 2640 feet South of the North line and 990 feet East of the West line of Section 4,
 Township 19 North, Range 27 East, Gila & Salt River Meridian.
 Apache Co., Arizona



I 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. 4, T.19 N., R.27 E. Apache Co., Arizona	
E.M. CLARK & ASSOC. Durango, Colorado	DATE: Jan. 22, 1963 FILE NO: 63003

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-
3983-65-

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: John L. Gimpster

Form No. 2

File Two Copies

Permit No. _____

236

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-
5983-65-

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)-----

Witness our hands and seals, this 2nd day of November, 1965

EASTERN PETROLEUM COMPANY

BY: Henry Fullop President
Principal

Witness our hands and seals, this 2nd day of November, 1965

UNITED STATES FIDELITY AND GUARANTY COMPANY

BY: Gary R. Peterson
Gary R. Peterson - Attorney-in-Fact

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

Approved Date 11-12-65
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: John Lammeter

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

Permit No. 236

(CERTIFIED COPY)

GENERAL POWER OF ATTORNEY

No. 76886

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
Gary R. Peterson

of the City of **Indianapolis**, State of **Indiana**
its true and lawful attorney ~~XXXXXXXXXXXXXXXXXXXX~~

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

Gary R. Peterson

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. 1965

UNITED STATES FIDELITY AND GUARANTY COMPANY.

(Signed) *By* **E. G. Hundley**
Vice-President.

(SEAL)

(Signed) **Richard D. Reinhardt**
Assistant Secretary.

STATE OF MARYLAND }
BALTIMORE CITY, } Not.

On this **24th** day of **May**, A. D. 19 **65**, before me personally came **E. G. Hundley**, Vice-President of the UNITED STATES FIDELITY AND GUARANTY COMPANY and **Richard D. Reinhardt**, 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 **E. G. Hundley** and **Richard D. Reinhardt** 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 affixed 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 **30th** day of **June**, A.D. 1965.

(Seal) (Signed) **Anne M. O'Brien**
Notary Public.

STATE OF MARYLAND, }
BALTIMORE CITY, } Not.

I, **James F. Carney**, Clerk of the Superior Court of Baltimore City, which Court is a Court of Record, and has a seal, do hereby certify that **Anne M. O'Brien**, 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. 19 **65**

(SEAL) (Signed) **James F. Carney**
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 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, H. G. Sachse, 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 Gary R. Peterson

of Indianapolis, Indiana, authorizing and empowering him 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 November 2, 1965
(Date)

H. G. Sachse
Assistant Secretary.

CANCELLED

Operator Eastern Petroleum Co. DATE _____

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:

80	348 shut-in	579
80 producing	363	<u>584</u>
88 producing	366 Not Drilled	<u>586</u>
107	367	<u>587</u>
108	368	<u>589</u>
109	369	<u>592</u>
150	370	<u>594</u>
152	371	<u>595</u>
155 Replaced by #561	372	<u>596</u>
188	373	<u>599</u>
194 producing	374	<u>600</u>
206 shut-in	375	<u>601</u>
209	376	
218	377	
236 shut-in	378	
237	379	
238	380	
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254	402	
255 shut-in	403	
258 shut-in	404	
259	405	
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262	408	
263 shut-in Prod	409	
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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



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.

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



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA

6626 N. CENTRAL, SUITE 108
PHOENIX, ARIZONA 85020
PHONE: (602) 271-5161

6626 N. CENTRAL, SUITE 108
PHOENIX, ARIZONA 85020

November 24, 1975

Mr. John Davidson
Kerr-McGee Corporation
P. O. Box 250
Amarillo, Texas 79105

Dear Mr. Davidson:

As you requested, we are enclosing a supply of Designation of Operator forms.

We suggest that prior to your assuming operation of Eastern Petroleum Corporation's Santa Fe #13 and Barfoot #1, within the Navajo Springs Coconino Gas Unit, you review the unitization agreement. We would especially call your attention to Articles #8, 10, 13, 23 and 24 of this agreement.

If we can be of further service, please advise.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/1

Encls.

cc: Mr. Henry Fullop

Mr. J. N. Edwards

236



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

TELEPHONE (312) 261-4104 P. O. BOX 291 CARMEL, ILLINOIS 60006

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.

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	206
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 13 1974

236



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

TELEPHONE (618) 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 Fulló

HF:sjn

736

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/r1b

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

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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 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



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

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, Carmi, Illinois

234
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236
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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

C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618-462-5345

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-Schlaefly 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 & Schlaefly, and likewise all the gas Purchased from these wells is purchased by Western Helium Corporation to the account of Crest and Schlaefly. 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.

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

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

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EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

TELEPHONE 28-2404 • P. O. BOX 261 • CARMEL, ILLINOIS

June 3, 1969

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-Chromo

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 #258 }
Permit #263 }
Permit #234 } X
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

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

CANCELLED

DATE 11-22-65

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



EASTERN PETROLEUM CO
EASTERN DRILLING, INC.

TELEPHONE 36 2104 • P. O. BOX 7 • CARMEL, ILLINOIS

June 10, 1968

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



Re: Back-Pressure Tests

Dear Mr. Bannister:

In accordance with your letter of June 6, 1968, we are applying for exemption from testing requirements for 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

also,

Ancon S.F. #21 31-20-28

Inasmuch as we have no plans at present to produce any of these wells we feel no useful purpose would result from such tests.

Test results of Santa Fe #13, Sec. 30-20-27 and Barfoot-State #1, Sec. 31-20-27 will be forwarded within the prescribed time.

Yours very truly,

EASTERN PETROLEUM COMPANY


J. N. Edwards

OK
JNE: s jn

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

September 11, 1933

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

Recently, the items mentioned are vital information as far as your 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 form, core analysis, Back Pressure Tests not on Completion form 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. 3, T19N, 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, T19N, R27E - we need Completion Report, Electric Log and micro-log, core analysis and gas analysis.

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, McNaughten 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

July 3, 1963

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

Re: Eastern-Santa Fe Fee #17 - Sec. 4, 19N, 27E,
Apache County, Arizona

Gentlemen:

Enclosed is your approved copy of application for
permit to drill the captioned test together with
a receipt for the \$25.00 permit fee.

Yours very truly,

N. A. Ludewick
Executive Secretary

encs 2



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
ROOM 202
1624 WEST ADAMS
Phoenix 7, Arizona
271-5161

PAUL FANNIN
GOVERNOR
R. KEITH WALDEN
CHAIRMAN
LYNN LOCKHART
VICE CHAIRMAN
CHARLES KALIL, M.D.
MEMBER
ROBERT B. HEWARD
MEMBER
ORME LEWIS
MEMBER

N. A. LUDEWICK
EXECUTIVE SECRETARY
JOHN K. PETTY
PETROLEUM GEOLOGIST

June 19, 1963

Mr. N. A. Ludewick
Executive Secretary
Oil and Gas Conservation Commission
State of Arizona
1624 West Adams, Room 202
Phoenix 7, Arizona

Dear Mr. Ludewick:

Enclosed herewith are original and one
copy of APPLICATION FOR PERMIT TO DRILL as sub-
mitted by Eastern Petroleum Company. The appli-
cation has been approved by Mr. Walden.

Very truly yours,

Anita Countryman

Anita Countryman, Secretary
to R. Keith Walden

enclosures

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DENVER OFFICE 20 FIRST NATIONAL BANK BUILDING - MAIN 33259



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

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

June 11, 1963

Oil & Gas Conservation Commission
Room 202
1624 West Adams
Phoenix 7, Arizona

Re: SF #17
Sec. 4-19N-27E
Apache County

Gentlemen:

We enclose our Application for permit to drill the above numbered well.

Will you kindly mail us a quantity of Form No. P-1, Application to Drill, etc.

Yours very truly,

EASTERN PETROLEUM COMPANY

J. N. Edwards
J. N. Edwards

JNE:mf

Encls.

Mailed to P-1 - 6/20/63

236