

Crest Oil Co. 8 Santa Fe
SE/4 -NW/4 Sec. 25 -Twp. 20N -R27E 134

P-W

County Apache
 Area Wildcat
 Lease No. Santa Fe Fee

Well Name Crest Oil Company #8 Santa Fe

Location SE NW Sec 25 Twp 20N Range 27E Footage 1650 FWL 1980 FNL
 Spud Date 11-8-60 Completed 6-4-61 Total
 Elev 5789 Gr KB Date 11-8-60 Abandon 9-13-68 Depth 1372
5805 G/L from 4365 7 1/2' just
 Contractor perone

Casing Size	Depth	Cement	Drilled by Rotary <input checked="" type="checkbox"/>	Cable Tool <input type="checkbox"/>
<u>11"</u>	<u>94'</u>	<u>35sx</u>	Production Horizon <u>Goconino</u>	
<u>8 5/8</u>	<u>94</u>	<u>50</u>	Initial Production <u>1582 MCF (8%-9% Helium) Shut-In</u>	
<u>6 3/4</u>	<u>1156/1372</u>	<u>40</u>		
<u>2 7/8</u>	<u>1372</u>	<u>40</u>		

REMARKS - Designation of Operator; dated 3-1-66 to Apache Drilling Co., Inc
 Perf: 8/1351-55: Core #1: 1357-1367 Rec. 4' SS buff-red F G sub round,
 sub angul, cross bed w/vert frac. DST#1 1359-1372/:35, GTS immediately
 unload mud for :05 then gas & salt wtr in :08 est 1000 FCF & 8 B salt wtr
 per hr, Rec. 270' (over)

Elec Logs IE, Temp, Perof, Micro Sample Log
 Applic. Plugging Completion Sample Descript.
 to Plug Record Report Sample Set T-1173 P-597
 Received 9-9-68 Core Analysis
 DSTs X (Gas Analysts-X)

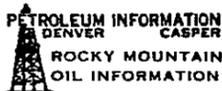
Water well accepted by

Bond Co. Maryland Casualty Company # 92-729085
 & No.

Bond Am't \$ 2,500 Cancelled 9-24-68 Date Organization Report
 Filing Receipt 9246 Dated 11-10-60 Well Book Plat Book
 API No. Loc. Plat Dedication All 25-20N-27E

Permit Number 134 Date Issued 12-2-60

ARIZONA
APACHE CO.
PINTA DOME (D)



Twp 20n-27e
Section 25
se nw
1980 s/n 1650 e/w

OPR: Crest Oil

WELL #: 8 Santa Fe

ELEV: ~~5000~~ 5803 ^{6L}

*TOPS: Log ~~Sample~~

Chinle 280
Shinarump 1154
Moenkopi 1221
Coconino 1351

DSTS. & CORES:
Crd 1357-67, rec 4 sd,
crossbedded. DST 1359-
72, 35 min, gas & salt
wtr in 8 min, gauged
1000 MCFGPD (8% heli-
um), flowed @ rate 8
bbls salt wtr per hr, rec
270 salt wtr, FP 57-169#
SIP (1 hr) 204#, HP 753#.
DST 1197-1203, 45 min,
rec 50 mud, FP 29-31#.
SIP (30 min) 140#, HP
658#. IHP=661
BHT = 75°F

BHT 75°

Contr: C. C. Smith

SPUD: 11-8-60 COMPL: 12-12-60
TD: 1372 PB: 1368

CSG: 2-7/8" @ 1370 w/40

PERF: 1351-55 w/2 per ft; acidized
w/500.

PROD. ZONE: Coconino 1351-55

INIT. PROD: IPF 1582 MCFGPD
(8% helium), 2-3/8" tbg.

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 **Crest Oil Company** Address **Box 57 Alton, Illinois**

Federal, State or Indian Lease Number or name of lessor if fee lease **Santa Fe Pacific Railway Co.** Well Number **8** Field & Reservoir **Un-named**

Location **1980 FNL - 1650 FWL** County **Apache**

Sec. TWP-Range or Block & Survey **Sec. 25-T20N-R27E**

Date spudded **11-8-60** Date total depth reached **11-16-60** Date completed, ready to produce **11-21-60** Elevation (DF, RT or Gr.) **5801** feet Elevation of casing hd. flange **5801** feet

Total depth **1372** P.B.T.D. **1370** 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 **1351 - 1370** Rotary tools used (interval) **surf to 1372** Cable tools used (interval) **-----**

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

Types of electrical or other logs run (check logs filed with the commission) **I.E.; Micro-log; Gamma Ray Pert. control-temp log** Date filed **9-19-68**

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
surf.	10"	8 5/8	32	94'	50	none
prod.	6 3/4	2 7/8	6.5	1370	40	none

TUBING RECORD

LINER RECORD

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

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Am't. & kind of material used	Depth Interval
2	1/2" Jet	1351 - 1355	plugged well with total of 65 sacks of cement squeezed 25 sks into formation	

INITIAL PRODUCTION

Date of first production **not produced** Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)

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

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

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

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the sole owner.....of the **Crest Oil**.....(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.

9/19/68
Date

[Signature]
Signature

Permit No. **134**

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

DETAIL OF FORMATIONS PENETRATED *

Formation	Top	Bottom	Description*
Surface Sand	0	280'	Lt. tan to brown surface sands
Chinle	280	1154	Alternating beds of white to gray. Fine sandstone and vari-colored shales.
Shinarump	1154	1221	White, coarse to fine sandstone
Moenkopi	1221	1351	Alternating beds of white sandstone and red to brown shales.
Coconino	1351	1372 TD	Tan to buff, medium grained, well sorted sandstone.

134

Drill Stem Tests

Test No. 1 - 1359' to 1372' coconino sandstone. Open 35 minutes, strong blow gas to surface immediately. Unloaded mud in 5 minutes - gas and salt water in 8 minutes. Est. 1,000,000 cu. ft. of gas per day plus 4 bbls. salt water per hour. Recovered 270' salt water. Initial flow pressure 57 psig. Final flow pressure 169 psig. Final shut in pressure 204 psig. Initial hydrostatic pressure 753 psig. Est. temperature 75 degrees F. Shut in Time 60 minutes.

Test No. 2 - 1197' to 1203' - Shinarump
 Open 45 minutes by-passed at 25 minutes, few bubbles to surface
 Recovered 50 feet drilling mud. Initial flow pressure 29 psig.
 Final flow pressure 31 psig.
 Final shut in pressure 140 psig.
 Initial Hydrostatic pressure 661 psig.
 Final Hydrostatic pressure 658 psig.
 Est. temp. 75 degree F
 Shut in time 30 minutes

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

PLUGGING RECORD					
Operator Crest Oil Company			Address Box 57, Alton, Illinois		
Federal, State, or Indian Lease Number, or lessor's name if fee lease. Railway Co. Santa Fe Pacific		Well No. 8	Field & Reservoir Un-named		
Location of Well 1980 FNL - 1650 FWL Sec. 25-T20N-R27E				Sec-Twp-Rge or Block & Survey	County Apache
Application to drill this well was filed in name of Crest Oil Company		Has this well ever produced oil or gas no	Character of well at completion (initial production): Oil (bbls/day) Gas (MCF/day) Dry? 1000		
Date plugged: September 13, 1968	Total depth 1372	Amount well producing when plugged: Oil (bbls/day) Gas (MCF/day) Water (bbls/day) 00 370			
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	Prod. 370 bbls wtr/day	1351-1372	Squeezed 25 sacks cement from 1372 to 1272 - left 40 sacks cement in 2 7/8 tbnng.		
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"	94'	00	94'	none	none
Was well filled with mud-laden fluid, according to regulations? yes				Indicate deepest formation containing fresh water. 410'	
NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE					
Name	Address		Direction from this well:		
R. Ted Spurlock	Navajo, Arizona		N - S - E - W		
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 sole owner of the Crest Oil (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 9-19-68		Signature <i>C. J. ...</i>			
Permit No. 134			STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Plugging Record File One Copy		
			Form No. 10		

APPLICATION TO ABANDON AND PLUG

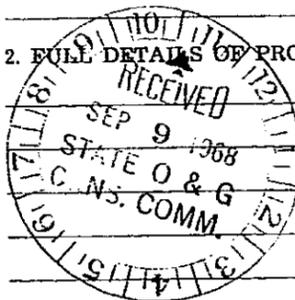
FIELD Unnamed
 OPERATOR C. F. Swain, d/b/a Crest Oil Co. ADDRESS P. O. Box 57 Alton, Ill. 62002
 Federal, State, or Indian Lease Number
 or Lessor's Name if Fee Lease Santa Fe Pacific Railroad Co. (SFP-9650) WELL NO. #8
 SURVEY _____ SECTION 25 COUNTY Apache
 LOCATION 1980' FNL and 1650' FWL Sec 25-20N-27E

TYPE OF WELL Helium-bearing Gas Well TOTAL DEPTH 1372'
(Oil, Gas or Dry Hole)
 ALLOWABLE (If Assigned) Not Assigned
 LAST PRODUCTION TEST OIL _____ (Bbls.) WATER 370 bbls/day (Bbls.)
 GAS 189.9 MCF/day (MCF) DATE OF TEST 9/13 & 9/14, 1968
 PRODUCING HORIZON Coconino Sandstone PRODUCING FROM 1351' TO 1355'

1. COMPLETE CASING RECORD

8-5/8" casing @ 94' cemented with 35 sacks cement
2-7/8" EUE Tubing @ 1370' cemented with 40 sacks cement

2. FULL DETAILS OF PROPOSED PLAN OF WORK



1. Leave all casing and tubing in the hole.
2. Pump 2-7/8" full of cement from T. D. to surface, after first squeezing formation through perforations.
3. Affix abandoned well marker as per #7 rule 202.
4. Backfill all pits and clean up location.

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 9/16/68
 NAME OF PERSON DOING WORK Drake Well Servicing Co. ADDRESS Farmington, New Mexico
 CORRESPONDENCE SHOULD BE SENT TO C. F. Swain, d/b/a Crest Oil Company
 Name
 Title Owner
 Address P. O. Box 57 Alton, Illinois
 Date 9/6/68

Date Approved 9-9-68
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By John Bamister

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

Permit No. 134

WELL SITE CHECK

By JCS
Date 9-27-68

Contractor _____ Person(s) Contacted _____

Spud date _____

Type Rig _____ Rotary Cable _____ Present Operations _____

Samples _____

Pipe _____ Drilling with Air _____ Mud _____

Water Zones _____ Size Hole _____

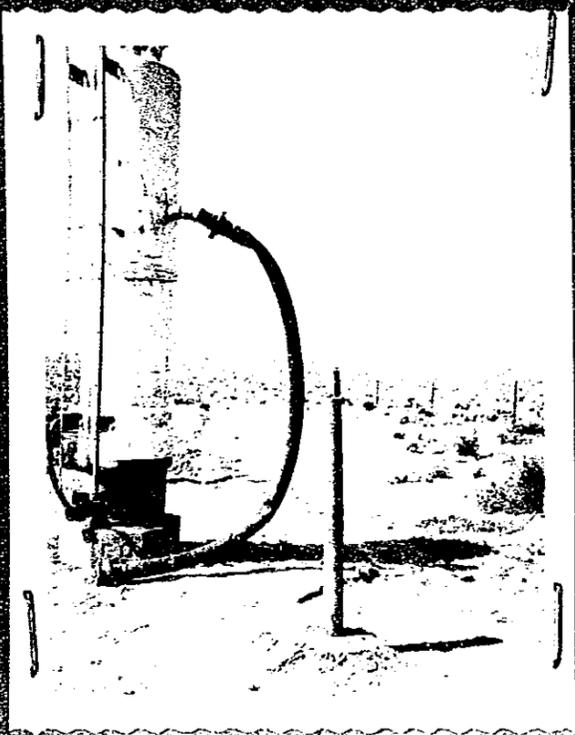
Lost Circ. Zones _____ Size Drill Pipe _____

Formation Tops _____ Type Bit _____

Gores, Logs, DST _____ No. Bit _____ Drilling Rate _____

_____ Formation _____

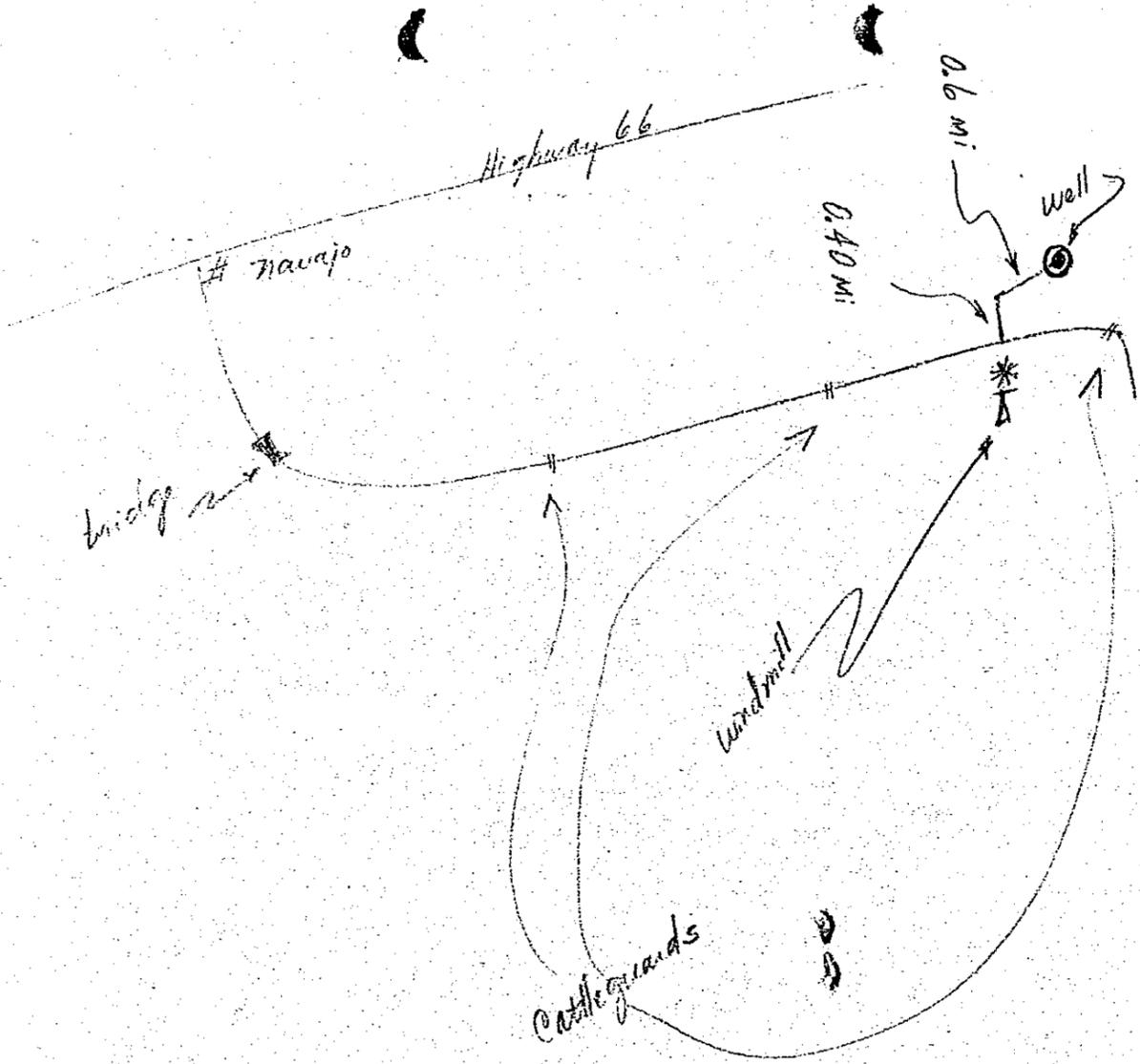
Crews _____ Lithology _____



Well P: A. All OK.
JCS
(MARKER PIPE IN PLACE)

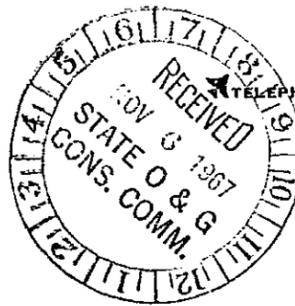
Map - see reverse side

WELL NAME Creek #3



EWELL N. WALSH
 PETROLEUM ENGINEER CONSULTANT
 PETROLEUM CLUB PLAZA BLDG.
 P. O. BOX 254
 FARMINGTON, NEW MEXICO
 87401

November 3, 1967



TELEPHONE BUS. 325-8203
 RES. - 325-6455

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

Ref: Open Flow Potential Test of
 Apache Drilling Co., Santa Fe
 Wells No. 8 and 21 in Apache
 County, Arizona.

Dear Mr. Bannister:

The subject wells were tested on October 31, 1967. The following are my observations and remarks concerning the Open Flow Potential Tests.

Santa Fe No. 8 (134)

The shut in casing pressure of the well was measured, with a dead weight pressure gauge, to be 199.5 psig. The well was opened to flow through a 2" Critical Flow Prover with a 3/8" (0.3750") orifice plate. The following are the results of the test:

Time	Prover Press. psig.	Prover Temp. F	Gas Volume MCF/D	Remarks
15 Min.	190.5		470	
30 Min.	187.5		465	
45 Min.	179.5		442	
1 Hr.	154.5		381	
2 Hr.	123.5		304	Heavy Mist of H ₂ O
2 Hr. 15 Min.	122.5		303	" " " "
2 Hr. 30 Min.	122.0	60	302	" " " "
Change to 1/2" (0.5000") orifice plate				
1 Hr.	117.5		576	Heavy Spray of H ₂ O
1 Hr. 15 Min.	117.5		576	" " " "
1 Hr. 30 Min.	117.5	65	576	" " " "
Change to 3/4" (0.7500") orifice plate				
1 Hr.				Well flowing heavy spray of water with some heading of flow.
Opened well through 2" pipe				
3 Hr.				Well flowing heavy spray of water in heads.

File # 134

The well could not be properly tested due to the amount of water being produced with the gas. Except for the gas volume measurements during the first hour of flow, with the 3/4" orifice plate, the gas volume measurements should be considered inaccurate.

The well does seem to have good gas flow capacity. However, the well could only be properly tested after flowing the gas and water through a separator, to separate the water from the gas, and measuring the gas volume with a Orifice Flow Prover. The separator to be used, in such a case, should have a minimum working pressure of 500 psig.

After shutting in the well a sample of the gas was obtained and has been forwarded to the Bureau of Mines, Amarillo Helium Plant at Amarillo, Texas. They have been requested to send the results of the analysis to the Commission.

WELL NO. 41

The shut in casing pressure of the well was measured, with a dead weight pressure gauge, to be 134.5 psig. The well was tested through a 3" Orifice Flow Prover utilizing various sizes of orifice plates. The results of the Open Flow Potential Test are as indicated in the enclosed copies of Form O-1, Gas Well Open Flow Potential Test Report.

The well did not flow any water or liquids during the test. The results of the test were plotted on 3 cycle log graph paper and are as indicated on the enclosed copies. The well is estimated to have an absolute Open Flow Capacity of 172 MCF per day. The following are estimates of the capacity of the well at various delivery pressures:

Delivery Press.	Estimated Gas Volume
Psig.	MCF/D
90	170
80	155
70	138
100	95

A sample of the gas was obtained and has been forwarded to the Bureau of Mines, Amarillo Helium Plant at Amarillo, Texas. They have been requested to send the results of the analysis to the Commission.

Mr. John Bannister

-3-

November 3, 1967

If you have any questions concerning the tests, please do not hesitate to call upon me.

Sincerely yours,



Ewell N. Walsh
Registered Professional Engineer
Arizona Reg. No. 6706

ENW:dfm
Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Budget Bureau No. 42-2619.9.
Approval expires June 30, 1968.



GAS WELL DATA
SURVEY OF HELIUM-BEARING NATURAL GAS



F.S. _____

Fill out as fully as possible and return to
Bureau of Mines, P. O. Box 10085, Amarillo, Texas 79106

STATE Arizona COUNTY Apache

FIELD Unnamed WELL NAME Santa Fe No. 8

LOCATION SE/4 NW/4 Sec.25-T20N-R27E OWNER Apache Drilling Company
See Remarks

OWNER'S ADDRESS See Remarks

DATE COMPLETED 11-21-60 DATE SAMPLED 10-31-67

SAMPLED BY Ewell N. Walsh, Registered Professional Engineer

NAME OF PRODUCING FORMATION Coconino

DEPTH (FEET) 1351 THICKNESS (FEET) Unknown

SHUT-IN WELLHEAD PRESSURE, PSIG 199.5 OPEN FLOW, MCF/D See Remarks

REMARKS: Send results of Analysis to
Mr. John Bannister
Executive Secretary
Arizona Oil and Gas Conservation Commission
1624 West Adams, Room 202
Phoenix, Arizona 85007

Note: Well produced large
volumes of water when
attempted to conduct
open flow potential
test. Sample may con-
tain water vapor.

SAMPLING INSTRUCTIONS

PLEASE COLLECT DUPLICATE SAMPLES AS FOLLOWS: Fill the bottle with water and invert in a bucket of water. Be sure that no air gets into the bottle. Attach a rubber hose to the well and allow gas to flow through the hose for 2 or 3 minutes, or long enough to be sure that the hose is completely purged. Place the end of the hose in the mouth of the bottle. When all of the water has been displaced from the bottle, stopper the bottle while it is still inverted under water. Label each bottle clearly, giving the well owner and the name of the well, using the gummed labels furnished. Please repack the bottles in the mailing tube and return by regular mail, using the enclosed self-addressed label, which requires no postage.

To prevent the bottle top from popping open, the spring clips should be taped down.

#134

WELL SITE CHECK

By JB
Date 10-31-67

Contractor _____	Person(s) Contacted _____
Spud date _____	_____
Type Rig _____ Rotary _____ Cable _____	Present Operations _____
Samples _____	_____
Pipe _____	Drilling with Air _____ Mud _____
Water Zones _____	Size Hole _____
Lost Circ. Zones _____	Size Drill Pipe _____
Formation Tops _____	Type Bit _____
Cores, Logs, DST _____	No. Bit _____ Drilling Rate _____
_____	Formation _____
Crews _____	Lithology _____

REMARKS, PHOTO, MAP

Ewell Walsh, on behalf of Commission was conducting test on this well (SE NW 25-2DN-28E) and Eastern Santa Fe Ancon (#234) (SE NW 31-2DN-28E). After being open approx 2 hrs a mist began to come & the well gradually began to blow water in such volumes as to make production test impossible. Ariz. Helium (Dick McDonald) said it will install a separator & will test then. Gas sample was caught & will go to Amarillo for analysis.

This is from Coconino

12 WELL NAME Crest Santa Fe #8

Permit No. 134
Confidential: Yes No

REPORT OF ANALYSIS

F.S.- 11204 M.S. N-35965 ,H 9.10 OBS. PRES. 64.6 CAL. PRES. 64.6
 STATE- ARIZONA COUNTY- APACHE
 FIELD- WELL NAME- SANTA FE NO. 8
 LOCATION- SEC. 25, T20N, R27E OWNER- APACHE DRILLING CO.
 DATE COMPLETED- 11-21-60 DATE SAMPLED- 10-31-67
 SAMPLED BY- EWELL N. WALSH
 NAME OF PRODUCING FORMATION- COCONINO
 DEPTH IN FEET- 1351 THICKNESS IN FEET-
 SHUT IN WELLHEAD PRES., PSIG- 199 OPEN FLOW, MCF/D-

CHECK OF DATA-
 THE WELL DATA ARE ACCURATE,WITHOUT CORRECTION,AS CORRECTED ABOVE.

REMARKS-

ANALYSIS-

METHANE	TRACE %	NORMAL PENTANE	0.0 %	OXYGEN	0.0 %
ETHANE	.1 %	ISOPENTANE	0.0 %	ARGON	.7 %
PROPANE	0.0 %	CYCLOPENTANE	0.0 %	HYDROGEN	0.0 %
NORMAL BUTANE	0.0 %	HEXANES PLUS	0.0 %	H2S	0.0 %
ISOBUTANE	0.0 %	NITROGEN	88.9 %	CO2	.7 %
SPECIFIC GRAV	.895			HELIUM	9.68 %
				TOTAL	100.1 %

CALCULATED GROSS BTU/CU FT, DRY AT 60 DEG F AND 30 IN. MERCURY- 2.

PERMISSION FOR RELEASE-
 PERMISSION IS HEREBY GRANTED FOR THE BUREAU OF MINES TO RELEASE THE ABOVE
 DATA, TOGETHER WITH SIMILAR DATA RELEASED BY OTHER OPERATORS AS PUBLIC
 INFORMATION AND AS PARTS OF A SERIES OF PAPERS ON ANALYSES OF GASES FROM
 VARIOUS FIELDS, STATES, OR REGIONS.



#134

COMPANY.....
 BY.....
 TITLE.....

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-Crest #8	Field Unknown	Reservoir Coconino
Survey or Sec-Twp-Rge SENW - Sec. 25-T. 20N -R 27E	County Apache	State Arizona
Operator Apache Drilling Co., Inc.		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street 3440 N. 16th St. Suite 10	City Phoenix	State Arizona
Above named operator authorizes (name of transporter) Arizona Helium Corp. Phoenix, Arizona		
Transporter's street address P. O. Box 14427	City Phoenix	State Arizona
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	% transported	Product transported
Apache Drilling Co., Inc.	100	Gas
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.		
NEW LEASE		

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 Vice President of the Apache Drilling Co. Inc. (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.

9 May 1967
Date

C. J. Henderson
Signature

Date approved: 5-9-67

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

By: John Bonmaster

Permit No. 134

Note. Production anticipated 9-1-67

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

DESIGNATION OF OPERATOR

TO: Oil & Gas Conservation Commission, State of Arizona.

The undersigned is, on the records of the Oil & Gas Conservation Commission, State of Arizona, the holder of that certain oil and gas lease,

No. SFR-9650 dated 15th August 1966

and hereby designates APACHE DRILLING COMPANY, an Arizona corporation, with offices at 7823 N. 27th Avenue, Phoenix, Arizona, as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Oil and Gas Operating Regulations with respect to the following acreage:

640 acres in Section 25, Township 20 North, Range 27 East, of Apache County, State of Arizona.

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

In case of default on the part of the designated operator, the leasee will make full and prompt compliance with all regulations, lease terms or orders of the Oil & Gas Conservation Commission, of the State of Arizona, or its representative.

The Lessee agrees promptly to notify the above named departments of any change in the designated operator.

3/1/66
Date

C. F. Swain
C. F. Swain, dba
CREST OIL COMPANY



WATER ANALYSIS REPORT

VALLEY LABORATORIES
Incorporated

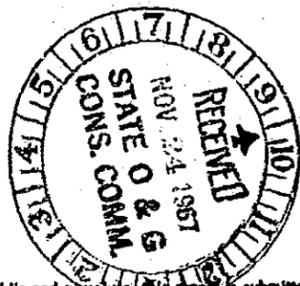


FOR
ARIZONA HELIUM CORPORATION
P. O. Box 14427
Phoenix, Arizona 85031
Attn: Charles B. Southard

DATE: 11-10-67
DATE RECEIVED: 11-8-67
SAMPLE OF: Water
IDENTIFIED AS: marked
SAMPLED BY: Client
DETERMINATIONS REQUESTED:

L
LABORATORY NO.: A67312-9

	Parts per Million
Total Soluble Salts	21,907
Total Hardness as Calcium Carbonate Gr./U.S. Gal.	2,910
Calcium (Ca)	170.18
Magnesium (Mg)	960
Sodium (Na)	124
Carbonate (CO ₃)	7,150
Bicarbonate (HCO ₃)	0 -0
Chloride (Cl)	373
Sulfate (SO ₄)	11,650
Fluoride (F)	1,650
Nitrate (NO ₃)	- 0 -
Boron (B)	
pH	7.50
Ratio of Sodium/Calcium	7.45



Respectfully submitted,
VALLEY LABORATORIES # 134

As a mutual protection to clients, the public and ourselves, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used in whole or in part or in connection with the name of these Laboratories nor any members of its staff without written authorization. These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

CORE DESCRIPTION

134

Crest Oil Company
No. 8 Santa Fe
Section 25, T20N, R27E
Apache County, Arizona
Elevation 5789' ground

Cone No. 1 1357 to 1367 (cut 10 feet, recovered 4 feet)

(Coring time (minutes per foot) 10-12-9-5-12-13-11-10-15-29)

Barrel jammed.

4' Sandstone, buff to red, fine grained, subround to sub-angular - cross-bedded and multiple vertical fractures.

Note: The core interval above has been corrected to Schlumberger's measurements. The previous measurements were 3 feet higher.

CORE ANALYSIS

1357 - 1358 - Porosity 9.8% - Permeability 13 md

1358 - 1359 - Porosity 9.4% - Permeability 32 md

1359 - 1360 - Porosity 16.4% - Permeability 108 md

1360 - 1361 - Porosity 15.7% - Permeability 81 md

Note: The above has also been corrected to correspond with Schlumberger's measurements.

MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool WILD CAT Formation COCONINO County APACHE
 Initial X Annual _____ Special _____ Date of Test 9-23-61
 Company CREST OIL CO Lease SANTA FE Well No. 8
 Unit 9 Sec. 29 Twp. 20N Rge. 27E Purchaser _____
 Casing _____ Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
 Tubing 2 7/8 Wt. 6.5 I.D. _____ Set at 1372 Perf. 1351 To 1355
 Gas Pay: From 1351 To 1355 L 1355 xG .220 -GL 1343 Bar.Press. 12
 Producing Thru: Casing _____ Tubing X Type Well S B
 Date of Completion: 11/21/60 Packer _____ Reservoir Temp. Est. 75
 Single-Bradenhead-G. G. or G.O. Dual _____

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						202		
1.		.375				181.5	64	1
2.		.500				159.0	59	1
3.		.750				82.0	62	1
4.		1.000				40.0	64	1
5.								

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	3.0891		181.5	.9943	.9076	1.0000	477
2.	3.5223		171.0	1.0048	.9076	1.0000	795
3.	12.2023		94.0	.9981	.9076	1.0000	925
4.	22.0862		52.0	.9962	.9076	1.0000	925
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
 Specific Gravity Separator Gas _____
 Gravity of Liquid Hydrocarbons _____ deg.
 Specific Gravity Flowing Fluid _____
 P_c 3.951 $(1-e^{-S})$.085 P_c 214 P_c^2 45,796

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.	181.5	37.442	2.648	7.022	6.01	33.045	7.751		
2.	171.0	29.241	4.232	18.000	1.930	30.795	15.000		
3.	94.0	8.836	9.125	26.360	3.260	11.104	34.682		
4.	52.0	2.704	5.135	26.360	2.260	4.972	49.804		
5.									

Absolute Potential: 1.720 MCFPD; r^2 .728
 COMPANY Crest Oil Co
 ADDRESS 2520 First National Bank Bldg Denver Colo.
 AGENT and TITLE Geological Ind. Agent
 WITNESSED _____
 COMPANY _____

REMARKS

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 52

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

Operator Crest Oil Company Field Wildcat
 Street P. O. Box 57 Pool _____
 City Alton State Illinois County Apache
 Lease Name Santa Fe Well No. 8 Acres in Unit 640
 Location 1980° FN & 1650° FW
 Sec. 25 Twp. 20N Rge. 27E
 Elevation DF GR 5789° Electric Log Run November 16, 1960
 Number of Crude Oil Producing Wells on this Lease, including this well None
 Has Authorization to Transport Oil or Gas From Well, Form O&G 57 been filed? No

OFFICIAL COMPLETION GAUGE

Date Test Commenced 11-21 1960 Hour M. Date Test Completed 11-21 1960 Hour M.
 Length of Test _____ Hours _____ Minutes
 For Flowing Well: 1,250 MCFGPD Estimated For Pumping Well: _____
 Flowing pressure on Tbg. 205 lbs./sq.in. Length of stroke used _____ inches
 Flowing pressure on csg. _____ lbs./sq. in. Number of strokes per min. _____
 Size tbg. 2 7/8 in. No. ft. run 1,372° Size of working barrel _____ inches
 Size choke _____ 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 (bbls. net oil per 24 hrs.) (100% tank tables.) _____
 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 8 From 1351 To 1355 Date Perforated 11-20-60
 Date well Spudded November 7, 1960 Date Well Completed November 21, 1960
 Top Pay 1350 Ft. Total depth of well 1372 Ft.

CASING LINER AND TUBING RECORD

String	Size	Wt. /Ft.	Name and Type	Amount Ft. In.	Depth Set at	Perforated From	To
<u>Surface</u>	<u>8 5/8</u>	<u>20 lbs.</u>	<u>H40</u>	<u>94°</u>	<u>94°</u>		
<u>PROD.</u>	<u>2 7/8</u>	<u>4.70 lbs.</u>	<u>J55</u>	<u>1372</u>	<u>1372</u>	<u>1351</u>	<u>1355</u>

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>11"</u>	<u>Surface</u>	<u>0° - 94°</u>	<u>35</u>	<u>Halliburton</u>			<u>Regular</u>
<u>6 3/4</u>	<u>PROD.</u>	<u>1156° - 1372°</u>	<u>40</u>	<u>Halliburton</u>			<u>Regular</u>

CHEMICAL OR SHOOTING RECORD BEFORE COMPLETION

Size	Chemical or	Quantity	Date	From	Depth To

AFFIDAVIT

I, C. E. Swain, 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.

C. E. Swain
Representative of Company

Subscribed and sworn to and before me this 16 day of January, 1961
Madison County, Ariz. James M. Scott Notary Public
 My Commission expires: Feb. 23, 1964

OIL AND GAS CONSERVATION COMMISSION
STATE OF ARIZONA

Form OG 51

Form Prescribed Under Oil and Gas Conservation Act of 1951

NOTICE OF INTENTION TO DRILL NEW WELL

This notice and surety bond must be filed and permit must be granted before drilling begins

Oil and Gas Conservation Commission _____ Arizona 11/23/19 60

In compliance with Statewide Rule 3, notice is hereby given that it is our intention to commence the work of drilling well No. 8 Sec. 25,

Twp. 20N, Rge. 27E B. & M., Wildcat Field

Apache ^{J.W.D.} County.

Legal description of lease SW 1/4 and N/2 of Section 25, T20N, R27E
(attach map or plat to scale)

Location of Well: 1980' FN & 1650' FW of Section 25
(give exact footage from section corners or other

legal subdivisions or streets)

Proposed drilling depth 1200 feet. Acres in drilling unit 640

Has surety bond been filed? yes. Is location a regular or exception to spacing rule? yes. (Reg.)

Elevation of ground above sea level 5789.0 feet.

All depth measurements taken from top of Kelly Bushing
(Derrick, floor, Rotary Table or _____ which is 2 feet above the ground.
(Kelly Bushing)

PROPOSED CASING PROGRAM

Size of Casing Inches A. P. I.	Weight	Grade and Type	Top	Bottom	Cementing Depth
8 5/8"	20 lbs.	J55	0	90	0-90

Intended Zone or Zones of completion:
Name Coconino

Perforated Interval

AFFIDAVIT:

I hereby certify under the penalty of perjury, that the information contained and statements herein made are to the best of my knowledge and belief, true, correct and complete.

Grest Oil Company P.O. Box 57 Alton, Ill.
(Applicant)

Application approved this 2nd day of November December 19 60

Permit No. 134
3-62 1/10/58

C.R.
Charles Kalil, M.D.
Oil and Gas Conservation Commission
Charles Kalil, M.D. - Vice Chairman
Acting Chairman of Commission

134

OIL AND GAS CONSERVATION COMMISSION
STATE OF ARIZONA

Form OG 51

Form Prescribed Under Oil and Gas Conservation Act of 1951

NOTICE OF INTENTION TO DRILL NEW WELL

This notice and surety bond must be filed and permit must be granted before drilling begins

Oil and Gas Conservation Commission

Arizona 11/1/19 60

In compliance with Statewide Rule 3, notice is hereby given that it is our intention to commence the work of drilling well No. 8 Sec. 25

Twp. 20N, Rge. 27E B. & M., Wildcat Field
Apache County.

Legal description of lease N/2 and SW/4 of Section 25, T20N, R27E
(attach map or plat to scale)

Location of Well: 1980* FN & 1650* FW of Section 25
(Give exact footage from section corners or other

legal subdivisions or streets)

Proposed drilling depth 1200 feet. Acres in drilling unit 480

Has surety bond been filed? IN TRANSIT. Is location a regular or exception to spacing rule? Yes - REGULAR.

Elevation of ground above sea level 5789.0 feet.

All depth measurements taken from top of Kelly Bushing
(Derrick, floor, Rotary Table or
(Kelly Bushing) which is 2 feet above the ground.

PROPOSED CASING PROGRAM

Size of Casing Inches A. P. I.	Weight	Grade & Type	Top	Bottom	Cementing Depth
<u>5/8"</u>	<u>20 lbs.</u>	<u>155</u>	<u>0</u>	<u>90</u>	<u>0 - 90</u>

Intended Zone or Zones of completion:
Name

Coconino

Perforated Interval

AFFIDAVIT:

I hereby certify under the penalty of perjury, that the information contained and statements herein made are to the best of my knowledge and belief, true, correct and complete.

CHEST OIL Co. - P.O. Box 57 - ALTON, ILL.
(Applicant)

Application approved this _____ day of _____ 19____
Permit No. 134
3-62 1/10/58

Oil and Gas Conservation Commission

134

CORE LABORATORIES, INC.
 Petroleum Reservoir Engineering
 DALLAS, TEXAS

Page No. 1

CORE ANALYSIS RESULTS

Company GREST OIL COMPANY Formation COCONINO File RP-3-1114
 Well # S SANTA FE Core Type DIAMOND CONVENTIONAL Date Report 11-20-60
 Field WILDCAT Drilling Fluid WATER BASE MUD Analysts ENGLISH
 County APACHE State ARIZONA Elev. 5789 Gr. Location SEC. 25 - 20N. - 27E

Lithological Abbreviations

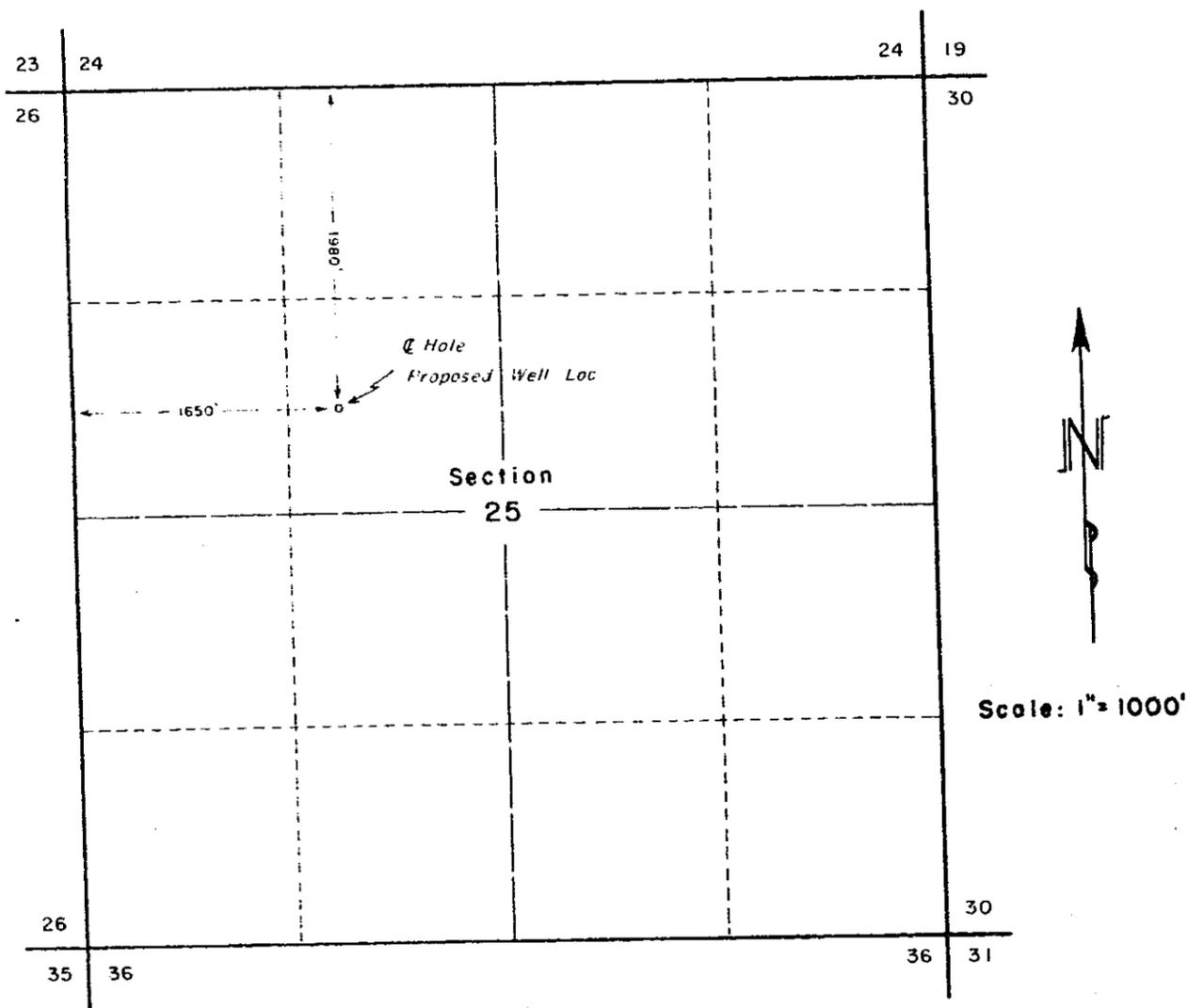
SANDST. SHALE-SH
 LIMST. LM
 DOLGHITE-DOL
 CHERT-CK
 GYPSUM-GYP
 ANHYDRITE-ANHY
 CONGLOMERATE-CONG
 FOSSILIFEROUS-FOSS
 SANDY-SST
 SHALY-SHY
 LIMY-LMY
 FINE FA
 MEDIUM-MED
 COARSE-CSE
 CRYSTALLINE-SLN
 GRAIN-GRN
 GRANULAR-GRNL
 BROWN-BRN
 GRAY-GY
 YUGGY-VGY
 FRACTURED-FNAG
 LAMINATION-LAM
 STYLOLITIC-STY
 SLIGHTLY-SL
 VERY-V/
 WITH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
1	1354-55	13	9.8			Sandstone
2	1355-56	32	9.4			Sandstone
3	1356-57	108	16.4			Sandstone
4	1357-58	81	15.7			Sandstone

A SERVICE NO. 8 NO INTERPRETATION OF RESULTS

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

CERTIFICATE OF SURVEY



WELL LOCATION: Crest Oil Co., Santa Fe No. 8

Located 1650 feet East of the West line and 1980 feet South of the North line of Section 25
 Township 20 North Range 27 East Gila & Salt River Meridian
 Apache County, Arizona
 Existing ground elevation determined at 5789.0 feet based on Arizona State Highway Datum

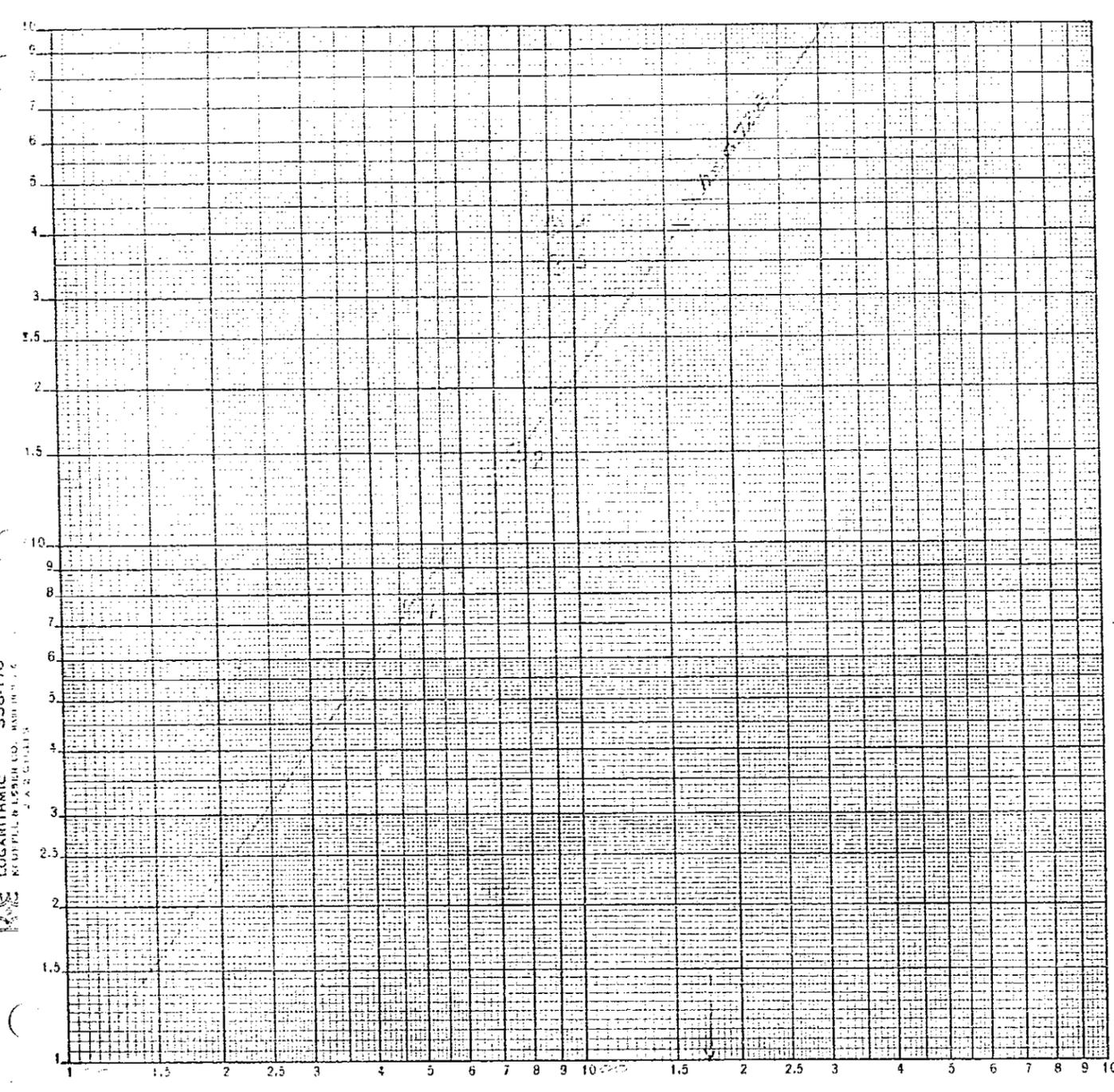
I hereby certify the above plot represents a survey made under my supervision and is accurate to the best of my knowledge and belief.

Elmer M. Clark
 ELMER M. CLARK
 Registered Land Surveyor
 Colorado State (No. 2279)

Oct. 29, 1960
E.M. CLARK & ASSOCIATES
 Durango, Colorado

File No 60667

LOGARITHMIC
KEUFFEL & ESSER CO.
358-110



Oct 1914

Bond # 92-729085

BOND

KNOW ALL MEN BY THESE PRESENTS,

That we: CREST OIL COMPANY

of the County of: MADISON in the State of: ILLINOIS

as Principal, and Maryland Casualty Company

of Baltimore, Maryland authorized to do business within the State of Arizona,

as surety, are held and firmly bound unto the State of Arizona 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 condition 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)

SINGLE WELL BOND

SECTION 25 - TWP 20N - R. 27E

APACHE Co, ARIZONA

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 State Land Commissioner, especially with reference to the requirements of A.R.S. 27-518, providing for the proper drilling, casing and plugging of said well or wells, and filing with the State Land Commissioner all notices and records required by said Commissioner, 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 Two Thousand Five Hundred and 00/100 Dollars (\$2,500.00)

Witness our hands and seals, this 16th day of November 1960

CANCELLED
DATE 9-21-62

CREST OIL COMPANY
By: [Signature] Principal

Witness our hands and seals, this 16th day of November 1960

MARYLAND CASUALTY COMPANY
By: _____ Surety
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 _____ STATE LAND COMMISSIONER

Form P-2

Chas Conkeli
Res agent

September 24, 1968

Mr. Samuel Conklin
Maryland Casualty Company
Suite 1600
100 West Clarendon
Phoenix, Arizona

Re: Crest Oil Company #8 Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #134
Bond No. 92-729085

Dear Mr. Conklin:

Records of this office indicate that on 9-24-68 the Crest Oil Company fulfilled its obligation to the State of Arizona as to the requirements pertaining to the captioned well. We authorize termination of the captioned bond effective this date.

Yours truly,

John Bannister
Executive Secretary

JL:jf
cc: Crest Oil Company

Memo: File
From: J. Lambert

9-11-68
Time: 9:30 a.m.

Re: Crest Oil Company Santa Fe #8
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #134

Ed Clement, Farmington, New Mexico, called this date. He identified himself as the party who would plug the captioned well on behalf of Crest Oil Company--Doctor Swain. He asked permission to commence operations prior to 9-16-68 as indicated on Form 9. Permission granted.

94

C.F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

September 6, 1968

John Bannister, Executive Secretary
Arizona Oil & Gas Conservation Commission
1624 W. Adams Room 202
Phoenix, Arizona 85007

Dear Mr. Bannister:

Attached please find my application to Abandon and Plug the Crest-Santa #8 well, 25-20N-27E, Apache County. If you find said application incomplete or unacceptable in any way, please call me collect at either of the following numbers:

Area Code 618	462-5346	Office	(P.M.)
" " "	462-7674	Residence	(A.M.)

The above well was recently connected to Arizona Helium Corporation's transmission line, and failed to deliver. Remedial measures following engineering analysis failed to improve the situation, and the well when open to buyer's line, will not deliver gas due to invasion by large quantities of water and sand.

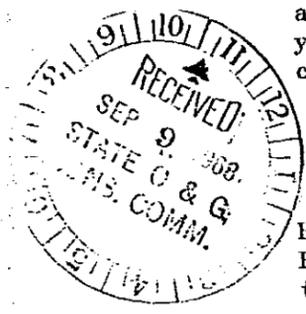
After thorough study and consideration, we feel this well should be plugged and another drilling program launched in an attempt to recover the lost reserves of gas which have been strongly counted upon by both Crest and Arizona Helium.

In this connection I recently ^{sent} you a night letter requesting a commission hearing at which time I will request 160 acre spacing in Section 25, in order that we may drill several wells into the Coconino (from which the above #8 was completed), and if same is unproductive, we plan to plug back and attempt completion in the "Shinarump" formation.

I realize that in order to properly apply for another permit to drill in said Section 25, there is another well to be abandoned and plugged; namely the Apache Drlg Company Santa Fe #1, an attempted completion in the "Shinarump". A swab test of this well last June shows this well to be a dry hole. Since this well was drilled by and completion attempted by Apache Drilling Company, I suggested to Mr. McDonald that application to Abandon could probably ^{be} expedited by requesting same through his office. At this point, due to inability to coordinate necessary phone calls, I am sure this application has not yet been filed, but will be done as soon as possible.

Sincerely yours,

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



34

C. F. SWAIN

OIL COMPANY

P. O. BOX 17
ALTON, ILLINOIS 62002

PHONE 462-5346

September 4, 1968

John Bannister, Executive Secretary
Arizona Oil & Gas Conservation Commission
1624 W. Adams Room 202
Phoenix, Arizona 85007

Dear Mr. Bannister:

As indicated by enclosed photocopy, I have applied for a Blanket Bond to cover anticipated drilling program being developed between Crest Oil Company and Arizona Helium Corporation, so please be on the look-out for same and hold pending receipt of application to drill a new well in Section 25, T20N, R27E, Apache County.

The location for the new well should have been surveyed and staked by now, and as soon as I receive the plats, I will forward them along with permit to drill application.

#134
At the same time I plan to forward application to Plug and Abandon the Crest Santa Fe #8 well in the same Section; as this well, after being extensively tested and analyzed a number of times by supposed competent personnel and pronounced commercially productive and ready to go on stream, has developed serious water and sand invasion problems and will not deliver. This well was completed in the Coconino sandstone.

#353
We will also forward application to Plug and Abandon the Apache Drilling Company Santa Fe #1, a Shinarump test drilled and completion attempted, approximately 300 feet north of the Crest Santa Fe #8 well. However, as this well was drilled by Apache, and permit and various records retained by them, the application to Plug and Abandon this well will no doubt be forwarded by Arizona Helium Corporation.

Any comments you may have regarding above will be appreciated.

Sincerely yours,

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

CFS:fs



C. F. SWAIN

Crest
OIL COMPANY
P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

June 28, 1968

Oil and Gas Conservation Commission
State Of Arizona
1624 W. Adams Rm 202
Phoenix, Arizona 85007

Re: Crest Oil-Santa Fe #8 well
SE NW 25-20N-27E, Apache Co.
Permit #134

Gentlemen:

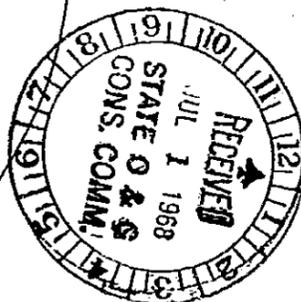
As the above captioned well is not yet in production ,
and is a shut-in helium bearing gas well, permission is requested
for exemption from the annual testing requirement for gas wells.

Sincerely yours,

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

CFS;fs

OK
89-1-68



November 20, 1967

Apache Drilling Company Inc.
3440 N. 16th St. - Suite 10
Phoenix, Arizona 85016

Arizona Helium Corp.
P.O. Box 14427
Phoenix, Arizona 85031

Attention: Mr. R.H. McDonald

Re: Crest #8 Santa Fe
SE NW 25-20N-27E, Apache County
Permit 134

Eastern #21 Santa Fe Ancon
SE NW 31-20N-28E, Apache County
Permit 234

Gentlemen:

Attached for your information is the report of the gas analysis from the captioned wells.

Should you have any questions, would you please advise.

Very truly yours,

John Bannister
Executive Secretary
mr
enc

cc: Mr. John Anderson, U.S.G.S., P.O. Box 1857, Roswell, N.M.
Mr. Ewell N. Walsh, P.O. Box 254, Farmington, N.M. 87401

November 6, 1967

Apache Drilling Company Inc.
3440 N. 16th St. - Suite 10
Phoenix, Arizona 85016

Attention: Mr. C.T. Henderson

Re: Crest #8 Santa Fe
SE NW 25-20N-27E
Apache County
Permit 134

Eastern #21 Santa Fe Ancon
SE NW 31-20N-28E
Apache County
Permit 234

Arizona Helium Corp.
P.O. Box 14427
Phoenix, Arizona 85031

Attention: Mr. R.H. McDonald

Gentlemen:

Attached hereto please find report from Mr. Ewall N. Walsh, the petroleum engineer recently hired by this Commission to test captioned wells. His report is in the form of a letter dated November 3, 1967 and an open flow potential report of the Eastern #21 Santa Fe.

The samples taken have been sent to Amarillo to be analyzed and the results will be filed with this Commission. At such date as these results are in our hands we will forward copies.

Very truly yours,

John Bannister
Executive Secretary
BT
enc

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 Eastern-Ancon Santa Fe #21	Field Navajo Springs Area	Reservoir Shinarump
Survey or Sec-Twp-Rge NWSEW Sec. 31; E. 20N-R28E	County Apache	State Arizona
Operator Apache Drilling Co., Inc.		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street 3440 N. 16th St. Suite 10	City Phoenix	State Arizona
Above named operator authorizes (name of transporter) Arizona Helium Copp. Phoenix, Arizona		
Transporter's street address P O Box 14427	City Phoenix,	State Arizona
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	% transported	Product transported
Apache Drilling Co., Inc.	100	Gas
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.		
NEW LEASE		

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 VICE President of the Apache Drilling Co. Inc. (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 9-May-1967

Signature C. J. Henderson

Date approved: _____

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

By: _____

Permit No. 234

<p>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</p>
--

C.F. SWAIN

Crest
OIL COMPANY

BOX 57
ALTON, ILLINOIS 62004

PHONE 462-5346

March 11, 1966

John Bannister, Executive Secretary
Oil and Gas Conservation Commission
1624 West Adams
Phoenix, Arizona

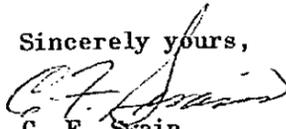
Dear Mr. Bannister:

I have just returned to work after a convalescent period at home following hernia surgery, and thus the delay in answering your letter written March 4th requesting core data on Crest's Santa Fe #8 well 25-20-27, Apache Co., Arizona.

As per your request, enclosed please find photocopy of Core Laboratories analysis, along with a photocopy of Geologist Robert E. Lauth's notes on the core.

Trusting this information will complete your file on this well, (but if further information is desired will be glad to furnish whatever I have) I am,

Sincerely yours,


C. F. Swain
Crest Oil Company

CFS:fs

enc.

March 4, 1966

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

Attention: Dr. C.F. Swain

Re: Crest Oil Company #8 Santa Fe well
SE/4NW/4 25-20N-27E, Apache County, Arizona
File 134

Gentlemen:

We note, in reviewing our file on the captioned well, that a core was taken from the interval 1357-1356 feet.

Inasmuch as we do not have the core analysis or core sample, will you please see that this information is furnished this office at your earliest convenience.

Thank you for your cooperation.

Very truly yours,

John Bannister
Executive Secretary
mr

June 21, 1965

Maryland Casualty Company
Suite 1201 Pierce Building
St. Louis, Mo. 63102

Attention: Mr. Richard A. White, Bond Department

Re: Crest Oil Company, Alton, Illinois

Gentlemen:

This will acknowledge receipt of your letter of June 15, 1965 in which you mention a letter dated June 9, 1965 addressed to this Commission at its old address. Please be advised that this letter has not been received by this office.

Below listed, please find a breakdown of each well drilled by Crest Oil and the necessary requirements to be met:

Santa Fe Well #1, NE/4SW/4 19-T20-R27E, Apache County.
Your Bond 92-676130. Our File 112

Our records reveal that captioned bond was released January 23, 1965 and that all necessary reports have been filed.

Santa Fe Well #2, NE/4SW/4 33-T20N-R27E, Apache County.
Your Bond 92-676089. Our File 110

This well is in the Navajo Springs Unit and consequently the bond must remain in force. Would you please send us a copy of this bond?

Santa Fe Well #3, SW/4NE/4 3-T19N-R27E, Apache County.
Your Bond 929677167. Our File 124

This well was completed as a dry hole and all our requirements have been met. This bond was released May 16, 1961.

June 21, 1965

Santa Fe Fee #4, NE/4SW/4 27-T20N-R27E, Apache County
Our File 131

This particular location was never drilled and our file does not reveal that it was ever bonded.

Santa Fe Fee #5, NE/4SW/4 26-T20N-R27E, Apache County
Our File 129

The bond covering this location was executed August 25, 1960 by Mr. J.M. Johnson on behalf of Maryland Casualty Company. The number of the bond is not known.

Our file does not reveal that this bond has been released, and, further, the Well Completion Report must be filed with this office before this bond may be released.

Santa Fe Fee #5A, NE/4SW/4 26-T20N-R27E, Apache County
Our File 151

The bond number is not known. Our file reveals this bond was released May 22, 1962.

Santa Fe Fee #5, NE/4NE/4 35-T20N-R27E, Apache County
File 130. Bond number unknown.

Our file reveals this bond was released May 22, 1962.

Santa Fe Fee #7, SW/4NE/4 6-T19N-R27E, Apache County
Your Bond 92-78 7379. Our File 204

Our records reveal that this well is in the Pinta Dome Unit. Consequently this bond must be kept in force and we request that you furnish us with a copy of same.

Santa Fe Fee #8, NE/4NW/4 25-T20N-R27E, Apache County
Our File 134. Bond number unknown.

Our records reveal that this is a shut-in pending well and consequently this bond must be kept in force. You are requested to furnish us with copy of same.

Santa Fe Fee #9, NE/4SW/4 24-T20N-R27E, Apache County
Our File 203. Your Bond 92-787378

This bond was released November 7, 1962. However the necessary Well Completion Report has not been filed with this office.

Santa Fe Fee #10, NE/4SW/4 11-T20N-R27E, Apache County
Our File 170. Your Bond 92-785349

Our file indicates that this location was not drilled by Crest under Permit 170, but apparently taken over by Eastern Petroleum and drilled as their Santa Fe Fee #12. However,

Maryland Casualty Company Page 3

June 21, 1965

until such time as Crest files with us a Well Completion Report showing that this well was not drilled under Permit 170, this bond may not be cancelled.

Santa Fe Fee #11, SW/4NE/4 26-T10N-R27E, Apache County
Our File 132. Your Bond 92-766510

Our file reveals that this well has been completed and this bond released May 22, 1962.

Should you have any further questions concerning the Crest Oil Company bonds, please advise.

Yours very truly,

John Bancister
Executive Secretary

BT

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



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

2520 FIRST NAT'L. BANK BLDG.
DENVER 2, COLORADO
MA 3-8259

September 27, 1961

Mr. Brooks Pierce
Oil and Gas Conservation Commission
Suite 312, 3500 North Central Avenue
Phoenix, Arizona

Re: Crest Oil No. 8

Dear Brooks:

Enclosed please find 4-point back pressure tests on the above cited well with initial potential gauged at 1,720 MCFPD.

Judi says that we are out of O&G 53 which should accompany this and that she has requested more from you under separate cover. Same will be filed upon receipt of additional forms.

Respectfully yours,

EASTERN PETROLEUM COMPANY
Rocky Mountain Division

James W. Dean
James W. Dean

JWD:JS
Enclosure



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

2520 FIRST NAT'L BANK BLDG.
DENVER 2, COLORADO
MA 3-5289

September 18, 1961

Mr. D. A. Jerome
Oil and Gas Conservation Commission
Suite 312, 3500 North Central Avenue
Phoenix, Arizona

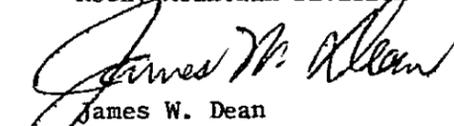
Dear Don:

In commenting to Mr. Swain on my joint conversation with you and Brooks Pierce of last week on the telephone, he observed that we have perhaps prevailed too far on the courtesy and understanding of the Commission in the filing of 4-point back pressure tests and official completion gauges for the Crest Oil No. 8 Santa Fe.

I am arranging to have this service performed immediately and we will file the appropriate reports as soon as same is completed.

Respectfully yours,

EASTERN PETROLEUM COMPANY
Rocky Mountain Division


James W. Dean
JWD:JS

May 22, 1961

Mr. James Dean
Eastern Petroleum Company
2520 First National Bank Building
Denver 2, Colorado

Re: Crest Oil Company Sante Fe #8 - Apache County,
Arizona

Dear Jim:

Thanks for the electric log on your above mentioned test which came through the mail today.

In reviewing the file, I noticed a letter written by D. A. Jerome under date of January 16 in which he granted you permission to postpone taking the 4-point back pressure test for six months from November 21, 1960. In as much as Kerr-McGee is commencing operations for the construction of their extraction plant, I believe that it would be more feasible and convenient for you to wait until such time as you are prepared to produce helium from this well to take this test.

I will prepare a note for our hold-over file so that we both may be reminded that this test is pending. I am sure this meets with your approval.

Kindest personal regards.

Yours very truly,

Brooks Pierce
Petroleum Geologist

BP:hme



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

2520 FIRST NAT'L BANK BLDG.
DENVER 2, COLORADO
MA 3-5259

May 17, 1961

Mr. Brooks Pierce
Oil & Gas Conservation Commission
Suite 312 - 3500 North Central Ave.
Phoenix, Arizona

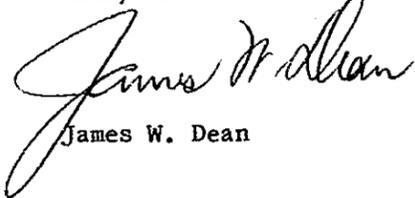
Dear Mr. Pierce:

Re: Crest Oil Company #8

Enclosed please find an electrical log of this well
for your files.

Yours very truly,

EASTERN PETROLEUM COMPANY
Rocky Mountain Division


James W. Dean

/m

Crest
OIL COMPANY
BOX 57
ALTON, ILLINOIS

January 17, 1961

Mr. D. A. Jerome, Executive Secretary
Oil and Gas Conservation Commission
3500 North Central Avenue
Phoenix, Arizona

Dear Mr. Jerome:

Enclosed please find two executed copies of Form O&G 52
Well Completion Report on Crest Oil Company's Santa Fe #8
Section 25, Twp 20N, Rge 27E, Apache County, Arizona.

These are the copies referred to by J. W. Dean of Eastern
Petroleum Company, in his letter to you dated January 5, 1961.

Respectfully yours,


C. F. Swain
Crest Oil Company

January 16, 1961

Mr. James W. Dean
Eastern Petroleum Company
2520 First National Bank Bldg.
Denver, Colorado

Re: Crest Oil Santa Fe #8

Dear Jim:

Concerning your letter of January 5, 1961, which enclosed a copy of the completion report for the subject well, I wish to state that when C.F. Swain has completed the required forms, send them to us.

Mr. Deddens, Chairman of our Commission, has advised me to notify you that the 4-point back pressure test form, O&G 53, will not require to be run at subject time. We are setting up our calendar on this matter, so that you will have six months * from November 21, 1960, the date of the completion of this said well, to take the required back pressure test.

We hope that at the time the back pressure test is taken, you will have several wells to complete in the same manner.

Very truly yours,

D. A. Jerome
Executive Secretary

DAJ/ew

* We might wait until such
time that is arrived and gas
ready to be purchased to cover
well expense.
1/22
5/22

DENVER OFFICE - 121 FIRST NATIONAL BANK BUILDING - MAIN 5-259



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

TELEPHONE 15-24104 - P. O. BOX 291 - CARMI, ILLINOIS

January 5, 1961

Mr. D. A. Jerome, Executive Secretary
Oil and Gas Conservation Commission
Suite 312, 3500 North Central Avenue
Phoenix, Arizona

Re: Crest Oil Santa Fe #8

Dear Don:

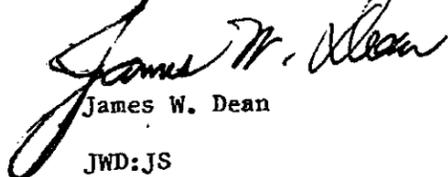
Herein enclosed is a copy of a completion report prepared on the above well in behalf of Crest Oil. We have sent the required copies to them for execution and then filing with you at a later date. In the meantime I wished, however, to furnish you with a copy of same and a letter of explanation.

You will note that the estimated potential production of this well is one and one-quarter million cubic feet of gas per day. This was obtained by a pitot tube method of testing with water. This is the maximum that can be gauged with this type of equipment and we did not have mercury at the well at the time of testing.

This is not a sufficiently accurate gauge to satisfy either us or probably the commission. However, since the per well cost of testing by sending an engineer to Pinta from Farmington to run a 4 point back pressure test is quite high, I had hoped, with your consent, to forestall filing an accurate 4 point back pressure well test until we have drilled and completed at least one more well. This will proportion out the expense of the engineer's time and travel to perform the services in a more beneficial manner to ourselves and Crest Oil.

Respectfully yours,

EASTERN PETROLEUM COMPANY
Rocky Mountain Division


James W. Dean

JWD:JS
Enclosure
Carbon Copy: Mr. C. F. Swain



**EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.**

2520 FIRST NAT'L BANK BLDG.
DENVER 2, COLORADO
MA 3-5259

December 28, 1960

Mr. W. F. Maule, Petroleum Engineer
Arizona Oil & Gas Conservation Commission
Suite 312, 3500 North Central Avenue
Phoenix, Arizona

Dear Mr. Maule:

In checking our records this date, I notice we have not filed a final completion report concerned with the Crest Oil Santa Fe No. 8. Same is due, I believe, by December 31 to be within the normal 30-day period allowed.

I have advised Mr. Dean of this situation by telephone to our Carmi office, and since I am having difficulty in completing the form satisfactorily, he suggested I place you of notice by this letter of the pending delay and that same will be filed as soon as possible but possibly not before his return to this office on January seventh.

If this does not meet with your approval, please contact me collect by telephone and I will attempt to make other arrangements. In the absence of Mr. Dean, please accept our apologies in the delay in this matter.

Respectfully yours,

EASTERN PETROLEUM COMPANY
Rocky Mountain Division

(Mrs.) Judith Stinemates

Judith Stinemates
Secretary to Mr. James W. Dean

Carbon Copy: Mr. D. A. Jerome

December 2, 1960

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

Dear Mr. Swain:

Enclosed is an approved copy of the application to drill Crest Oil Company Santa Fe #8 well. Also enclosed is your receipt for the drilling permit fee.

Please retain this copy of the application in your file or forward to Mr. Dean. A copy of this letter is being sent Mr. Dean for his information.

We are sorry for any inconvenience you and Mr. Dean may have been caused.

Yours very truly,

D. A. Jerome
Executive Secretary

W. F. Maule
Petroleum Engineer

EW
Enclosures



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

2520 FIRST NAT'L BANK BLDG.
DENVER 2, COLORADO
MA 3-5259

December 1, 1960

Mr. D. A. Jerome, Executive Secretary
Oil and Gas Conservation Commission
3500 North Central Avenue, Suite 312
Phoenix, Arizona

Re: Crest No. 8, Santa Fe

Dear Don:

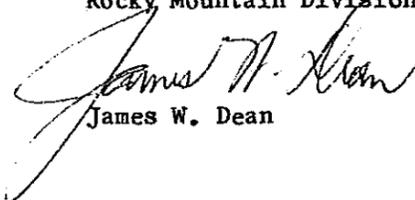
As per your request by letter of November 30th, enclosed are amended and initialled applications concerned with the above well.

My actions here are with the approval with Mr. C. F. Swain obtained by telephone this date.

I regret the confusion that seems to have plagued us all as concerns this application.

Respectfully yours,

EASTERN PETROLEUM COMPANY
Rocky Mountain Division


James W. Dean

JWD:BIC
CC:C.F.Swain

November 30, 1960

Mr. James W. Dean
Eastern Petroleum Company
2520 First National Bank Bldg.
Denver 2, Colorado

SPECIAL DELIVERY

VIA AIR MAIL

Dear Jim:

Thank you for your wire of November 30th, 1960, regarding the attached well. I appreciate it.

However, Dr. Kalil insists that you insert this southeast quarter and initial the same. So if you would do that, it will be appreciated.

I would suggest that you state that you have authority in your covering letter from C.F. Swain to make this correction.

Yours very truly,

D. A. Jerome
Executive Secretary

DAJ/ew
Enclosures (Form OG 51 - 3)

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

WESTERN UNION

TELEGRAM

1206 (4-55)

W. P. MARSHALL, PRESIDENT

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise the message will be sent at the full rate	
FULL RATE	<input type="checkbox"/>
LETTER TELEGRAM	<input type="checkbox"/>
SHORE-SHIP	<input type="checkbox"/>

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

NOVEMBER 30, 1960 - 12:15 p.m.

TELEGRAM REC'D THIS DATE - VIA PHONE:

THIS AUTHORIZES YOU TO INCLUDE SOUTHEAST QUARTER SECTION 25,
TOWNSHIP 20 NORTH RANGE 27 EAST IN APPLICATION CREST OIL COMPANY
80651, THEREBY DESIGNATING ALL SECTION 25 040 UNIT.

JAMES W. DEAN
EASTERN PETROLEUM CO.
DENVER, COLORADO

Original telegram will be sent us 12/1/60 from Western Union office.

Crest
OIL COMPANY
BOX 57
ALTON, ILLINOIS

November 26, 1960

D. A. Jerome, Executive Secretary
Arizona Oil & Gas Conservation Commission
3500 North Central Avenue
Phoenix, Arizona

Re: Permit Application
Crest Oil Company #8 Santa Fe
Section 25, 20N, 27E, Apache County, Ariz.

Dear Mr. Jerome:

Enclosed please find completed "corrected" application forms for above captioned well. (Refer your copy of letter dated November 22, from Mr. James Dean to me)

Respectfully yours,



C. F. Swain
Crest Oil Company

CFS/bs

cc: Mr. Jas. W. Dean

WESTERN UNION
TELEGRAM

WESTERN UNION
TELEGRAM

WESTERN UNION
TELEGRAM

WESTERN UNION
TELEGRAM

WUC080 PD K DENVER COLO NOV 22 1206P MST

D A JEROME, EXECUTIVE SECRETARY

ARIZONA OIL AND GAS CONSERVATION COMM

SUITE 312 3500 NORTH CENTRAL AVE PHOENIX ARIZ

REGRET DELAY AND POSSIBLE MIXUP ON LETTER OF OUR

POSITION AND APPROPRIATE ENCLOSURES DRAWN THIS OFFICE

NOVEMBER 16 STOP NEW APPLICATION FOR CREST NUMBER 8 OG

51 MAILED TO NAVAHO AND MISSED SWAIN BY HIS EARLY

RETURN TO ILLINOIS STOP WILL SEND NOW OG FORMS FOR CREST

8 TO ILLINOIS THIS DATE FOR HIS EXECUTION STOP WILL

DESIGNATE SECTION 25 AS 640 UNIT FOR THIS APPLICATION

JAMES W DEAN EASTERN PETROLEUM CORP

112P

134



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

2520 FIRST NAT'L BANK BLDG.
DENVER 2, COLORADO
MA 3-5259

November 22, 1960

Dr. C. F. Swain
Crest Oil Company
304 First National Bank Building
Alton, Illinois

RE: Santa Fe No. 8

Dear Doc:

By now you should have received a copy of my letter addressed to Dr. Kalil concerning his contestation of the application to drill the above well. On that application I specified a lease of 480 acres instead of 640 acres. With Judi's leaving this past week to be married and general confusion concerned with other items, I have lost track of this matter but believe corrected application forms were sent to you at Navajo. If same did not reach you before leaving there, then please execute the enclosed application forms and forward same to the attention of Don Jerome.

I believe that your copy of Kalil's letter sets out that I have furnished them with a photostatic copy of Article 5 of the supplemental contract between this company and Santa Fe. I see no reason that all of this information should not satisfy the needs of the Commission and relieve Dr. Kalil from any undue responsibility in approving application of this well.

Several very interesting things came out of my conversation with Dr. Kalil and Mr. Jerome as concerned the interpretation of the existing oil and gas regulations in Arizona. I will not attempt to go into a discussion of these here.

Respectfully yours,

EASTERN PETROLEUM COMPANY
Rock Mountain Division

James W. Dean

JWD:MM
Carbon Copy: Mr. D. A. Jerome

C
O
P
Y

DENVER OFFICE 2520 FIRST NATIONAL BANK BUILDING - MA 3-5259



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.
TELEPHONE 38-24104 • P. O. BOX 291 • CARMEL, ILLINOIS

November 22, 1960

Mr. D. A. Jerome, Executive Secretary
Arizona Oil & Gas Conservation Commission
Suite 312, 3500 North Central Avenue
Phoenix, Arizona

Dear Mr. Jerome:

Enclosed please find copy of our letter to Dr. Charles
Kalil of your office dated November 16, 1960 and copy of
Article V of the supplemental contract mentioned in para-
graph 2 of that letter.

Respectfully yours,

EASTERN PETROLEUM COMPANY
Rocky Mountain Division

Barbara C. Clark

Acting Secretary

BC
Encl.-2



**EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.**

2520 FIRST NAT'L BANK BLDG.
DENVER 2, COLORADO
MA 3-5289

November 16, 1960

Charles Kalil, M. D., Acting Chairman
Arizona Oil & Gas Conservation Commission
Suite 312, 3500 North Central Avenue
Phoenix, Arizona

Re: Permit Application
Crest Oil Company #8 Santa Fe
Section 25, T20N, R27E
Apache County, Arizona

Dear Dr. Kalil:

I wish to express my appreciation for the time and consideration extended by you and Mr. Jerome on the telephone this morning clarifying with me the inappropriateness of the acreage designation in the drilling unit involved with this well on our prior application of September first. I fully appreciate your position in this matter and realize that it is to our mutual benefit to correct this matter to leave both yourself and this company above reproach. The courtesies extended under the circumstances by you are indeed appreciated. We have had in general the finest of relationships between your office and this company and have always attempted to operate fully within the rules and regulations of your commission and offer our wholehearted cooperation at all times. You may rest assured that we shall continue this policy in the future.

The particular lease involved with this section is our Santa Fe Lease No. 9650, totaling 2400 acres and including 480 acres in each of Sections 23, 24, 25, 26, and 35 of T20N, R27E. Without exception, each of these sections is a 480 net lease with the SE/4 retained by Santa Fe. Their retention of the SE/4 is subject to the terms of a supplemental contract of which "Election to Participate" of Article V spells out the rights of each Santa Fe and Eastern Petroleum Company as concerns this retained quarter section. It further provides us protection and specific knowledge of the manner in which this quarter section will join us in the event a gas well is discovered and assuming that the minimum 640 acres facing unit should hold for that specified well under the rules and regulations of the state of Arizona.

In short, we entered into Santa Fe leases only after knowing and having a specific provision made available in the supplemental contract

Charles Kalil, M. D.

-2-

November 16, 1960

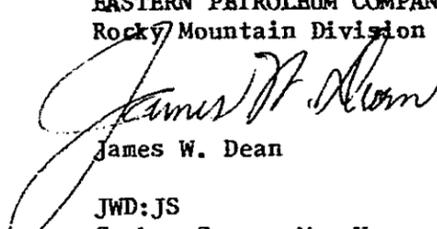
which would determine specifically that we retained control of a complete required 640 acre unit by some means. This "Election to Participate" arose for the first time in connection with the Crest Oil #2 Santa Fe of Section 33. In that case, as by previous agreement between this company and Santa Fe, they conveyed to us a lease on the SE/4 retained portion of the section which completed a 640 acre unit. Such, I am advised, will be their policy on all such gas producers drilled in the future after we have given them notice of completion of such a producer. You realize, of course, that Crest Oil participation in the above lease cited here is by virtue of joint operations with Eastern Petroleum Company on a farmout of that acreage to Crest Oil as operator. Our farmout to them of course places them subject to the terms of the lease as acquired by us from Santa Fe.

We have not been fully aware of the liberality of interpretation of how a unit may be constituted under the rules and regulations of Arizona. That same has been by your courtesy and explanation brought to our attention this date, may alter our approach to unit designation as concerns the individual producers drilled on the Navajo structure of T20N, R27E, because of geological peculiarities which have arisen during development drilling within the past week. As stated on the telephone earlier today, I would appreciate, for that reason, the opportunity of a few days consideration of this matter before making formal designation to you what appropriate unit outline is desired by us for each of the producing wells drilled to date. I feel sure we can advise you of the specific manner of these unit designations very shortly. At that time we will refile our Form No. O. G. 51, Notice of Intention to Drill New Well, to correct that space reading, "Acres in Drilling Unit" to read "640 acres" and will specifically state at that time what 640 acres is desired in that specific unit.

I must apologize for the laxity of our field personnel in placing appropriate signs at the site of drilling and/or completion well sites. I requested this be done immediately by telephone today in full compliance with your request.

Respectfully yours,

EASTERN PETROLEUM COMPANY
Rocky Mountain Division


James W. Dean

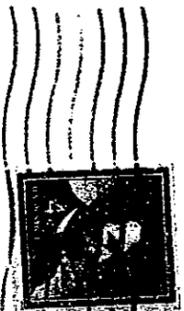
JWD:JS

Carbon Copy: Mr. Henry Fullop
Eastern Petroleum Co.
P. O. Box 291
Carmi, Illinois

Mr. C. F. Swain
Crest Oil Company
Navajo Motel
Navajo, Arizona



2520 FIRST NAT'L. BANK BLDG.
DENVER 2, COLORADO



Charles Kalll, M. D., Acting Chairman
Arizona Oil & Gas Conservation Commission
Suite 312, 3500 North, Central Avenue
Phoenix, Arizona

134

LEASE DESCRIBED HEREIN.

ARTICLE V

Election to Participate:

If a spacing area for gas wells prescribed by governmental authority (which includes all or a portion of any unleased quarter) be in existence when Lessee shall complete on any lease a gas well producing gas in commercial quantities, then Lessee will, within thirty (30) days after completion of such gas well, notify the Lessor of the completion of such well and of the existence of such spacing area, but if there be no such spacing area then prescribed, Lessee will, within thirty (30) days after a spacing area for such well shall be prescribed by governmental authority, notify Lessor of the spacing area prescribed for such gas well. At the time of delivery of such notice of completion and/or notice of spacing area, Lessee shall furnish Lessor a statement showing the cost of drilling, completing and equipping said well for production, and Lessor shall have thirty (30) days after receipt of such notice from the Lessee within which Lessor shall elect either (1) to become a part owner of such gas well by reimbursing and paying to the Lessee a sum of money equal to that part of the cost of drilling and completing such gas well in the ratio that the acreage content of its unleased quarter within such spacing area bears to the total acreage content of the spacing area prescribed for such well, or (2) to grant to the Lessee on a form similar in form to the lease where such well is located, an oil and gas lease covering that part of its unleased quarter within the aforesaid spacing area. Should Lessor elect to pay Lessee for such part of the cost of drilling and completing said gas well, then Lessor shall be entitled to an allocation of production from such gas well in the ratio that the acreage content of its unleased quarter bears to the total acreage within the spacing unit, and in addition thereto royalty on the production allocated to the acreage under lease from Lessor to Lessee within the spacing area, which allocation shall be in the ratio that the land under lease from Lessor to Lessee bears to the total acreage included within the spacing area for such well.

In the event Lessor shall so acquire an interest in such gas well, Lessee shall thereafter operate such gas well for the joint account of Lessor and Lessee.

ARTICLE VI

Force Majeure:

Crest
OIL COMPANY
BOX 57
ALTON, ILLINOIS

Nov. 7th 1960
NAVAJO, ARIZONA

MR. D. A. JEROME, EXEC. SECY.
ARIZONA OIL & GAS CONSERVATION COMMISSION
3500 N. CENTRAL AVE.
PHOENIX, ARIZONA

DEAR MR. JEROME:

ENCLOSED PLEASE FIND APPLICATION FOR PERMIT TO DRILL,
SURVEYOR'S PLAT, + CHECK, FOR CREST OIL CO - SANTA FE #8,
SEC 25, 20 N - 27 E, APACHE COUNTY.

THE BOND HAS BEEN APPLIED FOR THROUGH ALTON, ILL. AGENT
FOR MARYLAND CASUALTY CO (SAME AS OUR PREVIOUS BONDS) + WILL BE SENT
TO YOUR ATTENTION DIRECT FROM THE COMPANY'S PHOENIX AGENT.

IN THIS INSTANCE WILL YOU PLEASE FORWARD THE PERMIT TO ME @
NAVAJO MOTEL, NAVAJO, ARIZONA.

RESPECTFULLY YOURS,
C. F. SWAIN

C. F. SWAIN
CREST OIL CO.

P-W

Inehan-Stoltenberg, Purlock Wetzler
E/4-Nw/4 Sec 13-19N-26E
Beche, County 135

County Apache

Area Wildcat

Lease No. Spurlock, Wetzler Fee

Well Name Linehan & Stoltenberg ¹⁻¹³ A Spurlock-Wetzler

Location SE NW Sec 13 Twp 19N Range 26E Footage 1980 FN & WI

Elev 5788 Spud Complete Total 1083
KB Date 7-20-61 Abandon 7-26-61 Depth 1083

Contractors W. T. Myers Dlg Co. Albuquerque Approx. Cost \$
USGS Elev: 5773G+ from 7th Quad

Drilled by Rotary Cable Tool

Casing Size Depth Cement

Production Horizon

Initial Production P & A

1000' Coconino Test

REMARKS: Coconino (E. Log) 1075

(close out file)

Elec. Logs IF
Applic to Plub X Plugging Record X Completion Report X

Sample Log
Sample Descript
Sample Set
Cores

Water well - accepted by

Bond Co. & No. Maryland Casualty Company 90-713178

Bond Am't \$ 10,000 Canceled 11-2-62 Date Organization Report X

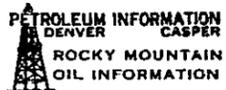
Filing Receipt 9247 dated 11-17-60 Well Book X Plat Book X

Loc. Plat X Dedication All 13-19N-26E

API # 02-001-05116

PERMIT NO. 135 Date Issued 11-17-60

135
ARIZONA
APACHE CO.
PINTA DOME (D)



Twp 19n-26e
Section 13
C se NW
1980 s/n 1980 e/w

OPR: Linehan-Stoltenberg

WELL #: 1-13 Spurlock-Wetzler

ELEV: 5791 DF

DSTS. & CORES:

SPUD: 7-20-61

COMPL: 7-26-61

*TOPS: Log-SKKMc

TD: 1080

PB:

Coconino 1075

No cores or tests.

CSG: 5½" @ 123 w/61

PERF:

PROD. ZONE:

INIT. PROD: D & A

Contr: Meyer

STATE OF ARIZONA
OIL AND GAS CONSERVATION COMMISSION
PHOENIX, ARIZONA

Form O & G 56

Form Prescribed Under Oil and Gas Conservation Act of 1951

ABANDONMENT AND PLUGGING RECORD

(Within thirty days after the plugging of any well has been accomplished, the owner or operator thereof shall file this form with the Commission, setting forth in detail the method used in plugging the well.)

PLUGGING METHODS AND PROCEDURE- - The methods and procedure for plugging a well shall be as follows: (a) The bottom of the hole shall be filled to, or a bridge shall be placed at, the top of each producing formation open to the well bore, and in either event a cement plug not less than fifty (50) feet in length shall be placed immediately above each producing formation open to the well bore when ever possible.

(b) A cement plug not less than fifty (50) feet in length shall be placed at approximately fifty (50) feet below all fresh-water-bearing strata.

(c) A plug shall be placed at or near the surface of the ground in each hole.

(d) The interval between plugs shall be filled with heavy-mud-laden fluid.

(e) An uncased hole shall be plugged with heavy mud up to the base of the surface string, at which point a plug of not less than fifty (50) feet of cement shall be placed.

Operator Linehan & Stoltenberg Field Wildcat
Pool _____
County Apache
Address all correspondence concerning this form to: Linehan & Stoltenberg
Street: P. O. Box 969 City: Midland State: Texas
Lease Name Spurlock & Wetzler Well No. 1-13 Sec. 13 Twp. 19N Rge. 26E
Date well was plugged July 27, 1961
Was the well plugged according to regulations of the Commissioner? Yes
Set out method used in plugging well and record of casing pulled: _____

56' cement plug 1083'- 1027, heavy mud 1027'-500', cement plug 500'-450',

heavy mud 450'-50', cement plug 50'-surface. 123' - 5 1/2" surface casing

left in hole.

H. W. Stoltenberg

(AFFIDAVIT)

STATE OF ~~ARIZONA~~ TEXAS
COUNTY OF Midland

Linehan & Stoltenberg
(Operator)

Before me, the undersigned authority, on this day personally appeared H. W. Stoltenberg,
a partner, known to me to be the person whose name is subscribed
to the above instrument, who being by me duly sworn on oath states that he is authorized to
make this report and has knowledge of the facts stated herein and that said report is true and
correct.

Subscribed and sworn to before me this the 28th day of July 19 61

V. A. Beckman
Notary Public V. A. BECKMAN

My Commission expires:

6/1/63

1354

STATE OF ARIZONA
OIL AND GAS CONSERVATION COMMISSION
PHOENIX, ARIZONA

Form O & G 55

Form Prescribed Under Oil and Gas Conservation Act of 1951
APPLICATION TO ABANDON, PLUG, DEEPEN, SIDETRACK OR PERFORATE

(After Well has Once Been Completed)

INSTRUCTIONS: - - File in duplicate with Commissioner. One copy will be returned with approval or denial.

FIELD: Wildcat
OPERATOR: Linehan & Stoltenberg ADDRESS Box 969, Midland, Texas
LEASE: Spurlock & Wetzler WELL NO. 1-13 COUNTY Apache
SURVEY: Gila & Salt River SECTION 13 DRILLING PERMIT NO. 138
LOCATION: 1980' South of North Line and 1980' East of West Line of
Section 13.

TYPE OF WELL: Dry Hole TOTAL DEPTH 1083'
(Oil, Gas or Dry Hole)

ALLOWABLE (If Assigned)
LAST PRODUCTION TEST: OIL _____ (Bbls.) Water _____ (Bbls.)
GAS _____ (M. C. F.) DATE OF TEST _____

PRODUCING HORIZON None PRODUCING FROM: _____ TO _____

1. COMPLETE CASING RECORD: 123' of 5 1/2" (15.5#-J-55) circulated with
18 sacks.

2. FULL DETAILS OF PROPOSED PLAN OF WORK: A cement plug will be placed
1083'-1033', heavy mud to about 500', with plug 500'-450, and heavy
mud to 50', with cement plug to surface.

If the well is to be deepened to another zone other than that covered by permit, this form shall be accompanied by a certified lease plat as is prescribed on Form No. O & G 51.

If well is to be abandoned, does proposed work conform with requirements of Rule 26?
Yes . If not, outline procedure proposed above.

DATE COMMENCING OPERATIONS: July 27
NAME OF PARTY DOING WORK: W. T. Myers Drig. Co. ADDRESS Albuquerque
CORRESPONDENCE SHOULD BE SENT TO: Linehan & Stoltenberg

NAME: H. W. Stoltenberg
TITLE: Partner

APPROVED: 7th DAY OF Aug 1961.

DENIED: _____ DAY OF _____ 19____.

Brooks Pierce
OIL & GAS CONSERVATION COMMISSION

BY: Brooks Pierce
Petroleum Geologist

1353

OIL AND GAS CONSERVATION COMMISSION
STATE OF ARIZONA

Form OG 51

Form Prescribed Under Oil and Gas Conservation Act of 1951

NOTICE OF INTENTION TO DRILL NEW WELL

This notice and surety bond must be filed and permit must be granted before drilling begins

Oil and Gas Conservation Commission Phoenix Arizona 11-15-1960

In compliance with Statewide Rule 3, notice is hereby given that it is our intention to commence the work of drilling well No. 1-13 Spurlock Sec. 13,
and Wetzler
Twp. 19-N, Rge. 26-E G&SR B. & M., Pinta Field
Apache County.

Legal description of lease All of Section 13, T-19-N, R-26-E, G&SR B&M Survey
(attach map or plat to scale)

Location of Well: 1980' FNL and 1980' FWL
(give exact footage from section corners or other

legal subdivisions or streets)

Proposed drilling depth 1100' feet. Acres in drilling unit 640

Has surety bond been filed? Yes. Is location a regular or exception to spacing rule? Regular.

Elevation of ground above sea level _____ feet.

All depth measurements taken from top of Kelly Bushing
(Derrick, floor, Rotary Table or _____
which is 5' feet above the ground.
(Kelly Bushing)

PROPOSED CASING PROGRAM

Size of Casing Inches A. P. I.	Weight	Grade and Type	Top	Bottom	Cementing Depth
<u>5 1/2"</u>	<u>15#</u>	<u>J-55</u>	<u>Ground</u>	<u>200' est</u>	<u>200' est.</u>
<u>2 7/8"</u>	<u>6.5#</u>	<u>J-55</u>	<u>Ground</u>	<u>TD</u>	<u>TD</u>

(Will circulate cement on surface casing if necessary)

Intended Zone or Zones of completion:
Name Coconino

Perforated Interval

AFFIDAVIT:

I hereby certify under the penalty of perjury, that the information contained and statements herein made are to the best of my knowledge and belief, true, correct and complete.

Linehan and Stoltenberg
(Applicant)

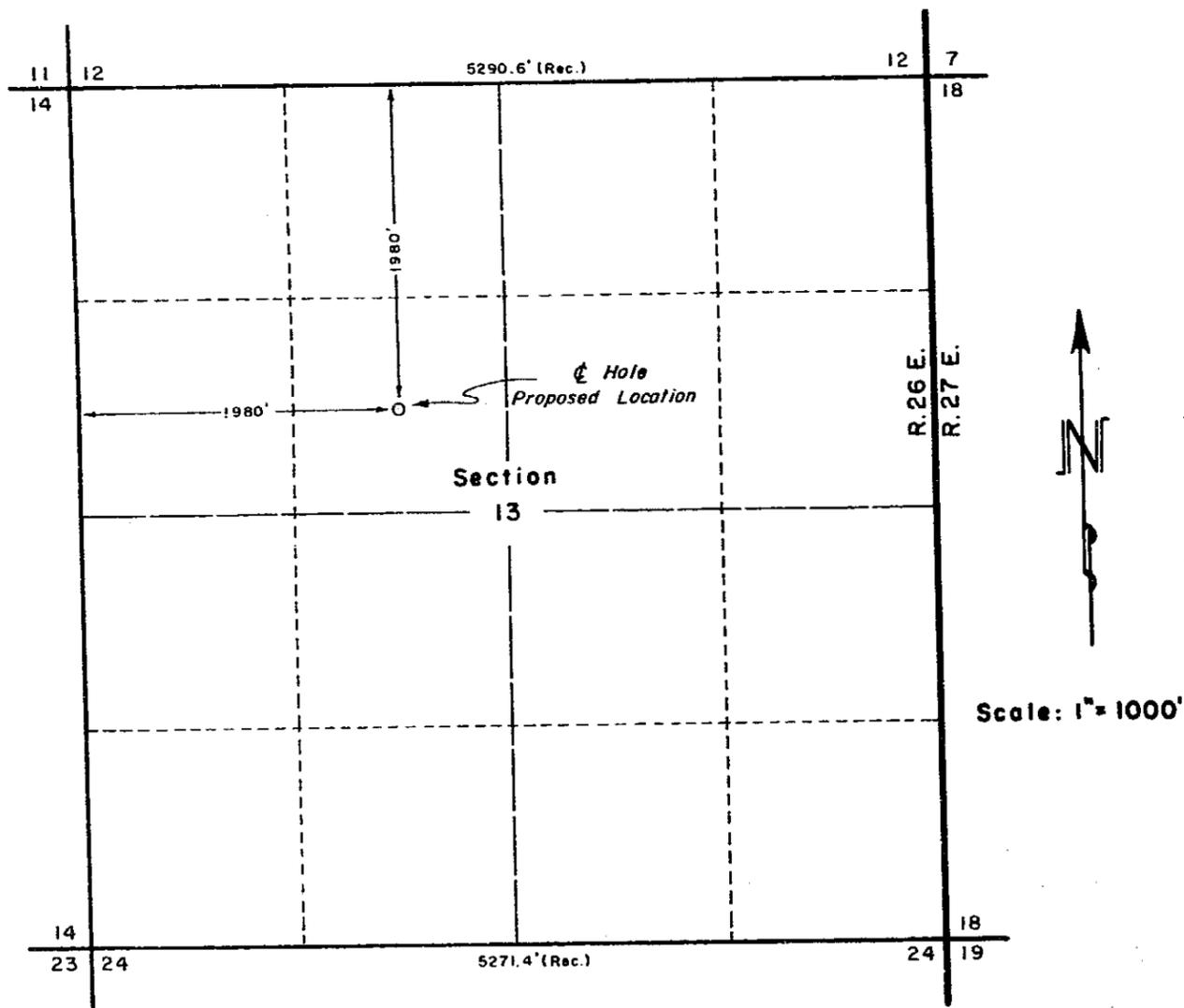
Application approved this 17th day of November 1960

Permit No. 135
3-62 1/10/58

Charles Kalil, M.D.
Oil and Gas Conservation Commission

Charles Kalil M.D. Vice Chairman
Acting Chairman Oil & Gas Cons. Comm.

CERTIFICATE OF SURVEY



WELL LOCATION: Linehan - Stoltenberg - Wetzler No. 1-13

Located 1980 feet East of the West line and 1980 feet South of the North line of Section 13,
 Township 19 North, Range 26 East Gila & Salt River Meridian,
 Apache County, Arizona
 Existing ground elevation determined at 5788 feet based on adjoining well elevations.

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



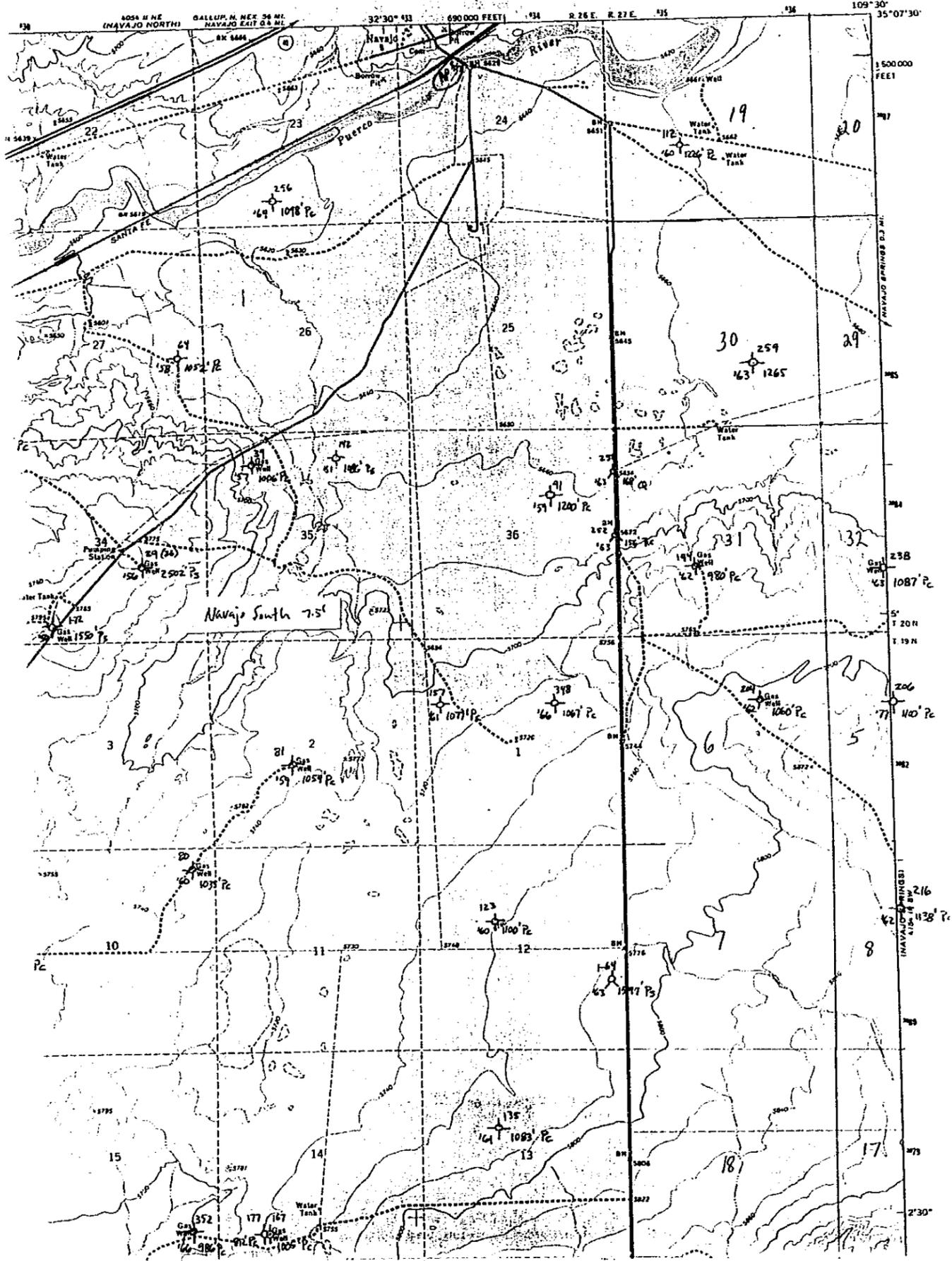
Elmer M. Clark
 ELMER M. CLARK
 Registered Land Surveyor
 State of Colo. # 2279

E.M. CLARK & ASSOCIATES
 Durango, Colorado
 April 3, 1961
 File No. 61025

135

36	3	32	33	34	35	36	31	
1	6	5	4	3	2	1	6	
12	7	8	9	10	11	12		
13	18	17	16	15	14	13		
24	19	20	21	22	23	19		
25	30	29	28	27	26	25	30	
36	31	32	33	34	35	36	31	
1	1	1	1	1	1	1	1	1
7	7	9	10	11	11	7		
13	13	16	15	14	13	13		
19	19	20	21	22	23	19		
135	19	20	21	22	23	24	19	2

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



APACHE COUNTY

ARIZONA

PINTA DOME 13-19N-26E

Well: LINEHAN & STOLTENBERG #1-13-Spurlock-Wetzler

Result: ABND LOC

Loc'n: SE NW, 13-19N-26E, 1980' FNL, 1980' FWL, 1300' Coco.

Location Abandoned 5-20-61.

NO #

Geo. H. Mitchell
OIL REPORTS

Date: 6-16-61

Card No.:

1 amr

D-1 #133

(19) 13-19N-26E 9th WILDCAT, Pecos Dome Area; proposed Coconino test; C/W. T.
1980' FNL-1980' FWL Myers Drlg Co, Albuquerque, N. M.; elev _____; set 5 1/2" csg
Linehan & Stoltenberg 123'/18 sx; TD 1083'; D, P&A 7-27-61. FINAL REPORT.
Spurlock-Wetzler #1-13

P.I card

Elev. 5791 DF

600-1075 - 4710

TD 1080

OC#135

BOND

KNOW ALL MEN BY THESE PRESENTS

BOND NO. 90-713178

That we: C. M. LINEHAN AND H. W. STOLTENBERG (A PARTNERSHIP)

of the County of: MIDLAND in the State of: TEXAS

as Principal, and MARYLAND CASUALTY COMPANY

of BALTIMORE, MARYLAND AUTHORIZED TO DO BUSINESS WITHIN THE State of Arizona.

as surety, are held and firmly bound unto the State of Arizona 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 condition 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:

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

CANCELLED

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 Ten thousand and no/100 (\$10,000.00)

Witness our hands and seals, this 24th day of October, 1960

LINEHAN AND STOLTENBERG

C. M. Linehan
C.M. LINEHAN, PARTNER

Witness our hands and seals, this 9 day of NOVEMBER, 1960

COUNTERSIGNATURE: MARYLAND CASUALTY COMPANY

Ronald R. Eaton N. J. MERCIER, ATTORNEY IN FACT Surety

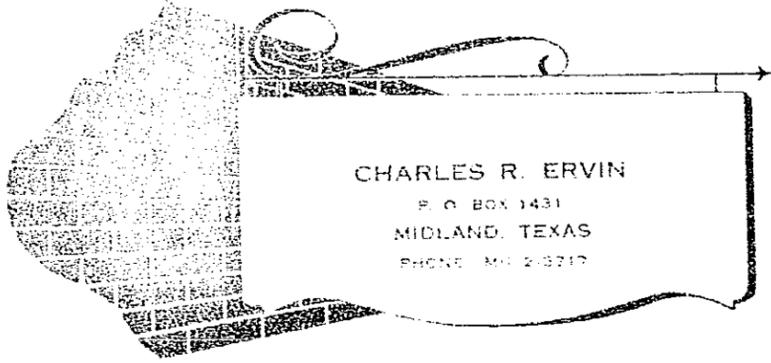
(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved November 17, 1960 Date Charles Kalil, M.D.
STATE OF ARIZONA

OIL AND GAS CONSERVATION COMMISSION

Charles Kalil, M.D. Vice Chairman
Acting Chairman, Oil & Gas Cons. Comm.

135



Complete Insurance Service

November 1, 1962

Oil and Gas Conservation Commission
3500 N. Central-Suite 221
Phoenix 12, Arizona

Re: C. M. Linehan &
H. W. Stoltenberg
Bond No. 90-713178

Gentlemen:

We have had on file with you a drilling bond for the above captioned concern.

We are desirous of cancelling this bond, however, the bonding company has advised us that in order to do so it will be necessary we have a letter from you agreeing to the cancellation of our Bond No. 90-713178 being a \$10,000.00 Blanket Drilling Bond in favor of the State of Arizona.

The letter should be addressed to Maryland Casualty Company, c/o Whyburn & Company, 315 E. Missouri, El Paso, Texas.

We will appreciate your cooperation in this matter.

Sincerely,

CHARLES R. ERVIN

by- *Margie Galman*

MH

D

September 14, 1965

Linehan & Stoltenberg
502 Midland Savings & Loan Bldg.
Midland, Texas

Re: Linehan-Stoltenberg #1-13 Spurlock Wetzlar Fee well
SE/4NW/4 13-19N-26E, Apache County, Arizona, Permit 135 ✓

Linehan-Stoltenberg #1-21 Spurlock Wetzlar Fee well
SW/4SE/4 21-20N-26E, Apache County, Arizona, Permit 136

Linehan-Stoltenberg #1-31 Spurlock Wetzlar Fee well
SE/4NE/4 31-20N-26E, Apache County, Arizona, Permit 137

Linehan-Stoltenberg #1-9 Spurlock Wetzlar Fee well
NW/4NW/4 9-20N-26E, Apache County, Arizona, Permit 147

Linehan-Stoltenberg #1-23 Spurlock Wetzlar Fee well
NW/4SW/4 23-19N-26E, Apache County, Arizona, Permit 148

Linehan-Stoltenberg #2-27 Spurlock Wetzlar Fee well
NE/4NW/4 27-19N-26E, Apache County, Arizona, Permit 149

Linehan-Stoltenberg #1 Jeffers Fee well
SE/4SW/4 11-20N-21E, Navajo County, Arizona, Permit 158

Linehan-Stoltenberg #1 Matthews Fee well
NW/4SE/4 4-20N-21E, Navajo County, Arizona, Permit 211

Gentlemen:

On August 4, 1965 we wrote you concerning the filing of Well Completion Reports on the captioned wells. We also enclosed the necessary forms. Will you please file this information at your earliest convenience.

Yours very truly,

John Bannister
Executive Secretary
NB

Horger

JFB

10-5-65

SAMUEL P. GOODARD
GOVERNOR
LYNN LOCKHART
CHAIRMAN
R. KEITH WALDEN
VICE CHAIRMAN
ORME LEWIS
MEMBER
LUCIEN B. OWENS
MEMBER



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
ROOM 208
1224 WEST ADAMS
Phoenix, Arizona 85007
PHONE: 271-8181

JOHN BANNISTER
EXECUTIVE SECRETARY
J. R. SCURLOCK
PETROLEUM GEOLOGIST

June 7, 1965

Linehan & Stoltenberg
Consulting Geologists
502 Midland Savings & Loan Building
Midland, Texas

Re: Linehan-Stoltenberg-Spurlock Wetzler #1-13
SE/4-NW/4 13-T19N-R26E, Apache County, Arizona
Permit 135

Linehan-Stoltenberg-Spurlock Wetzler #1-21
SW/4-SE/4 21-T20N-R26E, Apache County, Arizona
Permit 136

Linehan-Stoltenberg-Spurlock Wetzler #1-31
SE/4-NE/4 31-T20N-R26E, Apache County, Arizona
Permit 137

Linehan-Stoltenberg-Spurlock Wetzler #1-9
NW/4-NW/4 9-T20N-R26E, Apache County, Arizona
Permit 147

Linehan-Stoltenberg-Spurlock Wetzler #1-23
NW/4-SW/4 23-T19N-R26E, Apache County, Arizona
Permit 148

Linehan-Stoltenberg-Spurlock Wetzler #2-27
NE/4-NW/4 27-T19N-R26E, Apache County, Arizona
Permit 149

Linehan-Stoltenberg #1 Jeffers, SE/4-SW/4 11-T20N-R21E
Navajo County, Arizona
Permit 168



SAMUEL P. GODDARD
GOVERNOR
LYNN LOCKHART
CHAIRMAN
R. KEITH WALDEN
VICE CHAIRMAN
ORNE LEWIS
MEMBER
LUCIEN B. OWENS
MEMBER

OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
ROOM 202
1424 WEST ADAMS
Phoenix, Arizona 85007
PHONE: 271-5181

JOHN BANNISTER
EXECUTIVE SECRETARY
J. R. SCURLOCK
PETROLEUM GEOLOGIST

Page 2

Linchon-Stoltenberg
June 7, 1965

Linchon-Stoltenberg #1 Matthew NW/4-SE/4 4-T20N-R21E
Navajo County, Arizona
Permit 211

Our file for captioned well does not reflect that the required information has been submitted. Will you please forward to the office the following information:

Well Completion Report and copies of all logs

Forms are enclosed for your convenience.

Your earliest cooperation is appreciated.

Yours very truly,

John Bannister
Executive Secretary

Ecolbaure
cb

November 2, 1933

Maryland Casualty Company
c/o Wayburn & Company
315 E. Missouri
El Paso, Texas

Re: G. H. Linchan & H. W. Stoltenberg Bond No. 98-713178

Gentlemen:

Linchan and Stoltenberg have satisfied our rules and regulations regarding the above drilling bond.

We know no reason why you cannot cancel it; therefore, it is agreeable with us that you do so.

Yours truly,

John K. Petty
Petroleum Geologist

cc Linchan and Stoltenberg
P. O. Box 969 - Midland, Texas

158
2/1
167

August 10, 1964

Mr. C.M. Linshan
Linshan & Stoltenberg
Consulting Geologists
802 Midland Savings & Loan Bldg.
Midland, Texas

Dear Mr. Linshan:

In reviewing the files on the wells drilled by your company I find that we are in need of Completion Forms on each of the wells. Please find enclosed (8) forms for the files concerned.

RE: Spurlock-Watsler	#1-21	File #136
RE: " - "	#1-13	File #135
RE: " - "	#1-31	File #137
RE: " - "	#1-9	File #147
RE: " - "	#1-23	File #148
RE: " - "	#2-27	File #149
RE: # 1 Jeffers		File #158
RE: # 1 Matthew		File #211

Thank you for your early cooperation and if this office may assist you in any way will you please advise.

Very truly yours,

Bill Cooper
Records Section

Encl. Completion Forms

November 25, 1960

Mr. C. M. Linehan
Linehan & Stoltenberg
Consulting Petroleum Geologists
502 Midland Savings & Loan Bldg.
Midland, Texas

Dear Mr. Linehan:

Enclosed are your approved copies of Form OG 51, application
for permit to drill, re: Spurlock & Wetzler wells #1-31; #1-21;
and #1-13, in Apache County, Arizona.

Yours very truly,

D. A. Jerome
Executive Secretary

EW
Enclosures

135

LINEHAN & STOLTENBERG
CONSULTING PETROLEUM GEOLOGISTS
502 MIDLAND SAVINGS & LOAN BUILDING - MIDLAND, TEXAS

C. M. LINEHAN
H. W. STOLTENBERG

P. O. BOX 969
MUTUAL 2-1659

November 21, 1960

Mr. D. A. Jerome, Executive Secretary
Arizona Oil and Gas Commission
3500 N. Central Ave.
Phoenix, Arizona

Dear Sir:

We enclose duplicate copies of drilling permit applications on our Spurlock and Wetzler tests, Apache County, Arizona. We will appreciate your indicating approval of the same and returning to this office for our record. Thank you.

yours very truly,

LINEHAN AND STOLTENBERG

By C. M. Linehan
C.M. Linehan

df/cml
Encls. (3)

November 17, 1960

Mr. Charles Linehan
Linehan & Stoltenberg
502 Midland Savings & Loan Bldg.
Midland, Texas

Dear Charley:

This is to advise you that the three drilling permit applications, bond form, and all papers, have been formally approved this date. We would appreciate it, however, if you would send us another copy of each of the applications so that we can have them formally approved and then return them to you for your files. We will not need extra copies of the bond form as that is not necessary. Receipts for your checks are enclosed.

We are very pleased that you will drill these wells and it is certainly agreeable with us that you defer the drilling until next January. This is an operator's prerogative.

If we can be of any further service in any manner, kindly feel free to call upon us.

Sincerely yours,

D. A. Jerome
Executive Secretary

DAJ/ew
Encs.

LINEHAN & STOLTENBERG
CONSULTING PETROLEUM GEOLOGISTS
502 MIDLAND SAVINGS & LOAN BUILDING - MIDLAND, TEXAS

C. M. LINEHAN
H. W. STOLTENBERG

P. O. BOX 969
MUTUAL 2-1659

November 15, 1960

Mr. D. A. Jerome, Executive Secretary
Arizona Oil and Gas Commission
3500 North Central Ave.
Phoenix, Arizona

Re: Drilling Permit Applications
Apache County, Arizona

Dear Sir:

Pursuant to our recent telephone conversation, in which verbal approval was given to our proposed locations in the Pinta Dome area, we wish to make formal drilling applications at this time. Enclosed you will find the following:

- 1- Blanket Bond #90-713178, in the amount of \$10,000.00, executed by Maryland Casualty Company with N. J. Mercier, Attorney In Fact.
- 2- State Land Department Form OG 50.
- 3- Notice of Intention to Drill Form OG 51, with map attached, covering application to drill #1-13 Spurlock and Wetzler, located 1980' FNL and 1980' FWL of Section 13, T-19-N, R-26-E, Apache County.
- 4- Notice of Intention to Drill Form OG 51, with map attached, covering application to drill #1-31 Spurlock and Wetzler, located 2500' FNL and 660' FEL of Section 31, T-20-N, R-26-E, Apache County.
- 5- Notice of Intention to Drill Form OG 51, with map attached, covering application to drill #1-21 Spurlock and Wetzler, located 660' FSL and 1980' FWL of Section 21, T-20-N, R-26-E, Apache County.

6- Our checks # 637, 638, and 639 in the amount of \$25.00 each, or total of \$75.00, to cover the drilling permit applications.

Inasmuch as it is not our intention to drill prior to January 1961 we would appreciate your consideration of our request not to have the locations staked, on the ground, before we are ready to commence drilling. We have had the experience of having the location stakes destroyed, covered up by sand, etc. when the locations have been staked far in advance of drilling. We would like to avoid this if possible. You may be assured that when we are ready to commence drilling we will employ a Registered Surveyor and you will be furnished with appropriate copies of the location plats.

We wish to take this opportunity to thank you for your cooperation in this matter as well as for past courtesies extended.

Very truly yours,

LINEHAN AND STOLTENBERG

By C. M. Linehan
C.M. Linehan

gd/cml

ENCLS. (8)

cc Western Petroleum Company
San Francisco, California

Western Petroleum Company
Long Beach, California

Amtexas Oil Corporation
Midland, Texas