

Eastern Petroleum Co. 1-28 State
SE/4-SE/4 Sec. 28 -Twp. 20N -R26E

P-W

Formation Tops	Scout	Sample	E. Log	Remarks
Shinarump			761	
Moenkopi			801	
Coconino			935	

Apache County, Arizona OMO 88

Operator EASTERN PETROLEUM

Well: State

No. 28

Loc: Sec. 23 Twp. 20N Rge. 26E

Coord. 660FEL 660FSL Area NC

Csg. Size	Depth	Cement
8 5/8	98 48	50
4 1/2	1051	100

On File		
S.L.		
E.L.		
W.L.		

Spud 6-19-59

Comp/Abd 9-21-60

T.D. 1091 PBI051

LS Elev. 5685 G 5690DFKB

Per. Hor. Coconino 937-1000

I. P. Coconino ggd

Per. Hor.

* 3583 MCF, As

Geological Tops Scout Samp. E. Log S-Sea

Helium Well.

SZ

OMO, Completed 9-21-60, as Helium Well.

TD. 1091', PBI051'.

PERF: 126-937-1000; wash w/100 gal HA?

sub 200 MCF, Flush 937-1000 w/1500 gal.

Kerosene @ 1500 sd. NO DPD. IR-500 gal/min.

sub 1497 MCF.

Subd dry.

BDSMF 937-1000, 7500 w x 7,500 sd.

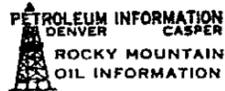
No BDP. IR-22.

ggd. 3583 MCF.

Core Analysis, DST cha:

ARIZONA
APACHE CO.
PINTA DOME (D)

88



Twp 20n-26e
Section 28
c se se
660 n/s 660 w/e

OPR: Eastern Pet.

WELL #: 1-28 State OWWO

ELEV: 5703 KB
*TOPS: Log-Samples
Shinarump 761
Moenkopi 801
Coconino 935

DSTS. & CORES:
No cores or tests

SPUD: 9-1-60 COMPL: 9-16-60
TD: 1091 PB: 1051
CSG: 8-5/8" @ 98 w/50
4 1/2" @ 1024 w/100
PERF: 937-1000 w/2 per ft.

PROD. ZONE: Coconino 937-1000

INIT. PROD: IPF 916 MCFGPD,
3/4" ck, SICP 100#.

***Corr ftg from 1660 n/s 1660 w/e

ADDITION TO JANUARY 2, 1960, FILE
STATE OF ARIZONA
OIL AND GAS CONSERVATION COMMISSION
PHOENIX, ARIZONA

FORM O&G 52

Form Prescribed Under Oil and Gas Conservation Act of 1951
WELL COMPLETION REPORT
(File in Duplicate)

Operator Eastern Petroleum Company Field Pinta
Street 2520 First National Bank Building Pool _____
City Denver 2 State Colorado County Apache
Lease Name State of Arizona # 2089 Well No. 1-28 Acres in Unit _____
Location 660 feet N of S line, 660 feet W of E line
Sec. 28 Twp. 36N Rge. 26E
Elevation DF 5703* GR _____ Electric Log Run June 26, 1959 19 _____
Number of Crude Oil Producing Wells on this Lease, including this well 1
Has Authorization to Transport Oil or Gas From Well, Form O&G 57 been filed? No

OFFICIAL COMPLETION GAUGE

Date Test Commenced 9-16-19 60 Hour A M. Date Test Completed 9-16-19 60 Hour _____ P. M.
Length of Test 5 Hours _____ Minutes
For Flowing Well: _____ For Pumping Well: _____
Flowing pressure on Tbg. _____ lbs. / sq. in. Length of stroke used _____ inches
Flowing pressure on csg. 100 lbs. / sq. in. Number of strokes per min. _____
Size tbg. _____ in. No. ft. run _____ Size of working barrel _____ inches
Size choke 4 points in. Type choke _____ Size tubing _____ in. No. ft. run _____
Length _____ in. Shut in pressure _____
If flowing well, was this well flowed for the entire duration of this test without the use of swab or other artificial flow device? Yes If jetted, used _____ cu. ft. gas per bbl. oil. Result of this test ~~2,140 MCFPD~~ 2,140 MCFPD
Gas-oil ratio of this well is _____ cu. ft. of gas per bbl. of oil.
Per cent water produced during this test _____
Gravity of oil produced during this test (Corrected to A. P. I. 60° F) _____
Name of Pipe Line or other carrier _____
If perforated: No. Shots 126 From 937 To 1000 Date Perforated _____
Date well Spudded June 17, 19 59 Date Well Completed September 12, 19 60
Top Pay 935 Ft. Total depth of well 1091 Ft.

CASING LINER AND TUBING RECORD

String	Size	Wt. / Ft.	Name and Type	Amount Ft.	Depth In.	Set at	Perforated From	To

CEMENT AND TESTING RECORD

Size of Hole	String	Where Cement Placed	No. Sacks Cement	Method Used	Pressure Applied in Testing	Hardness of Cement Drilled	Type of Cement
<u>6 3/4</u>	<u>4 1/2</u>	<u>T.D.</u>	<u>100</u>	<u>Howco</u>	<u>2,000 lbs.</u>		<u>No Record</u>

CHEMICAL OR SHOOTING RECORD BEFORE COMPLETION

Size	Chemical or	Quantity	Date	From	To
	<u>Mud Ban</u>	<u>1500 Glns/1500 Lbs.</u>	<u>9-8-60</u>	<u>937</u>	<u>1000</u>
	<u>Riverfrac</u>	<u>7500 Glns/ 7500Lbs.</u>	<u>9-10-60</u>	<u>937</u>	<u>1000</u>

AFFIDAVIT

I, J. Stoutner, being first duly sworn on oath state that I have knowledge of the facts and matter herein set forth and that the same are true and correct.

STATE OF COLORADO)

) ss.

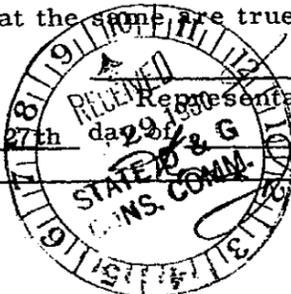
CITY & COUNTY OF DENVER)

Subscribed and sworn to and before me this _____ day of _____, 19 _____

by J. Stoutner

~~County Clerk~~

My Commission expires: April 23, 1963



J. Stoutner
Representative of Company

September, 19 60
Notary Public

PLUGGING RECORD					
Operator Kerr-McGee Corporation			Address P. O. Box 250, Amarillo, TX 79105		
Federal, State, or Indian Lease Number, or lessor's name if fee lease.		State	Well No.	Field & Reservoir	
			1-28	PINTA DOME/Coconino Sand	
Location of Well				Sec-Twp-Rge or Block & Survey	County
SE-SE, Section 28, Twp 20N, Rge 26E					Apache
Application to drill this well was filed in name of		Has this well ever produced oil or gas	Character of well at completion (initial production):		
Eastern Petroleum Co.		Yes-Helium	Oil (bbls/day) Unknown	Gas (MCF/day) Unknown	Dry? No
Date plugged:	Total depth	Amount well producing when plugged:			
4/14/77	1091'	Oil (bbls/day) 0	Gas (MCF/day) 68	Water (bbls/day) 0	
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		
N/A					
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"	48'	0	48'	---	EZSV Retainer at 881'
4 1/2"	1051'	0	1051'	---	----
Was well filled with mud-laden fluid, according to regulations?			Indicate deepest formation containing fresh water.		
Yes					
NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE					
Name	Address			Direction from this well:	
Kerr-McGee Corporation	P. O. Box 250, Amarillo, TX 79105			All	
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.					
Well P & A by setting 4 1/2" EZSV cement retainer at 881' with 50 sxs Class "B" Cement pumped below retainer and 72 sxs Class "B" Cement from retainer to surface.					
Use reverse side for additional detail.					
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Engineering Assistant</u> of the <u>Kerr-McGee Corporation</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	April 22, 1977	Signature <i>Lynn Kelley</i>		Lynn Kelley	
		APR 25 1977			
Permit No. 88	D & G CONS. COMM.		STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Plugging Record File One Copy		
			Form No. 10		

APPLICATION TO ABANDON AND PLUG

FIELD Pinta Dome
 OPERATOR Kerr-McGee Corporation ADDRESS P. O. Box 250, Amarillo, TX 79105
 Federal, State, or Indian Lease Number or Lessor's Name if Fee Lease _____ State _____ WELL NO. 1-28
 SURVEY T-20N, R-26E SECTION 28 COUNTY Apache
 LOCATION _____

TYPE OF WELL Gas (Helium) TOTAL DEPTH 1091'
(Oil, Gas or Dry Hole)
 ALLOWABLE (If Assigned) None
 LAST PRODUCTION TEST OIL 0 (Bbls.) WATER 0 (Bbls.)
 GAS 68 (MCF) DATE OF TEST 2-5-72
 PRODUCING HORIZON Coconino Sand PRODUCING FROM 937' TO 1000'

1. COMPLETE CASING RECORD

8-5/8" - cemented with 50 sx at 48'.
4-1/2" - cemented with 150 sx at 1051'.
PBTD 1051'.

2. FULL DETAILS OF PROPOSED PLAN OF WORK

1. Set cement retainer at 880'.
2. Squeeze 50 sx cement below retainer. Equalize 20 sx cement from 880-680'.
3. Pull tubing.
4. Fill casing to surface with cement.
5. Erect 4" pipe marker as per Rule 202-A7.

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

DATE COMMENCING OPERATIONS Upon approval.
 NAME OF PERSON DOING WORK _____ ADDRESS _____
 CORRESPONDENCE SHOULD BE SENT TO: C. J. Breeden *C. J. Breeden*
Name
District Manager
Title
P. O. Box 250, Amarillo, TX 79105
Address
March 1, 1977
Date

Date Approved 3-7-77
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: *[Signature]*

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

Permit No. 78

Figures read into record by John Fisher
Kerr M&G
Case # 33
9-18-68

KERR-MCGEE CORPORATION

EXHIBIT NO. 6

SUMMARY OF SURFACE SHUT-IN PRESSURES, PSIG
Pinta Dome Coconino Sand Gas Pool,
Apache County, Arizona

Unit Number	Well Name	Initial 10/1/61	24 Hours 10/1/62	24 Hours 6/16/63	8 Hours 1/22/64	24 Hours 8/27/64	24 Hours 11/11/65	24 Hours 5/2/66	24 Hours 12/30/66
42,510 I	State 4-A (State 4)	99.4	96.0	92.80	89.4	86.1	N.M.	77.2	N.M.
486,572 II	State 1-28	98.8	95.6	92.43	89.3	85.8	78.6	76.8	73.9
428,951 III	Fee 1	99.3	95.5	92.20	89.2	85.6	78.5	77.0	73.1
128,668 IV	State 3-A (State 3)	99.1	95.4	92.20	89.0	81.2	N.M.	77.7	73.2
1,066,013 V	State 2	99.1	95.5	92.15	89.0	85.6	78.5	76.7	73.0
502,013 VI	State 1	99.1	95.4	92.19	88.7	85.4	78.5	77.0	73.1
489,983 VIII	Fee 2	99.3	95.7	92.45	89.2	85.8	78.7	77.1	73.3
220,610 IX	State 1-2	99.6	96.7	93.85	91.2	N.M.	83.2	81.6	77.1
43,368 X	State 1-10	99.6	96.5	N.M.	N.M.	N.M.	83.0	81.6	77.0
349,968	Averages	99.3	95.8	92.53	89.4	85.1	79.9	78.1	74.2

N.M. - Not measured.

DENSITY IN PRESSURES
4 PRODUCERS

88

12/27/67
24 hrs
61.5/65

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

Lease Eastern State #1-28	Field Pinta Dome	Reservoir Coconino
Survey or Sec-Twp-Rge 28-20N-26E	County Apache	State Arizona
Operator Eastern Petroleum Company		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street Box 291	City Garmi	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 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. No Changes		

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 May 6, 1964
Date approved: MAY 11 1964
Commissioner's Number: _____
File No. 88

Jesse N Edwards
Signature

By *John W Bannerster*
Executive Secretary
State of Arizona
Oil and Gas Conservation Commission

**STATE OF ARIZONA OIL & GAS
CONSERVATION COMMISSION**
Operator's Certificate of Compliance & Authorization to
Transport Oil or Gas from Lease
Form No. P-17 File three copies
Authorized by Order No. 4-6-59
Effective April 6, 1959

88 3

Faint, illegible text, possibly bleed-through from the reverse side of the page.

RECEIVED

MAY 11 1984

MAY 11 1984



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: **2520 First Nat'l. Bank Bldg., Denver, Colo.**

Lease Name: **State of Arizona #2089** Well Number: **#1-28** Field & Reservoir: **Pinta**

Location: **660 feet N of S Line, 660 feet W of B Line** Sec.--TWP-Range or Block & Survey: **Section 28, T26N, R26E**

County: **Apache** Permit number: **88** Date Issued: **June 18, 1959** Previous permit number: _____ Date Issued: _____

Date spudded: **June 17, 1959** Date total depth reached: **June, 1959** Date completed, ready to produce: _____ Elevation (DF, RKB, RT or Gr.): **5703' K.B.** Elevation of casing hd. flange: **1' above G.I.** feet

Total depth: **1091'** P.B.T.D.: **1051'** 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: **Coconino Sandstone** Rotary tools used (interval): **0' - 1091'** 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): **Electrical Induction & Microlog** Date filed: **January 2, 1960**

CASING RECORD

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Surface	10 3/4	8 5/8		48'	50	
Production	6 3/4	4 1/2		1051.2'	100	

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
NO PERFORATION		937-1000 (P.I. Rep)		

INITIAL PRODUCTION

Date of first production: _____ Producing method (indicate if flowing, gas lift or pumping--if pumping, show size & type of pump:)

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

Tubing pressure	Casing pressure	Cal'd 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 **Secretarial Assistant** 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: **January 2, 1960**

Signature: *J. Stoutman*

MFW

STATE OF ARIZONA STATE LAND COMMISSIONER
Well Completion or Recompletion Report and Well Log
Form No. P-7 File two copies
Authorized by Order No. **4-5-59**
Effective **April 6, 1959**

88

16

Eastern Petroleum No. 1-28 State (continued)

Present Status: Shut-In

Cores:

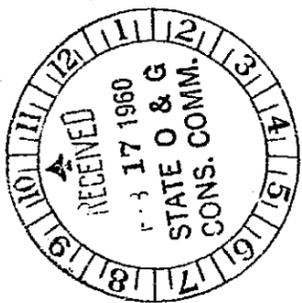
- No. 1 940 feet to 956 feet Cut 16 feet, recovered 16 feet
2' Sandstone, red to tan, streaked with light green
and red sandy shale.
1' Sandstone, tan to brown, fine grained, hard, sub-
round to subangular streaked with thin
green shale.
13' Sandstone, buff to brown, fine grained, hard, sub-
round to subangular, good porosity and
permeability becoming medium grained
towards the base.
Entire core was bubbling gas.
Vertical fractures from 943 to 946.
- No. 2 956 feet to 969 feet Cut 13 feet, recovered 13 feet
4' Sandstone, buff, fine to medium grained, subround,
good porosity and permeability.
5' Sandstone, buff, fine to medium grained, subround,
very much cross bedding.
4' Sandstone, ditto, some aeolian fluting in the sand-
stone.
Entire core bubbling gas, vertical fractures 956 - 960
and 968 - 969.
- No. 3 969 feet to 978 feet Cut 9 feet, recovered 9 feet
4' Sandstone, buff, fine to medium grained, subround
to subangular, firm, fair porosity and
permeability; very slight oil stain.
5' Sandstone, buff, ditto, good porosity and perm-
eability.

Drill Stem Tests:

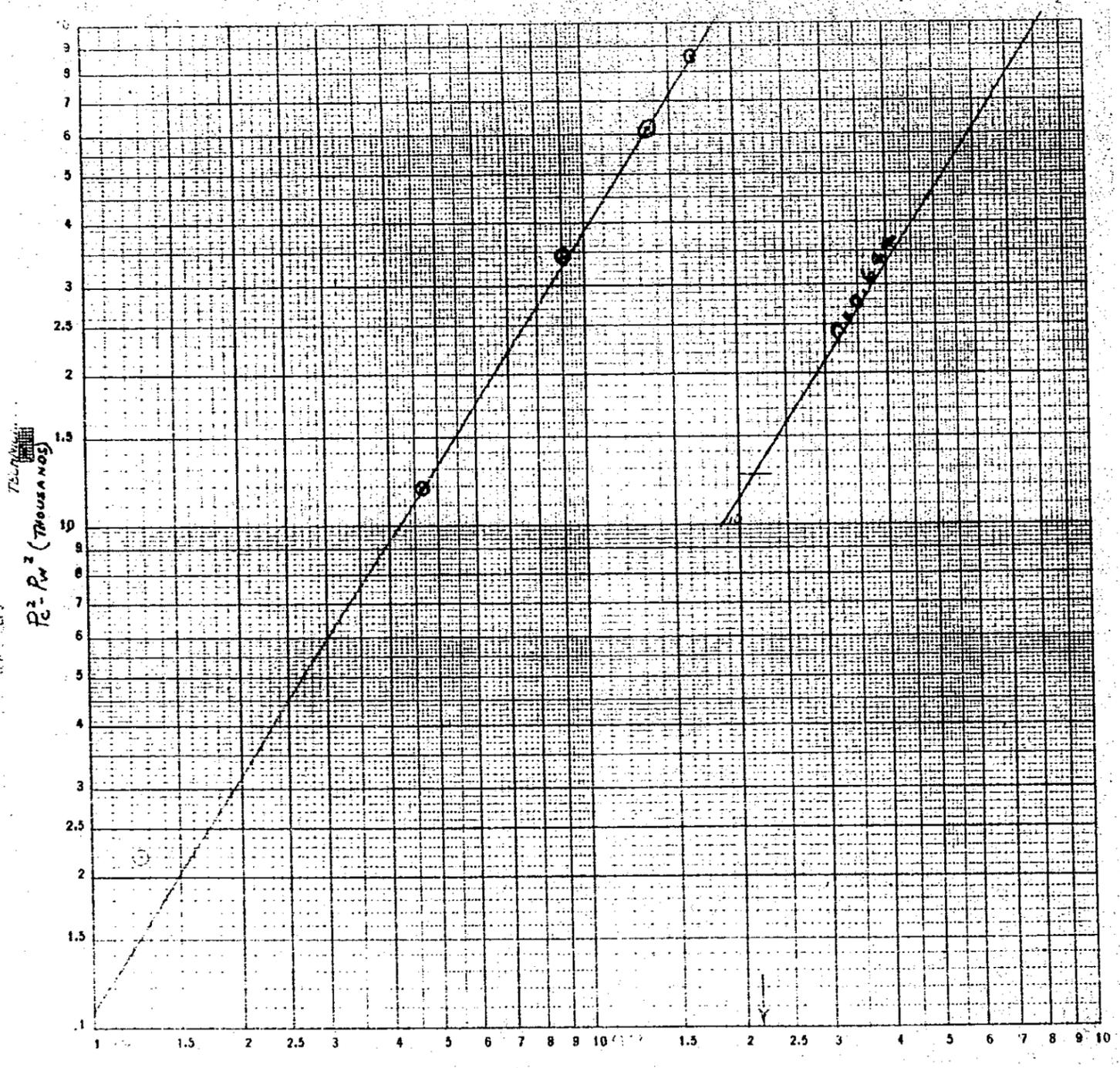
- No. 1 940 feet to 956 feet (Coconino sandstone)
Open two hours, helium-nitrogen gas to surface
immediately; flowed at the following rate:
30 minutes - 83 MCF/D
60 minutes - 105 MCF/D
90 minutes - 118 MCF/D
120 minutes - 118 MCF/D
This test would probably have been much better, but
approximately 60 barrels of mud with about 18% lost
circulation material was lost in the formation just
prior to testing. Surface pressure, when gas analysis
sample taken, was 50 psig.

Eastern Petroleum No. 1-28 State (continued)

Recovered 35 feet of gas cut mud.
Shut-in time, initial and final: 60 minutes.
Initial flowing pressure: 14 psig
Final flowing pressure: 16 psig
Initial shut-in pressure: 59 psig
Final shut-in pressure: 89 psig
Initial hydrostatic pressure: 458 psig
Final hydrostatic pressure: 453 psig



EASTERN PETROLEUM CO
STAFF 1-28



15025 PSIA

88-1

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool PINTA Formation COCONINO SANDSTONE County APACHE
 Initial Annual Special X Date of Test SEPT. 16, 1960
 Company EASTERN PETROLEUM CO. Lease STATE Well No. 1-28
 Unit P Sec. 28 Twp. 20N Rge. 25E Purchaser _____
 Casing 4 1/2 Wt. 9 1/2 I.D. _____ Set at 1051 Perf. 937 To 1000
 Tubing _____ Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
 Gas Pay: From _____ To _____ L _____ xG .920 -GL .957 Bar.Press. 12
 Producing Thru: Casing _____ Tubing _____ Type Well _____
 Date of Completion: SEPT. 12, 1960 Packer _____ Reservoir Temp. EST 75°

OBSERVED DATA

Tested Through (Prover) (~~CHOKE~~) (~~METER~~) Type Taps _____

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI	2"					100.0		
1.	2"	1/4				92.0	86	1
2.	2"	1/2				94.4	82	1
3.	2"	3/4				82.7	80	1
4.	2"	1				65.7	79	1
5.	2"	1 1/4				47.3	80	1

FLOW CALCULATIONS

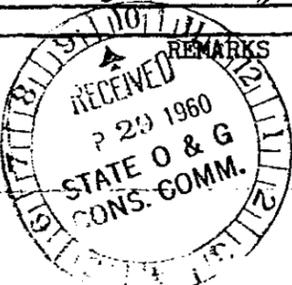
No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	1.4030		111.0	.9759	.8075	1.578	123
2.	9.5233		105.4	.9759	.8075	*	453
3.	12.2023		94.7	.9813	.8075	*	316
4.	22.0862		77.7	.9822	.8075	*	1350
5.	35.6735		59.3	.9813	.8075	*	1676

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Gravity of Liquid Hydrocarbons _____ deg.
 P_c 112.0 (1-e^{-s}) .933
 Specific Gravity Separator Gas _____
 Specific Gravity Flowing Fluid _____
 P_c 112.0 P_c 12.544

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.	111.0	12321	.976	.952	.933	12321	12321-933		
2.	105.4	11104	.976	.952	.933	11104	11104-933		
3.	94.7	8968	1.439	2.071	.971	8968	8968-971		
4.	77.7	6037	2.131	4.541	.971	6037	6037-971		
5.	59.3	3516	2.638	6.960	.971	3516	3516-971		

Absolute Potential: 2,140 MCFPD; n 0.644
 COMPANY Geological, Inc.
 ADDRESS Box 642 103 N. MAIN AVENUE, TUCSON, ARIZONA
 AGENT and TITLE Regional Agent
 WITNESSED _____
 COMPANY _____



INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

- Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.
- P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia
- P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia
- P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if
flowing through casing.) psia
- P_f = Meter pressure, psia.
- h_w = Differential meter pressure, inches water.
- F_g = Gravity correction factor.
- F_t = Flowing temperature correction factor.
- F_{pv} = Supercompressibility factor.
- n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

STATE OF ARIZONA
OIL AND GAS CONSERVATION COMMISSION
PHOENIX, ARIZONA FORM O&G 53
Form Prescribed Under Oil and Gas Conservation Act of 1951

CAPACITY TEST REPORT
BACK PRESSURE TEST OF GAS WELL
(Critical Flow Prover or Orifice Meter)
OPEN FLOW POTENTIAL TEST

Date September 27, 19 61

Operator Eastern Petroleum Company Field Pinta

Lease State No. 1-28 Well Ac. None

Acres Under Well 640 Connection None

Reservoir Coconino County Apache

Sand Depth 935' Csg. @ 1051' Tubing @ _____
Size Line and _____

Gr. of Gas 8.5% Helium Meter or Prover _____

Pressure _____
Is ~~Volume~~ Corrected to sand face? No

Orifice Size	Coeff 24 Hr.	Working Pressure psia	LBS.		Back Pressure Test		
			(Pc - PW)	2	2	If Orifice Meter used	Volume
					Lb. Q.	MCFPD @ 15.025 psia	
1/2"	5.5233	106.4		1,187,000		465	
3/4"	12.2023	94.7		3,435,000		916	
1"	22.0622	77.7		6,196,000		1,360	
1 1/4"	35.6738	59.3		8,557,000		1,676	
Volume - 24 Hour						MCF.	

Open Flow Test

Shut In Pres. 112 psia Time Shut In 4 days Water - Oil - Etc. (Important) _____

Producing Through Casing

TIME	READING	LIQUID USED	SPRING GAUGE
15 Min.	See back pressure chart on file		
20 Min.			
25 Min.			
30 Min.			

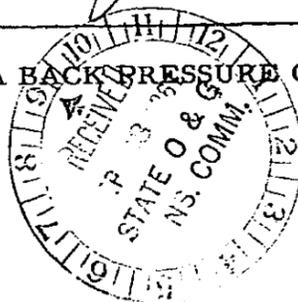
Test Until Two Readings Check
OPEN FLOW CAPACITY 2,140 MCF per 24 Hrs.

SIGNATURES

BOARD _____
CON. _____
CO. James W. Law
OTHER _____

(ACCOMPANY THIS REPORT WITH A BACK PRESSURE CHART)

5/12/58



88 10

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL DEEPEN PLUG BACK

NAME OF COMPANY OR OPERATOR

DATE

EASTERN PETROLEUM COMPANY

JUNE 12, 1959

Address **2520 1st. National Bank Bldg.,** City **Denver 2,** State **Colorado**

DESCRIPTION OF WELL AND LEASE

Name of lease State # 2089	Well number 4	Elevation (ground) furnish later
Well location 660 NSL; 660 WEL;	(give footage from section lines) Section—township—range or block & survey Sec. 28, T. 20 N. R. 26 E. G. & S. R.B. & M.	
Field & reservoir (If wildcat, so state) XXXXXXXXXXXXXXXXXXXXXXXXXXXX Pinta Dome Area	County Apache	
Distance, in miles, and direction from nearest town or post office 6 Miles SW from Navajo, Arizona		
Nearest distance from proposed location to property or lease line: 660'	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: 9 Miles approx.	
Proposed depth: 2500'	Rotary or cable tools Rotary	Approx. date work will start June 20, 1959
Number of acres in lease: 1520	Number of wells on lease, including this well, completed in or drilling to this reservoir:	

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 **Attorney-in-fact** 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 **12 June 1959** Signature **James J. Henry**

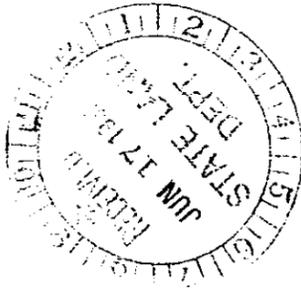
Permit Number: **88**
Approval Date: **June 18, 1959**
Approved By: **Obed M. Lassen**

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 STATE LAND COMMISSIONER

Application to Drill, Deepen or Plug Back
Form No. P-1 File two copies
Authorized by Order No. **4-5-59**
Effective **April 6, 1959**

4/15/59
OK
88



10942

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"	24#	H 40	Surf.	200'	200	200
Note: 4 1/2" casing of 11# weight, grade J 55, will be run from the surface to total depth in the well in the event of production.						

Form No. P-1

JUN 12 11 24 AM 1959

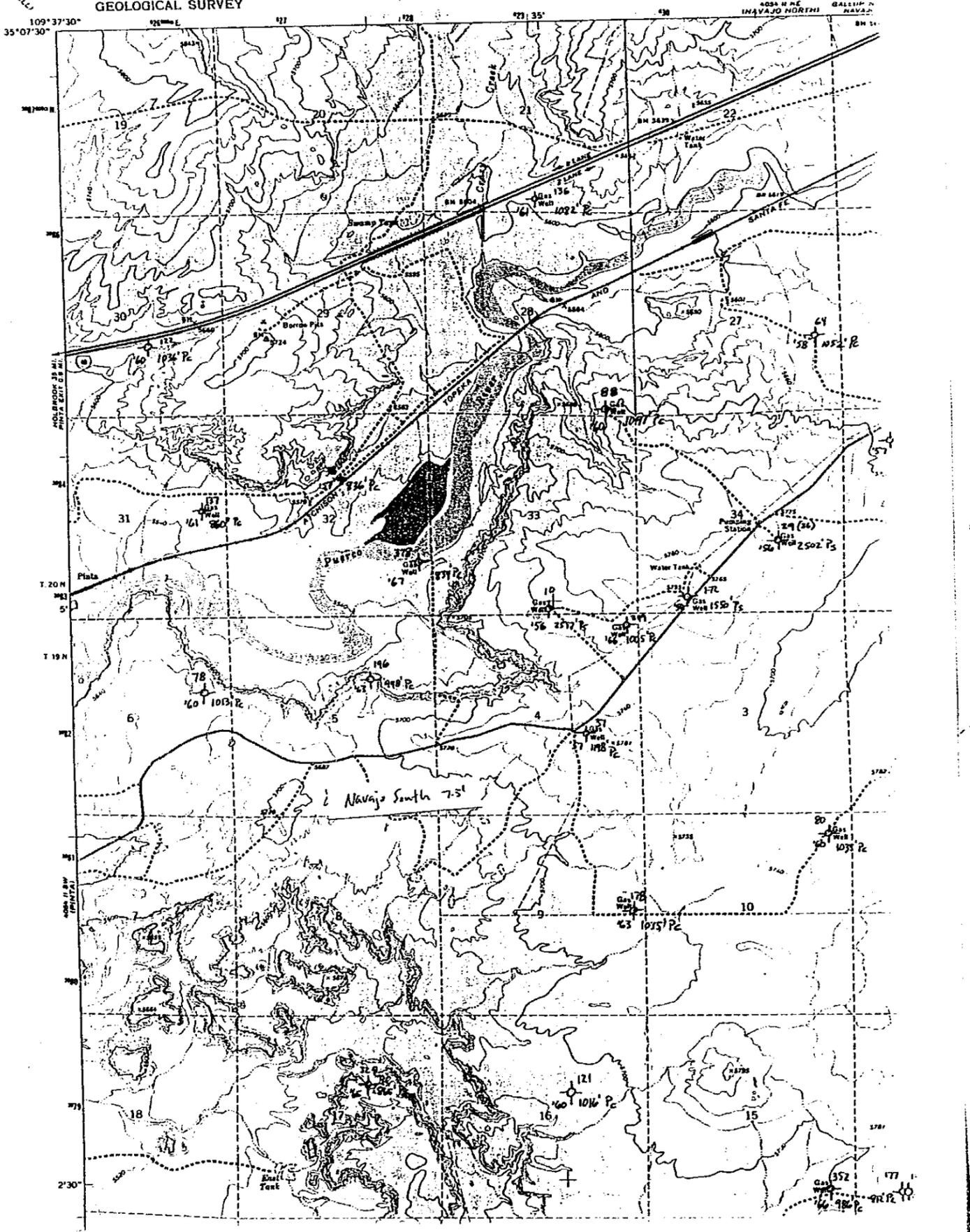
STATE LAND DEPARTMENT



10202

STATE LAND DEPARTMENT
JUN 12 11 24 AM 1939

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



EASTERN PETR. 1-28 State

D.S.T. No. 1 940 to 956 Open 2 Hours
Good blow Immed. Gauged: 30 Minutes - 83 MCFG/D
60 " - 105 MCFG/D
90 " - 118 MCFG/D
120 " - 118 MCFG/D

Recovered: 35' Gas cut drlg mud.

IHP - 468#
FHP - 468#
ISIP (1 hr) - 93#
FSIP (1 hr) - 93#
IFP - 15#
FFP - 30#

Note: This test would probably have been much better but there was lost approximately 60 bbls of mud in the formation and the mud had approximately 20% lost circulation material in it.

38 feet of the Coconino was cored.

It had an average Porosity of 13.8%
Average Permeability of 87 Millidarcys
Average Water Satur. of 39.9 %

The log shows 78 feet of pay with these characteristics:

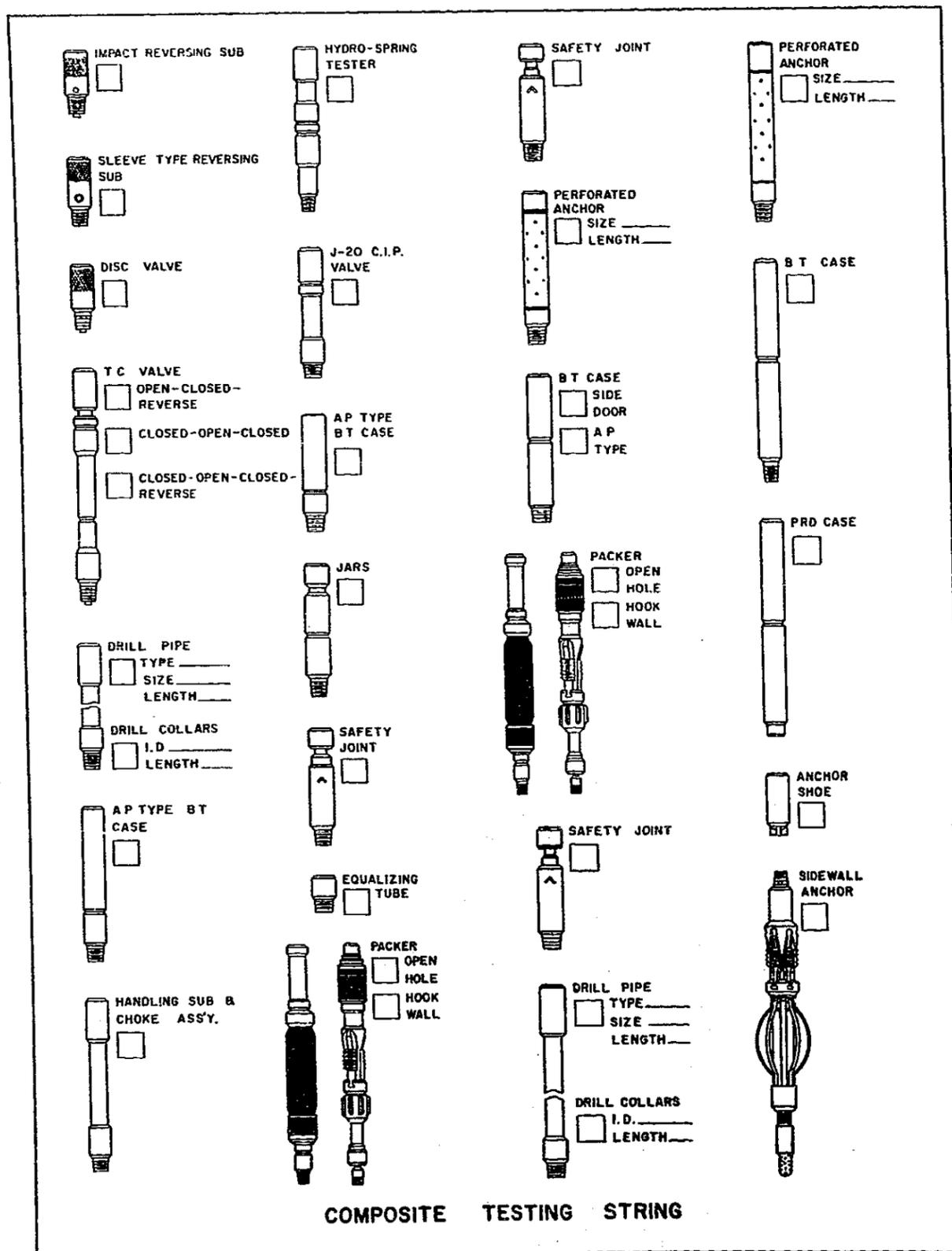
There is an additional 20 feet of pay with slightly higher water saturation.

Initial Closed In Time	60	Minutes		Date	6-21-59
Tool Open Flow Period	120	Minutes		Ticket No.	T-189041
Final Closed In Time	60	Minutes		HOWCO DISTRICT	Farmington N.M.
Depth Top Gauge	Ft.	Blanked Off		Kind of Job	Open Hole Test
BT. P.R.D. No		Hr. Clock	CONTRACTOR Apache Dr. Co.		
Pressure Readings	Field	Office Corrected	HOLE & TOOL DATA		
Initial Hydro Mud Pressure			Elevation	Top Packer Depth	←
Initial Closed in Pres.			Total Depth	Bottom Packer Depth	956' 948'
Initial Flow Pres.			Casing or Hole Size	Size & Type Well Packer	6 3/4" 5 1/2"
Final Flow Pres.			Inner or Rathole Size	Size Bottom Choke	6 3/4" 1"
Final Closed in Pres.			Casing Perforations	Top Bottom	Size Surface Choke 1"
Final Hydro Mud Pressure			Interval Tested	ID & Length Air Chamber	948'-956' none
Depth Center Gauge	Ft.	Blanked Off	Formation Tested	ID & Length Drill Collars	-177'
BT. P.R.D. No		Hr. Clock	Est. Gauge Depth Temp.	Size Drill Pipe	100 2 7/8"
Pressure Readings	Field	Office Corrected	MUD DATA Weight	Viscosity	9.7 53
Initial Hydro Mud Pressure			All depths measured from	No. Folders Reproduced	Rotary table
Initial Closed in Pres.			REMARKS: Opened tool with Good Blow & continued thru test.		
Initial Flow Pres.					
Final Flow Pres.					
Final Closed in Pres.					
Final Hydro Mud Pressure					
Depth Bottom Gauge	Ft.	Blanked Off	TYPE JARS None		
BT. P.R.D. No		Hr. Clock	Recovered 35 Feet of mud		
Pressure Readings	Field	Office Corrected	Recovered Feet of		
Initial Hydro Mud Pressure			Recovered Feet of		
Initial Closed in Pres.			Recovered Feet of		
Initial Flow Pres.			Recovered Feet of		
Final Flow Pres.			Recovered Feet of		
Final Closed in Pres.			Recovered Feet of		
Final Hydro Mud Pressure			Witnessed By		
Amount-Type of Cushion			Tester D. Taylor		

LOCATION
FIELD
COUNTY
STATE

LEASE NAME
WELL NO.
TEST NO.
LEASE OWNER
OWNERS DISTRICT

S. E. H. Co.
1-28
Eastern P. O.
Gallup N.M.



*GEOLOGICAL COMPLETION REPORT
EASTERN PETROLEUM COMPANY
STATE NO. 1-28
Section 28, T20N, R26E
Apache County, Arizona
PN 88*

Boys' egg

*By: Robert E. Lauth
Geological Consultant
Durango, Colorado
August 13, 1959*

ROBERT E. LAUTH
Consulting Geologist

GEOLOGICAL COMPLETION REPORT
Eastern Petroleum Company
State No. 1-28
Section 28, T20N, R26E
Apache County, Arizona

WELL DATA

Rotary: Surface to total depth - mud drilled
Spud date: June 17, 1959
Date drilling completed: June 24, 1959
Initial production: Testing
Surface casing: 8 5/8" @ 48 feet with 50 sacks
Production casing: 4 1/2" @ 1051.2 feet with 100 sacks
Contractor: Eastern Drilling Company
Leased rig of Apache Drilling Company, Denver, Colorado
Well location: SE - SE; 660' FSL & 660' FFL,
Section 28, Township 20 North, Range 26 East,
Apache County, Arizona
Elevation: 5696' ground
5703' rotary bushing
Total depth: 1091 feet
Plug back: 1051 feet

FORMATION TOPS

Formation	Depth	Elevation	Thickness
Chinle	Surface	+5703	761'
Chinle congl.	674	+5029	44'
Shinarump congl.	761	+4942	40'
Moenkopi	801	+4902	134'
Coconino	935	+4768	-

CORRELATION

Formation	Eastern Petr. 1-28 State SE 28-20N-26E	Eastern Petr. 1-2 State SW 2-19N-26E	Eastern Petr. 1-10 State NE 10-19N-26E
Chinle congl.	+5029	+5029	+5044
Coconino	+4768	+4767	+4768

Formation	Eastern Petr. 1-6 State NE 6-19N-26E	Kern McGee No. 1 Reese SE 27-20N-26E	Kern McGee No. 2 Fee NW 35-20N-26E
Chinle congl.	+4991	+4895	+5052
Coconino	+4713	+4649	+4780

Formation	Kerr McGee No. 1 State SW 34-20N-26E	Kerr McGee No. 2 State SE 34-20N-26E	Kerr McGee No. 3 State SE 4-19N-26E
Chinle congl.	+5040	+5052	+5031
Coconino	+4773	+4782	+4766

Formation	Kerr McGee No. 4 State NE 32-20N-26E	Kerr McGee No. 1 Fee SE 33-20N-26E
Chinle congl.	+5006	+5061
Coconino	+4735	+4787

Note: On Kerr McGee No. 2 Fee in Sec 35-20N-26E there is a discrepancy in elevations. The one used here is 5732'KB. The other elevation given by Kerr-Mcgee is 5671'KB.

DISCUSSION

The purpose of this report is to present geological information and basic data concerning the Eastern Petroleum Company, State No. 1-28 well located in the SE - SE of Section 28, Township 20 North, Range 26 East, Apache County, Arizona.

Under surface pipe the hole was drilled to a depth of 1091 feet with a 6 3/4 inch bit. A fresh water sand was noted from 262 to 283 feet. Considerable mud, approximately 400 barrels, was lost in the Coconino pay zone while coring and drilling.

Four and one-half inch casing was set and cemented at 1051.2 feet (ground level measurements) with 100 sacks of cement. Three cores and one drillstem test were taken in the Coconino sandstone. The entire pay zone was not cored due to excessive loss of mud while coring. Details of the cores and drillstem test will be given in the report. Careful examination of the sample cuttings was made at the wellsite at the time of drilling.

A Schlumberger Electrical-Induction log was run from under surface casing to a depth of 1075 feet. A micralog was run from 750 to 1073 feet.

Final formation tops have been adjusted and picked from electrical log curves related to sample cutting examination and stratigraphic correlation.

STRATIGRAPHY

Attached to this report is the sample description made by the writer from 10 foot and 5 foot sample cuttings for the interval 50 to 1090 feet.

The lithology and correlation of the possible producing horizon (the Coconino sandstone) is discussed in the following paragraphs.

The (thin) conglomerate section is completely water wet and will not be discussed.

Coconino sandstone 935 to 1091' (penetrated 156 feet)

The Coconino sandstone is massive, buff in color, and exhibits cross-bedding in the cores. A transition zone exists which is composed of buff and tan colored fine grained sandstones of the Coconino streaked with dark red silty and micaceous shales of the Moenkopi formation. This zone is present from 977 to 935 feet.

By log analysis and core analysis there is a maximum of 98 feet of sandstone which will be productive of helium-nitrogen gas. Of this, twenty feet is in the gas-water transition zone.

The upper seventy-eight foot zone has the following characteristics which are averaged from core and electrical-microlog analysis.

935 to 1013 feet - 78 feet

Average Porosity 13.8%
Average Permeability 87 millidarcies
Average Water Saturation 39.9%

The lower twenty foot gas-water transition zone has essentially the same porosity; a little higher permeability and approximately 60% water saturation.

An analysis of the gas sample taken on the drillstem test in the upper 16 feet of this section and sent to the Bureau of Mines in Amarillo, Texas, had the following analysis:

Helium 8.6%
Nitrogen 89.9%
CO₂ 0.8%
Methane 0.7%
Argon 0.6%

Total 100.0%

A commercial helium-nitrogen producer can be made in the upper 78 feet of Coconino sandstone. An initial potential in excess of five million cubic feet of gas per day would be reasonable to expect.

RECOMMENDED COMPLETION PROCEDURE

Four and one-half inch (OD), J-55, 9.5 lb and P-110, 15.10 lb used casing was set and cemented at 1051.2 feet with 100 sacks of cement. Only one joint 25.58 feet in length of P-110, 15.10 lb casing was used. It is the bottom joint and below the lowest possible pay zone. The remainder of the pipe is J-55, 9.5 lb. A float shoe was used. The top of the float is at 1051 feet. Centralizers were placed at 1026, 954, and 938.55 feet respectively. The plug was pumped down to the top of the float shoe with clear water.

The following procedure is recommended in completing the Coconino sandstone zone:

- 1) Perforate with 2 shots per foot the interval 937 to 1005 feet (68 feet).
- 2) Wash with mud acid sufficient to cover completely all perforations plus an additional amount to penetrate back into the mud invaded zone, approximately 160 gallons.
- 3) Load the hole with water to help push the acid back into the formation. Allow to set for 8 to 12 hours.
- 4) Sub water and acid back. Allow the well to blow dry.

From the characteristics of the electrical-induction and microlog, core analysis and drillstem test data, the completion should be a natural one.

Because 400 barrels of mud with cotton seed hulls and fibers were lost in the Coconino sandstone, much washing and cleaning with mud acid might be necessary.

CONCLUSIONS

This test is considered to have adequately tested all the formations penetrated.

The Coconino sandstone from 935 to 1033 feet contains helium-nitrogen gas.

It is recommended that the interval 937 to 1005 feet be perforated. The completion should be a natural one.

An initial potential in excess of 5 million cubic feet of gas per day is reasonable to expect.

The writer expresses his appreciation for the opportunity of making this well study and respectfully submits this report.

Robert E. Lauth

Robert E. Lauth
Geological Consultant
Durango, Colorado
August 13, 1959

CORE DESCRIPTION
Eastern Petroleum Company
State No. 7-28
Section 28, T20N, R26E
Apache County, Arizona
Elevation 5703' rotary bushing

Core No. 1 940 - 956 (cut 16 feet, recovered 16 feet)
(Coring time (minutes per foot) 6, 3, 5, 5, 5, 3, 4, 6, 4, 5, 5,
3, 3, 4, 4, 4. Lost circulation, pulled core barrel.
2' Sandstone, red to tan, streaked with light green and red sandy
shale.
1' Sandstone, tan to brown, fine grained, hard, subround to sub-
angular streaked with thin green shale.
13' Sandstone, buff to brown, fine grained, hard, subround to
subangular, good porosity and permeability becoming
medium grained towards the base.
Entire core was bubbling gas.
Vertical fractures from 943 to 946.

Core No. 2 956 - 969 (cut 13 feet, recovered 13 feet)
(Coring time (minutes per foot) 7, 7, 7, 4, 3, 3, 5, 4, 4, 4, 1/2,
5, 3, 3. Core barrel jammed.
4' Sandstone, buff, fine to medium grained, subround, good
porosity and permeability.
5' Sandstone, buff, fine to medium grained, subround, very much
cross bedding.
4' Sandstone, ditto, some acollan fluting in the sandstone.
Entire core bubbling gas, vertical fractures 956 - 960 and
968 - 969.

Core No. 3 969 - 978 (cut 9 feet, recovered 9 feet)
(Coring time (minutes per foot) 4, 5, 4, 5, 6, 4, 4, 13, 14. Lost
circulation, pulled core barrel.
4' Sandstone, buff, fine to medium grained, subround to subangular,
firm, fair porosity and permeability; very slight
oil stain.
5' Sandstone, buff, ditto, good porosity and permeability.

DRILLSTEM TEST RECORD
Eastern Petroleum Company
State No. 1-28
Section 28, T20N, R26E
Apache County, Arizona
Elevation 5703' rotary bushing

DST No. 1 940 - 956 (Coconino sandstone)
Open two hours, helium-nitrogen gas to surface immediately;
flowed at the following rate:

30 minutes - 83 MCF/D

60 minutes - 105 MCF/D

90 minutes - 118 MCF/D

120 minutes - 118 MCF/D

This test would probably have been much better, but approximately
60 barrels of mud with about 18% lost circulation material was
lost in the formation just prior to testing. Surface pressure,
when gas analysis sample taken, was 50 psig.

Recovered 35 feet of gas cut mud.

Shut-in time, initial and final: 60 minutes.

Initial flowing pressure: 14 psig.

Final flowing pressure: 16 psig.

Initial shut-in pressure: 59 psig.

Final shut-in pressure: 89 psig.

Initial hydrostatic pressure: 458 psig.

Final hydrostatic pressure: 453 psig.

DRILLING TIME RECORD

Eastern Petroleum Company

State No. 1-28

Section 28, T20N, R26E

Apache County, Arizona

Elevation 5703' rotary bushing

From	To	Minutes Per Ten Feet
70	100	14-13-9
100	200	7-6-6-10-5-5-6-6-6-5
200	300	5-8-8-5-5-10-9-7-9-8
300	400	7-5-6-7-7-9-5-8-8-7
400	500	8-8-18-17-12-11-14-15-19-15
500	600	11-14-14-16-22-17-18-14-13-15
600	700	18-14-12-14-11-15-16-20-20-12
700	800	7-14-14-11-16-16-17-17-21-23
800	900	22-22-20-30-20-24-24-27-34-36
900	940	29-36-27-33
940	956	See Core No. 1
956	969	See Core No. 2
969	978	See Core No. 3
980	1000	108-87
1000	1090	70-62-83-90-53-96-69-69-86

SAMPLE DESCRIPTION

Eastern Petroleum Company
State No. 1-28
Section 28, T2N, R26E
Apache County, Arizona
Elevation 5703' rotary bushing

Samples start at 50' in the Chinle formation. The "A" sandstone bed (mapping horizon) is on the surface.

- | | |
|-----------|---|
| 50 - 60 | 80 sandstone clear, fine to coarse grained, subangular.
20 shale red, pink. |
| 60 - 70 | 80 sandstone ditto, also green, very fine grained,
20 shale ditto. |
| 70 - 80 | 60 sandstone, ditto. 40 shale pink, in part finely
arenaceous. |
| 80 - 90 | 30 sandstone ditto. 70 shale as above. |
| 90 - 100 | 10 sandstone ditto. 90 shale as above, some very light
green - bentonitic. |
| 100 - 110 | 20 sandstone clear, medium to coarse grained, angular to
subangular. 80 shale pink, in part sandy. |
| 110 - 120 | 70 sandstone ditto. 90 shale pink to red. |
| 120 - 130 | Trace of sandstone. 100 shale red to pink, in part finely
arenaceous. |
| 130 - 140 | 60 sandstone white, very fine grained, salt and pepper
in appearance, cemented. 40 shale as above. |
| 140 - 150 | 90 sandstone ditto. 10 shale ditto. |
| 150 - 160 | 80 sandstone ditto. 20 shale ditto, some light green
bentonitic. |
| 160 - 170 | 30 sandstone ditto. 70 shale pink to light purple, in
part finely arenaceous. |
| 170 - 180 | 20 sandstone as above. 80 shale ditto, occasional round
coarse pebbles in shale. |
| 180 - 190 | Trace of sandstone. 100 shale red to gray, pink, in
part very sandy. |

190 - 200 Trace of light green, very fine grained sandstone.
100 shale as above.

200 - 210 Trace of white crystalline limestone. 100 shale lavender
with green blebs and mudstones.

210 - 220 Trace of sandstone. 100 shale ditto, some light green,
finely arenaceous.

220 - 230 20 sandstone clear, medium grained, loose, angular to
subangular. 80 shale ditto. Trace of tan crystalline
limestone.

230 - 240 30 sandstone ditto. 10 limestone ditto. 60 shale ditto.

240 - 250 20 sandstone ditto. Trace of limestone. 80 shale pre-
dominately light green.

250 - 260 10 sandstone clear, fine grained, angular to subangular.
10 limestone tan crystalline. 80 shale predominately
light green, also red and gray.

260 - 270 90 sandstone clear to rust colored, fine to medium grained,
subround to angular, some brown chert. 10 shale ditto.

270 - 280 100 sandstone ditto. Trace of green shale.

280 - 290 100 sandstone ditto. Trace of green shale.

290 - 300 90 sandstone ditto. 10 shale pink and light green.

300 - 310 80 sandstone ditto. 20 shale pink and light green.

310 - 320 70 sandstone ditto, some brown chert. 30 shale ditto.

320 - 330 30 sandstone ditto. 70 shale light green, pink, tan, and
gray, in part sandy.

330 - 340 20 sandstone ditto. 80 shale ditto, some lavender.

340 - 350 20 sandstone ditto. 80 shale ditto, predominately
light green.

350 - 360 10 sandstone some red chert. 90 shale light green and
lavender.

360 - 370 Trace of sandstone. 100 shale as above.

370 - 380 Trace of sandstone. 100 shale as above.

380 - 390 Trace of sandstone. 100 shale as above.

390-400 10 sandstone clear, fine grained, subround to subangular,
loose. 90 shale light green and lavender.

400 - 410 100 shale very pale green to white.

410 - 420 100 shale ditto.

- 420 - 430 100 sandstone clear to tan, fine to medium grained, subround to angular, loose.
- 430 - 440 100 sandstone ditto. Trace of green and lavender shale.
- 440 - 450 50 sandstone ditto, some brown chert. 50 shale light green, gray, and lavender.
- 450 - 460 30 sandstone ditto, some red chert. 70 shale ditto, predominately purple.
- 460 - 470 10 sandstone ditto. 90 shale ditto, predominately brown.
- 470 - 480 80 sandstone clear to tan, very fine to fine grained, round to angular. 20 shale ditto.
- 480 - 490 50 sandstone ditto. 50 shale ditto.
- 490 - 500 90 sandstone ditto, becoming coarse grained. 10 shale ditto.
- 500 - 510 100 sandstone clear to reddish, fine to medium grained, angular to subround, loose. Trace of green shale.
- 510 - 520 80 sandstone ditto, some red chert. 20 shale light green.
- 520 - 530 70 sandstone ditto, becoming predominately medium grained. 30 shale ditto, gray and red.
- 530 - 540 20 sandstone ditto. 80 shale ditto, and gray.
- 540 - 550 20 sandstone ditto. 80 shale ditto.
- 550 - 560 10 sandstone ditto. 90 shale light green, gray, and brown.
- 560 - 570 20 sandstone ditto. Trace of red crystalline limestone. 80 shale ditto.
- 570 - 580 10 sandstone ditto. 90 shale ditto, trace of yellow shale.
- 580 - 590 Trace of sandstone, some red chert. 100 shale ditto.
- 590 - 600 10 sandstone ditto. 90 shale predominately brown micaceous and red.
- 600 - 610 Trace of sandstone. 100 shale predominately brown, some green, finely micaceous.
- 610 - 620 Trace of sandstone, some brown chert. 100 shale predominately light green, some gray, brown, and red.
- 620 - 630 A few coarse, round, loose grains of sandstone. 100 shale ditto.
- 630 - 640 Trace of clear, fine grained, loose sandstone. 100 shale ditto, light green and brown.

(*Chinle 761*)
7' thick

674
Top Chinle
enough
(56')

761
Top Shinarump
(40')

801
Top Moqui
top

- 640 - 650 70 sandstone as above, few coarse clear grains.
90 shale ditto.
- 650 - 660 30 sandstone clear to red, very fine grained to coarse
grained. 70 shale light green and lavender. Trace of
red chert.
- 660 - 670 Trace of sandstone clear, very fine grained, loose.
100 shale light green, gray, lavender, and red.
- 670 - 680 10 sandstone ditto, some coarse grains. 90 shale ditto,
poor sample, lot of caving.
- 680 - 690 50 sandstone clear to red to tan, fine to coarse grained,
angular to subround. 50 shale ditto.
- 690 - 700 30 sandstone ditto. 70 shale light green with very much
fine grains of sandstone, also mudstone conglomerate.
- 700 - 710 100 sandstone clear, coarse grained, angular, loose.
Trace of limestone and chert (conglomerate).
- 710 - 720 90 sandstone reddish, fine to medium grained, loose,
occasional coarse pebble. 10 shale red micaceous.
- 720 - 730 70 sandstone ditto. 30 shale ditto, also green. Trace
of gray crystalline limestone.
- 730 - 740 Trace of sandstone ditto. 100 shale ditto, predominately
red, finely arenaceous. Trace of yellow shale.
- 740 - 750 10 sandstone ditto. 90 shale brick red, finely arenaceous.
- 750 - 760 Trace of sandstone. 100 shale light green and gray.
Trace of yellow shale, some red.
- 760 - 770 100 shale ditto. Trace of brown chert.
- 770 - 780 30 sandstone clear to red, coarse grained, pebbles.
70 shale ditto. Trace of calcite.
- 780 - 790 60 sandstone coarse - conglomerate. 40 shale gray, red,
micaceous.
- 790 - 800 20 sandstone ditto. 80 shale brick to chocolate red,
finely micaceous and sandy.
- 800 - 810 10 sandstone white, fine to coarse grained, well cemented.
90 shale as above.
- 810 - 820 30 sandstone as above, occasional pebble. 70 shale
chocolate brown, some gray.
- 820 - 830 Trace of sandstone. 100 shale chocolate brown, also gray,
micaceous, trace of limestone.

830 - 840	Trace of sandstone. 100 shale ditto.
840 - 850	100 shale ditto.
850 - 860	10 sandstone green, fine grained, cemented with calcareous cement. 90 shale ditto.
860 - 870	Trace of sandstone ditto. 100 shale chocolate red.
870 - 880	30 sandstone red, very fine grained, shaly and silty, occasional pebble. 70 shale ditto, some gray and green.
880 - 890	40 sandstone ditto, in part micaceous. 60 shale ditto.
890 - 900	10 sandstone ditto, some clear, fine grained, and loose. 90 shale ditto. Trace of yellow shale.
900 - 905	100 shale chocolate brown and gray. Trace of red chert.
905 - 910	10 sandstone white, medium grained with much clay cement. Trace of white, fine grained, micaceous. 90 shale ditto.
910 - 915	10 sandstone ditto. 10 limestone white crystalline. 80 shale as above.
915 - 920	10 sandstone ditto. Trace of root beer, fine grained, and hard sandstone. 90 shale red and gray, in part very sandy.
920 - 925	70 sandstone tan to root beer color, very fine grained to hard and tight. 30 shale varicolored.
925 - 930	70 sandstone ditto. 30 shale red to chocolate to micaceous.
930 - 935	10 sandstone ditto, red. 90 shale red, micaceous, and sandy.
935 - 940	30 sandstone ditto, tan. 70 shale red, micaceous, and sandy.
15 min. c.c. sample @ 940	30 sandstone fawn colored to buff, fine grained, and well cemented. 70 shale red, micaceous, and sandy, sandstone is probably in streaks in shale.
940 - 956	See Core No. 1.
956 - 969	See Core No. 2.
969 - 978	See Core No. 3.
978 - 985	100 sandstone buff, fine to medium grained, and firm. Lot of cavings.
985 - 990	100 sandstone ditto. Lot of cavings.
990 - 995	100 sandstone ditto, becoming firmer and compact. Lots of cavings.

Foot + Bed sand.

935
Top 60 core in.

995 - 1000	100 sandstone ditto. Lot of cavings.
1000 - 1005	Trace of sandstone. 100 green chloritic material.
1005 - 1010	20 sandstone. 30 green chloritic material. 50 shale, cavings.
1010 - 1015	80 sandstone buff, fine to medium grained, good porosity and permeability. 20 green chloritic material (basalt?).
1015 - 1020	100 sandstone ditto.
1020 - 1025	100 sandstone ditto, firm, fair porosity and permeability.
1025 - 1030	20 sandstone very fine grained to neoground. 80 shale light pale green (cavings).
1030 - 1035	30 sandstone ditto, some buff, fine to medium grained, subround to angular with iron stains. 70 shale as above (cavings).
1035 - 1040	100 sandstone ditto, much cavings.
1040 - 1045	100 sandstone buff, fine to medium grained, subround to subangular, looks wet. Much cavings.
1045 - 1050	100 sandstone ditto, looks wet, much cavings.
1050 - 1055	100 sandstone ditto, looks wet, much cavings.
1055 - 1060	100 sandstone ditto, looks wet, slight salty taste, much cavings.
1060 - 1065	100 sandstone ditto, looks wet, much cavings.
1065 - 1070	100 sandstone ditto, in part iron stained, looks wet, still much shale cavings.
1070 - 1075	100 sandstone ditto, much iron stain, looks wet, and tastes salty, much cavings.
1075 - 1080	100 sandstone ditto, much iron stain, looks wet, and tastes salty, much cavings.
1080 - 1085	100 sandstone ditto, much iron stain, looks wet, tastes salty, and much cavings.
1085 - 1090	100 sandstone ditto, still much cavings, some red shale.
Total depth	1091'



Fife Syraington
Governor

State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795



Larry D. Fellows
Director and State Geologist

October 28, 1992

Mr. Merle Bohlander
1600 Turtle Creek
Pampa, Texas 79065

Dear Merle:

Enclosed is the information you requested, the last few years of production and the plugging records for the wells in the Pinta Dome Field. I have also enclosed a summary of surface shut-in pressures for the Pinta Dome Field.

Sincerely,

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
8686 NORTH CENTRAL, SUITE 106
PHOENIX, ARIZONA 85020
PHONE: (602) 271-5161

March 7, 1977

Mr. C. J. Breeden
Kerr-McGee Corporation
P.O. Box 250
Amarillo, Texas 79105

Re: Form 9, Application to Abandon and Plug

Dear Mr. Breeden:

Attached are your approved copies of Form 9, Application to Abandon and Plug ten wells in the Pinta Dome Field, Apache County, Arizona.

Please advise me what date you plan to commence plugging operations.

Very truly yours,

William E. Allen
Director
Enforcement Section

WEA/vb
Enc.

~~88~~ 88



626 AMARILLO PETROLEUM BUILDING
P. O. BOX 250 • AMARILLO, TEXAS 79105

PHONE
806 376-7256

February 28, 1977

Arizona Oil and Gas Conservation Commission
8686 North Central Avenue, Suite 106
Phoenix, Arizona 85020

RECEIVED

MAR 3 1977

O & G CONS. COMM.

RE: Form 9
Application to Abandon
and Plug

Gentlemen:

Attached are two copies each of Form 9, Application to Abandon and Plug, for 10 wells in the Pinta Dome Field, Apache County, Arizona. Plugging will commence when your approval is obtained and with availability of equipment to perform this work. If there are any questions, please advise.

Sincerely,

KERR-McGEE CORPORATION

C. J. Breeden
C. J. Breeden
District Manager
Southwest District - North America

CJB/srm

Attachments

88



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 57401

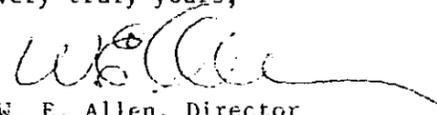
Dear Mr. Fullop:

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

RECEIVED
FEB 01 1971
O & G CONS. COMM.

RECEIVED
1971
O & G CONS. COMM.

January 28, 1971

50
51
88

Mr. F. C. Ryan
State Land Department
1624 West Adams
Phoenix, Arizona 85007

Re: U.S.F.G. Bond 13374760
Amount - \$4000.00

Dear Mr. Ryan:

I know we've had a few discussions regarding release of this bond which has been in effect for 10 years or so. It was taken out to cover the drilling of a well at that time. For some years now we have had a \$25,000 blanket bond #13398363 in effect. I can think of no useful purpose this smaller bond can perform. The well in question was plugged and the location cleaned up. Surely the blanket bond is large enough to satisfy state requirements.

It's a bit hazy with me now but I believe the Land Department's attorney is the one who refused to authorize release.

Anything you may do in this regard will be appreciated.

Yours very truly,

EASTERN PETROLEUM COMPANY

J. N. Edwards

JNE:sjn

cc: Mr. John Bannister
Oil & Gas Conservation Comm.
4515 North 7th Avenue
Phoenix, Arizona 85013

Could you give me
a hand here -
Thanks

4625

X-Chrons
X-Lumber

X { 10
39
36
349
378
80
88
81
KERR-McGEE State #1
(No Permit)

June 12, 1969

Mr. Otto C. Barton
Kerr-McGee Corporation
P. O. Box K
Sunny, Texas 79086

Re: Pinta Dome Unit Wells

Dear Mr. Barton:

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

88



June 9, 1969

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

Attention: Mr. James A. Lambert

Dear Sir:

In accordance with my telephone conversation with you and Mr. John Bannister today, we are hereby requesting the commissions approval to defer the annual testing requirements set forth in Rule 401 on all helium gas wells in the Pinta Dome Unit, Apache County, Arizona.

This field is a unit operation. Only six wells, Eastern State #1-2 and #1-28, Kerr-McGee State #1, #2, #3A, and Fee #1 have been produced, the other three wells, Eastern State 1-10, Kerr-McGee State #4A and Kerr-McGee Fee #2 have been shut-in since unit was formed on January 1, 1968.

Shut in pressures in this field are very low with none exceeding 60 p.s.i.g. Plant operation makes gas flow very erratic, rate of flow and line pressures are very seldom steady for over a few hours at one time. Also when plant is in full operation, line pressures and well operating pressures are never more than 1 to 5# less than well shut in pressures. These conditions make testing procedures as outlined in the testing manual impossible. The only way potential tests could be accomplished would be by venting gas to air which would constitute a waste of valuable natural resources.

We believe that a representative test of the wells in this field is almost impossible and that no useful purpose can be accomplished by flow tests of wells in this unit operation. Therefore we are making this request that annual tests on all wells in Pinta Dome unit be again deferred.

Yours very truly,

KERR-McGEE CORPORATION

Otto C. Barton
Otto C. Barton
Division Superintendent
Oil and Gas Production



OCB/ds

88

X [Handwritten notes and scribbles]



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. Otto C. Barton
 Kerr-McGee Corporation
 P. O. Box K
 Sunray, Texas 79086

Re: Kerr-McGee Fee #1
 Kerr-McGee Fee #2
 Kerr-McGee State #1 (Sec. 34 of 20826)
 Kerr-McGee State #2
 Kerr-McGee State #3A
 Kerr-McGee State #4A
 Eastern State #1-10
 Eastern State #1-28
 Eastern State #1-2

Permit #10
 Permit #39
 No Permit
 Permit #36
 Permit #349
 Permit #378
 Permit #80
 Permit #88
 Permit #81 X

Dear Mr. Barton:

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. Barton
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.



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

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

September 25, 1968

JB

Mr. James A. Lambert
Administrative Assistant
Oil & Gas Conservation Comm.
1624 West Adams, Room 202
Phoenix, Arizona 85007

Re: State #1-28
State #1-2

Dear Mr. Lambert:

I realize you are relatively new in your present position, but somewhere in your office is a copy of Plan of Unitization of Pinta Dome Coconino Sand Gas Pool approved by the Commission. Said Plan, among other things, provides that Kerr-McGee Corporation shall be the Operator and shall be charged with making timely reports to your office. Therefore, our reporting obligation ceased at that time.

However, I am late with the Navajo Springs Unit report. Looks like we're even.

Cordially,

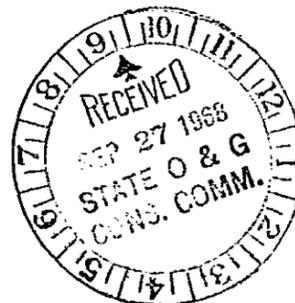
EASTERN PETROLEUM COMPANY

J. N. Edwards
J. N. Edwards

JNE:sjn

Enc.

JB



September 23, 1968

Mr. Henry Fullup
Eastern Petroleum Company
Box 91
Carmi, Illinois

Re: Eastern Petrol Co. State #1-28
T20N, R26E, G & SRM
Sec. 28: SE/4 SE/4
Apache County, Arizona
Permit #88

Eastern Petrol Co. State 1-2
T19N, R26E, G & SRM
Sec. 2: NE/4 SW/4
Apache County, Arizona
Permit #81

Dear Mr. Fullup:

The rules and regulations of the Oil and Gas Conservation Commission of the State of Arizona state that a Monthly Producer's Report, form #16, shall be filed on each producing lease within the State for each calendar month. Our records indicate that invariably Eastern Petroleum Company must be reminded that their report has not been received. We expect to receive the report on or before the 15th of the subsequent month. All of the other companies reporting production are able to comply with this request. Please advise this office why your company has a problem in furnishing this report.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf

88

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 ✓ |
| <u>88</u> ✓ | 206 ✓ |
| <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



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

June 6, 1968

Kerr-McGee Corporation
P.O. Box K
Sunray, Texas 79086

Attention: Mr. Otto C. Barton

Re: Kerr-McGee #1 State
SW SW 34-20N-26E, Apache County, Permit

Kerr-McGee #2 State
NW SE 34-20N-26E, Apache County, Permit 36

Eastern Petroleum #1-2 State
NE SW 2-19N-26E, Apache County, Permit 81

Eastern Petroleum #1-28 State
SE SE 28-20N-26E, Apache County, Permit 88

Kerr-McGee #1 Fee
SW SE 33-20N-26E, Apache County, Permit 10

Eastern Petroleum #1-10 State
NE NE 10-19N-26E, Apache County, Permit 80

Kerr-McGee #2 Fee
NW NW 35-20N-26E, Apache County, Permit 39

Kerr-McGee #3A State
NE NE 4-19N-26E, Apache County, Permit 349

Kerr-McGee #4A State
SW NE 32-20N-26E, Apache County, Permit 378

Gentlemen:

In reply to your letter of May 22, 1968, this letter constitutes permission from this Commission to suspend until further notice the annual capacity testing of captioned helium gas wells comprising the Pinta Dome Coconino Sand Gas Pool Unit.

Very truly yours,

John Bannister
Executive Secretary



May 22, 1968

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

Attention: Mr. John Bannister
Executive Secretary

Gentlemen:

We are hereby requesting the Commissions approval to defer the annual testing requirements set forth in the rule 401 on all Helium Gas Wells in the Pinta Dome Unit, Apache County, Arizona.

This field is a unit operation and only those wells needed to supply the plants demand are produced. At present only four wells, Eastern State #1-28, Eastern State #1-2, KM State #1 and KM State #2 are being produced. The other five wells in the unit, Eastern State #1-10, KM State #3A and 4A and KM Fee #1 and #2 have been shut in since the unit was formed on January 1, 1968.

As our sales and production rates vary greatly over short periods of time and well pressures are very low, it is almost impossible to follow testing procedures as outlined in the testing manual except by venting gas to the air while testing.

The venting of gas to air constitutes a waste of valuable natural resources. We feel that no useful purpose can be served by annual potential tests of wells in a unit operation of this kind. Therefore we are making this request that annual tests be deferred on all wells in the Pinta Dome Unit. This includes both the four producing wells and five temporarily shut in wells listed above.

Yours very truly,
Kerr-McGee Corporation

Otto C. Barton
Otto C. Barton
Division Superintendent of Oil & Gas Prod.
Box K-Sunray, Texas-79086

*Granted
5-29-68
JB*

RECEIVED
MAY 23 1968
OIL & GAS
STATE COMMISSION

Our File No. 88

May 12, 1964

Eastern Petroleum Company
Box 291
Carmi, Illinois

Attention: Mr. J. N. Edwards

Re: Eastern State #1-28
Section 28 - T20N - R26E, Apache County

Gentlemen:

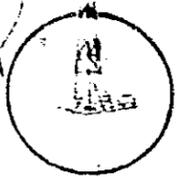
Enclosed for your files is an executed copy, with approval date of May 11, 1964, of Operator's Certificate of Compliance and Authorization to Transport Oil or Gas From Lease in connection with captioned well.

Very truly yours,

John Bannister
Executive Secretary

JB/mkc
Encl.

DENVER OFFICE, 2520 FIRST NATIONAL BANK BUILDING - MAIL 3-5250



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

TELEPHONE 35 24104 - P. O. BOX 291 - CARMEL, ILLINOIS

May 6, 1964

Mr. John Petty, Petroleum Geologist
Oil and Gas Conservation Commission
Room 202
1624 West Adams St.
Phoenix, Arizona

Dear Mr. Petty:

Certificate of Compliance for the three Pinta Dome wells are enclosed.

No Certificates are enclosed for Navajo Springs as no gas is being transported at this time.

Yours very truly,

EASTERN PETROLEUM COMPANY

J. H. Edwards

JNE:mf

Encls.

Files Nos. 80
81
88 ✓

O & G
COMM.

December 30, 1959

FOR INFORMATION ONLY:

Cecil Brown, Accountant, Louisville, Illinois, who is employed by Paul Tipton, Carmi, Illinois, was inquiring about Eastern's and Mr. Fullop's plans and activities here, and I told him I was not aware of any.

I understand Tipton was formerly associated with Eastern Petroleum, and is now in competition with them.

D. A. JEROME,
EXECUTIVE SECRETARY

DAJ:smr

DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a full rate telegram	
<input checked="" type="checkbox"/> FULL RATE TELEGRAM	<input type="checkbox"/> SERIAL
<input type="checkbox"/> DAY LETTER	<input type="checkbox"/> NIGHT LETTER

WESTERN UNION

1206

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise this message will be sent at the full rate	
<input type="checkbox"/> FULL RATE	<input checked="" type="checkbox"/> DEFERRED
<input type="checkbox"/> CODE	<input type="checkbox"/> NIGHT LETTER

W. P. MARSHALL, PRESIDENT

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED

Send the following message, subject to the terms on back hereof, which are hereby agreed to

December 8, 1959 -
9:40 A. M.

Mr. Henry Fullop
EASTERN PETROLEUM CO.
P. O. Box 291
Carmi, Illinois

MEETING WILL BE AT 7:30 A. M., TUESDAY, DECEMBER 15, AT THE
WESTWARD HO HOTEL, PHOENIX.

D. A. JEROME,
EXECUTIVE SECRETARY

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION
3500 N. CENTRAL AVE., SUITE 312
PHOENIX, ARIZONA

WIRE TELEPHONED TO WESTERN UNION - AL 2-3411 - M. R.

88

July 1, 1959

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

Attention: Mr. Henry Fullop

Dear Mr. Fullop:

Thank you for your letter of transmittal of June 26, 1959, with which you enclosed powers of attorney for Mr. Geary in regard to your #1-28 and for Mr. Dean in regard to future drilling permits and instruments connected thereto, together with an Organization Report bearing the date of June 26th.

Your prompt cooperation is appreciated. If we could be of help in the future, please call on us.

Very truly yours,

STATE LAND COMMISSIONER

By: Frederick C. Ryan,
Supervisor,
Oil & Gas Conservation

FCB:mb
cc - James W. Dean
Denver, Colorado



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

P. O. BOX 291 · CARMEL, ILLINOIS

June 26, 1959

Mr. Frederick C. Ryan, Supervisor
Oil and Gas Conservation
State Land Department
Phoenix, Arizona

Dear Mr. Ryan:

Enclosed you will find three instruments:

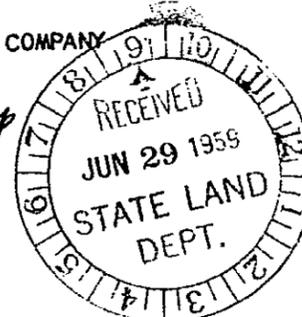
- (1) Power of Attorney for James E. Geary, relative to drilling of the State #1-28, SE SE Section 28-20N-26E, Apache County.
- (2) Power of Attorney for James W. Dean to secure additional drilling permits and to execute any and all instruments relating thereto. Mr. Dean is currently acting in the capacity of geologist and general manager of our western division.
- (3) One copy of Organization Report.

Trusting you will find these instruments in order, I remain

Sincerely yours,

EASTERN PETROLEUM COMPANY

Henry Fullop
Henry Fullop



HF:bjja

Enclosure

cc: James E. Geary
James W. Dean

10840

June 18, 1959

Eastern Petroleum Company
2520 1st National Bank Bldg.,
Denver 2, Colorado

Gentlemen: Re: Eastern Petroleum Co.-State #89-4

We are transmitting herewith your copy of Application for Permit to Drill, etc., in Section 25, Township 20 North, Range 26 East, Apache County, Arizona.

This approved application constitutes your drilling permit No. 88 and is for your records.

We are also inclosing a receipt in the amount of \$25.00 covering permit fee.

As soon as the elevation on this well has been determined please notify this office.

Thank you for your cooperation in the matter, and if we may be of further assistance, please let us know.

Very truly yours,

STATE LAND COMMISSIONER

By: Frederick C. Ryan,
Supervisor,
Oil and Gas Conservation

FCR:mb
Encls.



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

P. O. BOX 291 - CARMEL, ILLINOIS

June 13, 1959

Mr. Frederick Ryan
Asst. to Land Commissioner
Phoenix, Arizona

Dear Mr. Ryan:

Mr. Paul Fullop who has applied for drilling permits in behalf of this company has been lost in a personal plane since May 27, 1959, while enroute from Denver, Colorado to Farmington, New Mexico. An intensive search by C.A.P., the Air Force and private individuals has failed to reveal his whereabouts.

We wish to designate Mr. James E. Geary as Power of Attorney to announce an oil and gas location and to obtain permit for same and to have the proper power to execute bonds and other necessary instruments in behalf of this company. The requested permit is for the State #1-28 to be located in SE SE Section 28-20N-26E, Apache County, Arizona.

Trusting this will be sufficient for you to issue the requested permit, I remain

Sincerely yours,

EASTERN PETROLEUM COMPANY

By Henry Fullop
Henry Fullop - Partner

HF:sjn

cc: Mr. James W. Dean
Eastern Petroleum Company
2520 First Nat'l. Bank Bldg.
Denver 2, Colorado

June 12, 1959

Mr. Phillip W. Johnson
P. O. Box 4126
Tucson, Arizona

Dear Phil:

I am transmitting herewith the intent for Eastern Petroleum Company for Section 28, Township 20 North, Range 26 East, Apache County which was presented by Mr. James E. Geary, Attorney this date.

Mr. Geary has been appointed by James W. Dean of Eastern Petroleum Company to execute all necessary instruments pertaining to their company.

Would you please check it over and return to me as soon as is convenient?

Best regards.

Very truly yours,

Muriel R. Bates

mb
Encl.

June 12, 1959

Eastern Petroleum Company
1st National Bank Building
Denver 2, Colorado

Gentlemen:

Reference is made to Power of Attorney, dated June 11, 1959, designating James E. Geary as attorney for Eastern Petroleum Company.

According to our records, Mr. James W. Dean, signer of the above mentioned Power of Attorney, has never been designated to sign such an instrument. The Organization Report of your company on file in this office designates only Paul Fullop as authorized agent for the partnership.

Please forward to us an instrument authorizing James W. Dean to act for your company.

Very truly yours,

STATE LAND COMMISSIONER

By: Frederick C. Ryan,
Supervisor,
Oil and Gas Conservation

FCR:mb
cc - James E. Geary



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

9886

1ST NATIONAL BANK BLDG.
DENVER 2, COLORADO

June 9, 1959

Mr. Phillip W. Johnson, State Geologist
State Land Department
Arizona State Office Building
Phoenix, Arizona

Re: Well Nos. 1-6 and 1-10
T19N, R26E
Apache County, Arizona

Dear Mr. Johnson:

Mr. Charles Blanton, Drilling Superintendent of this company, has in the course of conversation advised me that you paid a personal visit to our drilling operations at the above described wells.

I am sure that Mr. Blanton relayed to you the situation facing this company with the disappearance of Mr. Paul Fullop during an airplane trip on May 27th from Denver to the Pinta Dome area. Mr. Fullop had of course handled all of the details concerned with the acquisition of permits and other matters relating to the State of Arizona, and I am at this time attempting to the best of my ability to familiarize myself with the overall operations of this company in that particular area. I trust that our actions to date have met with the approval of yourself and State agencies.

In behalf of this company, I wish to express our appreciation for some of the helpful suggestions that you passed on to Mr. Blanton. I feel sure that Mr. Blanton has of course advised you of the position taken by this company to the general release of information in light of the previous attitude taken by other offset operators in the immediate vicinity of Pinta Dome. This position of course does not include such necessary information as would be required by agencies of the State of Arizona.

Respectfully yours,

EASTERN PETROLEUM COMPANY
Rocky Mountain Division

James W. Dean
James W. Dean
Geologist

JWD:JS



May 20, 1959

Eastern Petroleum Company
2520 First National Bank Building
Denver 2, Colorado

Attention: Paul Fullop

Dear Mr. Fullop:

I am writing to acquaint you with the program for the collection of sample cuttings from wells drilled in Arizona and to request your cooperation in helping us carry out this program.

The overall policy of collecting and preserving sample cuttings is a joint program between the Arizona State Land Department, the U. S. Geological Survey Ground Water Branch, the Arizona Bureau of Mines, and the Museum of Northern Arizona.

Inasmuch as your particular concern is the drilling of oil test wells, I will confine my discussion to the phase of the program directly bearing on your operation.

Under the law it is mandatory that samples of cuttings and core chips taken at all intervals from all oil and gas test wells, as well as logs and other pertinent data, be filed with the State Land Commissioner within six months after the well is completed or abandoned.

The sample cuttings from all oil and gas test wells in Arizona are collected and cut to supply either two or three complete sets of samples, depending on the location of the well. All test wells in the northern part of the State (Plateau Uplands) are cut to make three complete sets: One set for the loan library at the State Land Department, Phoenix, Arizona; one set for the permanent library at the Arizona Bureau of Mines, University of Arizona, Tucson, Arizona, Tucson, Arizona; and one set for the Research Center, Museum of Northern Arizona, Flagstaff, Arizona. All wells drilled in the southern part of the State (Basin and Range Lowlands) are cut to make two complete sets: One set for the State Land Department and one set for the Arizona Bureau of Mines.

Mr. Paul Fullop
May 20, 1959
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Inasmuch as your wells are located in the northern part of the State, a large enough sample of cuttings will be needed to make three complete sets.

Arrangements for handling the samples should be made directly through me or the State Land Department.

We sincerely appreciate your cooperation in this matter. If we can serve you in any way, please feel free to call on us.

Very truly yours,

Phillip W. Johnson,
Geologist

PWJ:mb

