

P-W

CREST-ARIZ HELIUM #8X SANTA FE
SE NW 25-20N-27E, Apache County 473

sl

COUNTY Apache AREA 7 mi E. of Navajo LEASE NO. Santa Fe #9650

WELL NAME Crest-Ariz Helium #8X Santa Fe (Eastern Petroleum Company)

LOCATION SE 4 NW/4 SEC 25 TWP 20N RANGE 27E FOOTAGE 2120' FNL & 1800' FWL

ELEV 5801 GR KB SPUD DATE 10-11-68 STATUS Helium P&A 12-15-71 by Eastern Pet COMP. DATE 12-15-71 DEPTH 1402'

CONTRACTOR Drake Well Service Company *Helium completion; no prod. record*

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY
8 5/8"	30	10 SKS	NA	<input checked="" type="checkbox"/>
4 1/2"	1346.65'	35 SKS		<input type="checkbox"/>
2 7/8"	1402	175 SKS		<input type="checkbox"/>

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Chinle	280'	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Shinarump	1147'			
Moenkopi	1216'			
Coconino	1346'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
IE Log/Welex Radio. Schulumberger	1345-49	NA	<u>Am Strat</u> SAMPLE DESCRP. SAMPLE NO. <u>1479</u> CORE ANALYSIS DSTs

REMARKS Additional samples in Tucson 6-9-69

APP. TO PLUG
 PLUGGING REP.
 COMP. REPORT

WATER WELL ACCEPTED BY _____

BOND CO. Maryland Casualty Company BOND NO. 94-174784

BOND AMT. \$ 5,000 CANCELLED 2-17-78 DATE 11-19-67

FILING RECEIPT 9555 LOC. PLAT WELL BOOK PLAT BOOK

API NO. 02-001-20085 DATE ISSUED 9-19-68 DEDICATION NW/4 of Sec. 25

PERMIT NUMBER 473

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

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

DESCRIPTION OF WELL AND LEASE

Operator Eastern Petroleum Company		Address P. O. Box 291, Carmi, Illinois 62821	
Federal, State or Indian Lease Number or name of lessor if fee lease Crest Santa Fe		Well Number 8-X	Field & Reservoir East Navajo Springs-Coconino
Location 2120' FNL; 1800' FWL		County Apache	
Sec. TWP-Range or Block & Survey 25-20N-27E			

Date spudded	Date total depth reached	Date completed, ready to produce	Elevation (DF, RKB, RT or Gr.) 5801 Gr feet	Elevation of casing hd. flange feet
Total depth 1402	P.B.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.	
Producing interval (s) for this completion Coconino - 1345-49		Rotary tools used (interval)	Cable tools used (interval)	
Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed	
Type of electrical or other logs run (check logs filed with the commission) Welex Radioactivity			Date filed 3-19-71	

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

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
2 7/8 in.	1402 ft.		in.				

PERFORATION RECORD			ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD	
Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval
4	Strip Jet	1345-49		

INITIAL PRODUCTION

Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)				
Date of test Jan. 26-28, 1971	Hrs. tested 24	Choke size 5/16	Oil prod. during test -0- bbls.	Gas prod. during test 125 MCF	Water prod. during test 420 bbls.	Oil gravity * API (Corr)
Tubing pressure 160	Casing pressure	Cal'ated rate of Production per 24 hrs.	Oil -0- bbls.	Gas 125 MCF	Water 420 bbls.	Gas-oil ratio -0-
Disposition of gas (state whether vented, used for fuel or sold): Shut in						

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

April 21, 1971
Date

[Signature]
Signature

RECEIVED
APR 23 1971
O & G CONS. COMM.

Permit No. **473**

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

PLUGGING RECORD

Operator Eastern Petroleum Company		Address Box 291, Carmi, Illinois 62821	
Federal, State, or Indian Lease Number, or lessor's name if fee lease. Crest Santa Fe Fee		Well No. 8-X	Field & Reservoir East Navajo Springs - Coconino
Location of Well 2120 ENL; 1800 FWL		Sec-Twp-Rge or Block & Survey 29-20N-27E	County Apache
Application to drill this well was filed in name of	Has this well ever produced oil or gas No	Character of well at completion (initial production): Oil (bbls/day) -0- Gas (MCF/day) 125 Dry? Yes	
Date plugged: 12-15-71	Total depth 1402'	Amount well producing when plugged: Oil (bbls/day) -0- Gas (MCF/day) -0- Water (bbls/day) -0-	
Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement
Coconino	420 bbls. daily	1402	Cement plug
Shinarump	366 bbls. daily	1110	1402-1060
Shinarump	146 bbls. daily	1140	w/30 sax
Shinarump	336 bbls. daily	1170	
CASING RECORD			
Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)
8 5/8	30	-0-	30
4 1/2	1346.65	-0-	1346.65
2 7/8	1402	-0-	1402
Was well filled with mud-laden fluid, according to regulations? Yes		Indicate deepest formation containing fresh water. 1349	
NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE			
Name	Address	Direction from this well:	
Eastern Pet. Company	Box 291, Carmi, Illinois 62821	All	
In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.			
Use reverse side for additional detail.			
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Secretary</u> of the <u>Eastern Petroleum Company</u> (company) and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.			
Date January 5, 1972	RECEIVED		Signature <i>J. N. Ewas</i>
O & G CONS. COMM.		STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Plugging Record File One Copy	
Permit No. 473	Form No. 10		

APPLICATION TO ABANDON AND PLUG

FIELD East Navajo Springs - Coconino
 OPERATOR Eastern Petroleum Company ADDRESS P. O. Box 291, Carmi, Illinois 62821
 Federal, State, or Indian Lease Number Crest Santa Fe Fee WELL NO. 8-X
 or Lessor's Name if Fee Lease
 LOCATION 2120 ENL; 1800 FWL, Section 25-20N-27E, Apache County, Arizona
 TYPE OF WELL Dry Hole TOTAL DEPTH _____
(Oil, Gas or Dry Hole)
 ALLOWABLE (If Assigned) _____
 LAST PRODUCTION TEST OIL -0- (Bbls.) WATER 420 (Bbls.)
 GAS 125 (MCF) DATE OF TEST Jan. 26-28, 1971
 PRODUCING HORIZON _____ PRODUCING FROM _____ TO _____

1. COMPLETE CASING RECORD.

1402' - 2 7/8" tubing w/175 sax
 1346.65' - 4 1/2" casing w/35 sax
 30' - 8 5/8" surface w/10 sax

2. FULL DETAILS OF PROPOSED PLAN OF WORK

Propose to abandon all equipment in hole

Place cement plugs from 1402-1060; fill interval 1060-30 w/heavy drilling mud; cement plug 30-0, erect regulation marker as per Rule 104.A.

DATE COMMENCING OPERATIONS 12-15-71
 NAME OF PERSON DOING WORK A. K. Schneider ADDRESS Navajo, Arizona
 Signature J. N. Edwards
 Title Secretary
 Address Box 291, Carmi, Illinois 62821
 Date January 5, 1972

RECEIVED

JAN 07 1972

O & G CONS. COMM.

Date Approved 1-7-72
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By: W. S. [Signature]

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

Permit No. 473

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Eastern Petroleum Company, Designee
 2. OIL WELL GAS WELL OTHER (Specify) _____
 3. Well Name Crest Santa Fe #8-X
 Location 2120' FNL; 1800' FWL
 Sec. 25 Twp. 20N Rge. 27E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease _____
Santa Fe Fee
 5. Field or Pool Name East Navajo Springs - Coconino

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:		
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
(OTHER)	<input type="checkbox"/>		<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
				ALTERING CASING	<input type="checkbox"/>
				ABANDONMENT	<input type="checkbox"/>
				(OTHER) <u>Workover</u>	<input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

12-7-70 - Set bridge plug at 1348'. Perforate @ 1110', 1140' & 1170' w/4 shots per ft.

Swab Results: @ 1110' - 366 bbls. water per day
 @ 1140' - 146 bbls. water per day
 @ 1170' - 336 bbls. water per day

Lost return circulation @ 1200'

12-8-70 - Drilled plug out @ 10:30 A.M.

12-9/12-16 Deepened to 1402' - Set 2 7/8" tubing w/175 sax.

1-26-71 - Perforate 1345-1349 w/4 shots per ft. Well made some gas on 4th swab.

Test Results: 24 hrs.
 Rec. 125 MCF gas & 420 bbls. water per day
 Shut-in pressure - 160#
 Orifice size - 5/16"

1-28-71 - Test concluded - well shut-in.

Welex log run 10/16/70 - Enclosed

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

Signed J. N. Edwards Title Secretary Date 3/19/71

cc: Crest Oil Company

Permit No. 473

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Sundry Notices and Reports On Wells
 File ~~100~~ Copies
 Form No. 25 1

RECEIVED

MAR 23 1971

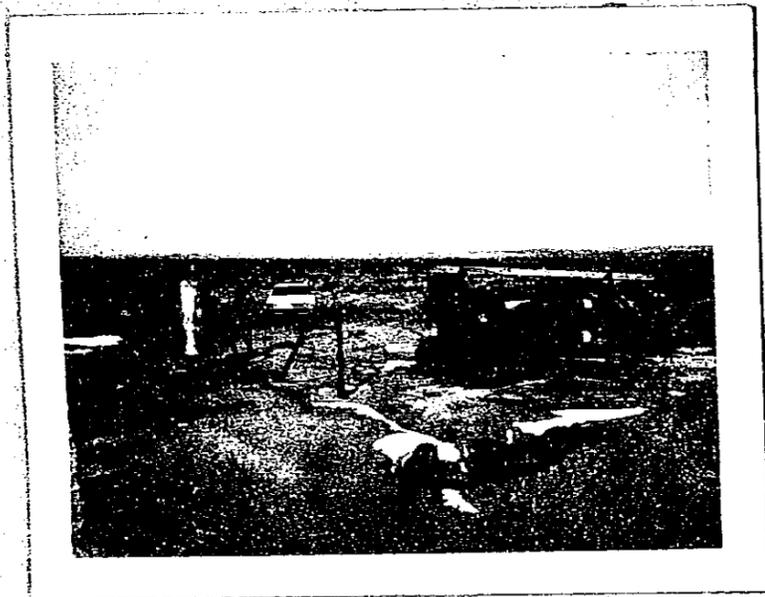
O & G CON. COM.

March 8, 1971

Memo from W. E. Allen, Director
Enforcement Section

Memo to: Crest-Arizona Helium #8X Santa Fe
SE/4 NW/4 Sec. 25-T20N-R27E
Apache County
Our File #473

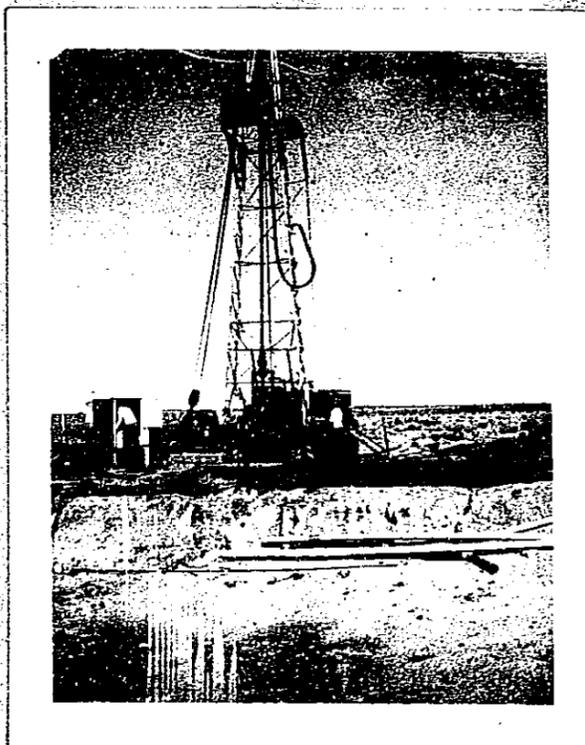
This well has recently been worked over. There is a separator set on location and a separator connected to the gathering line. There is a meter on the downstream side of the separator with a seven-day chart. The chart has made two complete revolutions and indicates the well has been producing. At the time I visited the well on 2-23-71, the well was shut in.



Crest #8X ~~XXXX~~
#473

February 23, 1971

Rig set up on Crest Arizona Helium #8X.
December 3, 1970
Eastern rig on hole.



5 473

DESIGNATION OF OPERATOR

The undersigned is the record holder of Lease:
(Number or name of lease and description of entire lease acreage)

Santa Fe Pacific Railroad Company SFP-9650
All of Section 25-T20N-R27E, 640 Acres, Apache County, Arizona

and hereby designates

Name: **EASTERN PETROLEUM COMPANY**

Address: **BOREN BUILDING
CARM, ILLINOIS 62821**

RECEIVED

DEC 21 1970

O & G CONS. COMM.

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and all regulations, whether Federal, Indian, State, or local, applicable thereto and on whom may be served written or oral instructions in securing compliance with all the applicable lease terms, and rules and regulations of the Oil and Gas Conservation Commission, State of Arizona, with respect to:

(Describe only the acreage to which this designation applies)

**ALL OF SECTION 25-T20N-R27E
APACHE COUNTY, 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 with all the applicable rules and regulations of the Oil and Gas Conservation Commission, State of Arizona. It is 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 record holder of the lease remains primarily responsible for and will make full and prompt compliance with all applicable lease terms, the rules and regulations of the Oil and Gas Conservation Commission, State of Arizona, or orders of other appropriate regulatory governmental agencies.

The lessee agrees promptly to notify all proper authorities and appropriate regulatory governmental agencies on any change in the designated operator.

The designated operator agrees to promptly notify all proper authorities of any change of his address during the period in which this designation of operator is in force.

December 14, 1970

(Date)

12/18/70

(Date)

C. F. Swain
Lessee C. F. SWAIN, d/b/a Crest Oil
EASTERN PETROLEUM COMPANY
BY: *Allen Fullup*, President
Designated Operator

(If this Designation of Operator applies to a State of Arizona Oil and Gas Lease, copy of this designation of operator must be filed with the State Land Department.)

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

Federal, State or Indian Lease Number, or lessor's name if fee lease Santa Fe Fee Crest 8-X	Field East Navajo Springs	Reservoir Coconino
Survey or Sec-Twp-Rge 25-20N-27E	County Apache	State Arizona
Operator Eastern Petroleum Company		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street Box 291	City Garmi	State Illinois
Above named operator authorizes (name of transporter) Western Helium Corporation		
Transporter's street address Box 1358	City Scottsdale	State Arizona
Field address		
Oil, condensate, gas well gas, casinghead gas		
To transport	100 % of the	helium bearing gas from said lease.
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer None	% transported	Product transported
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change.		

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

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

Date December 16, 1970

[Signature]
Signature

Date approved: 12-21-70
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: *[Signature]*
Permit No. 473

RECEIVED
DEC 21 1970
O & G CONS. COMM.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Operator's Certificate of Compliance & Authorization to
Transport Oil or Gas from Lease
File Two Copies
Form No. 8

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Crest Oil Company
 2. OIL WELL GAS WELL OTHER (Specify) _____
 3. Well Name Crest-Arizona Helium Santa Fe #8-X
 Location SE/4 NW/4
 Sec. 25 Twp. 20 Rge. 27 County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease
Santa Fe Pacific Railroad Co. SFP-9650
 5. Field or Pool Name Undesignated

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input checked="" type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <input type="checkbox"/>	ABANDONMENT <input type="checkbox"/>
(OTHER) <input type="checkbox"/>		(OTHER) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Test for water
 Set bridge 1350-1352
 Perforate casing from 1346-1349
 Cement in 2½" tbg. from T.D. (Approx. 1392) to surface
 Re-perforate in 2½" tbg. 1346-1350

Purpose for this work is to shut off present water and attempt recompletion in 2½" tubing inasmuch as old T.D. penetrated too deep into Coconino resulting in excessive water.

APPROVED
 OIL & GAS CONSERVATION COMMISSION
 By: [Signature]
 Date: 12-16-70

RECEIVED
 DEC 16 1970
 O & G CONS. COMM.

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

Signed BY: [Signature] Title President Date Dec. 11, 1970
 EASTERN PETROLEUM COMPANY

CREST OIL COMPANY
 BY: [Signature], Owner

Permit No. 473

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Sundry Notices and Reports On Wells
 File 4 Copies
 Form No. 23

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator C. F. Swain, d/b/a Crest Oil Company
 2. OIL WELL GAS WELL OTHER (Specify) _____
 3. Well Name Crest-Arizona Helium #8-X Santa Fe
 Location SE/4 of NW/4
 Sec. 25 Twp. 20N Rge. 27E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease
Santa Fe Pacific Railroad Company SFP-9659

5. Field or Pool Name Undesignated

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:				
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>	MONTHLY PROGRESS	<input checked="" type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	(OTHER)	<input type="checkbox"/>	ABANDONMENT	<input type="checkbox"/>
(OTHER)	<input type="checkbox"/>						

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

1. Above described well is shut-in awaiting market. This report covers all the month of November 1970.

*DN 12-3-70
 Eastern rig over the
 hole to attempt to recomplete
 and shut off water*

RECEIVED
 DEC 7 1970
 O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct.
 Signed C. F. Swain Title Owner Date 12/3/70
C. F. Swain, d/b/a Crest Oil Co.

Permit No. #473

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

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator C. F. Swain, d/b/a Crest Oil Company
 2. OIL WELL GAS WELL OTHER (Specify) _____
 3. Well Name Crest-Arizona Helium #8-X Santa Fe
 Location SE/4 of NW/4
 Sec. 25 Twp. 20N Rge. 27E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease
Santa Fe Pacific Railroad Company SFP-9650

5. Field or Pool Name Undesignated

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:				
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>	REPAIRING WELL	<input checked="" type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	(OTHER)	<input type="checkbox"/>	ABANDONMENT	<input type="checkbox"/>
(OTHER)	<input type="checkbox"/>			(OTHER)	<input type="checkbox"/>		

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

1. Captioned well is shut in awaiting market, all month of April 1970.

from Oct. 1970



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

Signed C. F. Swain Title Owner Date 5/1/70 thru 11-10-70
 C. F. Swain d/b/a Crest Oil Co.

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

Permit No. 473

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator C. F. Swain, d/b/a Crest Oil Company
 2. OIL WELL GAS WELL OTHER (Specify) _____
 3. Well Name Crest-Arizona Helium #8-X Santa Fe
 Location SE/4 NW/4
 Sec. 25 Twp. 20N Rge. 27E County Apache Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease SFP-9650

5. Field or Pool Name Undesignated

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <input checked="" type="checkbox"/>	ABANDONMENT <input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

- This, though capable of production, has been shut-in due to loss of market with Arizona Helium Corporation. (Since mid July 1969)
- This well will be put back on production as soon as Arizona Helium Corporation plant resumes operation, or if plant resumes operation under a successor Company; until such occurrence, well will be held in shut-in status.



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

Signed C. F. Swain Title Owner Date 3/12/70
 C. F. Swain

Permit No. 473

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

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 Pac III Co. SFP-9650	Field Undesignated	Reservoir Coconino
Survey or Sec-Twp-Rge Section 25-20N-27E	County Apache	State Arizona
Operator C. F. Swain, d/b/a Crest Oil Company		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street P. O. Box 57	City Alton,	State Illinois 62002
Above named operator authorizes (name of transporter) Arizona Helium Corporation		
Transporter's street address P. O. Box 14427	City Phoenix,	State Arizona 85031
Field address Navajo, Arizona 86509		
Oil, condensate, gas well gas, casinghead gas		
To transport One Hundred % (100 %) of the Gas from said lease.		
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer	% transported	Product transported
NONE		

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 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.

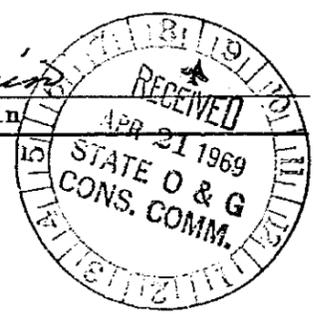
Date April 16, 1969

Signature C. F. Swain

Date approved: 4-17-69

By: John Bannister

Permit No. 471, 473



**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

X-Chesno

April 10, 1969

MEMO TO: Arizona Helium File

FROM : James Scurlock

Mr. Robert MacTough was in the office this date. Reports Arizona Helium Corporation started production last night. They have been beset with much trouble in the past few months. Replacing CO₂ scrubbing unit and relaying some field pipe. The Poly Vinyl Chloride piping blew up on two occasions during testing periods. The laboratory specs had indicated that this pipe would withstand pressures up to 1100 pounds per square inch; but, it failed when subjected to 200 pounds of line pressure by Arizona Helium Corporation. The pipe exploded and caused a rip in the line over long distances.

The company now has begun to use fiberglass pipe which seems to work well.

X
X
X
At present, three wells are tied into the plant: the Eastern #21 Incon Santa Fe, Section 31, T20N, R28E; the Eastern #35 Santa Fe, Section 27, T20N, R27E; and the new Crest #1 Santa Fe, Section 25, T20N, R27E. These three wells now are delivering approximately 450,000 cubic feet of raw gas per day to the plant. A compressor located approximately 1/2 of a mile from the plant strengthens the line pressure to 200 pounds as it enters the plant. The raw gas consists of about 8.8% helium. If these wells can continue to deliver at this steady rate, the plant theoretically should be able to produce about 1,000 MCF of grade A helium per month. We understand from Mr. MacTough that about 1,500 MCF per month would be required to break even economically. Therefore, the plant will be producing initially at a loss.

Immediate plans include working over the Crest #2X Santa Fe, Section 25, T20N, R27E. This well has had some problems with water; however, the operator has great hopes in this well as a good producer. This #2X Well is already tied into the plant but is not yet on production.

234
263
471
24 473-✓

typing

Pipe Spools

We started making preparations for all Polypropylene Chloride (plastic) pipes 2, 3, and 4 pipes buried 10' into the ground in an 18" man trench. The data says that this will withstand pressures up to 1100 lbs/sq in but it has blown under 200 lbs pressure. It will be used as applied, it appears to be approximately 75% of the overall pipe line necessitating ~~the~~ ~~use~~ ~~of~~ ~~it~~ ~~as~~ ~~is~~ ~~now~~ for repairs and replacements.

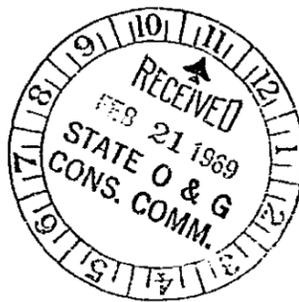
The weight of the plastic pipe is 11 lbs/foot therefore working with 40 foot lengths, liquid poured men to handle it but, on the other hand, fiberglass weighing 1 lb/foot, can be handled easily by one man. The difference in price, shown in the next paragraph, is enough higher, more than offsets the saving in repairs and handling time in a lifetime operation.

The price of 1" pipe is \$1.00 per foot, 2" is \$1.50 per foot, 3" is \$2.00 per foot and 4" is \$2.50 per foot, whereas A.O. Smith Red Thread Fiberglass pipe is 10" \$1.25 per foot.

We are gradually replacing with fiberglass piping. As of now, we have ~~just~~ A.O. Smith Red Thread Fiberglass from our previous contract #1 and #2 but, from now on, any repairs or additional piping to be done, will be fiberglass for we have ~~not~~ ^{just} said in the Polypropylene Chloride piping.

473

471



Geological & Drilling Report
of
CREST OIL COMPANY
Crest-Arizona Helium #8-X Santa Fe

Section 25 T20N - R27E
Apache County, Arizona

E. A. Clement
Consulting Geologist

Farmington, N. M.
October 21, 1968

WELL DATA

Operator: Crest Oil Company

Well Name: Crest-Arizona Helium #8X Santa Fe

Location: 2120' from the North line & 1800'
from the West line of Section 25,
T20N, R27E
Apache County, Arizona

Elevation: 5801 ft ground -- 5807 KB

Contractor: Drake Well Service
Farmington, N. M.

Starting Date: October 11, 1968

Total Depth: 1358' below ground level

Hole Size: 10", 0 to 30'
6 1/8", 30' to 1358'

Casing Program: 8 5/8", surface to 30' cemented
with 10 sacks cement. 4 1/2", surface to 1358',
cemented with 35 sacks.

Fresh Water Zones: 410'

Drill Stem Tests: 1169' to 1204'
1344' to 1358' (mis-run)

Cores: 1149' to 1171'
1172' to 1204'

Logs: Schlumberger - Induction - Electric
log from 34' to 1358'

Completion: Not yet completed

FORWARD

This well was drilled as a twin to the old Crest Oil Co. Santa Fe #8, which was completed in 1960 and shut in, due to the lack of a market for the gas at that time. After the recent establishment of a market for the gas, an attempt was made to produce the well, but due to the large amount of water and sand produced, it was found that the well needed remedial work before it could be produced. It was then decided the remedial work would be more expensive than drilling a new well, therefore the No. 8 well was plugged and the No. 8X spudded and drilled at a point 200' southeast of the original well.

GEOLOGY

Formation tops were identified by sample examination as drilling progressed and were later correlated with the Schlumberger log. The surface at the well location is recent wind blown sand. Other formation tops are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Sea Level Datum</u>
Chinle Shale	280'	Plus 5521
Shinarump Sandstone	1147'	Plus 4654
Moenkopi Shale	1216'	Plus 4585
Coconino Sandstone	1348'	Plus 4455

Drill cutting samples were taken at 10 foot intervals from 100' to 1120' and at 5' intervals from 1120' to 1155'. The well was cored from 1155' to 1210' and

samples were caught at 10' intervals from 1210' down to 1340', where 5' samples were again caught until the total depth of 1364' was reached.

All samples and the core were microscopically examined at the well site as drilled. Drilling time was recorded by the driller at 5' intervals while drilling and at 1' intervals while coring.

A sample description and core description along with the drilling time and a log of the daily drilling operations are included in this report.

All measurements by the driller were taken from 6' above ground level. Measurements by Schlumberger were taken from ground level. Measurements have been corrected to the Schlumberger datum in all cases except in the sample descriptions. Sample description depths are 6' more than the log depth on corresponding points.

During the drilling of this well, the drilling mud was kept at 45 viscosity and the well was drilled to total depth without losing circulation or any serious difficulty. A core was cut from 1149' to 1171' with 9 feet being recovered. This was the top section of the Shinarump and the recovered core of coarse grained very poorly cemented sandstone appeared to be containing water. A second core from 1172' to 1204' was a better consolidated sandstone and was noted to be very slightly

bleeding gas. A drill stem test at this point recovered 90' of drilling mud. After drilling the Coconino Sandstone a second drill stem test was run but resulted in a mis-run due to the tool not opening or the packer setting. This malfunction was caused by insufficient weight of the drill pipe to operate the tool. While running the drill stem test tool on the second test, it was noted the hole would not stay full of mud. It was found that circulation was being lost at a depth of 239'. This continued periodically but casing was successfully run and cemented at 1345'.

DRILL STEM TEST DATA

D.S.T. #1 1169' to 1204' -- Opened tool for 10 min. for pressure build up and closed for 30 min. for initial shut in pressure. Tool open for 53 min--good blow of air immediately. Attempted to run swab -- swabbed stopped in 3rd jnt, closed tool, unseated packer and pulled 3 jnts -- changed out 3rd joint. Went back to bottom, reseated packer and opened tool for 28 min. Ran swab 5 times with no recovery. Shut in for 30 minutes. Pulled tool, recovered 90 feet of drilling mud.

Initial Flow pressure	52 psi
Final Flow pressure	52 psi

Initial Shut in pressure	144 psi
Final Shut in pressure	151 psi
Initial Hydrostatic pressure	600 psi
Final Hydrostatic pressure	600 psi

D.S.T. #2 -- 1344' to 1358'
(Mis-run -- packer would not set due to insufficient weight of drill pipe).

E. A. Clement
Consulting Geologist

CREST OIL CO.-CREST-ARIZONA HELIUM #8X SANTA FE

DAILY OPERATIONS

- 10-10-68 Moved rig from #1 to #8-X and partially rigged up. Hauled 5 loads water. Wtr truck left Farmington at 7:30 am - arrived Navajo at 1 pm, worked till 9 pm.
- 10-11-68 Finished rigging up. Beasley hauled all tbng & casing to new location. Took AAA small drill collars back to Farmington. Mixed 50 sks Jel, 1/2 sk cellex, 2 sks cc 16, 2 sks HySeal 3 sks Fiber tex before starting to drill. Started drilling at 11 am with S3J Security 6 1/8" bit with 9/32" jets installed. Water truck hauled 6 loads from 7 am until 4:45 pm and left for Farmington. All tanks filled. Mud vis 45. Drilled to 360' & pulled out of hole. Bit in good condition. S.D. at 7:10 pm.
- 10-12-68 On location at 6:45 am -- mixed up and jetted mud - added 1 sk cc 16 -- changed out 8 5/8" X 7" swage -- (Bit was hanging slightly on old high pressure swage). Worked on pump as it was not operating efficiently. Ran same bit #1. On bottom drilling at 9:20 am -- had 1 ft fill-up on bottom. Drilled to 435'--

12:15 pm. Drilling slowed to 65 min on last 5' -- pulled bit-- sl dull. Had gummy clay in base. On bottom drilling w/new S-4 Security bit at 1:25 pm. Mud vis 44. Drilling better, averaging 8 min per 5 ft with new bit. Drilled to 540'. Started out of hole at 3:45 pm after circled 20 min; out of hole, pump drained & S.D. at 6:45 pm.

10-13-68 On loc @ 7 am. Went in hole w/same bit (S-4 - No 2) -- Jetted mud, cleaned out sample trough -- On bottom drilling at 8:45. Had 1' fill-up on bottom. Mud viscosity 45. Drilled to 572', would not drill, started out of hole at 12:45 to change bit. Went in with S3J Security #3, on bottom drilling at 2:20 pm Drilled to 750' - started out of hole at 6:15. Mud vis 47. S.D. at 7 pm. Bit looks good. Had ball of clay on it.

10-14-68 Went in hole with same bit (#3 - S3J) -- added 1540 gal diesel to mud system. Hit bridge 9 jnts off bottom (at 480') - worked thru without drilling or circulating - had 6" fillup on bottom. On bottom drilling at 8:30 am. Drilled 750' to 785'. Mud vis 45. Stopped drilling - drags when picking up &

pump pressure increases. Picked up & worked pipe - apparently got ball off of bit - started drilling - 5 to 7 min per 5 ft. Mud vis at 1 pm, 52 -- drilling ok.

Security Bit Salesman left 2 S3 bits.

Bill McIlvain picked up 3 Hughes 3 7/8" bits.

Bill McIlvain left 8 5/8" X 4 1/2" osng head-4 1/2" X 1 1/2" tubing head - 2" X 1 1/2" change over - 1 1/2" valve. Beasley delivered 4 1/2" osng - 1 1/2" tubing - 4 3/4" core barrel w/5 3/4" head plus subs and tools. 3 2" valves, 1 1 1/4" pin collar, 3 2" nipples. Drilled to 1084', bit started sticking, started out of hole - pulled hard - until bit went by zone at 480'. Out of hole and shut down at 7 pm.

10-15-68 On loc at 7:15 am. Put on used S3J bit w/9/32" nozzles. Service rig - start in hole. Hit bridge at 800' - circulated and moved pipe up above & down below bridge until completely cleared up. Circulated after putting in each joint - pipe completely free - went on to bottom. Started drilling at 10:30. Drilled to 1155', pulled bit, went in with core barrel. On bottom coring at 3:53 pm. Cored good to 1177. Time went to 18 min per ft.

Pump started pressuring up - pulled core barrel. Could not get core out. Shut down at 8:15. (Yellow dog pump quit)

10-16-68 On loc at 7 am. Removed core from barrel-- out 22' core - recovered 9'. Went in hole w/new Security S-3 bit - reamed down hole - drilled 2 feet. Did not find any bridges - circulated 1 hr. Mixed 1 sk cc 16. Pulled bit - went in hole w/core barrel. Started coring at 1 pm. Mud vis 58. Cut 32' core. finished at 3:35 - circul 30 min started out of hole at 4:05. Pulled core - recov 11'. Crew left at 4:45. Bob Drake left for Farmington at 7 am.

10-17-68 On loc 7 am. All air lines frozen - thawed out - on bottom reaming at 9 am. Reamed down to 1210 - circul 30 min - Haliburton on loc at 9:30. Pulled pipe & bit. Made up test tool & run - DST #1 1175 - 1210 - Tool open for 10 min. for ISIP build up. Shut in 30 min - tool open 53 min. Gd blow air immed - attempted to swab, could not get below 3 jnts. Closed tool - unseated packer pulled 3 jnts. Changed 3rd jnt - went back to bottom, set pkr and opened tool for 26 min. Run swab

5 times. No recovery. S.I. for 30 min,
pulled tool, recov 90' mud.

IFP 52 ISIP 144 IHP 600
FFP 52 FSIP 131 FHP 600

Crew left at 7:15 pm. Bob Drake back from
Farmington, here for couple of hrs--left for
Tulsa.

10-18-68 On loc at 7 am. Went in hole with Security
S-3 bit (#5, which was used for reaming core
hole). On bottom drilling at 9:25. Drilled
to 1345'. Shut down and out of hole at 6 pm.

10-19-68 On loc at 6:45 am. Went in hole with bit
#6, S-4, Security. Schlumberger arrived on
loc at 8 am. On bottom drilling at 8:42.
Drilled to 1364' - circul for 45 min. Pulled
bit. Ran Schlumberger ES - Ind log. Ran
test tool, set bottom packer at 1343.5'.
Attempted test 1343 to 1364 -- on running
tool, hit bridge at 1184' but tool went thru.
Hole was unloading mud due to the pipe dis-
placing it until bridge was hit. No mud un-
loaded after this. Ran tool to bottom - pac-
ker would not set. Used only 4 drill collars
as we cannot swab thru collars. Apparently
we did not have enough weight to set packer.

Could not keep hole filled. Mud could be going into Coconino, (although none was lost while drilling), or into Shinarump. Pulled tool, released Haliburton tester. Shut down at 6:15 pm.

Lost total of 38 bbls mud while trying to fill hole. Bottom hole bomb registered 559 psi after mud in hole stabilized. This calculates a depth of 239' as the point at which circulation was lost.

10-20-68 On loc 6:45 am. Mixed 25 sks gel, 2 sks cc 16, 7 qts celled, 20 sks L.C. material to fill small pit. Went in hole w/bit & drill pipe, hit first bridge at 90'. Drilled & washed down 11 jnts, losing mud all the time. Would put on a jnt & attempt to circulate. No returns at times, never over $\frac{1}{2}$ returns. Hole solid from 6 jnts to 11 jnts. Drilled & circled down to bottom, hit a few small bridges, had full circulation after approx 16 jnts. Lost circulation on bottom, picked up & regained after dumping L.C. material directly over suction. Circulated for 45 min. Started out of hole to run casing at 4:30 pm. Haliburton pump truck arrived at 11 am. Bulk

Could not keep hole filled. Mud could be going into Coconino, (although none was lost while drilling), or into Shinarump. Pulled tool, released Haliburton tester. Shut down at 6:15 pm.

Lost total of 38 bbls mud while trying to fill hole. Bottom hole bomb registered 559 psi after mud in hole stabilized. This calculates a depth of 239' as the point at which circulation was lost.

10-20-68 On loc 6:45 am. Mixed 25 sks gel, 2 sks cc 16, 7 qts celled, 20 sks L.C. material to fill small pit. Went in hole w/bit & drill pipe, hit first bridge at 90'. Drilled & washed down 11 jnts, losing mud all the time. Would put on a jnt & attempt to circulate. No returns at times, never over $\frac{1}{2}$ returns. Hole solid from 6 jnts to 11 jnts. Drilled & circled down to bottom, hit a few small bridges, had full circulation after approx 16 jnts. Lost circulation on bottom, picked up & regained after dumping L.C. material directly over suction. Circulated for 45 min. Started out of hole to run casing at 4:30 pm. Haliburton pump truck arrived at 11 am. Bulk

truck arrived at 2 pm. Pulled out of hole with no tight places, rigged up & run 1346.65' of 4 $\frac{1}{2}$ " 9.5# casing with 3 centralizers. 1 on every other jnt from bottom up, and guide-shoe. Casing hung 3 times as centralizers went by caved spot at 233'. Cemented with 35 sacks of 50-50 poz mix cement with 2% jel & 12 $\frac{1}{2}$ # Gilsonite per sack. Pumped 16 bbls water in front of cement & started circulating. Circulated during pumping of cement & when plug was pumped down. Calculated top of cement to be at 790'. Plug down at 9:25 pm 10-20-68. Crew left loc at 9:45 pm. Will come back to loc morning of 21st & pick up tools then go to Farmington & return morning of 23rd & drill plug.

SAMPLE DESCRIPTION

Crest Oil Company Crest-Arizona Helium #8X Santa Fe

<u>Depth</u>	<u>Drilling time</u>	<u>Description</u>
100-170		100% ran, fine to med ss, abund loose qtz grns.
170-210		100% wh to red & brn, fine to coarse v/calco ss.
210-220		90% ss as abv, 10% hd tan l.s.
220-280		100% wh to tan, fine to coarse, some pale grn. ss.
280-300		100% wh pale grn, tan, fine to coarse ss with blk & brn chert & wh to clr qtz.
300-310	77	50% tan, wh, red, fine to coarse, s&p ss, 50% shale - gry, pple, gry-blue, & red
310-320	6	70% wh to clr, loose qtz grns 30% Gry, pple, grn shale
20-30	6	As abv
30-40	7	100% red & gry sh
40-50	7	80% Brn-red-mic, fine, v/silty ss. 20% gry & redish
50-60	6	100% Brn-red ss as abv
60-70	8	100% ss. 50% red-brn, 50% fine-med lt gry
70-80	8	As abv - very silty
80-90	7	90% ss as abv. w/trace of lt grn fine to coarse 10% red-brn & gry-blue shale
390-400	6	As abv

Depth	Drilling time	Description
400-410	9	As abv.
10-20	9	As abv.
20-30	21	60% red, fine-med, hd, silty, mic ss 40% Gry, med, s&p, v/friable & porous, w/rded ss.
30-40	72	50% red ss as abv - conglomeratic 40% gry ss as abv, 10% red shale
40-50	24	As abv.
50-60	18	60% red ss as abv. 30% gry ss as abv, 10% red-brn shale.
60-70	14	90% tan to gry, fine to coarse, hd ss, some silty 10% red brn shale.
70-80	13	As abv.
80-90	90	50% red-brn, fine to coarse, some silty 40% gry to red gry, fine to coarse, some friable 10% red-brn shale.
490-500	10	As abv.
500-510	11	As abv.
10-20	15	40% red ss as abv. 30% gry ss as abv, 30% red-brn shale.
20-30	14	As abv.
30-40	13	90% brn, fine, s&p, tite, hard ss 10% brn-red shale.
40-50	18	70% gry to red-brn, fine to coarse, s&p, hard ss 30% red-brn shale.
50-60	15	50% red-brn, fine to med, hard, some very silty ss. 20% wh, med, s&p, clean porous ss. 30% red-brn shale.

Depth	Drilling time	Description
560-570	129	ss as abv. 30% red-brn, & green shale
70-80	59	As abv.
80-90	7	40% red ss as abv 10% wh ss as abv. 50% red, brn, lav & grn sh.
590-600	8	50% red ss as abv. 50% red, brn, pple, grn shale.
600-610	9	40% brn, fine, silty ss. 60% red, brn, lav, ppl, grn sh.
10-20	8	60% ss as abv. 40% sh as abv.
20-30	16	40% brn ss as abv. 60% sh as abv.
30-40	27	20% brn ss as abv. 30% wh, fine-med, s&p friable ss. 50% sh as abv.
40-50	9	50% wh ss as abv. 50% sh as abv.
50-60	10	70% wh ss as abv. 30% sh as abv.
60-70	10	As abv.
70-80	14	50% wh ss as abv. 50% brn, tan, lav.
80-90	8	80% wh & brn, v/fine, ss 20% sh as abv.
690-700	9	20% ss as abv. 80% wh bentonite, lav, ppl, brn shale.
700-710	9	50% lt tan, fine, silty, bent ss 50% brn, lav sh.

Depth	Drilling time	Description
710-720	9	50% tan & gry ss as abv. 50% shale as abv.
20-30	9	As abv.
30-40	9	20% ss as abv. 80% wh bentonite, brn & gry sh.
40-50	9	As abv.
50-60	10	As abv. (mostly oavings) many large pieces chert.
60-70	9	As abv. (mostly oavings) many large pieces chert.
70-80	11	20% brn to gry, fine, silty ss 80% gry, lav, gry-blue, brn sh. many large pieces chert.
80-90	85	As abv.
790-800	10	As abv.
800-810	10	As abv w/some lt grn, med, ss.
10-20	14	20% ss as abv. 80% sh. gry, brn grn.
20-30	11	As abv.
30-40	9	20% wh-fine-bentonitic 80% wh to gry bentonitic & red-brn.
40-50	13	As abv.
50-60	11	As abv.
60-70	11	As abv.
70-80	13	As abv w/ppl sh.
80-90	11	As abv w/ppl sh.
890-900	12	As abv. w/ppl sh.
900-910	14	20% wh, gry & brn, fine to coarse silty ss 80% shale gry, brn, ppl, grn & wh to gry bentonite.

Depth	Drilling time	Description
910-920	13	As abv.
20-30	11	As abv.
30-40	12	As abv.
40-50	15	As abv.
50-60	11	As abv.
60-70	15	10% ss as abv. 90% shale, brn, gry, grn, ppl.
70-80	14	As abv.
80-90	11	As abv.
990-1000	15	As abv.
1000-1010	17	As abv.
10-20	13	As abv.
20-30	16	As abv.
30-40	13	100% gry & brn shale.
40-50	10	As abv.
50-60	14	As abv.
60-70	10	As abv.
70-80	11	As abv.
80-90	8	10% gry-grn, med, ss 90% sh as abv.
1090-1100	14	As abv.
1100-1110	13	20% wh, med-orse, mic, w/rnded, friable ss w/clay cement.
10-20	16	10% ss as abv. 90% sh as abv.

Depth	Drilling time	Description
1120-1125	9	5% gr to wh, fine, s&p 5% brn, med, r/hd 90% sh as abv.
1125-30	8	20% brn ss as abv. 80% sh as abv.
30-35	9	As abv.
35-40	8	5% wh, crse, friable ss 5% brn, fine hd ss 90% sh as abv.
40-45	6	As abv.
45-49	6	As abv.
1149	15 min circul sample	10% gry to wh, fine-med, hd, mic, ss 90% sh as abv.
1149-1155	8	As abv.
1155	15 min circul smpl	20% wh ss as abv. 80% sh as abv.
Core #1 1155' to 1177 - Rec 9'.		
1155-1156	3	Conglomerate--Red, brn, gry qtz & chert pebbles with gry-grn, sub-ang to rnd, crse ss. very/porous w/clay cement.
1156-57	3	As abv.
57-58	3	s.s - Gry-grn, silty-dirty ang to rnd v/porous ss v/poorly consol w/clay cement.
58-59	3	As abv with vertical fracture.
59-60	3	As abv with vertical fracture.
60-61	3	As above w/drilling mud in pore spaces & w/vertical & horoz fractures.

Depth	Drilling time	Description
1161-1162	3	SS - Gry-grn, very clean, crse, ang to rnd & pebbly v/poorly consol w/clay cement
1162-63	3	It is believed the sandstone washed out in this section & approx 10 feet were lost. It is assumed the description would have been the same as the sample above.
1163-64	3	
64-65	3	
65-66	3	
66-67	3	
67-68	3	
68-69	3	
69-70	3	
70-71	2	
71-72	3	SS - Gry-grn, silty & dirty, med- crse, vert frac,
72-73	5	Pore space filled w/clay
73-74	4	As abv.
74-75	7	Shale--sl sndy, gray-grn, hard.
75-76	16	The last 2 feet were believed to be lost by washing out.
76-77	18	
77-78		
78-79	7	Washed out
79-80	6	SS--Gry-grn, crse, congl, v/friable w/sft clay cement, v/por, <u>blgd gas</u> .
80-81	3	Washed out
81-82	4	" "
82-83	4	" "

Depth	Drilling time	Description
1183-1184	10	Washed out
84-85	14	" "
85-86	8	" "
86-87	4	SS--asaby w/½" to 1" shale partings, <u>blgd gas</u> & less porosity
87-88	4	Washed out
88-89	2	" "
89-90	3	" "
90-91	3	" "
91-92	1	" "
92-93	1	" "
93-94	3	SS--as abv. but no shale partings, <u>blgd gas</u> .
94-95	8	Washed out
95-96	3	" "
96-97	3	" "
97-98	2	" "
98-99	3	" "
1199-1200	6	" "
1200-1201	24	" "
01-02	12	Top 6" ss as abv. Bottom 6" shaly & silty & finer grain
02-03	2	Blk to gry, sandy shale
03-04	2	Gry sandy shale
04-05	2	SS--lt gry to wh, crse, friable, porous, <u>blgd gas</u> .

Depth	Drilling time	Description
1205-1206	2	SS--lt gry to wh, crse, friable, porous, <u>bidg gas</u> .
06-07	2	Washed out.
07-08	2	As abv.
08-09	1	As abv.
1209-10	2	As abv becoming finer grained.
10-20	24	20% wh, crse, sub-rnd, friable ss 80% gry, grn, brn sh.
20-30	24	10% wh, fine, sl silty ss & Tr brn fine ss 90% red-brn, ppl gry sh.
30-40	24	As abv.
40-50	24	As abv.
50-60	58	As abv.
60-70	28	As abv.
70-80	33	Tr ss as abv. 100% choc brn, gry & ppl sh.
80-90	29	100% sh as abv.
1290-1300	31	As abv.
1300-1310	30	As abv.
10-20	30	As abv.
20-30	30	As abv.
30-40	33	As abv.
40-45	18	5% wh, fine, s&p ss 5% brn shaly v/fine ss 90% sh as abv.
45-50	11	100% sh as abv.

Depth	Drilling time	Description
1350-1355	11	100% sh as abv.
55-60	11	As abv. Tr pink buff, med, w/rnded, friable Coconino ss.
	15 min circul sample	
1360		5% wh to pink buff, Coconino ss 95% sh as abv.
	25 min circul sample	
1360		Same as abv.
60-64	11	20% ss, as abv. 80% sh as abv.
	15 min circul sample	
1364		40% ss as abv. 60% sh as abv.

CREST OIL CO. -CREST-ARIZONA HELIUM #8X SANTA FE
DAILY COMPLETION REPORT

- 10-23-68 Crew on location 11:30 am, rigged up and went in hole with tbng. and 3 7/8" bit. Drilled plug, went to bottom and circulated water for 30 min. Picked up 1 jnt. and swabbed thru tbng- when water level reached 500', well kicked off and unloaded - let water unload for approx. 1 hr and shut in for nite. Left location at 6 pm.
- 10-24-68 On loc. at 7:15 am- pressure on tbng. was 220 psi. Opened well, let water unload thru tbng. Opened casing, some water unloaded. Let water unload for 1 1/2 hrs, had very slight salt taste. Pulled tubing and bit, well blew over crown. Took flange and flow nipple off of casing. Stabbed swage and 3" valve on casing with jnt. of casing for weight, shut well in. Pumped water into casing to kill well. Run 2 3/8" tubing with seating nipple on bottom - swabbed well in, kicked off and unloaded water and gas for approx. 45 min. Shut in for nite.
- 10-25-68 Beasley trucks arrived at 7:30 am- started moving rig to #2 well. Took sample of gas

from well in horoz. separator and hauled to
plant - checked 9.3% helium. Took McDonald and
Southard to well and opened and blew thru casing
for 45 min. - opened tubing, would not unload,
Unloaded thru casing for 30 min. more.

- Beasley hauled separator from #8 and set up.
Completed moving rig to #2 well. Transwestern
loaded and hauled all water from #8X to #2
- 10-26-68 Monarch crew arrived at 11:30 am and hooked up
separator. Blew well thru tbng. for 45 min.
Monarch left at 5 pm.
- 10-27-68 Tested well with Minicorder- test 200 MCF w/
approx. 500 bbls. wtr - water decreased thru day -
back pressure on separator 50 psi. Tbng. pressure
75 psi. Casing pressure 200 psi.
- 10-28-68 Left Minicorder on all nite- checked and changed
chart at 9 am - Water tested 55 gal in 4½ min.
which is 419 bbls per day. Gas at 5 psi thru 1"
orifice is 299 MCF. Holding 50 psi on separator.
Changed back pressure on separator to 75psi at
6 pm.
- 10-29-68 Checked Minicorder - registering 1.5 psi for
15 hrs. with 75 psi back pressure thru 1" orifice.
Calculated 157.8 MCF per day. Turned well into
pipe line.

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator C. F. Swain, d/b/a Crest Oil Company
 2. OIL WELL GAS WELL OTHER (Specify) Coconino
 3. Well Name Crest ARIZONA Helium #8-X Santa Fe
 Location 2120' FNL and 1800' FWL (SE/4 of NW/4)
 Sec. 25 Twp. 20N Rge. 27E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease SFP-9650 Santa Fe Pacific RR Company

5. Field or Pool Name Undesignated

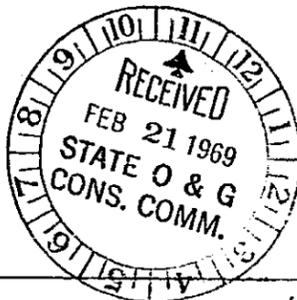
6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input checked="" type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <input type="checkbox"/>	ABANDONMENT <input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

1. Well completed as Helium-bearing Gas well, see well completion report Form 4, dated 2/5/69. Bureau Of Mines, Amarillo, Analysis enclosed.
2. Hooked up to Arizona Helium Corporation Pipe Line 10/29/68, partial. Connection to Pipe Line completed 12/9/68.
3. Meter installed 12/9/68.
4. Well not yet on stream. Shut-in awaiting completion of Arizona Corporation Plant.
5. For day by day drilling and completion report, see enclosed Geological brochure.



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

Signed C. F. Swain Title Owner Date 2/18/69

Permit No. 473

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

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 P. O. Box 57 Alton, Ill. 62002	
Federal, State or Indian Lease Number or name of lessor if fee lease Santa Fe Pacific Railroad Co. SFP-9650		Well Number 8-X	Field & Reservoir Undesignate
Location 2120' FNL and 1800' FWL		County Apache	
Sec. TWP-Range or Block & Survey Section 25-20N-27E			

Date spudded 10/11/68	Date total depth reached 10/20/68	Date completed, ready to produce 10/29/68	Elevation (DF, RKP, RT or Gr.) 5801' GL feet	Elevation of casing hd. flange 5805 feet	
Total depth 1358	P.B.T.D.	Single, dual or triple completion? Single	If this is a dual or triple completion, furnish separate report for each completion.		
Producing interval (s) for this completion 1346' - 1358'		Rotary tools used (interval) 0' - 1358'	Cable tools used (interval)		
Was this well directionally drilled? No	Was directional survey made? No	Was copy of directional survey filed?	Date filed		
Type of electrical or other logs run (check logs filed with the commission) Schlumberger Induction-Electrical Log			Date filed 12/5/68		

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
Surface	10"	8-5/8"	24 lb	30'	10 sacks	None
Production	6-1/8"	4-1/2"	9.5 lb	1346.65	35 sacks	None

TUBING RECORD

LINER RECORD

Size EUE	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
2-3/8 in.	1325 ft.	ft.	in.	ft.	ft.	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
	Open Hole	Completion	Natural Completion	

INITIAL PRODUCTION

Date of first production Shut-in		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:) Flowing				
Date of test 10/28/68	Hrs. tested 24	Choke size 1"	Oil prod. during test None bbls.	Gas prod. during test 299 MCF	Water prod. during test 400 bbls.	Oil gravity * API (Corr)
Tubing pressure 50 psi	Casing pressure 200 psi	Cal'd rate of Production per 24 hrs.	Oil None bbls.	Gas 150-200 MCF	Water 200 bbls.	Gas-oil ratio

Disposition of gas (state whether vented, used for fuel or sold):
Under contract to Arizona Helium Corporation....Awaiting completion of Plant

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

Date 2/5/69

Signature C. F. Swain
C. F. Swain



160-Acre Spacing
Case 33, Order 34
Permit No. 473

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

Form No. 4

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
<p>PRIMARY FORMATION TOPS ON PAGE -2- GEOLOGICAL BROCHURE ATTACHED.</p>			
<p>DETAILED SAMPLE DESCRIPTION OF FORMATION FROM 100' to TOTAL DEPTH INCLUDED IN GEOLOGICAL BROCHURE ATTACHED, PAGE -3- thru -22-.</p>			
<p>CORE DESCRIPTION, SEE PAGE -3- & -4- GEOLOGICAL BROCHURE</p>			
<p>DRILL STEM TEST DESCRIPTION SEE PAGE -4- & -5- GEOLOGICAL BROCHURE</p>			
<p>(Also, see Electric Log, DST, & CORE data filed 112/5/68)</p>			
Chinle Shale	280'		
Shinarump			
Sandstone	1147'		
Moenkopi			
Shale	1216'		
Coconino			
Sandstone	1346'		

* 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.

MEMO: FILES
FROM: J. SCURLOCK

1-29-69

Re: Arizona Helium Plant, Navajo, Arizona

Visited Arizona Helium Plant. Conversation with Mr. Dick McDonald. Mr. McDonald indicated that he hoped to have the plant on production by March 15. According to him, the situation was very favorable. At present four wells have been tied into the plant:

1. Ancon #21 (a shinarump producer) This well (EASTERN ANCON #21 SANTA FE) is expected to make approximately 1,000 CFG per day with no water. 234
2. #35 Santa Fe (located in Navajo Springs Unit) Operator will be allowed to take 70,000 CFG per day from this well; that is to say, 16% of the allocated Navajo Springs production. (EASTERN #35 SANTA FE) 263
3. #1 Well (located in section 25, SE) This well (Crest-Ariz Helium #1 SANTA FE) is expected to produce about 400,000 CFG per day with 25 barrels of water. 471
4. #8X Well (located in SW of section 25) This well (Crest-Ariz Helium #8X SANTA FE) is expected to produce about 300,000 CFG per day with about 30 barrels of water. 473

Mr. McDonald indicated that these four wells will produce enough gas to put the plant on stream, initially; but that much more raw gas would be needed in the future. Therefore, the company anticipates drilling about 25 wells this year in the south Navajo area on company acreage. They have great hopes for the shinarump production in this area.

473
~~263~~

Crest 8x

Permit 473

10-31-68

Telephone @ Doc Swain:

Spud 10-11-68

Top Coconino 1346

TD 1356

Set 4 1/2" csg @ 1345 w/ 35 SX

Ran 2 3/8" tbg to 1348.

Well now tied in to plant (Ariz He Corp);

Running preliminary tests

2 cores - 2 DSTS

Telephone Doc Swain 11-19-68

#8-X Well tied in to plant for testing.

Hope this well eventually will produce 200,000 - 300,000 cfpd (plus some water). Has separator connected in to line. Structurally

This well is about the same as the #8 well. Water from this well slightly saline

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator C. F. Swain, d/b/a Crest Oil Company
 2. OIL WELL GAS WELL OTHER (Specify) _____
 3. Well Name Crest Arizona Helium #8-X Santa Fe
 Location 2120' FNL and 1800' FWL (SE/4 NW/4)
 Sec. 25 Twp. 20N Rge. 27E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Santa Fe (SFP-9650)

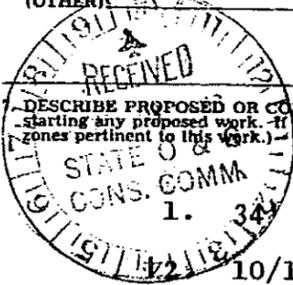
5. Field or Pool Name Undesignated

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:		
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	MONTHLY PROGRESS	<input checked="" type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
(OTHER)	<input type="checkbox"/>	(OTHER)	<input type="checkbox"/>	ABANDONMENT	<input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)



1. 34" of 8-5/8 previously set by Mesa Service Co., Farmington, N.M. 10/10/68, moved rig from location #1 to #8-X and partially rigged.
3. 10/11/68, finished rigging up and drilled to 360'.
4. 10/15 & 10/16/68, core #1....shinarump formation, 1155-1177; recovered 9'. core #2...shinarump, 1179-1211; recovered 11(11)ft.
5. Core parts of each foot sent to Core Lab (Farmington) and core parts of each foot sent to Arizona) & G Cons. Comm.
6. Drilled to 1210' . Drill stem test #1, Halliburton, 1175-1210, 10/17/68. Recovered 90' drilling mud. ISIP..144; FSIP:..131 psi.
7. Drilled to 1364'. Ran Schlumberger IBSlog (Ind-ES log). DST #2, Halliburton, 1343.5-1364'. Packer would not seat. Losing mud into some formation and could not keep hole full for testing. Packer never did seat. After 90" pulled tool... misrun. Conditioned hole, (recovered circulation) and ran 1346.5' of J-55 9-5 lb 4-1/2" csg and cemented with 35 sacks, Halliburton.
8. Drilled plug 10/23/68, & Swab testing 10/24/68.

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

Crest Oil Company

Signed

C. F. Swain

Title

Owner

Date

10/24/68

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

Permit No.

473

CORE ANALYSIS RESULTS

Company CREST OIL COMPANY Formation SHINARUMP File RP-3-2324
Well CREST-ARIZONA HELIUM NO. 8-X Core Type DIAMOND 2.75" Date Report 10-22-68
Field UNDESIGNATED SANTA FE Drilling Fluid WATER BASE GEL Analysts GALLOP
County APACHE State ARIZONA Elev. 5801' GL Location 2021' FNL 1800' FWL SEC 25-T20N-R27E

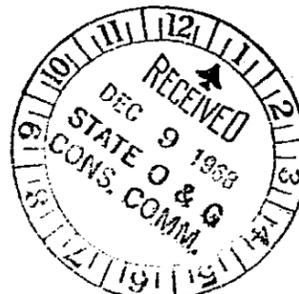
Lithological Abbreviations

SAND-SD SAND-SS SAND-SH SAND-LM	DOLMITE-DOL CHERT-CH GYPSUM-GYP	ANHYDRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SANDY-SDY SHALY-SHY LIMY-LMY	FINE-FN MEDIUM-MED COARSE-CSE	CRYSTALLINE-XLN GRAIN-GRN GRANULAR-GRNL	BROWN-BRN GRAY-GY VUGGY-VGY	FRACTURED-FRAC 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			

(CONVENTIONAL ANALYSIS)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
1	1156.0-57.0	175	27.7	0.0	70.7	Sd, Gy, Med Grn, Shy, W/Bentonite
2	1158.0-59.0	5.3	26.3	0.0	64.5	Sd, Bl, Fn Grn, Shy, W/Bentonite
3	1160.0-61.0	5.8	25.3	0.0	62.4	Sd, Gy/Bl, Fn Grn, Shy, W/Bentonite
4	61.0-62.0	2.1	25.6	0.0	67.4	Sd, Gy, Med Grn, Shy, W/Bentonite
5	1165.0-66.0	1.0	21.7	0.0	63.9	Sd, Bl, Fn Grn, Shy, W/Bentonite
6	1168.0-69.0	3.7	23.3	0.9	62.1	Sd, Gy/Green, Fn Grn, Shy, W/Bentonite
7	1179.0-80.0	23	24.9	0.0	68.6	Sd, Gy, Med Grn, W/Bentonite
8	1186.0-87.0	0.4	17.3	0.0	69.4	Sd, Gy, Med Grn, Shy, W/Bentonite
9	1193.0-94.0	9.5	25.3	0.0	73.1	Sd, Gy, Med Grn, W/Bentonite
10	1201.0-02.0	115	26.7	0.0	76.3	Sd, Gy, Med Grn, Sl/Shy, W/Bentonite
11	1204.0-05.0	8.2	20.6	0.0	71.2	Sd, Gy, Med Grn, W/Bentonite
12	05.0-06.0	15	18.2	0.0	66.5	Sd, Gy, Med Grn, W/Bentonite
13	1207.0-08.0	7.6	23.4	0.0	69.3	Sd, Gy, Med Grn, W/Bentonite
14	08.0-09.0	15	21.4	0.0	76.6	Sd, Gy, Med Grn, W/Bentonite
15	09.0-10.0	30	29.8	0.7	76.2	Sd, Gy, Fn Grn, W/Bentonite

473



Service #5-A

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 operations, or other results of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

Oct 17, 1968

Oct 17, 1968

John Bannister

We are sending samples of the core which was cut in the Shinarump conglomerate on the Crest Oil Co. - 8-X.

Core #1 was cut from 1155' to 1177' - Recovery was 9 ft.

We believe the loss was 5' at 1172 to 1177 & 8' from 1161

to 1171. The depths shown on each sample are where we believe the sample came from.

B. A. Clement

10-17-68

P/N 473

509 71 700

AAA FISHING TOOL CO., INC.

World's Finest Magnet

2405 EAST MAIN, P. O. BOX 1281
Pho. Off. 325-4410 — Res. 325-5773
FARMINGTON, N. M.

*Square Drill Collars
Skidding Equipment
Hard Bending
Power Saws
Pump And Tack
Fishing Tools
Experienced Operators*

WA - (2/2/68)

REPORT OF ANALYSIS

F. S. - 11680 M.S. N-43220 H 9.06 OBS. PRES. 68.0 CAL. PRES. 69.1

STATE- ARIZONA

COUNTY- APACHE

FIELD- Undesignated

WELL NAME- SANTA FE NO. 8X

LOCATION- SEC. 25, T20N, R27E

OWNER- CREST - ARIZONA HELIUM

DATE COMPLETED- 10/29/68

DATE SAMPLED- 11/25/68

SAMPLED BY- C. F. Swain

NAME OF PRODUCING FORMATION- CICONE

DEPTH IN FEET- Approx 1350

THICKNESS IN FEET- Actual 1346+1356'

SHUT IN WELLHEAD PRES. PSIG- 200 psi

OPEN FLOW, MCF/D- 299 MCF/D thru 1" orifice with 50 psi back pressure on separator.

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

REMARKS- Well produces approximately 400 Bbls slightly salty water per day

ANALYSIS-

METHANE	.1 %	NORMAL PENTANE	.1 %	OXYGEN	0.0 %
ETHANE	0.0 %	ISOPENTANE	0.0 %	ARGON	.6 %
PROPANE	0.0 %	CYCLOPENTANE	0.0 %	HYDROGEN	0.0 %
NORMAL BUTANE	0.0 %	HEXANES PLUS	0.0 %	H2S	0.0 %
ISOBUTANE	0.0 %	NITROGEN	0.0 %	CO2	.5 %
SPECIFIC GRAV	.889			HELIUM	9.99 %
				TOTAL	100.0 %

CALCULATED GROSS BTU/CU. FT., DRY AT 60 DEG. F AND 30 IN. MERCURY 1.

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.

COMPANY Crest Oil Company

BY C. F. Swain

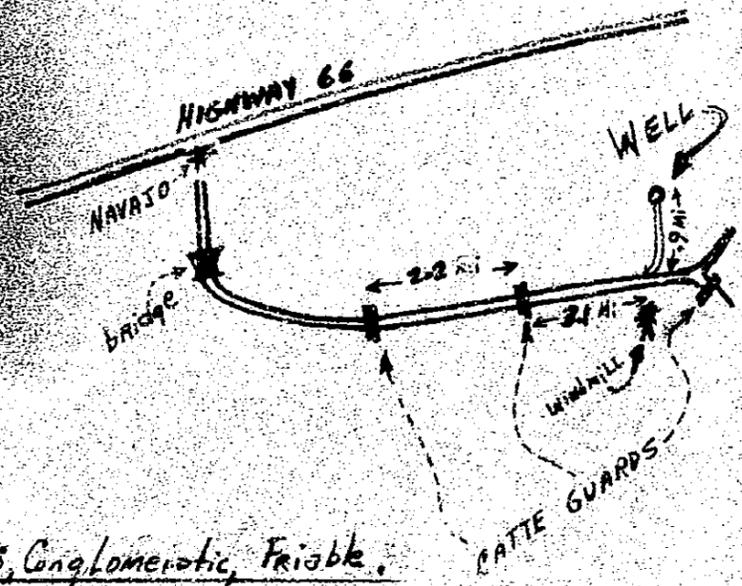
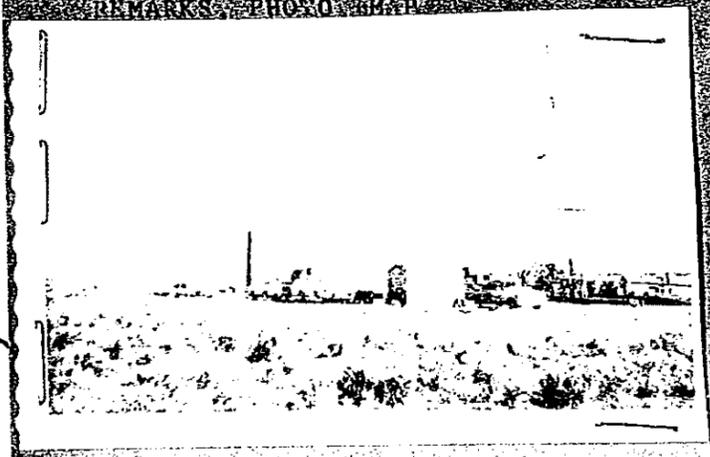
TITLE Owner

473

WELL SITE CHECK

Contractor DRAKE (FARMINGTON) Person(s) Contacted Ed Clements, Doc Swain
 Spud date 10-11-68 By JRS Date 10-17-68
 Type Rig _____ Rotary Cable _____ Present Operations _____
 Samples _____
 Pipe SET 8 5/8 @ 30' w/10.5x Drilling with Air _____ Mud
 Water Zones _____ Size Hole DRILLING 6 1/8" hole
 Lost Circ. Zones _____ Size Drill Pipe _____
 Formation Tops _____ Type Bit _____
 Cores, Logs, DST _____ No. Bit _____ Drilling Rate _____
 Formation _____
 Crews _____ Lithology _____

REMARKS: PHOTO TAKEN



Cored SHINARUMP
 #1: 1155-1177 Rec 9' SS, Conglomeratic, Friable.
 Reamed hole
 DRILLED 1177-78
 #2: 1178-1210 Rec 11' SS Conglomeratic, Friable.

PREP TO DST SHINARUMP FROM 1175-1210.
 (Brought in CORE CHIPS OF SHINARUMP)
 WELL NAME CREST, ARIZ, HELIUM #8X SANTA FE

Permit No. 473
 Confidential Yes

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL

RE-ENTER OLD WELL

Crest Oil Company
NAME OF COMPANY OR OPERATOR

Address P. O. Box 57 City Alton State Illinois

Drake Well Service Company
Drilling Contractor
Farmington, New Mexico
Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor Santa Fe #9650	Well number 8-X	Elevation (ground) 5801.0
Nearest distance from proposed location to property or lease line: <p style="text-align: right;">1800 feet</p>	Distance from proposed location to nearest drilling completed or applied—for well on the same lease: <p style="text-align: right;">1840 feet</p>	
Number of acres in lease: <p style="text-align: center;">640</p>	Number of wells on lease, including this well, completed in or drilling to this reservoir: <p style="text-align: center;">3</p>	
If lease, purchased with one or more wells drilled, from whom purchased: Name _____ Address _____		

Well location (give footage from section lines) 2120 FNL - 1800 FWL Section—township—range or block and survey Sec 25-T20N-R27E Dedication (Comply with Rule 105) NW/4 of Sec 25

Field and reservoir (if wildcat, so state) Wildcat County Apache

Distance, in miles, and direction from nearest town or post office
7 miles East of Navajo

Proposed depth: 1500'	Rotary or cable tools rotary	Approx. date work will start 9-20-68
Bond Status Amount \$5,000	Organization Report On file <input checked="" type="checkbox"/> Or attached	Filing Fee of \$35.00 Attached <input checked="" type="checkbox"/>

Remarks:

See Case #33 for exception to Rule 105

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.

Signature [Signature]

Date 9-19-68

Permit Number: 473
Approval Date: 9-19-68
Approved By: John V. Bannister

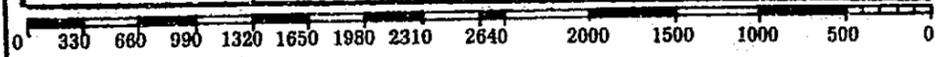
Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

Form No. 3

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

1. Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
3. All distances shown on the plat must be from the outer boundaries of the Section.
4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES NO
5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES NO If answer is "yes," Type of Consolidation _____
6. If the answer to question four is "no," list all the owners and their respective interests below:

Owner	Land Description
CERTIFICATION	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
<i>C. F. [Signature]</i>	
Name	
Position sole owner	
Company Crest Oil Company	
Date 9 19 68	
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	



PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
7"	17#	New J-55	surf	30'	circulate to surface	10
4 1/2"	9.5	New -55	surf	1390'	T.D. to 10'	50

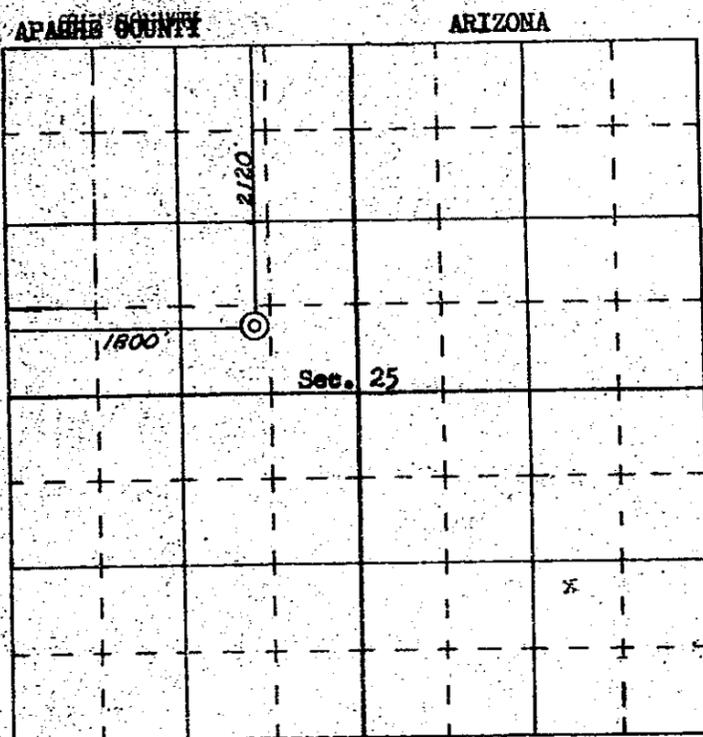
COMPANY CREST OIL COMPANY

LEASE CREST-ARIZONA HELIUM SANTA FE WELL NO. 8-X

SEC. 25, T. 20 NORTH, R. 27 EAST, G.&S.R.M.

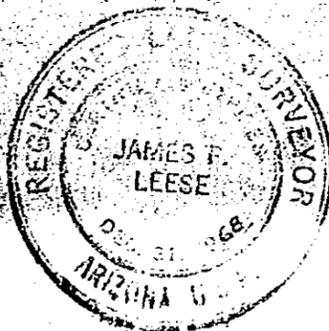
LOCATION 2120 feet from the North line and
1800 feet from the West line

ELEVATION 5801.0



SCALE—4 INCHES EQUALS 1 MILE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
FIELD NOTE OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPER-
VISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF.



SEAL:

James P. Leese
Registered Land Surveyor,
JAMES P. LEESE
Ariz. Reg. No. 1849

SURVEYED 2 September 1968



PERMIT TO DRILL

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

To: CREST OIL COMPANY
(OPERATOR)

to drill a well to be known as

CREST-ARIZ HELIUM #8X SANTA FE

(WELL NAME)

located 2120' FWL and 1800' FWL (SE/4NW/4)

Section 25 Township 20N Range 27E, Apache County, Arizona.

The NW/4 of said

Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 19th day of September, 1968.

160-acre spacing
Case 33, Order 34

OIL AND GAS CONSERVATION COMMISSION

By John Bonmeister
EXECUTIVE SECRETARY

PERMIT N^o 473

RECEIPT NO. 9555

API 02-001-20085

State of Arizona
Oil & Gas Conservation Commission

Permit to Drill

FORM NO. 27

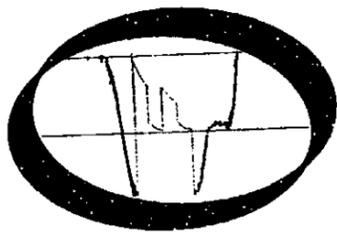
SAMPLES ARE REQUIRED

34

Formation Testing Service Report

CREST ARIZONA HELIUM SANTA FE X-8 2

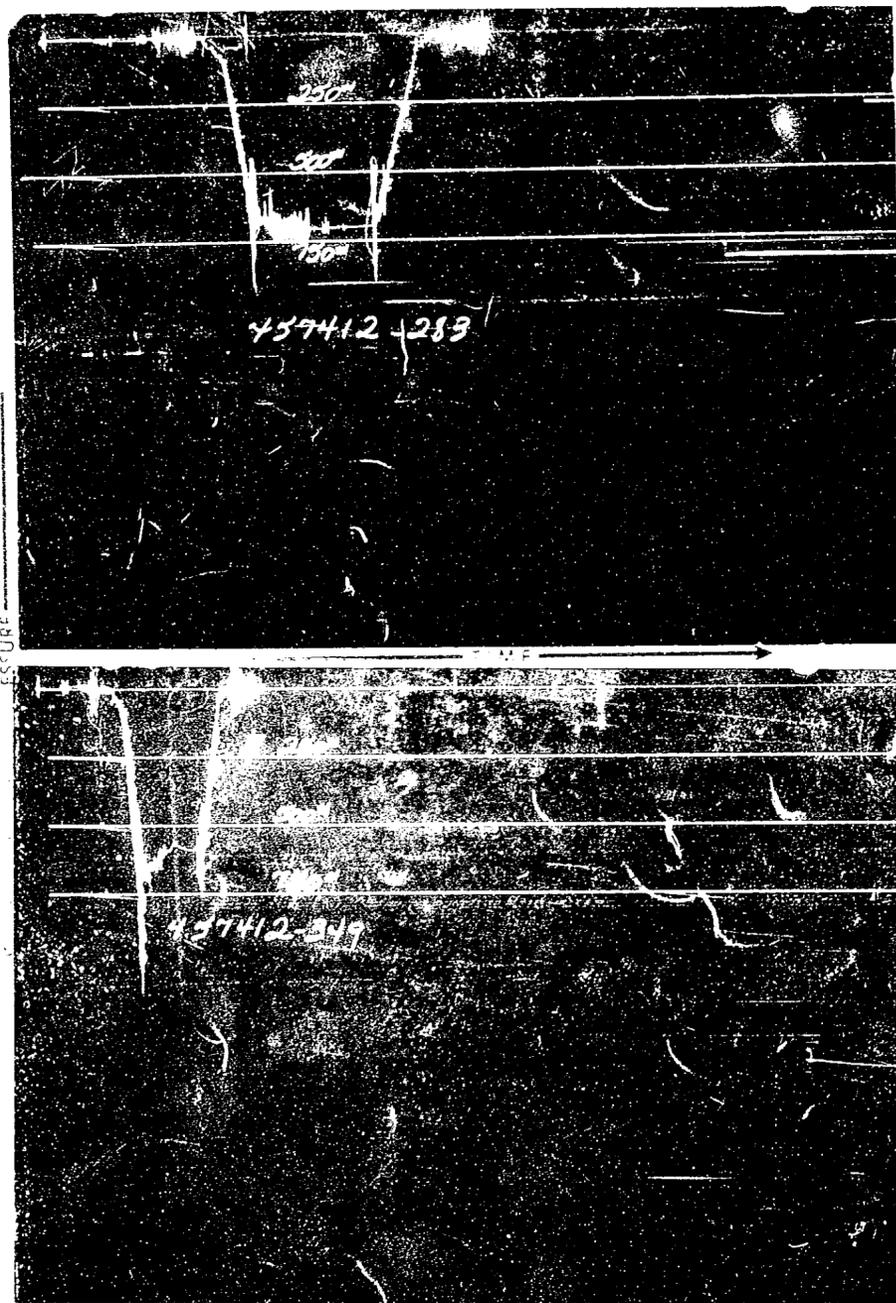
CREST OIL COMPANY



473



HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

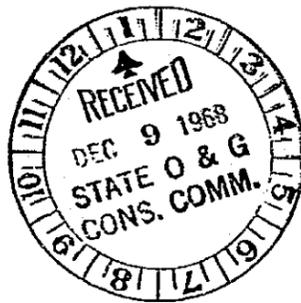
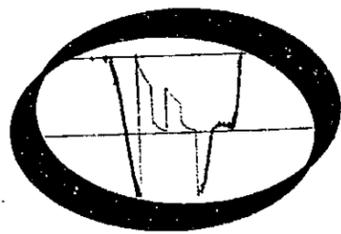


Each Horizontal Line Equal to 1000 p.s.i.

Flow Time	1st	Min.	2nd	Min.	Date	Ticket Number
Closed In Press. Time	1st	Min.	2nd	Min.	Kind of Job	Halliburton District
Pressure Readings	Field			Office Corrected	Tester	Witness
Depth Top Gauge	Ft.			Blanked Off	Drilling Contractor	Lease Name
BT P.R.D. No.	Hour Clock			Elevation	Top Packer	Well No.
Initial Hydro Mud Pressure				Total Depth	Bottom Packer	Test No.
Initial Closed in Pres.				Interval Tested	Formation Tested	Field Area
Initial Flow Pres.	1			Casing or Hole Size	Casing Top Perfs. Bot.	County
Final Flow Pres.	1			Surface Choke	Bottom Choke	Lease Owner, Company Name
Final Closed in Pres.				Size & Kind Drill Pipe	Drill Collars Above Tester	State
Final Hydro Mud Pressure				Mud Weight	Mud Viscosity	
Depth Cen. Gauge	Ft.			Temperature	F Est	Anchor Size ID OD
BT P.R.D. No.	Hour Clock			Depths Mea. From	F Actual	Depth of Tester Valve
Initial Hydro Mud Pres.				Cushion	TYPE	AMOUNT
Initial Closed in Pres.				Recovered	Feet of	Depth Back Pres. Valve
Initial Flow Pres.	1			Recovered	Feet of	Min. From Tester Valve
Final Flow Pres.	1			Recovered	Feet of	
Final Closed in Pres.				Recovered	Feet of	
Final Hydro Mud Pres.				Oil A.P.I. Gravity	Water Spec. Gravity	
Depth Bot. Gauge	Ft.			Gas Gravity	Surface Pressure	
BT P.R.D. No.	Hour Clock			Tool Opened	A.M. F.M.	Tool Closed
Initial Hydro Mud Pres.				Remarks		
Initial Closed in Pres.						
Initial Flow Pres.	1					
Final Flow Pres.	1					
Final Closed in Pres.						
Final Hydro Mud Pres.						

FORMATION TEST DATA

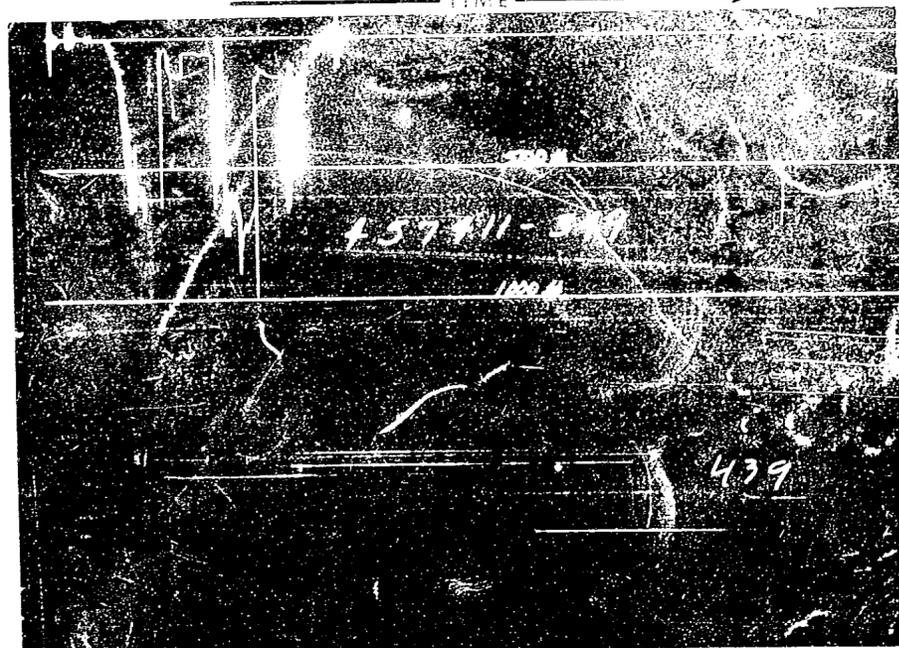
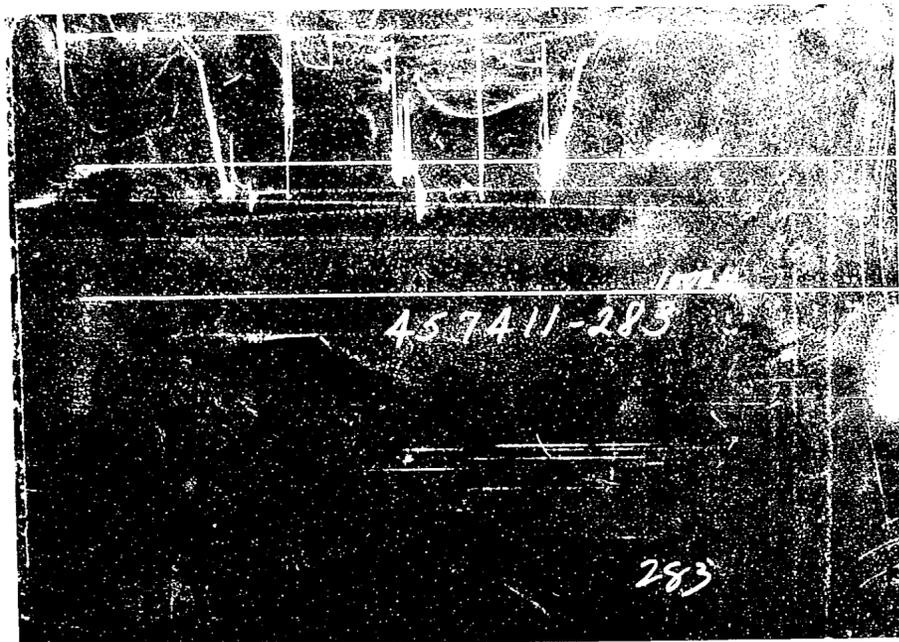
Formation Testing Service Report



473

HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

CREST-ARIZONA-HELIUM-SANTA FE 8X 1 CREST OIL COMPANY



Each Horizontal Line Equal to 1000 p.s.i.

Flow Time	1st	Min.	2nd	Min.	Date	Ticket Number	
Closed in Press. Time	1st	Min.	2nd	Min.	Kind of Job	Halliburton District	
Pressure Readings	Field		Office Corrected		Tester	Witness	
Depth Top Gauge	Ft.		Blanked Off		Drilling Contractor	Top Packer	
BT P.R.D. No.			Hour Clock		Elevation	Bottom Packer	
Initial Hydro Mud Pressure					Total Depth	Formation Tested	
Initial Closed in Pres.					Interval Tested	Casing Top Perfs. Bottom	
Initial Flow Pres.	1				Casing or Hole Size	Bottom Choke	
Final Flow Pres.	2				Surface Choke	Drill Collars Above Tester	
Final Closed in Pres.	1				Size & Kind Drill Pipe	Mud Viscosity	
Final Hydro Mud Pressure	2				Mud Weight	Mud Viscosity	
Depth Cen. Gauge	Ft.		Blanked Off		Temperature	F Est	Anchor Size ID & Length OD
BT P.R.D. No.			Hour Clock		Depths Mea. From	F Actual	X
Initial Hydro Mud Pres.					Cushion	Depth Back Pres. Valve	
Initial Closed in Pres.					Recovered	Feet of	
Initial Flow Pres.	1				Recovered	Feet of	
Final Flow Pres.	2				Recovered	Feet of	
Final Closed in Pres.	1				Recovered	Feet of	
Final Hydro Mud Pres.	2				Oil A.P.I. Gravity	Water Spec. Gravity	
Depth Bot. Gauge	Ft.		Blanked Off		Gas Gravity	Surface Pressure	
BT P.R.D. No.			Hour Clock		Tool Opened	A.M. P.M.	Tool Closed
Initial Hydro Mud Pres.					Remarks		
Initial Closed in Pres.							
Initial Flow Pres.	1						
Final Flow Pres.	2						
Final Closed in Pres.	1						
Final Hydro Mud Pres.	2						

FORMATION TEST DATA

Gauge No.		Depth		Clock		Ticket No.				
283		1156'		12 hour		457411				
First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure			
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	
P ₀	.000	23	.000		26	.000	30	.000		63
P ₁	.0146	24	.0198		104	.355*	52	.0204		118
P ₂	.0292	25	.0396		122	.525	63	.0408		126
P ₃	.0438	26	.0594		128			.0612		129
P ₄	.0584	26	.0792		131			.0816		131
P ₅	.0730	26	.0990		134			.1020		133
P ₆			.1188		136			.1224		134
P ₇			.1386		137			.1428		134
P ₈			.1584		137			.1632		135
P ₉			.1782		138			.1836		135
P ₁₀			.1980		139			.2040		136
Gauge No.		Depth		Clock		Ticket No.				
349		1206'		24 hour						
P ₀	.000	73	.000		44	.000	63	.000		143
P ₁	.007	59	.0096		109	.171*	65	.010		146
P ₂	.014	46	.0192		129	.257	143	.020		148
P ₃	.021	44	.0288		138			.030		150
P ₄	.028	44	.0384		143			.040		150
P ₅	.035	44	.0480		146			.050		151
P ₆			.0576		148			.060		152
P ₇			.0672		149			.070		152
P ₈			.0768		150			.080		152
P ₉			.0864		150			.090		152
P ₁₀			.0960		150			.100		152
Reading Interval		2		3		3		Minutes		
REMARKS:		*52 minutes - total 79 minutes.								

SPECIAL PRESSURE DATA

5

Each Horizontal Line Equal to 1000 p.s.i.

APACHE ARIZ HELIUM #8X SANT
SE NW 25-20N-27E, Apache

KNOW ALL MEN BY THESE PRESENTS

BOND SERIAL NO. 94-174784

That we: C. F. SWAIN, DBA: CREST OIL COMPANY

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

as principal, MARYLAND CASUALTY COMPANY and _____

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

as surety, are held and firmly bound unto the Oil and Gas Conservation Commission, State of Arizona, in the penal sum as indicated, lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents. The conditions of this obligation is that whereas the above bounden principal proposes to drill a well or wells for oil, gas, helium, other minerals, or for stratigraphic purposes in and upon the following described land situated within the State, to wit:

NORTHWEST QUARTER OF SECTION 25, TOWNSHIP 20N, RANGE 27E, APACHE COUNTY
(May be used as blanket bond or for single well)

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. Liability under this bond may not be terminated without written permission of this commission.

Penal sum of FIVE THOUSAND AND NO/100THS-----DOLLARS (\$5,000.00)

Witness our hands and seals, this 16TH day of SEPTEMBER, 1968

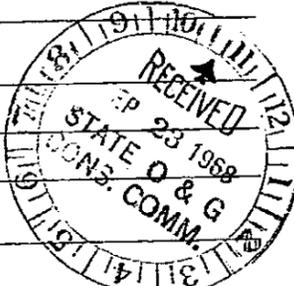
C. F. Swain
Principal

Witness our hands and seals, this 16TH day of SEPTEMBER, 1968

MARYLAND CASUALTY COMPANY
BY: Samuel E. E. Conklin
SAMUEL E. E. CONKLIN, ATTORNEY-IN-FACT

Surety, Resident Arizona Agent
(If issued in a state other than Arizona)

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



Approved 9-19-68
Date _____
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: John Kanner
Permit No. 473

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

CERTIFIED COPY

Know all Men by these Presents: That MARYLAND CASUALTY COMPANY, a corporation created by and existing under the laws of the State of Maryland, of Baltimore City, Maryland, in pursuance of the authority set forth in Section 12 of Article V of its By-laws, from which the following is a true extract, and which Section has not been amended nor rescinded:

"The President or any Vice-President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Corporation, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority."

does hereby nominate, constitute and appoint W. J. BUFFINGTON and SAMUEL E. E. CONKLIN, each with full power to act alone,

of PHOENIX State of ARIZONA its Attorney s-in-Fact to make, execute, seal, and deliver on its behalf as Surety, and as its act and deed, any and all bonds, recognizances, stipulations, undertakings, and other like instruments.

Such bonds, recognizances, stipulations, undertakings, or other like instruments shall be binding upon said Company as fully and to all intents and purposes as if such instruments had been duly executed and acknowledged and delivered by the authorized officers of the Company when duly executed by either one of the aforesaid attorneys in fact.

This instrument supersedes power of attorney granted W. J. Buffington and E. J. McKenna dated October 14, 1964.

In Witness Whereof, MARYLAND CASUALTY COMPANY has caused these presents to be executed in its name and on its behalf and its Corporate Seal to be hereunto affixed and attested by its officers, thereunto duly authorized, this 13th day of January, 1966, at Baltimore City, Maryland.

ATTEST: (CORPORATE SEAL) MARYLAND CASUALTY COMPANY

(Signed) Rose E. Lutz Assistant Secretary. By (Signed) Albert H. Walker Vice-President.

STATE OF MARYLAND } ss.
BALTIMORE CITY }



On this 13th day of January, A. D., 1966, before the subscriber, a Notary Public of the State of Maryland, in and for Baltimore City, duly commissioned and qualified, came

Albert H. Walker Vice-President, and Rose E. Lutz Assistant Secretary, of MARYLAND CASUALTY COMPANY, to me personally known, and known to be the officers described in, and who executed the preceding instrument; and they each acknowledged the execution of the same; and, being by me duly sworn, they severally and each for himself deposed and said that they respectively hold the offices in said Corporation as indicated, that the Seal affixed to the preceding instrument is the Corporate Seal of said Corporation, and that the said Corporate Seal, and their signatures as such officers, were duly affixed and subscribed to the said instrument pursuant to all due corporate authorization.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal, at Baltimore City, the day and year first above written.

(NOTARIAL SEAL) (Signed) Clagett R. Reimer Notary Public.

My commission expires July 1, 1967

CERTIFICATE

I, an Assistant Secretary of the Maryland Casualty Company, do hereby certify that I have compared the aforesaid copy of the Power of Attorney with the original now on file among the records of the Home Office of the Company and in my custody, and that the same is a full, true and correct copy, and that the Power of Attorney has not been revoked, amended or abridged, and is now in full force and effect.

Given under my hand as Assistant Secretary, and the Seal of the Company, at Baltimore City, Md., this

16TH day of SEPTEMBER, A. D., 1968

Clagett R. Reimer
Assistant Secretary.



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

February 17, 1978

Doris Swift
Bond Department
The Maryland
Suite 270-10 Broadway
St. Louis, Missouri 63102

Re: Crest Oil Company Maryland Casualty Bonds
Nos. 9278739, 94174782 and 94174784

Dear Ms. Swift:

Crest Oil Company has complied with all the rules of the Oil and Gas Conservation Commission on wells covered by the above referenced bonds. This letter is your authorization to cancel these bonds.

Very truly yours,

A handwritten signature in cursive script, appearing to read "W. E. Allen".

W. E. Allen
Director
Enforcement Section

WEA/vb

cc - Froemling Agency, Inc.
Crest Oil Company

C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618-462-5346

RECEIVED

FEB 16 1978

O & G CONS. COMM.

February 11, 1978

W. E. Allen
Director Enforcement Section
Oil and Gas Conservation Commission
1645 W. Jefferson Suite 420
Phoenix, Arizona 95007

Dear Mr. Allen:

Re: Wells drilled by Crest Oil Company & or
Operator designee Eastern Petroleum Co.,
in Apache Co., Arizona. See your letter
dated 1/3/78 to Maryland Casualty Co.,
with copy and footnote to C. F. Swain

As suggested in footnote of your letter captioned
above, I would like to have bonds released (Maryland Casualty
Company) as shown below.:

1. Maryland Casualty Bond #94-174782, covering a well drilled in SE-SE-25, 20N, 27E, Apache Co., Arizona. Permit No. 471, dated 9/19/68. (Photocopy enclosed) Plugged 1/20/75. (photocopy of plugging enclosed)
2. Maryland Casualty Bond #94-174784, covering a well drilled in NW/4 of Section 25, 20, 27E, Apache Co., Ariz.; Permit No. 473, dated 9/19/68. (Photocopy enclosed) Plugged 1/5/72. (photocopy of plugging enclosed)
3. Maryland Casualty Bond #92-787379, covering a Navajo Springs Unit well, Crest Santa Fe #7, Section 6, 19N-27E, Apache Co., Ariz. (NE/4) Permit No. 204, dated 8/7/62. (Photocopy enclosed) Plugged 10/12/77. (photocopy of plugging by Halliburton as furnished to Crest by Unit Operator, Eastern Pet. Co)

I also enclose a photocopy of a letter from my bonding agent, Froemling Agency, Inc., verifying that their records show the above bonds still active, and on which I have been paying the annual premiums.

Will very much appreciate it if you will write the Maryland Bond department as suggested in the Froemling letter and authorize release of the above bonds.

Sincerely yours,

C. F. Swain Crest Oil Company

473

Froemling Agency, Inc.



ALL LINES OF INSURANCE

3600 NAMEOKI ROAD - 2ND FLOOR
GRANITE CITY, ILLINOIS 62040
(618) 876-9090 OR 451-9902

January 24, 1978

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

Dear Mr. Swain:

In regard to your letter of January 20, 1978, we show the following bonds are still in force

- 1) Maryland Casualty Bond #94-174782
Southeast Quarter of Section 25,
Township 20 N, Range 27 E, Apache County, Arizona
(9/16/77 to 9/16/78)
- 2) Maryland Casualty Bond #94-174784
Northwest Quarter of Section 25,
Township 20 N, Range 27 E, Apache County, Arizona
(9/16/77 to 9/16/78)
- 3) Maryland Casualty Bond #92-787379
Sante Fe #7, Apache County, Arizona

Would suggest you have the Oil and Gas Conservation Commission contact:

Doris Swift
Bond Department
The Maryland
Suite 270-10 Broadway
St. Louis, Missouri 63102

Sincerely,

Donald K. Jaffke
Donald K. Jaffke

DKJ:cc

473

September 3, 1975

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

RE: Crest-Ariz Helium #8X S. F.	Crest-Ariz Helium #1 S. F.
SE/4, NW/4	SE/4, SE/4
Sec 25-T20N-R27E	Sec 25-T20N-R27E
Apache Co. Ariz.	Apache Co., Ariz.
Permit No. 473	Permit No. 471

Dear Dr. Swain

We have your letter of August 14, 1975 requesting release of the bond covering the above referenced wells.

The Crest 8X is eligible for release at the present time. The Crest #1 has been properly plugged, however the regulated dry hole marker has not been installed on this well the last time I checked.

I requested Mr. Fullop in April 1975 and again in June 1975 to have regulation dry hole markers placed on the wells that were recently plugged in this area. As of this date, he has completely ignored this request. Copies of the letters to Mr. Fullop are enclosed.

As quickly as these wells are in compliance with our rules and regulations, we will authorize release of the bond covering these wells.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/sl

Encls.

C.F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618-462-5346

August 14, 1975

RECEIVED

5-18

O & G CONS. COMM.

Mr. John Bannister, Executive Secretary
Arizona Oil & Gas Conservation Commission
8686 N. Central Suite 106
Phoenix, Arizona 85020

Re: Crest-Ariz Helium #8X S.F.
SE/4, NW/4
Sec 25-T20N-R27E
Apache Co., Ariz.
Permit No. 473

Crest-Ariz Helium #1 S.F.
SE/4, SE/4
Sec 25-T20N-R27E
Apache Co., Ariz.
Permit No. 471

Dear John:

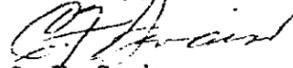
I would certainly like to close my files on the captioned wells. They have both been plugged, but I am still being billed by my insurance company for annual Bond renewal premiums.

The plugging was done by Eastern Petroleum Company as directed by Mr. Allen while Eastern was designated Operator of above captioned Section 25. Well #8X was plugged 1/5/72 and well #1,4/21/75, copies of plugging record enclosed.

Will you please look into this matter for me at your earliest convenience and advise me when the Maryland Casualty Company Bonds covering these wells will be released.

With best personal regards to you and yours,

Sincerely,


C. F. Swain
Crest Oil Company

CFS:fs

encs.



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

~~XXXXXXXXXXXX~~
PHOENIX, ARIZONA 85013

8686 N. Central, Suite 106
Phoenix, Arizona 85020

PHONE: (602) 271-5161

74
May 28
June 28

April 28, 1975

Mr. Henry Fullop
Eastern Petroleum Company
P. O. Box 291
Carmi, Illinois 62521

Re: Wells recently plugged by order of Commission

Dear Mr. Fullop:

We recently spot-checked a few of the wells that have been recently plugged to determine if the dry hole markers had been installed. On the six wells we checked, dry hole markers were on location. They were not permanently installed and neither did they have the required information. The only information on these markers were the section number, township and range, and in a few instances the permit number. As you know, the regulation marker is required to have the name of the operator, the state permit number, the well location by quarter/quarter, the numerical designation of the well and the type of lease. Copies of this rule are enclosed.

It will be appreciated if you have the correct dry hole marker permanently installed as quickly as possible.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rfb

Encs.

cc Jess Edwards

June 25, 1975

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

RE: Dry Hole Markers on Plugged
Wells in Navajo Springs area

Dear Mr. Fullop:

On April 25, 1975, I advised you that the majority of wells that you recently caused to be plugged do not have correct dry hole markers. A recent check confirmed that proper dry hole markers had still not - erected.

Please advise this Commission when we can reasonably expect you to have proper identification placed on these plugged wells.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/sl

cc - Mrs. Edwards

February 1, 1974

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

Re: Crest Arizona #8X
SE/NW Sec 25-T20N-R27E
Apache County, #473

Dear Dr. Swain:

At long last I was able to check on the above referenced well. Apparently this well has been plugged, however, the mud pit has never been filled. Until this pit is properly filled, the Commission will be unable to release the bond covering this well.

While checking on this location I noticed that a 55 gallon oil drum with half the head cut out had been buried on the original Santa Fe #8 location. The top of this half-full drum is at ground level and presents a hazard to stock as well as humans. For your own protection, I would advise that you have this drum filled to ground level.

You are aware that as of January 1, 1974, Western Helium is no longer taking gas from any wells in this area. Unless this area can be reactivated in the near future, it will be necessary for this Commission to order all wells plugged and abandoned. We just mentioned this for your information.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

47³

Registered mail receipt for letter - Dec 30, 1971

SENDER: Be sure to follow instructions on other side.

PLEASE FURNISH SERVICE(S) INDICATED BY CHECKED BLOCK(S)
(Additional charges required for these services)

Show to whom, date and address where delivered Deliver ONLY to addressee

RECEIPT

Number of packages: 1
Description of contents: [Handwritten signature]

Postmark: JAN 2 1972

H Permit 473

RECEIVED

JAN 07 1972

O & G CONS. COMM.

Office Of Attorney General

INTER-OFFICE MEMO

TO: Mr. W. E. Allen

FROM: Mr. John McGowan

SUBJECT: Eastern Petroleum Company

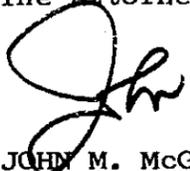
Date January 4, 1972

Dear Mr. Allen:

This is to acknowledge receipt of a copy of your letter to Mr. Fullop, dated December 30, 1971.

Sincerely,

GARY K. NELSON
The Attorney General


JOHN M. MCGOWAN, II
Special Assistant Attorney General

JMM:ell

RECEIVED

JAN 05 1972

O & G CONS. COMM.

473



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

December 30, 1971

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

Re: Crest Arizona Helium 8X Santa Fe
SE/NW Section 25-T20N-R27E
Our File #473

Dear Mr. Fullop:

Following our telephone conversation, this date, your Application to Drill 1-25, was received by mail. During our conversation, you informed me that you had plugged the 8X Well. However, since our records indicate this to be an open hole, I thought it best to discuss the issuing of this permit to drill your proposed 1-25 with Mr. Bannister.

In view of the fact that you plugged the 8X Well contrary to the Rules and Regulations of the Oil and Gas Conservation Commission, it was decided to withhold the issuance of a drilling permit for 1-25 Santa Fe Fee until you are in compliance with the Rules and Regulations. BE ADVISED NOT TO START DRILLING OPERATIONS ON THE 1-25 WELL UNTIL SUCH TIME AS A DRILLING PERMIT HAS BEEN ISSUED. Also be advised that any future plugging of wells that does not conform to our Rules and Regulations will be deemed unacceptable and the Commission will take necessary action to have the well reopened and plugged in conformance to the Rules and Regulations of the Oil and Gas Commission. Future plugging operations shall be witnessed by a representative of the Oil and Gas Commission.

At such time as we have received the Application to Plug, Form 9, and the Plugging Report, Form 10, on the 8X Well, we shall issue your Permit to Drill 1-25.

We have previously stressed the fact that neither the Commission nor its representatives has any desire to be difficult nor work any hardships on any operator. Our Rules and Regulations are based

Sent by registered mail

#473

Page 2
Mr. Henry Fullop
December 30, 1971

on certain laws enacted by the Arizona Legislature and signed into law by the Governor of the State. The time has come when the Commission must insist that you strictly adhere to the Rules that are applicable to your operations.

Very truly yours,



W. E. Allen, Director
Enforcement Section

WEA/rlb

Encs.

cc- Mr. John Mc Gowan
Attorney General's Office
Phoenix, Arizona



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

TELEPHONE 36-24104 • P. O. BOX 291 • CARM, ILLINOIS

April 21, 1971

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

Re: Santa Fe #1 - 27-21N-26E ⁵⁰⁴
Crest S.F. #1 - 25-20N-27E ⁴⁷¹
Crest S.F. #8-X - 25-20N-27E ⁴⁷³

Dear Mr. Allen:

Completion and other reports applicable to the above are enclosed.

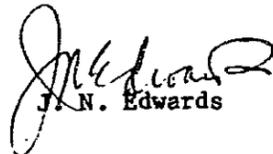
I am sorry of the delay. In case of the Crazy Creek well in Section 27 it took me sometime to get in touch with Mr. Lauth who has been working out of town for some weeks. We did not have a well sitter on this job, but Mr. Lauth kindly read the tops and provided other pertinent information.

In the case of the two test wells these reports furnish only the things Eastern did on the workovers. Other basic information previously furnished by Mr. Swain should be on file in your office.

I hope you find these satisfactory.

Yours very truly,

EASTERN PETROLEUM COMPANY


J. N. Edwards

JNE:sjn

Encs.

RECEIVED
APR 23 1971
O & G CONS. COMM.

473

April 13, 1971

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

Re: Crest-Arizona #1 Santa Fe
SE/4 SE/4 Sec. 25-T20N-R27E
Apache County
Our File #471

Crest-Arizona #8X
SE/4 NW/4 Sec. 25-T20N-R27E
Apache County
Our File #473

Dear Mr. Edwards:

Please refer to our letter of March 23, 1971 requesting a Form 4, Well Completion or Recompletion Report, on the above referenced wells. Please forward these reports as quickly as possible.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA:jd

March 23, 1971

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

Re: Crest-Arizona Helium #1 Santa Fe	Crest-Arizona Helium #8x
SE/4 SE/4 Sec. 25-T20N-R27E	SE/4 NE/4 Sec. 25-T20N-R27E
Apache County	Apache County
Our File #471	Our File #473

Dear Mr. Edwards:

We have this date received Form 25, Sundry Notices and Reports on Wells. Thank you for your complete compilation of the work performed on these wells. We notice that on Form 25 concerning Crest-Arizona Helium #1 Santa Fe it indicates the well was perforated from 1046-1060' with 25 shots per foot. We are assuming this to be a typographical error. Would you please confirm this assumption.

We also need Form 4, Well Completion or Recompletion Report, on these two wells. Rule 120, Paragraph B stipulates that this form must be filed when certain recompletion work is performed on a well. We will appreciate receiving these Form 4's at an early date.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA:jd
Enc.

March 8, 1971

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

Re: Crest-Arizona Helium #1 Santa Fe
SE/4 SE/4 Sec. 25-T20N-R27E
Apache County
Our File #471

Crest-Arizona Helium #8X Santa Fe
SE/4 NW/4 Sec. 25-T20N-R27E
Apache County
Our File #473

Dear Mr. Fullop:

Please submit a Form 25, Sundry Notices and Reports on Wells, indicating the present status of Crest-Arizona Helium #8X Santa Fe and also Crest-Arizona Helium #1 Santa Fe.

You had previously indicated by filing Form 25 your intentions of working over these wells. On a recent field trip, appearances indicated that each of the above wells had recently undergone workover activities.

It was also noticed that a number of your wells, both those on production and those being presently carried on our reports as temporarily abandoned are still without identifying signs. Please have these conditions corrected as quickly as possible.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA:jd
Enc.

DEPARTMENT OF LAW
OFFICE OF THE
Attorney General
STATE CAPITOL
Phoenix, Arizona 85007

GARY K. NELSON
THE ATTORNEY GENERAL
FRANK SAGARINO
CHIEF ASSISTANT ATTORNEY GENERAL

December 16, 1970

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

Dear Mr. Allen:

If you do not hear in a reasonable time from Eastern
Petroleum Company, Crest Oil Company and Western
Helium Corporation, please notify this office, and
we will write a follow-up letter.

Sincerely,

GARY K. NELSON
The Attorney General

John M. McGowan, II
JOHN M. MCGOWAN, II *lyell*
Special Assistant Attorney General

JMM:ell

RECEIVED
DEC 17 1970
O & G CONS. COMM.

WA

2171
473
234
110

473

WP

C.F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618-462-5346

December 15, 1970

110
201
171
473

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

Re: Your letter December 9, 1970
Identifying Well Signs
Navajo Springs Area

Dear Mr. Allen:

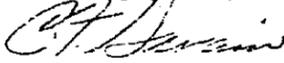
In paragraph two of your letter of December 9, you state,
"A good number of your wells have no identifying signs."

Crest has four (4) gas wells in the Navajo Springs Area:

- (All in Apache County)
- #2 Santa Fe.....Section 33-20N-27E, Unit Tract V, Navajo Springs Unit
- #7 Santa Fe.....Section 6-19N-27E, Unit Tract II, " " "
- Crest-Arizona Helium #1 Santa Fe...SE/4 SE/4 Section 25-20N-27E
- Crest-Arizona Helium #8-X Santa Fe...SE/4 NW/4 " "

In conjunction with a similar inspection with Eastern Petroleum Company personnel, these installations will be checked in the near future, and any obliterated or missing signs will be replaced.

Sincerely yours,



C. F. Swain
Crest Oil Company

cc: Eastern Petroleum Company
Attn: Henry Fullop, Pres.

RECEIVED

DEC 21 1970

O & G CONS. COMM.

473



EASTERN PETROLEUM CO.
EASTERN DRILLING, INC.

TELEPHONE 36-24104 · P. O. BOX 291 · CARMEL, ILLINOIS

RECEIVED

DEC 21 1970

O & G CONS. COMM.

December 15, 1970

473
471
234

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

Dear Mr. Allen:

This is relative to your letter dated December 10, 1970, concerning violations.

Item 1

The 8X well was drilled by Crest Oil Company some years ago and attempted completion was made in the Coconino sandstone with negative results. I have taken the full responsibility of a re-entry into this well and also the responsibility of not filing Form 25 at the time a rig was moved over the hole inasmuch as I did not know what the conditions and the situations were down hole until I had a chance to evaluate the problem after re-entry. You have been in the oil fields long enough to know that when you re-enter a hole drilled by another party you can expect to find almost anything and you cannot depend on the old completion records. Consequently, filling out and filing Form 25 before we have a chance to evaluate the problem could only call for a falsified report which I have no intention of doing. However, on December 11, 1970, I filled out Form 25 on the 8X well which is somewhat of an educated guess and as soon as I can evaluate all of my problems and can correct same I will file an amended report on said well. I am enclosing Form 25 on the Crest-Arizona Helium Santa Fe #1 with the understanding that I do not know at this filing what will be necessary to attempt a completion of this well.

Item 2

Mr. Allen, as concerning this violation, Western Helium has taken over a helium plant which has never been tested for its capabilities. Needless to say it has many internal problems which have to be corrected.

473

Mr. W. E. Allen
Page 2

December 15, 1970

These problems may or may not be solved, only time will tell. Our gas charts have been sent to an uninterested third party for calculations and upon receiving same we can then file all necessary forms to comply with State regulations. Until then we can only ask your indulgence.

Items 3 & 4

These forms will be filed as soon as the charts have been calculated and returned to this office. Please refer to letter dated November 30, 1970, which brought this to your attention. A copy is enclosed.

Item 5

Mr. Allen, the disappearance of the dry hole marker on the Ancon #21 is news to me. However, I will replace it one more time and you will be notified of its replacement accompanied by a colored photograph of same for your file. If you will make a field trip outside the limit of our present drilling program you will find many dry hole markers missing from their original position inasmuch as somebody has cut them off with a cutting torch and evidently needs the marker more than us or the State.

Item 6

I am sure Mr. Allen that you have repeatedly requested from us various forms to be submitted and repeatedly we have complied. Yes, we may be a little late or slow in doing so, however, we have tried in every way to conform to all regulations. Your letter sounds as though we are perpetual violators, outlaws, moonlighters or what have you. Mr. Allen, we are legitimate operators trying to develop the natural resources from under our leases as well as for the great State of Arizona. Mr. Allen, as of November 15 as reported in the Natural Resources Service, Eastern has four of the eight operations listed. Just a few other statistics, in a 40 township area, totalling one million acres, there has been 180 wells drilled. Eastern has drilled approximately 54 with 17 producers for an average of 31.4%. Eastern has been responsible for Crest Oil Company coming to the State of Arizona a number of years ago and spending money to develop the natural resources of that state. Eastern was also responsible for Western Helium coming to the State of Arizona and activating the old Arizona Helium plant with additional drilling expenditures also. Eastern is now responsible for a new joint venture program in the State of Arizona for a thirty well drilling program.

I have been dressed down by the President of Western Helium for placing that company in an embarrassing position with the state as to the filing of the proper forms mentioned in your letter. The next time you decide to dress me down or this company for not complying to the rules and regulations, I would appreciate you directing your correspondence

Mr. W. E. Allen
Page 3

December 15, 1970

directly to this office or to me personally. I think the publication of your letter to Mr. Halter and Mr. Swain was uncalled for.

Violation #8 needs some clarification. Three weeks ago I personally visited some thirty locations for any possible violations pertaining to dry hole markers, pits and so forth and found all of the holes in satisfactory condition. Please define specifically the holes you are referring to.

Yours very truly,

EASTERN PETROLEUM COMPANY

Henry Fullop

Henry Fullop

HF:sjn

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

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

Mr. John McGowan
Attorney General's Office
Phoenix, Arizona

C. F. SWAIN

W A

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

RECEIVED

DEC 16 1970

O & G CONS. COMM.

December 14, 1970

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

Re: Crest Arizona Helium #8-X Santa Fe
SE/4 NW/4 Section 25-T20N-R27E
Apache County Permit #473

Your letter dated December 8, 1970

Dear Mr. Allen:

Upon receipt of your letter of December 8th, I talked with Mr. Fullop, President of Eastern Petroleum Company as soon possible, and advised him of the contents of your letter, and that inasmuch as work had been commenced on the lease, you had advised me that we were in violation of Rule 120, and that it was necessary that we immediately submit two copies of Form 25 setting forth work done and anticipated to be done.

After checking with his Foreman, Mr. Fullop has prepared Form 25 outlining work program, has discussed same with me by phone, and as we are in agreement we have both executed the Form 25, enclosed herewith.

I assure you that neither Crest nor Eastern had any intention of violating the Commission rules. We are extremely anxious to get this lease into production as there have been many past disappointments and many thousands of dollars over the normal spent in attempting to do so, as well as several years of frustration in obtaining a market.

As with #8-X, the Crest Arizona Helium #1 Santa Fe will also need to be reworked in order to put it back into production. Accordingly Mr. Fullop will prepare another Form 25 attempting to set out what the program of work will be. I'm sure you can appreciate the fact that ^{until} a rig is moved over the hole and some testing done, it is pretty hard to state in advance what has to be done or will be done, whether it is the #8-X, #1 or any other well.

As Crest and Eastern are in agreement for a program of work and development in Section 25-T20N-R27E, I am forwarding to Eastern a "Designation Of Operator" Form executed by Crest as Lessee. After execution they will forward to you.

Sincerely yours,

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

cc: Henry Fullop
Eastern Petroleum Co.

473

471
472
234

December 11, 1970

Mr. John McGowan
Office of the Attorney General
159 Capitol Building
Phoenix, Arizona 85007

Dear Mr. McGowan:

Attached is a copy of a letter sent to the various offending operators.

The subject operators have been requested to submit the required information both by letter and verbally many times. However, they are seemingly reluctant to comply with our rules on their own initiative.

Should you need or desire any further information pertaining to this situation, please notify me.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.

473



OFFICE OF
Oil and Gas Conservation Commission

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

December 10, 1970

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

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

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

Re: Reports Required by the Oil and Gas Commission, State of
Arizona

Gentlemen:

This letter is being directed to all the above operators because it is felt that you have a common interest in the operations of the wells and helium processing plant in the Navajo Springs area.

This situation was also discussed with Mr. Halter, Western Helium Corporation, earlier today by telephone.

Enumerated below are a number of violations that are occurring or have occurred in the past that affect in some manner all of you:

1. Eastern Petroleum has re-entered Crest Arizona Helium #8X Santa Fe Fee without obtaining permission of the Oil and Gas Commission. This situation is covered by Rule 120.
2. Eastern Petroleum is making deliveries to and Western Helium is accepting these deliveries without the filing of Form 8 in compliance with Rule 801. Neither has Form 22, Request for Gas Allowable, been submitted for the producing wells.

473
234
471

473

Page 2
December 10, 1970
Crest Oil Company
Eastern Petroleum Company
Western Helium Corporation

3. Western Helium has failed to timely file Forms 19, Gas Purchasers Monthly Report, and Forms 23, Purchasers Gas Nominations.
4. Eastern Petroleum has of this date failed to file Form 20, Producers Report of Gas Production.
5. The dry hole marker on the Eastern Ancon #21 has apparently been removed.
6. It has been necessary to repeatedly request the various forms that are required to be submitted to the Commission.
7. Very few wells have identifying signs.
8. Some wells reported plugged and abandoned still have open pits and pipe and debris on the location.

Crest #1 has been called previously to the attention of Dr. Swain.

You, as operators, of oil and/or gas properties within the State of Arizona are familiar with the rules and regulations as established by the Commission and are expected to abide by said rules and regulations. Our files contain many requests for forms that should be submitted in a routine manner. Each month it is necessary that some of you be reminded to submit Forms 25, Sundry Notices and Reports on Wells, for shut in wells. This is necessary in spite of the many letters and reminders that have been sent you regarding this particular situation.

This Commission has no desire to cause any operator unnecessary inconvenience or hardship. We do have rules and regulations that must be adhered to; and, we must insist that you abide by these rules.

This office, without further notification, will expect the above operators to be in full compliance with any and all rules and

Page 3
December 10, 1970
Crest Oil Company
Eastern Petroleum Company
Western Helium Corporation

regulations of the Commission by January 8, 1971. Also, please furnish an explanation of the purpose of the removal of the dry hole marker on the Eastern Ancon #21; and, have this marker replaced before the above mentioned compliance date. Should you not be in compliance with all the rules and regulations, this situation will be referred to the Attorney General for further handling under Arizona Revised Statutes, Section 27-524 and 27-527.

In the future notify this office at least twenty-four hours prior to the actual plugging operations in order that we may have a representative to witness the plugging of the well.

Should you have any questions regarding any of the above, please notify me.

Enclosed are copies of the Rules and Regulations of the Oil and Gas Conservation Commission.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.

cc: Mr. Henry Fullop, Eastern Petroleum Company, Carmi, Illinois
Mr. J. N. Edwards, Scottsdale, Arizona
Mr. Thoureen, Western Helium Corporation, Scottsdale, Arizona

Certified No. 231796 - J. N. Edwards, Scottsdale, Arizona
" " 231797 - Dr. C. F. Swain, Alton, Illinois
" " 231798 - Mr. L. Halter, Scottsdale, Arizona
" " 231803 - Mr. Henry Fullop, Carmi, Illinois
" " 231804 - Mr. O. R. Thoureen, Scottsdale, Arizona

cc; Mr. John McGowan, Attorney General's Office, Phoenix

473

December 11, 1970

Mr. John McGowan
Office of the Attorney General
159 Capitol Building
Phoenix, Arizona 85007

Dear Mr. McGowan:

Attached is a copy of a letter sent to the various offending operators.

The subject operators have been requested to submit the required information both by letter and verbally many times. However, they are seemingly reluctant to comply with our rules on their own initiative.

Should you need or desire any further information pertaining to this situation, please notify me.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.

473



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

December 10, 1970

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

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

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

Re: Reports Required by the Oil and Gas Commission, State of
Arizona

Gentlemen:

This letter is being directed to all the above operators because it is felt that you have a common interest in the operations of the wells and helium processing plant in the Navajo Springs area.

This situation was also discussed with Mr. Halter, Western Helium Corporation, earlier today by telephone.

Enumerated below are a number of violations that are occurring or have occurred in the past that affect in some manner all of you:

1. Eastern Petroleum has re-entered Crest Arizona Helium #8X Santa Fe Fee without obtaining permission of the Oil and Gas Commission. This situation is covered by Rule 120.
2. Eastern Petroleum is making deliveries to and Western Helium is accepting these deliveries without the filing of Form 8 in compliance with Rule 801. Neither has Form 22, Request for Gas Allowable, been submitted for the producing wells.

473

Page 2
December 10, 1970
Crest Oil Company
Eastern Petroleum Company
Western Helium Corporation

3. Western Helium has failed to timely file Forms 19, Gas Purchasers Monthly Report, and Forms 23, Purchasers Gas Nominations.
4. Eastern Petroleum has of this date failed to file Form 20, Producers Report of Gas Production.
5. The dry hole marker on the Eastern Ancon #21 has apparently been removed.
6. It has been necessary to repeatedly request the various forms that are required to be submitted to the Commission.
7. Very few wells have identifying signs.
8. Some wells reported plugged and abandoned still have open pits and pipe and debris on the location.

Crest #1 has been called previously to the attention of Dr. Swain.

You, as operators, of oil and/or gas properties within the State of Arizona are familiar with the rules and regulations as established by the Commission and are expected to abide by said rules and regulations. Our files contain many requests for forms that should be submitted in a routine manner. Each month it is necessary that that some of you be reminded to submit Forms 25, Sundry Notices and Reports on Wells, for shut in wells. This is necessary in spite of the many letters and reminders that have been sent you regarding this particular situation.

This Commission has no desire to cause any operator unnecessary inconvenience or hardship. We do have rules and regulations that must be adhered to; and, we must insist that you abide by these rules.

This office, without further notification, will expect the above operators to be in full compliance with any and all rules and

Page 3
December 10, 1970
Crest Oil Company
Eastern Petroleum Company
Western Helium Corporation

regulations of the Commission by January 8, 1971. Also, please furnish an explanation of the purpose of the removal of the dry hole marker on the Eastern Ancon #21; and, have this marker replaced before the above mentioned compliance date. Should you not be in compliance with all the rules and regulations, this situation will be referred to the Attorney General for further handling under Arizona Revised Statutes, Section 27-524 and 27-527.

In the future notify this office at least twenty-four hours prior to the actual plugging operations in order that we may have a representative to witness the plugging of the well.

Should you have any questions regarding any of the above, please notify me.

Enclosed are copies of the Rules and Regulations of the Oil and Gas Conservation Commission.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.

cc: Mr. Henry Fullop, Eastern Petroleum Company, Carmi, Illinois
Mr. J. N. Edwards, Scottsdale, Arizona
Mr. Thoureen, Western Helium Corporation, Scottsdale, Arizona

Certified No. 231796 - J. N. Edwards, Scottsdale, Arizona
" " 231797 - Dr. C. F. Swain, Alton, Illinois
" " 231798 - Mr. L. Halter, Scottsdale, Arizona
" " 231803 - Mr. Henry Fullop, Carmi, Illinois
" " 231804 - Mr. O. R. Thoureen, Scottsdale, Arizona

cc; Mr. John McGowan, Attorney General's Office, Phoenix

December 8, 1970

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

Re: Crest Arizona Helium #8-X Santa Fe
SE/4 NW/4 Section 25-T20N-R27E
Apache County
Our File #473

Dear Dr. Swain:

On December 7, 1970, we received in this office Form 25, Sundry Notices and Reports on Wells. This form was prepared in your office on December 3, 1970. Information on the form indicated the well shut-in and awaiting market.

On December 3, 1970, I was at this location. Eastern Petroleum Company's rig was rigged up on the well; and, according to Tony Schneider the foreman in charge, the well was being re-entered to perform various recompletion attempts, reperforating and testing among other things.

As you know, Rule 120 of the Oil and Gas Conservation Commission of the State of Arizona specifically forbids work of this nature without prior approval of the Commission. (A copy of this rule is enclosed.) Form 25 is to be used in requesting this permission. A copy of ARS Section 27-527 is also enclosed for your information.

Rather than to order operations halted on this well, it was my thought that perhaps Form 25 had been submitted and had not been received when I left the office to visit your lease.

It is imperative that Form 25 be submitted, two copies, to this

December 8, 1970
Page 2
Dr. C. F. Swain

office immediately detailing all anticipated work. In the future
please abide by the Rules and Regulations as established by the
Oil and Gas Commission under the laws of the State of Arizona.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.

C. F. SWAIN

WA

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618-462-5346

December 3, 1970

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

Crest-Arizona Helium #1 Santa Fe
SE/4 SE/4 Section 25-20N-27E
Apache County
Permit #471

Crest-Arizona Helium #8-X Santa Fe
SE/4 NW/4 Section 25-20N-27E
Apache County
Permit #473

Dear Mr. Allen:

Enclosed herewith, please find Form 25 for each of above wells,
reflecting their shut-in status for the month of November 1970.

Sincerely yours,



C. F. Swain
Crest Oil Company

CFS:fs

RECEIVED

DEC 7 1970

O & G CONS. COMM.

C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618-462-5346

WA

November 10, 1970

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

Crest-Arizona Helium #1 Santa Fe
SE/4 SE/4 Section 25-20N-27E
Apache County
Permit #471

Crest-Arizona Helium #8-X Santa Fe
SE/4 NW/4 Section 25-20N-27E
Apache County
Permit #473

Dear Mr. Allen:

Enclose please find Form 25 for each of above wells, reflecting their shut-in status for the month of October 1970.

Sincerely yours,

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

C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618 462 5343

WA

October 8, 1970

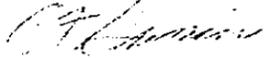
W. E. Allen
Director Of Enforcement Section
Oil and Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Re: Crest-Arizona Helium #1 Santa Fe SE/4 SE/4 Section 25-20N-27E Apache County Permit #471
Crest-Arizona Helium #8-X Santa Fe SE/4 NW/4 Section 25-20N-27E Apache County Permit #473

Dear Mr. Allen:

Enclosed please find 1 Form #25 for each of above wells, reflecting their shut-in status for the month of September 1970.

Sincerely yours,



C. F. Swain
Crest Oil Company



C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618-462-5346

September 8, 1970

W. E. Allen
Director Of Enforcement Section
Oil and Gas Conservation Commission
1624 W. Adams Rm 202
Phoenix, Arizona 85007

Dear Mr. Allen:

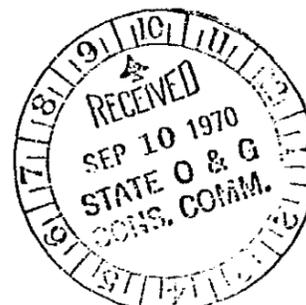
Re: Crest-Arizona Helium #1 Santa Fe
SE/4 SE/4 Section 25-T20N-R27E
Apache County
Permit #471

Crest Arizona Helium #8-X Santa Fe
SE/4 NW/4 Section 25-20N-27E
Apache County
Permit #473

Enclosed please find 1 Form #25 for each of above wells, reflecting their shut-in status for the month of August 1970.

Sincerely yours,

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



August 25, 1970

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

Re: Crest-Arizona Helium #1 Santa Fe
SE/4 SE/4 Sec. 25-T20N-R27E
Apache County
Our File #471

Crest-Arizona Helium #8X Santa Fe
SE/4 NW/4 Sec. 25-T20N-R27E
Apache County
Our File #473

Dear Dr. Swain:

As of this date we haven't received Form #25, Sundry Notices and Reports on Wells, for the month of July, 1970. Please forward this report to this office at your earliest convenience.

As you well know, this Form #25 is required by this Commission each month. In the future please have these reports prepared and sent to this office on a regular basis.

Very truly yours,

W. E. Allen
Director of Enforcement Section

WEA:jd
Enc.

August 25, 1970

Dr. C. F. Swain
Crest Oil Company
P. O. Box 37
Alton, Illinois 62002

Re: Crest-Arizona Helium #1 Santa Fe
SE/4 SE/4 Sec. 25-T20N-R27E
Apache County
Our File #471

Crest-Arizona Helium #8X Santa Fe
SE/4 NW/4 Sec. 25-T20N-R27E
Apache County
Our File #473

Dear Dr. Swain:

As of this date we haven't received Form #25, Sundry Notices and Reports on Wells, for the month of July, 1970. Please forward this report to this office at your earliest convenience.

As you well know, this Form #25 is required by this Commission each month. In the future please have these reports prepared and sent to this office on a regular basis.

Very truly yours,

W. E. Allen
Director of Enforcement Section

WEA:jd
Enc.

July 15, 1970

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

Re: Crest-Arizona Helium #1 Santa Fe
SE/4 SE/4 Sec. 25-T20N-R27E
Apache County
Our File #471

Crest-Arizona Helium #8X Santa Fe
SE/4 NW/4 Sec. 25-T20N-R27E
Apache County
Our File #473

Dear Dr. Swain:

As of this date we haven't received Form #25, Sundry
Notices and Reports on Wells, for the month of June, 1970.
Please forward this report to this office at your earliest
convenience.

Sincerely,

W. E. Allen
Director of Enforcement Section

WEA:jd
Enc.

May 13, 1970

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

Re: Crest-Ariz #8X Santa Fe Crest-Ariz #1 Santa Fe
SE/4 NW/4 Sec. 25-T20N-R27E SE/4 SE/4 Sec. 25-T20N-R27E
Apache County, Arizona Apache County, Arizona
Our File #473 Our File #471

Dear Dr. Swain:

Will you please submit a Form 25 showing the two captioned wells as shut in for the month of April. Again I remind you that as long as these wells are called shut in these forms must be sent in monthly. The only other alternative is to put these wells on temporary abandoned status. However, in view of Eastern's hopes to put these wells back on production, I would suggest that you continue them as shut in and submit your Form 25 reports the first of each month showing the wells as being shut in. Your cooperation will be appreciated.

Sincerely,

John Bannister
Executive Secretary

JB:jd

C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618-462-5346

March 12, 1970

John Bannister, Exec Sec'y
Oil and Gas Conservation Commission
1624 West Adams Rm 202
Phoenix, Arizona 85007

Dear Mr. Bannister:

Enclosed herewith please find Forms No. 25 for the month of March 1970 covering the status of Crest-Arizona Helium #1 and #8-X Santa Fe wells in Section 25-20N-27E Apache County.

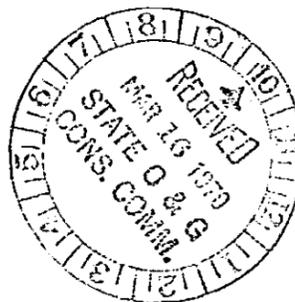
If and when the Arizona Helium Corporation plant resumes operation, either under their own reorganization or by some successor Company, we will undoubtedly put these wells back on production, and I will then resume the filing of the monthly Form No. 16 Producers Report, as suggested in your letter of March 3rd.

Sincerely yours,



C. F. Swain
Crest Oil Company

CFS:fs



473

March 3, 1970

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

Re: Crest-Ariz #8X Santa Fe
SE/4 NW/4 Sec. 25
T20N, R27E, G & SRM
Apache County
Our Permit #473

Crest-Ariz #1 Santa Fe
SE/4 SE/4 Sec. 25
T20N, R27E, G & SRM
Apache County
Our Permit #471

Dear Dr. Swain:

Inasmuch as the captioned wells are not now producing and apparently will not produce until such time as Arizona Helium Plant may go on stream, it is my suggestion that you file with this office monthly a Form 25 (enclosed) on each well. Note thereon that these wells are capable of production but are currently shut in due to lack of market. In this manner we can then do without your filing our Form 16, Producers Report, each month until such time as the wells do actually go on production. I believe this will save both you and I considerable work. Inasmuch as we have been carrying the #1 Santa Fe on our Monthly Production Report, we will report it one final time indicating that it will be picked up when it again goes into production. Should you have any questions, please advise.

Sincerely,

John Bannister
Executive Secretary

JB:jd
Enc.

February 18, 1970

Mr. Arthur Remian
2723 N. Ridgeway
Chicago, Illinois 60647

Re: Crest-Arizona Helium 8X Santa Fe
SE/4 NW/4 Sec. 25, T20N, R27E,
Apache County, Arizona.
Our File 473

Dear Mr. Remian:

Thank you for your letter of February 14, 1970 concerning
the captioned well.

Arizona Helium Corporation is not now in production. Shortly
after the first of the year this corporation took bankruptcy
under Chapter 10 and is currently in the process of reorganiza-
tion. At this time we have no way of anticipating the outcome
of this action.

During 1968 there was spasmodic production, small in amount,
primarily used for purposes of testing operations. To the
best of my knowledge, only one truckload of helium has been
sold from this plant and that was during 1967, I believe.

I am sorry that I am unable to give you more encouraging news,
hosever, if the reorganization of this company is successful,
I believe we can develop an additional market for helium
within this area.

If this office can be of further help, please advise.

Sincerely,

John Bannister
Executive Secretary

/vb

2723 N. Ridgeway
Chicago, Ill. 60647
February 14, 1970

OIL & GAS CONSERVATION COMM.
3500 N. Central Suite 221
Phoenix 12, Arizona

RE: Crest Oil Co.
Santa Fe #8, Apache Cty, Ariz.

Gentlemen:

Approximately one year ago I was informed that in cooperation with Arizona Helium Corp., Crest Oil Co. was ready for production and marketing.

Since that time there has been no further word.

Could you possibly advise me of the status of this operation?

Thank you.

Sincerely yours,

Art Remian
Arthur Remian



C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

AREA CODE 618-462-5346

December 10, 1969

John Bamister, Exec Secretary
Oil & Gas Conservation Commission
1624 West Adams Bm 202
Phoenix, Arizona 85007

Dear John:

Even though every one knows the Arizona Helium Corporation plant has been shut down, I thought you might prefer to have the Form No. 16 filled out for your files, so I am listing them all as shut-in with no gas produced nor sold.

I will continue to send the Form 16 unless you advise me otherwise.

Thank you for your attention to the releasing of the Bonds on the Crest-ariz #1 and the Crest Spurlock #1.

With best wishes for a joyful Holiday Season,

Sincerely yours,

C. F. Swain

C. F. Swain
Crest Oil Company

473



X-WAJA'S
SPRINGS

CREST OIL COMPANY

May 21, 1969

James A. Lambert, Adm Asst
Oil and Gas Conservation Commission
1024 W. Adams Rm 202
Phoenix, Arizona 85007

Re: Filing of Form #16, covering 1st production
To Arizona Helium Corporation, Navajo, Ariz.

Dear Mr. Lambert:

94

471

In response to your letter of May 19th, enclosed please find our report covering first production from Section 25-20N-27E, Apache Co., Arizona.

I have been somewhat in doubt as to whether Crest or Eastern should report ^{on} sales to Arizona Helium from Navajo Springs Unit as per our previous correspondence.

Inasmuch as the Unit Operator has apparently reversed his position from his letter of September 11, 1968 addressed to Richard McDonald, and has directed Arizona Helium through its production Mgr Robert MacTough to account for gas sales from the Unit (Well 35) to Eastern, by correspondence dated May 16th, 21, & 23, 1969, and has set forth in detail percentages of ownership and manner of distribution, I am of the opinion it is to the best interest of all concerned not to interfere or dissent and further complicate matters.

Therefore pending our accountant's review of the percentages of ownership as worked out by Unit Operator, Crest agrees to the suggested procedure concerning sales of gas from #35 to Arizona Helium Corporation.

473 - 263

Concerning the Crest Arizona Helium #8-X Santa Fe, it has not yet been made clear to me why the well is not producing, what steps have been taken to produce it, or what further measures are contemplated. Since no charts were submitted showing delivery of gas, and no gas was shown as produced from #8-X on Form #19, I have shown ^{the well} as Shut-in and no gas produced, on Form No. 16. Am requesting specific information by letter to Mr. MacTough, Production Mgr., this date.

Sincerely yours,

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

CFS:fs

473

C.F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

May 8, 1969

James A. Lambert, Adm Asst.
Oil and Gas Conservation Commission
1624 West Adams Rm 202
Phoenix, Arizona 85007

Dear Mr. Lambert:

Thank you for your letter of May 5, in answer to my letter written April 30, in which I requested your opinion on matters having to do with Crest's sale of gas from the Navajo Springs Unit to Arizona Helium Corporation.

I have since found my copy of the letter written September 11, 1968 by Mr. Fullop, Unit Operator, to Mr. McDonald of Arizona Helium Corporation, which clarifys the situation in my mind considerably. Thank you for the duplicate copy.

I enclose herewith a copy of the Gas Sales Contract executed by J. F. Schlafly, C. F. Swain, and R. H. McDonald.

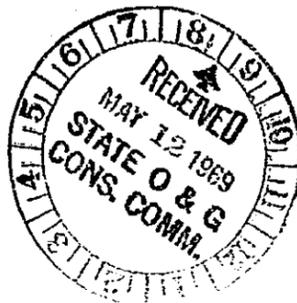
Sincerely yours,

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

CFS:fs

471

473 L



*in Navajo Springs Unit File
(Case 15)*

X-471
X-chears
X-Lambert

May 5, 1969

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

Dear Dr. Swain:

I have studied your letter dated April 30, 1969. It is our feeling that the Unit Agreement which you signed is the controlling instrument; and, that your dealings perforce must be with the Unit operator.

I call attention to a letter addressed to Richard McDonald, Arizona Helium Corporation, dated September 11, 1968. This letter was written over the signature of Henry Fullop, Chairman, who acted on behalf of Eastern Petroleum Company, the Unit operator. This letter appears to me to authorize Arizona Helium to pay Crest directly. This Commission is not in position to interfere in the internal activities as set out in the plan of Unitization.

Please furnish us a copy of the Gas Sales Contract.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf
Enc.

P. S. We enclose a photocopy of the aforementioned letter to Mr. McDonald should your copy have been lost.



September 11, 1968

Mr. Richard McDonald
Arizona Helium Corp.
P. O. Box 14427
Phoenix, Arizona 85012

Dear Mr. McDonald:

File →

Crest Oil and Schlafly have been authorized by the Operating Committee, Navajo Springs Unit, to take in kind their proportionate part of the current monthly production of helium bearing gas from Navajo Springs.

As purchaser you are authorized to do those things necessary to take delivery, and in a manner that will not interfere with present operations. Further, Santa Fe Well No. 35 in Section 27-20N-27E has been made available for this purpose. It should be understood the Unit shall not bear any cost or expense of hooking up or laying lines to this well or of operations.

The current monthly authorized production from the Unit is 12,500 MCF. When you are on stream this quantity is to be divided and delivered in the following manner:

Arizona Helium Corp.	16.026% - 2,003 MCF
Kerr-McGee Corporation	83.974% - 10,497 MCF
Crest Oil Co. Ownership	8.552% of Unit
J. F. Schlafly Ownership	7.474% of Unit
	16.026%

You are to pay these owners direct for the entire amount delivered. They will, in turn, be responsible for timely payments to their royalty owner and to overriding royalty owners, if any, and to other owners, if any, not reflected in Division Orders or other public record.

Records - The Unit Operator, Eastern, is charged with the responsibility of keeping true and accurate records of all purchases and furnishing monthly reports of operations and production and pipe

473

Mr. Richard McDonald
Page 2

September 11, 1968

line runs to Lessees. Therefore, it is most important that all recording charts be forwarded to this office for audit. Same procedure will apply to Kerr-McGee.

Since both purchasers from the Unit are charged with keeping their deliveries in line with the percentages and quantities set forth above it might be well to correlate your activities insofar as it is possible to do so. Over and under production will be adjusted periodically.

During the course of hookup, operations, etc. it is realized there might be problems. These will be dealt with as they arise. Please keep us informed of all progress.

Yours very truly,

EASTERN PETROLEUM COMPANY
UNIT OPERATOR

By

Henry J. Fullop
Chairman

HF:sju

cc: Mr. John I. Fisher
Kerr-McGee Corporation
Kerr-McGee Building
Oklahoma City, Oklahoma

Plant Superintendent
Kerr-McGee Corporation
Navajo, Arizona

Mr. P. K. Smith
Kerr-McGee Corporation
Kerr-McGee Building
Oklahoma City, Oklahoma

Mr. William R. Dickinson, Jr.
120 West Adams, Room 2300
Chicago, Illinois 60603

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

Mr. J. F. Schlafly
First Nat'l. Bank Bldg.
Alton, Illinois

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



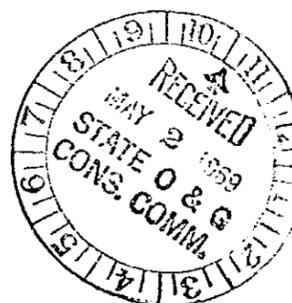
C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

April 30, 1969



James A. Lambert, Adm Asst
Oil and Gas Conservation Commission
1624 West Adams Room 202
Phoenix, Arizona 85007

Dear Mr. Lambert:

Thank you for sending the Forms #16 and the sample photocopy of Eastern's February report on the Navajo Springs Unit.

Crest has a contract with Arizona Helium Corporation (Same contract is entered into and executed by J. F. Schlafly of this City), and since we are taking our gas "in kind" from the Navajo Springs Unit, we have made arrangements with Arizona Helium Corporation to account to us monthly and to pay Crest directly for said gas purchased.

When our gas sales contract with the Kerr-McGee Corporation was in effect, we were paid directly by Kerr-McGee for the percentage of Unit gas assigned to the #7 well, whereas the percentage of gas assigned to the #2 well was accounted for by Kerr-McGee through the Unit Operator. Just why this set-up was made I really don't know, but as no one objected that is the way it was continued until the cancellation of the contract.

This system from the beginning was very unsatisfactory from bookkeeping standpoints both in Eastern's office and Crest's office. So Crest definitely prefers to account for the gas taken in kind from the Unit, and to do so from the beginning of production. This will avoid the previously objectionable double records keeping.

Do you see any objections to Crest being paid directly for all gas taken and in turn accounting to all interested parties? Do you need to be furnished with a copy of the Gas Sales Contract?

I will appreciate your thorough consideration of this matter and your comments and suggestions concerning same.

Sincerely yours,

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

471-x
473

CFS:fs

C.F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

April 16, 1969

James A. Lambert, Adm Asst
Oil & Gas Conservation Commission
1624 W. Adams Rm 202
Phoenix, Arizona 85007

Re: Form #8, Sec 25-20N-27E, Apache Co., Ariz.

Dear Mr. Lambert:

In response to your letter written April 11, 1969,
I enclose herewith executed Form #8 in duplicate. —

I have been informed via telephone conversation with
Robert B. MacTough, Arizona Helium Corporation, that their new
extraction plant at Navajo, Arizona was put on stream 1 A. M.
Thursday 4/10/69. I am requesting confirmation and some of the
details of operation by letter. (Copy of my letter requesting
confirmation enclosed)

Sincerely yours,

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

*Returned for signature
4/17/69
94*
*Recd. 4/21/69
94*

CFS:fs

enc. 2



C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

April 16, 1969

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

Attention: Robert B. MacTough

Dear Bob:

94
Although we discussed over the phone last Friday that the new plant at Navajo has been placed on stream, would you please write me a letter of confirmation for my files, and in order that I will have authority to notify others; answering the following questions:

1. Date and time on stream.
2. Initial volume of field gas being processed and stored.
3. Percentage of purity of Helium.
4. Names of wells turned into the line.
5. Are all wells individually metered?
6. Is the plant operating satisfactorily....what volumes are now being processed and stored.
7. Any additional pertinent data you may have and care to add.

Thank you very much.

Sincerely yours,

C. F. Swain

C. F. Swain
Crest Oil Company

cfs:fs



X-Lambert
X-Chloro

April 15, 1969

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

Re: Crest-Ariz Helium #1 Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 SE/4
Apache County, Arizona
Permit #471 X

Crest-Ariz Helium #8X Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #473

Dear Dr. Swain:

Enclosed are our Forms #16. Please complete these monthly.

We enclose a photocopy of a report submitted by Eastern covering their February production. You may use this as a model to assist you in completion of your forms.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf

Enc.

473

X - Cheno Log
X - Lambert

April 11, 1969

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

Re: Crest-Ariz Helium #1 Santa Fe Crest-Ariz Helium #2 Santa Fe
T20N, R27E, G & SRM T20N, R27E, G & SRM
Sec. 25: SE/4 SE/4 Sec. 25: C SW/4
Apache County, Arizona Apache County, Arizona
Permit #471 X Permit #472 X

Crest-Ariz Helium #8X Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #473

Dear Dr. Swain:

Enclosed is Form #8 in duplicate. Please complete and return to this office at once. We understand that the #1 and #8X Santa Fe Wells are to be produced. This Form will take care of the three captioned wells.

At such time as the Crest #1 Spurlock is produced we will require a Certificate of Compliance on that well.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf
Enc.

473

X - Lambert log
X - Cleburn log

March 17, 1969

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

Re: Crest-Ariz Helium #8X
T20N, R27E, G & SRM
Sec. 25: 3E/4 NW/4
Apache County, Arizona
Permit #473

Crest-Ariz Helium #1
T20N, R27E, G & SRM
Sec. 25: 3E/4 SE/4
Apache County, Arizona
Permit #471

Dear Dr. Swain:

The only requirements outstanding at this time pertaining to the Crest Arizona Helium #1 is that we have not received samples on this particular well.

Samples are in the Arizona Bureau of Mines from the Crest Arizona Helium #8X. Both of these wells are being carried as shut-in helium wells.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf

C. F. SWAIN

Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

March 13, 1969

James A. Lambert, Adm Asst
Oil and Gas Conservation Commission
1624 W. Adams Rm 202
Phoenix, Arizona 85007

Re: Crest-Ariz Helium #2 S. F. Permit #472

Dear Mr. Lambert:

In answer to your letter of March 11, 1969 requesting that I file a Form #25 on above captioned well as of the last day of February, I have done so and attach hereto. 4

I assumed that the form filed 2/18/69, at which time I also filed Form #25 on Crest-Arizona Helium #1 S. F., #8-X S.F., and Crest-Spurlock #1 took care of obligations for February.

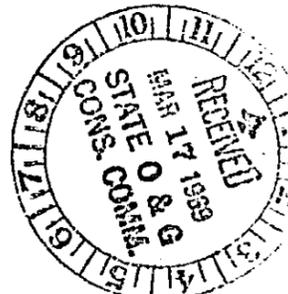
471
473
442

442 - TA 4/1/69
Samples in

If additional reports are expected for February will you please so advise. Will Form #25 reports be expected on all of above wells on the last day of March? And each month thereafter?

Also Mr. Lambert, when you have the opportunity, please check your files concerning samples saved from the above wells. Crest saved samples from all, and sent them to the Four Corners Sample Cut Association in Farmington for processing and distribution. To this date, I have only received billing from them for samples I finally was able to locate and obtain from Steve Henderson on the Apache Drilling Company #1 Santa Fe. (this was a shinarump test and completion attempted, but plugged and abandoned September 1968 under permit 353). According to billing from Four Corners, they send cuts to the Arizona Bureau Of Mines, and to the Museum of Northern Arizona. Just wanted you to know that samples from all the wells were saved and taken to them for processing and delivery, as each well was drilled to total depth.

Sincerely yours,
C. F. Swain
C. F. Swain
Crest Oil Company



CFS:fs

472

C. F. SWAIN

CREST
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

February 18, 1969



James A. Lambert, Administrative Ass't.
Oil and Gas Conservation Commission
Phoenix, Arizona 85007

Re: Previous correspondence, monthly reports,
ending with your letter dated 2/6/69

Dear Mr. Lambert:

Attached hereto please find the following enclosures:

Permit #442, Crest Spurlock #1, 3-17-26, Apache County.

1. Sundry Notices Form 25 dated 2/18/69.
2. Report of Gas Analysis by Bureau Of Mines, Amarillo, Texas, sample from Supai formation. (See item 2 above report) Report of Analysis received 12/20/68.

Permit #471, Crest Arizona Helium #1 Santa Fe, 25-20-27, Apache Co.

1. Sundry Notices Form 25 dated 2/18/69.
2. Well Completion Report Form Number 4, dated 2/5/69.
3. Report of Gas Analysis by Bureau Of Mines, Amarillo, Texas, sample from Coconino formation. Date of Analysis, 12/20/68. (Date Report of Analysis received)
4. Geological brochure (copy), detailed report of drilling, testing, and completion work, including sample study.

Permit #472, Crest Arizona Helium #2 Santa Fe, 25-20-27 Apache Co.

1. Sundry Notices Form 25, dated 2/18/69.
2. Geological brochure (copy), detailed report of drilling, testing, and attempted completion work, including sample study.

Permit #473, Crest Arizona Helium #8-X Santa Fe, 25-20-27, Apache Co.

1. Sundry Notices Form 25 dated 2/18/69.
2. Well Completion Report Form No. 4, dated 2/5/69.
3. Report of Gas Analysis, sample from Coconino formation, received 12/20/68 from Bureau Of Mines, Amarillo, Texas.
4. Geological brochure (copy) detailed report of drilling, testing, and completion work, including sample study.

Will appreciate receipt of your acknowledgement of having received these reports and enclosures and your comments concerning same.

Sincerely yours,

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

CFS:fs

442
471
472
473

TELEGRAM - NIGHT LETTER
ALTON, ILLINOIS
FEBRUARY 19, 1969

DEAR MR. LAMBERT - PLEASE REFER TO OUR CORRESPONDENCE ENDING
WITH YOUR LETTER DATED FEBRUARY 6 1969. REPORTS ON ALL WELL
INCLUDING VARIOUS ENCLOSURES SENT TO YOU AIRMAIL CERTIFIED THIS
PM. SINCERELY YOURS C F SWAIN

#442
471
472
473

February 6, 1969

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

Re: Permits #442
#471
#472
#473

Dear Dr. Swain:

The Commission has notified the Attorney General to suspend action in your case for another ten days.

We are sympathetic to your series of personal misfortunes that has occurred. However, note that we have asked your cooperation and failed to receive it in December prior to the series of misadventures and maladies that have beset you. Postponement of required reports only compounds the requirements and earns a negative opinion of service commissions that have been set up to help you and conserve resources of the people. Please bring your operations into conformance with the published regulations prior to February 20, 1969.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf

473

C. F. SWAIN

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

PHONE 462-5346

January 24, 1969

James A. Lambert
Administrative Assistant
Oil and Gas Conservation Commission
1624 W. Adams Room 202
Phoenix, Arizona 85007

Dear Mr. Lambert:

Wish to acknowledge your letters written 1/14/69 requesting reports due the commission on the Crest Arizona Helium #1, #2, and #8-X Santa Fe, and the Crest Spurlock #1.

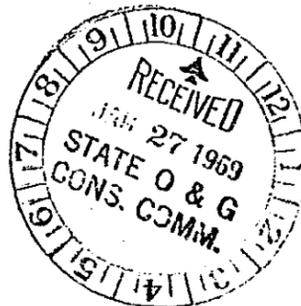
I realize that these reports are due and will get to them soon as I possibly can. I assure you I am not just ignoring your reminders nor just being negligent.

No one can take care of these reports for me. Both Betty (wife and bookkeeper) and I have been really down with the Influenza since very shortly after we arrived back in Alton following our drilling program covering the Subject wells. First I had it and then she, with each of us staying home and taking care of the other. So from mid December until January 15th we were unable to work at the office at all.

Our backlog of work became tremendous as I am sure you can appreciate, particularly at this time of the year. So please bear with me a few more days and I assure you I will bring myself into compliance as soon as possible.

Sincerely yours,

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



442

471

472

473

January 24, 1969

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

Re: Permits #442
#471
#472
#473

Dear Dr. Swain:

Please refer to our letters dated January 14 and January 16 pertaining to the captioned permits. Note our letters of December 9, 1968, and of December 23, 1968. According to the Arizona Revised Statutes; Title 27, Minerals, Oil and Gas; Article 1, Production and Conservation; Section 27-527; Any person who violates any rule, regulation or order of the Commission is subject to a civil penalty of not more than one thousand dollars for each violation and for each day the violation continues.

By copy of this letter, we notify the Attorney General, State of Arizona, that Dr. C. F. Swain, Crest Oil Company, P. O. Box 57, Alton, Illinois, is in violation of rules and regulations.

Please bring yourself into full compliance with these regulations on or before February 5, 1969.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf
cc: Attorney General, State of Arizona

(not sent)

January 16, 1969

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

Re: Crest-Ariz Helium #8X Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #473

Dear Dr. Swain:

This Commission requires that you submit a Form #25, Sundry Notices and Reports on Wells, covering activities from November 29 until December 31, 1968, on the captioned well. We also need a Form #25 describing activities from January 1 through January 15, 1969. If no work has been done, so state; but keep the Commission informed. We need a Form #4, Well Completion Report, on this well. Both sides must be completed.

You have disregarded the requests of the Commission. Please conform with the Rules and Regulations at once.

Yours truly,

James A. Lambert
Administrative Assistant

jf

473

December 23, 1968

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

Re: Crest Oil #1 Spurlock
T17N, R26E, G & SRM
Sec. 3: SW/4 NE/4
Apache County, Arizona
Permit #442

Crest-Arizona Helium #1 Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 SE/4
Apache County, Arizona
Permit #471

Crest-Arizona Helium #8X Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #473

Dear Dr. Swain:

We are still awaiting our form #25, Sundry Notices and Reports on Wells, for the Crest Oil #1 Spurlock, Permit #442. This form must be submitted monthly even though the well is in temporary abandonment. We also require Completion Reports on the #1 and #8X wells. These forms were enclosed in our letter of December 9, 1968. Your cooperation will be appreciated.

Yours truly,

James A. Lambert
Administrative Assistant

ji

473

December 9, 1968

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

Re: Crest Oil #1 Spurlock
T17N, R26E, G & SRM
Sec. 3: SW/4 NE/4
Apache County, Arizona
Permit #442

Crest-Arizona Helium #1 Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 SE/4
Apache County, Arizona
Permit #471

Crest-Arizona Helium #8X Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #473

Dear Dr. Swain:

It seems our letters crossed in the mails and we did receive your letter and various forms this date. We are returning an approved copy of the Sundry Notices and Reports on Wells in which you asked that the Crest Oil #1 Spurlock be in temporary abandon status. This status is effective from this date until 4-1-69. You are reminded that our Form #25, Sundry Notices and Reports on Wells must be submitted monthly even though the well is in temporary abandonment. We also require Completion Reports on the #1 and #8X Santa Fe Wells. These forms are enclosed for your convenience.

Yours truly,

James A. Lambert
Administrative Assistant
jf
Enc.

473

C. F. SWAIN



Crest
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

12/5/68



John Bannister, Executive Secretary
Arizona Oil and Gas Conservation Commission
1624 West Adams Rm 202
Phoenix, Arizona 85007

Dear Mr. Bannister:

Enclosed please find Form 25 Sundry Notices and Reports on Wells on the Crest Arizona Helium #1 Santa Fe, #2 Santa Fe, #8-X Santa Fe, and also the Crest-Spurlock #1.

Please note that the #8-X was hooked up to the pipe line 10/29/68; #1 ready for pipe line (as soon as line is brought to well); #2 is on the pump in an effort to get out as much water as necessary to allow gas to come in; Crest-Spurlock requests additional time to see if gas will come to well bore, to help determine if additional work is warranted on lease block....also awaiting Bureau of Mines analysis of sample of gas from Supai which might also help above determination. (Hate to be hasty in condemning a large lease block on one Test Well, if any evidence exists at all to warrant additional work.)

I have spoken to Dick McDonald since I last talked to you and relayed your request that he inform you right away as to when the Navajo Springs connection was made to their pipe line.

Along with the Sundry Notices on each well, I am enclosing their respective electric logs, and copies of all test data as taken.

Due to lost circulation problems, it was not possible to Drill Stem Test or Core the #1 Santa Fe.

The same is true of the #2 Santa Fe as relates to the Coconino. As relates to the Shinarump, the well ran 100 feet lower than the #8-X and our Geologist Ed Clement had great difficulty in trying to decide just when to start coring. Finally in desperation, we went in with the core barrel, but recovered nothing but shale. When the true Shinarump sand started showing in the samples, it was too late. The shale corings we did not even send in for analysis as there was nothing to analyze.

Sincerely yours,

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

473

December 9, 1968

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

Re: Crest-Arizona Helium #1 Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 SE/4
Apache County, Arizona
Permit #471

Crest-Arizona Helium #2 Santa Fe
T20N, R27E, G & SRM
Sec. 25: ~~SE/4~~ SW/4
Apache County, Arizona
Permit #472

Crest-Arizona Helium #8X Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #473

Dear Dr. Swain:

Recd 12/17/68

This office still has not received the completed Form No. 25, Sundry Notices and Reports on Wells, for the Crest-Arizona Helium #1 and #8X wells bearing a November date. We enclosed forms in our November 20, 1968, letter for your use in reporting activities on the wells for the month of December. We would appreciate receiving all these forms as soon as possible.

We have brought this matter to your attention in correspondence dated 11-20-68 and 12-2-68. Please reply.

Yours truly,

James A. Lambert
Administrative Assistant

jj

December 2, 1968

Dr. C. F. Swain
Crest Oil Company
Navajo, Arizona 86509

Re: Crest-Arizona Helium #1 Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 SE/4
Apache County, Arizona
Permit #471

Crest-Arizona Helium #8X Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #473

Dear Dr. Swain:

This office still has not received the completed Form No. 25, Sundry Notices and Reports On Wells, for the Crest-Arizona Helium #1 and #8X wells bearing a November date. We enclosed forms in our November 20, 1968, letter for your use in reporting activities on the wells for the month of December. We would appreciate receiving all these forms as soon as possible.

Yours truly,

James A. Lambert
Administrative Assistant

jl

November 20, 1968

Dr. C. F. Swain
Crest Oil Company
Navajo, Arizona 86509

Re: Crest-Arizona Helium #1 Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 SE/4
Apache County, Arizona
Permit #471

Crest-Arizona Helium #2 Santa Fe
T20N, R27E, G & SRM
Sec. 25: C SW/4
Apache County, Arizona
Permit #472

Crest-Arizona Helium #8X Santa Fe
T20N, R27E, G & SRM
Sec. 25: SE/4 NW/4
Apache County, Arizona
Permit #473

Dear Dr. Swain:

Please submit a completed form No. 25, Sundry Notices
And Reports On Wells, at once for the Crest-Arizona
Helium #1 and #8X wells. We received your Sundry Report
of 11-9-68 concerning the #2 well. Forms are also
enclosed for report of activities on the three captioned
wells due on or about the 5th of December.

Yours truly,

James A. Lambert
Administrative Assistant

jf
Enc.

473

C. F. SWAIN

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

Navajo, Arizona

PHONE 462-5346

October 24, 1968

John Bannister, Exec Secy
Arizona O & G Conservation Comm
1624 W. Adams
Phoenix, Arizona 85007

Dear Mr. Bannister:

In answer to your letter of October 22nd, enclosed find reports as requested, and also report requested by Mr. Lambertin his letter dated 10/17/68.

I am sorry if we have not been reporting progress frequently enough and will do my best to complete forms as required when due.

My only excuse is that I arise at 5:30 and after breakfast with Ed and crew I go to the field and generally don't get back to trailer house until after dark. We are doing our best to get as much work done as possible before the weather turns bad, and also office facilities leave a lot to be desired.

Samples and logs are being furnished practically as soon as obtained, and we will forward copies of core and DST reports as soon as we get them.

Sincerely yours,

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

P.S. Navajo Address is:
C. F. Swain
P. O. Box 4
Navajo, Arizona 86509
Phone is: 688-2914



473

October 22, 1968

Dr. C. F. Swain
Crest Oil Company
Navajo, Arizona 86506

Re: Crest-Arizona Helium #1 Santa Fe
Our Permit #471

Crest-Arizona Helium #2 Santa Fe
Our Permit #472

Crest-Arizona Helium #8X Santa Fe
Our Permit #473

Dear Dr. Swain:

I am enclosing some copies of our Sundry Notice Form #25. Will you please fill out one form for each of the captioned wells and return this immediately. We have no written reports from you on any of these wells although we do have Mr. Scurlock's reports. I would remind you that our rules and regulations call for an up to date report at least monthly on all drilling wells. As you know, these wells were permitted September 19, 1968, and a report should be submitted for each permit monthly as long as they are in the drilling status. In the case of the #8X Well, I believe, which has not been commenced, a report should be submitted to this effect. In the case of the other two wells a report should bring us to date from the date of spudding showing in detail what action has been taken. I will appreciate your cooperation.

I would like to take this opportunity to remind you that the permit date of each well is September 19 and should no work be commenced on a permit within 90 days after its date of issuance, then the permit will expire by law unless an extension is granted by this Commission. Consequently, should you find yourself in a position of not having work commenced on each of these wells by December 18, you should notify this office requesting an extension or the permit will expire by operation of law. If we may be of any help, please do not hesitate to ask.

Sincerely,

John Bannister
Executive Secretary
JB:jf
Enc.

C.F. SWAIN

 **CREST**
OIL COMPANY

P. O. BOX 57
ALTON, ILLINOIS 62002

PHONE 462-5346

Field Office
C.F. Swain, Crest Oil Co.
Navajo, Ariz 86509

July 20, 1968

John Bannister, Exec Sec'y
Oil and Gas Conservation Commission
1624 W. Adams Room 202
Phoenix, Arizona 85007

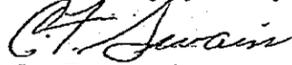
Dear Mr. Bannister:

Attached please find the Originals of three (3) single well bonds executed by me as Principal and Maryland Casualty Company as Surety covering the recently applied for Permits to drill in Section 25-20N-27E, Apache Co.

I have not yet had the chance to locate the other information from Mr. Henderson, but I understand he is in the Navajo area and will be here for several days.

Thank you very much for the time and assistance given to me by you and your staff, especially Mrs. Rushton. Please tell her that Navajo area is in full bloom and seems to have great possibilities for picnic lunches and the like.

Sincerely yours,


C. F. Swain
Crest Oil Company

CFS:fs

P.S. May I have copies of the bonds for my file?

