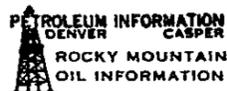


P-W

CREST OIL CO #9 SANTA FE 203
NE SW 24-20N-27E APACHE COUNTY

203
ARIZONA
APACHE CO.
PINTA DOME (D)



Twp 20n-27e
Section 24
ne sw
1650 n/s 1650 e/w

OPR: Crest Oil

WELL #: 9 Santa Fe

ELEV: 5779 Gr.

TOPS: ~~80%~~ Sample.

Chinle 295
Shinarump 1110
Moenkopi 1160
Coconino 1297

DSTS. & CORES:

DST 1098-1120, open
10 mins, rec 70 mud,
FP 50-50#, SIP (30 mins)
250#, HP 700#.

SPUD: 9-25-62

COMPL: 10-2-63

TD: 1300

PB:

CSG: 8-5/8" @ 90 w/26
4 1/2" @ 1298 w/25

PERF: Flowed wtr from Coconino
(open hole) 1298-1300.

PROD. ZONE:

INIT. PROD: D & A.
(Completed as a wtr well)

Contr: Myers.

Ariz. 1-468120

OIL AND GAS CONSERVATION COMMISSION

STATE OF ARIZONA
3500 N. CENTRAL AVE - SUITE 221
PHOENIX 12, ARIZONA

WELL TRANSFER FORM

To the ~~STATE OF ARIZONA OIL AND GAS CONSERVATION COMMISSION~~
STATE OF ARIZONA OIL AND GAS CONSERVATION COMMISSION

This is to advise you that I accept the abandoned wildcat well,
known as the Crest Oil Co. Santa Fe #9, located on the
South West $\frac{1}{4}$ of Section 24, Township 30N,
($\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$)

Range 27E, as a water well to be used for domestic purposes.
Further, that I accept full responsibility for the proper maintenance
of the well in compliance with the provisions of Arizona Revised
Statutes Title 27, Chapter Four, Articles 1 and 2.

E. L. Sauerbeck
(Signature)
Box 9
(Street)
Flagstaff Arizona (City) Arizona (State)

Date: Oct. 2, 1962

(This form is to be filed in duplicate.)

March 8, 1971

Memo from W. E. Allen, Director
Enforcement Section

Memo to: Crest Oil Company #9 Santa Fe
NE/4 SW/4 Sec. 24-T20N-R27E
Apache County
Our File #203

Approximately 1300' south and a little east is another well with 4" casing and a 1" pipe out of the 8-5/8" surface casing. There is a pool of water around the well and a 1" line goes northwest to the first mentioned well. We have no records in our files of this last mentioned well.



Crest Santa Fe #9 ?

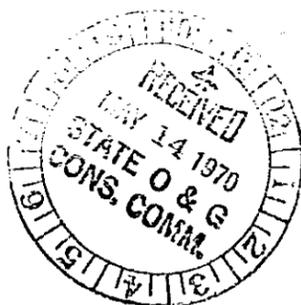
February 23, 1971

GEOLOGICAL REPORT

OF

CREST OIL COMPANY
SANTA FE NO. 9

Section 24 - T20N - R27E
Apache County, Arizona



Prepared for

Crest Oil Company
Alton, Illinois

E. A. Clement
Consulting Geologist
Farmington, N. M.
October 5, 1962

FORWARD

This report is being written before the well has been completed at the request of Crest Oil Co. When the well is completed, a supplement will be written detailing the operations as they occurred during the completion phase. The conclusions of this well will also be considered in the supplement.

WELL DATA

Operator: Crest Oil Co.
P. O. Box 57
Alton, Illinois

Well Name: Santa Fe No. 9

Location: 1650' from the South line &
1650' from the West line of
Section 24, T20N, R27E
Apache County, Arizona

Elevation: 5779' Ground

Contractor: Myers Drilling Co.
P. O. Box 615
Navajo, Arizona

Spud Date: September 25, 1962

Completion Date: 10-13-62

Total Depth: 1330

Hole Size: 12 $\frac{1}{4}$ " from surface to 90'
4 $\frac{3}{4}$ " from 90' to 1298'

Casing Program: 8 $\frac{5}{8}$ " from surface to 90', cemented with
26 sacks of cement.

Gas Zones: 1297 to 1298'

Fresh Water Zones: 15' and 590'

Salt Water Zones: None

Lost Circulation Zones: 1298'

Cores: None

Drill Stem Tests: DST No. 1, 1098 to 1120'; open 10 minutes with
very weak blow of air to surface immediately;
shut in for 30 minutes for initial shut in
pressure; Open 130 minutes, no blow of air;
swabbed well with no recovery; pulled tool;
recovered 70' drilling mud; Initial flow
pressure 50 psi, final 50 psi; Initial shut
in pressure 250 psi, final not taken; initial
hydrostatic pressure 700 psi, final 700 psi.

Logs : None

Completion Data:

DISCUSSION

The Crest Oil Co. Santa Fe No. 9, a direct north off-set of the successful Crest Oil Co. Santa Fe No. 8 was drilled to further evaluate the helium bearing possibilities of the Coconino sandstone. The well was drilled by Myers Drilling Co. using a small, truck mounted, rotary rig. Conventional, water base, bentonite mud was used as a circulating medium through out the drilling operations of the well.

The well was spudded and 90' of 8 5/8" surface pipe was cemented with 26 sacks of cement on September 25, 1962. A fresh water flow was noted at a depth of 15'. Drilling operations were started on a 12 hour per day basis on the morning of September 26, and at 6 p.m., 610 feet of 4 3/4" hole had been cut. On the morning of September 27, it was found that fresh water had flowed from the hole all night. This water flow, of approximately 5-6 gallons per minute was thought to be coming from a sand zone located by sample examination to be from 590' to 650'. At 6 p.m. on September 27, the hole had been drilled to 885' and it was found on the morning of the 28th that the water from 590' had again flowed all night. A depth of 1080' was reached by 6 p.m. on the 28th and on September 29, it was decided to work on a 24 hour per day basis as the fresh water was continuing to flow and thinning the mud and causing the hole to cave. A depth of 1120' was reached at 1:30 p.m. on September

29th. The top of the Shinarump formation was found by sample examination to be at 1110' and it was decided to test the top 10 feet of this zone. A drill stem test was run from 1098' to 1120' with the results as shown on page 1 of this report. The drill stem test was completed at 2:15 a.m. on September 30th and drilling was resumed. The top of the Moenkopi formation was picked by sample examination to be at 1160'. At this time the top of the Coconino sandstone was expected to be found at 1300' and at a depth of 1270', the viscosity of the drilling mud was raised and lost circulation material was mixed in anticipation of losing mud in the top of the Coconino sandstone. A good drilling break was encountered from 1296' to 1297 $\frac{1}{2}$ '; however, at 1297 $\frac{1}{2}$ ', drilling became slower and the bit jumped and vibrated, which is one indication that the top of the Coconino sandstone has been reached. It was decided to drill a few inches and circulate up a sample in order to be sure the sand had been reached before the core barrel was run to cut a core of the sandstone. After drilling approximately 4 inches, circulation was lost and the bit was immediately raised off bottom, the pump stopped, and more lost circulation material added to the mud. On attempting to regain circulation, one pit of mud was lost and the drill pipe pulled up while new mud was being mixed. The bit was lowered to bottom and circulation attempted. The mud circulated for a few minutes and it was noted the mud was heavily gas cut, further indicating the Coconino had been reached and contained gas. Cuttings from the mud ditch were examined extensively but only loose quartz

grains were found. Circulation stopped and another pit of mud was lost while attempting to regain by adding lost circulation material and pumping very slowly. The drill pipe was pulled from the hole to prevent it becoming stuck while new mud was being mixed. It was noted that heavily gas cut mud flowed from the drill pipe when each stand was taken off.

With the heavy accumulation of gas in the mud and the particularly bad lost circulation, it was felt certain the Cocaine sandstone had been reached and that it was very porous or fractured and contained gas.

It was decided that further efforts should be made to get some kind of test on the well and possibly a core for evaluation of the reservoir before pipe was run.

New mud was mixed and conditioned with lost circulation material, the pipe run back in the hole and circulation was regained. After cleaning up the hole, the pipe was pulled and a Caldwell packer was run on 2 7/8" tubing to open the bottom of the hole to the atmosphere and possibly flow the well. The packer was set 3 feet off bottom but no blow of gas was evident. It was ascertained that the drilling mud lost in the hole had blocked the gas in the sand. The well was swabbed through the tubing and it was noted on the first run that approximately 12 feet of drilling mud was on the swab and line; however, the swab did not recover mud. Swabbing was continued without recovery. Water was poured in the tubing on top of the swab but the water was not recovered when the swab was pulled. On another attempt of recovering water in this manner, the swab brought part of the water up. On

examining the swab, it was found to be in perfect condition and it was thought that some of the tubing was probably swelled or out of gauge which allowed the water to leak by the swab. This did not seem to be a plausible explanation; however, the same swab was used successfully on the Santa Fe No. 7 well and the only change that had been made was that new swab cups, of the same brand, had been installed. It was felt that a test was impossible under the conditions and that it was dangerous to leave the packer in the hole any longer. The tubing and packer was pulled from the hole and the drill pipe re-run in order to attempt to circulate and condition the hole so that the core barrel could be run and the sandstone cored. On reaching total depth, circulation was lost and one pit of mud was pumped in while attempting to regain returns. The pipe was pulled 300 feet off of bottom while mud was mixed. On attempting to regain circulation another pit of mud was lost. Drill pipe was pulled from the hole and mud mixed and conditioned. On the morning of October 3rd the pipe was run back to bottom and circulation lost again after a few minutes of circulating. It was decided at this time that too much mud was being lost in the formation and that the hole should be reamed to $8\frac{1}{4}$ inches and $4\frac{1}{2}$ inch casing run in a completion attempt. Reaming was started by the day crew on the morning of October 3rd.

STRATIGRAPHY

The formation tops presented below were determined by sample examination and as a log was not run, must suffice for this report.

<u>FORMATION</u>	<u>DEPTH</u>	<u>THICKNESS</u>
Tertiary	surf. to 295'	295
Chinle	295	815
Shinarump	1110	50
Moenkopi	1160	137
Coonino	1297	

Drilling time was recorded at 10' intervals by the driller from 440' to total depth. Drill cutting samples were taken at 10' intervals from 100' to total depth and were microscopically examined at the well site as drilled. All samples are being held by Myers Drilling Co. at Navajo, Arizona, for distribution if requested.

A complete description of the samples along with the drilling time follows.

<u>DEPTH</u>	<u>DRL'NG TIME</u>	<u>DESCRIPTION</u>
100-300		100% loose qtz grains; fine to medium, clear to dark red & dk. brown, well rounded, with some bentonite
		<u>TOP CHINLE 295</u>
300-10		50% sand as above; 50% red soft shale
310-20		As above
320-30		25% qtz grns as above; 75% red shale as above.
330-40		75% as above; 25% as above
340-50		45% as above; 5% ls; 50% as above
350-60		As above
360-70		As above
370-80		As above
380-90		40% qtz grns as above; 10% wh. to red, crse ss; 10 wh ls; 40% red and maroon shale
390-400		As above
400-10		As above

410-20		40% wh. to clr. qtz grns.; 20 red, fine to coarse. S&P w/ blk & grn grains; 40% red shale
420-30		As above
430-40	9	90% fine, clr. qtz grns; 10% brown shale
440-50	5	80% qtz grns as abv; 20% brown and red shale
450-60	6	40% red to brn and blk. fine to coarse. silty ss; 10% fine qtz grains; 50% brown and red shale
460-70	6	20% red to brn ss as above; 10% qtz grns as abv.; 70% shale as above
470-80	5	50% red, fine, silty ss; 10% wh ls; 40% sh. as abv.
480-90	4	50% red to white, silty, fine to med ss, some clean; 10% wh ls; 40% red and maroon shale
490-500	5	30% red to wh ss as above; 30% wh to cream ls; 40% shale as above
500-10	5	20% red ss as abv; 20% fine, clear, qtz grns; 30% wh ls; 30% red, brn, maroon shale
510-20	7	as above
520-30	7	20% wh, fine to med, friable, clean ss; 20% red, fine to med, silty ss; 10% fine qtz grns; 10% wh ls; 40% rd sh.
530-40	5	20% wh, 20% red ss as abv; 30% fine qtz grns; 10% ls; 20% red to brn shale
540-50	8	20% wh, 30% red ss as abv; 20% qtz grns; 10% ls; 20% shale
550-60	8	10% wh ss as above; 30% qtz grns; 10% ls; 50% shale as abv.
560-70	11	As above
570-80	8	10% wh ss; 10% wh ls; 10% qtz grns as abv; 70% red, brn sh
580-90	8	As above
590-600	9	20% wh to lt gry; med, S&P ss; 30% free qtz grns; 10% ls; 40% red, black and lavender shale
600-10	10	10% lt gry as abv; 10% brn, silty, dirty, fine-med ss; 30% qtz grns; 10% wh ls; 40% shale as above

610-20	10	10% silty brn as abv; 20% grey as above; 20% qtz grns; 20% ls; 30% brown and red shale
620-30	10	30% grey ss as abv; 20% qtz grns as abv; 10 ls; 40% sh as abv.
630-40	13	As above
640-50	17	As above
650-60	11	10% grey ss as abv; 10% brn ss as abv; 30% qtz grains; 50% shale as above.
660-70	8	As above
670-80	10	20% qtz grns as abv; 10% ls; 70% grey, red, brn, lav shale
680-90	7	As above
690-700	11	30% white, med, limy ss; 20% wh ls; 50% sh as above
700-10	11	10% ss as abv; 20% ls; 10% qtz grns; 60% sh as abv.
710-20	9	10% ls; 10% qtz grns; 80% shale as above
720-30	5	30% qtz grns; 10% red to brn chert; 60% sh as abv.
730-40	6	As above
740-50	8	50% fine to coarse, ang. qtz grns; 10% chert; 40% sh as abv.
750-60	11	40% qtz grns; 20% chert as abv; 40% shale as abv.
760-70	10	40% qtz grns as abv; 30% red, yellow, brn chert; 30 sh.
770-80	7	As above
780-90	12	30% qtz grns; 10% chert; 5% ls; 55% shale as abv.
790-800	11	As above
800-10	10	50% qtz grns; 10% chert; 10 ls; 30 shale as above
810-20	6	As above
820-30	8	As above
830-40	7	20% qtz grns; 80% lav, ppl, brn, red shale
840-50	7	As above
850-60	14	50% qtz grns; 10% chert; 40% lav, ppl, brown shale

850-60	14	50% fine to coarse, ang qtz grns; 10% yellow, red & brown chert; 40% lavender, purple and brown shale
860-70	20	30% qtz grns as abv; 10% lt gry, med., friable ss; 60% sh as abv.
870-80	14	As above
880-90	22	5% qtz grns; 5% ls; 10% grey-green & 80% brown shale
890-900	51	As above
900-10	12	As above
900-20	16	As above
920-30	10	As above
930-40	8	As above
940-50	11	10% qtz grns as abv; 5% ls; 85% brown to maroon shale
950-60	14	As above
960-70	9	10% qtz grns; 10% lt. gry, fine ss; 5% ls; 75% grey, green and brown shale
970-80	10	As above
980-90	9	10% fine qtz grns; 90% grey, green and silty brn sh.
990-1000	9	As above
1000-10	16	As above
1010-20	14	As above
1020-30	11	As above
1030-40	14	5% lt gry, med, S&P ss; 45% fine-med, clr, qtz grains; 50% grey to brn shale
1040-50	19	10% lt grey ss as above; 20% qtz grns as abv; 70% sh as abv.
1050-60	21	As above
1060-70	24	As above
1070-80	85	As above
1080-90	92	20% fine, clr, qtz grns; 80% grey to brown shale

1090-1100	85	Tr. fine, tan, soft ss; 5% fine clr qtz grns; 90% red grey, blue, purple, brown shale
1100-10	72	As above
		TOP SHINARUMP 1110
1110-20	13	90% clr to frstd, orse, ang, qtz grns with some consolidated sand of same; 10% shale as above
1120-30	27	50% qtz grns as abv; 10% ls; 40% sh as abv.
1130-40	36	60% qtz grns; 10% ls; 30% shale as above
1140-50	16	80% qtz grns; 20% shale, all as above
1150-60	38	70% qtz grns, 10% consol. ss; 20% sh as abv.
		TOP MOENKOPI 1160
1160-70	105	60% qtz grns; 40% shale as above
1170-80	89	As above
1180-90	160	As above
1190-1200	56	40% qtz grns as abv; 20% lt. grey, fine, friable, w/ sorted sandstone; 40% rd, brn, grey, blue shale
1200-10	60	40% qtz grns as abv; 20% reddish brown, fine, friable sandstone; 40% shale as abv.
1210-20	79	40% lt. gry to clr, fine, tite, hd ss; 10% fine to med, clr. qtz grns; 50% red, brn & grey shale
1220-30	60	40% ss as abv; 80% silty brn, grey & lav. shale
1230-40	60	5% ss as abv; 95% shale as abv.
1240-50	70	50% lt. brn, fine, loose, friable ss; 50% sh as abv.
1250-60	47	As above
1260-70	59	10% brn ss as abv; 50% fine-med, clr to frstd qtz grns; 40% red, brown, lavender, blue, and grey shale
1270-80	57	5% wh, fine, friable ss; 30% fine brn ss as abv.; 65% sh as abv
1280-90	61	5% wh & 5% brn ss as abv; 40% qtz grns; 50% sh as abv.
		TOP COCONINO 1297
1290-98	(circul. sample)	90% wh to clr, uniform, w/rnded, medium qtz grns 10% rd, brn, lav, blu, grey shale.

E. A. Clement
 E. A. Clement
 Consulting Geologist

SUPPLEMENT TO THE
GEOLOGICAL REPORT
OF
GREAT OIL COMPANY
SANTA FE NO. 9

Section 24 - T20N - 18E7E
Apache County, Arizona

Prepared for
Great Oil Company
Alton, Illinois

E. A. Clement
Consulting Geologist
Farmington, N. M.
October 19, 1922

SUPPLEMENT TO THE
GEOLOGICAL REPORT
OF
GREAT OIL COMPANY
SANTA FE NO. 9

Section 24 - T20N - R27E
Apache County, Arizona

Prepared for
Great Oil Company
Alton, Illinois

E. A. Clement
Consulting Geologist
Farmington, N. M.
October 19, 1963

WELL DATA:

Completion Date: October 13, 1962
Total Depth: 1330 feet
Casing: 4 $\frac{1}{2}$ " @ 1296, cemented with 8 sacks.
Gas Zones: None
Salt Water Zones: 1296 to total depth
Lost Circulation Zones: 1296 to total depth
Logs: Schlumberger Well Surveying Corp. Gamma-Ray log from surface to 1296 feet.
Electrical-Induction log from 1296 to 1330.
Completion Data: Abandoned; to be completed as water well by land-owner.

DISCUSSION (continued from page 5)

Reaming of the hole from 4 3/4" to 6 $\frac{1}{4}$ " was accomplished after some difficulty in recovering a bit which was lost while reaming at 435'. 4 $\frac{1}{2}$ " casing was run from the surface to 1296', (corrected from 1298'), and cemented with 8 sacks of cement. After cement had hardened, the cement plug was drilled and immediately after going out of the casing, 350' of fluid came into the hole. Mud was first blown from the hole and this gradually turned to salt water as the blowing was continued. Drilling was resumed in order to have enough hole in the Cocconino sandstone to log the well. A total of 34 feet was drilled in the Cocconino, during which, 2 $\frac{1}{2}$ pits of mud were lost in the sand. The hole was logged by Schlumberger with a gamma ray log from the surface to 1296', and with an Electrical-induction log from 1296 to 1330'. Due to the shows of fresh water in the upper zones of this well, the landowner requested and was given permission to attempt to complete it as a water well.

CONCLUSION

The sea level datum on the top of the Coconino in this well is plus 4482', which is 44 feet higher than the successful Crest No. 8 well located 3300 feet to the south. The only plausible explanation of the sandstone being relatively high and containing salt water is the existence of an east-west trending fault between the 2 wells. It is apparent that the salt water on the north side of the fault is sealed off from the No. 8 well by the displacement of the beds. The Eastern No. 12 well in Sec. 11, 2 $\frac{1}{4}$ miles northwest of the Crest No. 9, also had salt water in the Coconino sandstone. The datum on the top of the sand in this well is plus 4602', or 120 feet higher than the No. 9. The faults of this local area seemingly have a greater bearing on the presence or absence of salt water in the Coconino than the structures, and due to the sand and mantle covering of the surface are impossible to locate on the surface.

When the Coconino sandstone was first topped before casing was run in this well, the mud was definitely gas out. It is believed that this was a small amount of gas which was trapped on top of the salt water in the first few inches of the sandstone.

It is unfortunate that the well first showed such good indications of being successful, (44 feet high to the No. 8 and gas out mud in the hole), and then proved to be unproductive. Shows of this nature are indicative of a successful well, and most certainly when they are present, a completion attempt is warranted by the best and most economical means available to fit the existing situation.

Had the lost circulation problem not been present, the well could

have been cored and logged and the salt water and lack of gas detected before casing was run. However, with the fresh water flow at 520' and the lost circulation problem in the Cocconino sand, the best solution was to shut the water off with casing and drill or core the Cocconino with air, as losing mud in the sand blocks the porosity and is very difficult to clean out.

It seems that the many problems found in drilling wells in this area were all present on this well, and in looking back, all operations accomplished were necessary for completion of the test.

Respectfully submitted,


E. A. Clement
Consulting Geologist

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL DEEPEN PLUG BACK

NAME OF COMPANY OR OPERATOR

DATE

Crest Oil Company

July 31, 1962

Address

City

State

P. O. Box 57

Alton

Illinois

DESCRIPTION OF WELL AND LEASE

Name of lease

Well number

Elevation (ground)

El Santa Fe

No. 9

5779'

Well location

(give footage from section lines)

Section--township--range or block & survey

1650' FSL and 1650' FWL

24 20N 27E

Field & reservoir (if wildcat, so state)

County

Wildcat

Apache

Distance, in miles, and direction from nearest town or post office

Ten Miles from Navajo, Arizona

Nearest distance from proposed location to property or lease line:

1650

feet

Distance from proposed location to nearest drilling, completed or applied--for well on the same lease:

3300

feet

Proposed depth:

1500'

Rotary or cable tools

Rotary

Approx. date work will start

Sept. 1, 1962

Number of acres in lease:

3,840

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

2

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

Name

Address

Status of bond Individual Well Bond applied for and will be sent direct from Phoenix Agent Maryland Casualty Company.

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

* Fill in Proposed Casing Program on other side

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

July 31, 1962

Date

Signature

C. F. Swain

Permit Number: 263

Approval Date: July 31, 1962

Approved By: *[Signature]*

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

See Instruction on Reverse Side of Form

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION

Application to Drill, Deepen or Plug Back

Form No. P-1

File two copies

Authorized by Order No. _____

Effective _____

9037

INSTRUCTIONS

READ CAREFULLY AND COMPLY FULLY

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

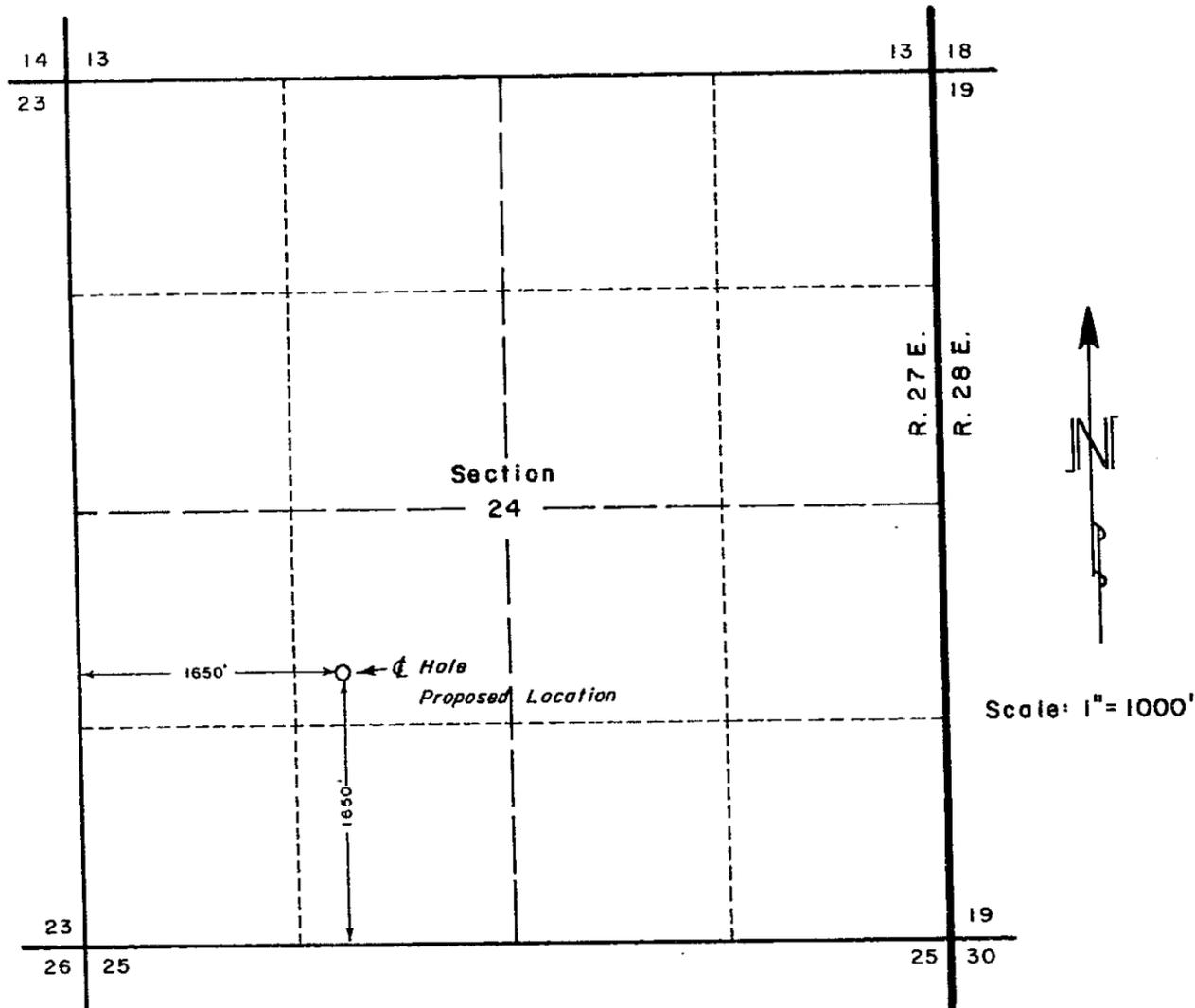
In event plat is filed for the purpose of designating the drilling and producing unit, or proration unit, on which the proposed well is to be drilled, the boundaries of such unit shall be shown, also the boundaries of all other such units attributed to other wells on the same lease completed in or drilling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

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

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

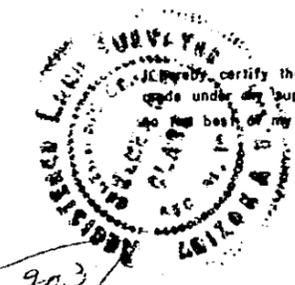
PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
8 5/8"	20lbs	J55	0	100'	0 to 100'	50



WELL LOCATION: Crest Oil Company - Santa Fe # 9

Located 1650 feet North of the South line and 1650 feet East of the West line of Section 24,
 Township 20 North, Range 27 East, Gila & Salt River Meridian.
 Apache Co., Arizona



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

Elmer M. Clark

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

CREST OIL COMPANY	
WELL LOCATION PLAT Sec. 24, T.20 N., R.27 E. Apache Co., Arizona	
E.M. CLARK & ASSOC. Durango, Colorado	DATE: July 23, 1962 FILE NO: 62054

C. F. SWAIN

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

AREA CODE 618-462-5346

May 11, 1970

James Scurlock, Geologist
Oil and Gas Conservation Commission
1624 W. Adams Rm 202
Phoenix, Arizona 85007

Re: Crest #9 Santa Fe
NE/4 SW/4 Section 24
T20N, R27E, Apache County
Permit #203

Dear Jim:

Sorry to be so long in responding to your letter March 13th. Have been out of office quite a bit and the correspondence and bills keep piling up!

Hope the enclosed logs, Executed well Transfer Form, and complete Geological report will be sufficient to complete your file on this well.

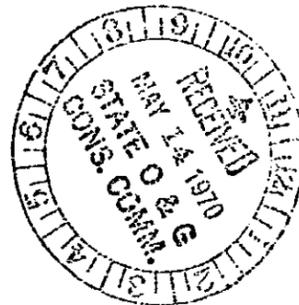
Sure would like to get back to Arizona. Keep waiting to hear from the court appointed authorities in the reorganization activities of the plant.

With best regards,

Sincerely yours,

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

CFS:fs



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

OFFICE OF
Oil and Gas Conservation Commission

STATE OF ARIZONA
3500 N. CENTRAL - SUITE 221
Phoenix 12, Arizona
CR 9-3397 CR 9-2731

JOHN K. PETTY
PETROLEUM GEOLOGIST

November 7, 1962

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

Re: Crest Oil Co - Santa Fe No. 9 - SW $\frac{1}{4}$ Sec. 24
T 20 N, R 27 E, Apache County, Arizona

Dear Dr. Swain:

Ted Sparlock sent the well transfer forms accepting the abandoned Crest Oil Company #9 Santa Fe Fee well in Section 24, 20N, 27E, Apache County, Arizona as a water well. A copy is enclosed for your files.

In regard to the drilling and completion of this well, all the requirements of our rules and regulations have been fulfilled thus we can release you of the responsibilities per your bond.

Yours truly,

John K. Petty
John K. Petty
Petroleum Geologist

enc



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OIL AND GAS CONSERVATION COMMISSION

STATE OF ARIZONA
3500 N. CENTRAL AVE - SUITE 221
PHOENIX 12, ARIZONA

WELL TRANSFER FORM

To the ~~State of Arizona Oil and Gas Conservation Commission~~
STATE OF ARIZONA OIL AND GAS CONSERVATION COMMISSION

This is to advise you that I accept the abandoned wildcat well,
known as the Crest Oil Co. ^{File} Santa Fe # 9, located on the
South West 1/4 of Section 24, Township 20 N.
(3 4 4)

Range 27 E, as a water well to be used for domestic purposes.

Further, that I accept full responsibility for the proper maintenance
of the well in compliance with the provisions of Arizona Revised
Statutes Title 27, Chapter Four, Articles 1 and 2.

R. J. Agnew
(Signature)

Bar 9
(Street)

Navajo Arizona (State)
(City)



Date: Oct 2 1962

(This form is to be filed in duplicate.)

March 13, 1970

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

Re: Crest Oil Company #9 Santa Fe
NE/4 SW/4 Section 24
T20N, R27E, G & SRM
Apache County
Permit #203

Dear Dr. Swain:

Any chance that your files might contain any kind of operational data, scout data, anything at all on the subject well. We need data such as total depth, casing, size hole, testing, coring, etc. Would appreciate this very much as we have nothing for our files.

Hurry back to Arizona. The year is getting on. Still hoping the new plant will have enough helium to operate.

Kindest regards,

James Scurlock
Geologist

JS:jd

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BOND

KNOW ALL MEN BY THESE PRESENTS

BOND SERIAL NO. 92-787378

That we: C. F. Swain, d/b/a Crest Oil Company P. O. Box 57, Alton, Ill.

of the County of: Madison in the State of: Illinois

as principal, and Maryland Casualty Company

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

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

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

Single Well Bond for below described location

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

Crest-Santa Fe #9

1650' from South Line and 1650' from West Line of Section 24

Township 20 North, Range 27 East, Apache County, Arizona

NOW, THEREFORE, if the above bounden principal shall comply with all of the provisions of the laws of this State and the rules, regulations and orders of the Oil and Gas Conservation Commission, especially with reference to the requirements of A.R.S. 27-516, providing for the proper drilling, casing and plugging of said well or wells, and filing with the Oil & Gas Conservation Commission all notices and records required by said Commission, in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, then this obligation is void; otherwise, the same shall be and remain in full force and effect.

Penal sum of Twenty-five Hundred Dollars (\$2,500.00)

Witness our hands and seals, this 3rd day of August, 1962

C. F. Swain

C. F. Swain, d/b/a Crest Oil Company
Principal

Witness our hands and seals, this 3rd day of August, 1962

COUNTERSIGNED AT PHOENIX, Maryland Casualty Company

ARIZONA, BY W. J. Hart By Lerald M. Rogers

W. J. HART, RESIDENT AGENT

Attorney-in-Fact Surety

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

Approved _____
Date _____

CANCELLED

STATE OF ARIZONA
OIL AND GAS CONSERVATION COMMISSION

DATE 11-7-62

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STATE OF MISSOURI
CITY OF ST. LOUIS

} ss.

On this 3rd day of August, A. D., 1962, before me personally appeared Gerald M. Rogers, with whom I am personally acquainted, who, being by me duly sworn, said: that he resides in the City of St. Louis; that he is Attorney-in-Fact of the Maryland Casualty Company, the corporation described in, and which executed the foregoing instrument; that he knows the corporate seal of said Company; that said seal affixed to said instrument is such corporate seal; that it was so affixed pursuant to a power of attorney granted in accordance with Section 12 of Article V (formerly Section 13 of Article IV) of the By-Laws of said Company; and that he signed his name thereto as Attorney-in-Fact by like authority.

Robert D. Gallon
Notary Public within and for the City of St. Louis, Mo.

My commission expires 11/30/66

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 Chairman of the Board and President or any Vice-President may, by written instruments 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 HOBART A. MARTIN, VINCENT A. BAYER, EDWIN J. HARTY, ELMER F. DENNESS, GERALD M. ROGERS, ERNST W. KUHN and RICHARD A. WHITE, each with full power to act alone, of ST. LOUIS State of MISSOURI its Attorney -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 any one of the aforesaid attorneys in fact.

This instrument supersedes power of attorney granted Hobart A. Martin, E.H.Calliotte, Vincent A. Bayer, Edwin J. Harty, Elmer F. Denness, Gerald M. Rogers, Ernst W. Kuhn and Richard A. White dated October 20, 1960.

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 31st day of May, 1961, 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 }
BALTIMORE CITY } ss.

On this 31st day of May, A. D., 1961, 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) Blanche V. Karfgin Notary Public.

My commission expires May 6, 1963

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 3rd day of August, A. D., 19 62

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Cancelled 11-7-1962

Rose E. Lutz
Assistant Secretary.

June 21, 1965

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

Attention: Mr. Richard A. White, Bond Department

Re: Crest Oil Company, Alton, Illinois

Gentlemen:

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

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

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

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

Santa Fe Tee #2, NE/4SW/4 33-T20W-R27E, Apache County.
Your Bond 92-676089. Our File 110

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

Santa Fe Tee #3, SW/4NE/4 3-T19W-R27E, Apache County.
Your Bond 929677167. Our File 124

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

Maryland Casual Company Page 2

June 21, 1965

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

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

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

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

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

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

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

Santa Fe Fee #6, NE/4NE/4 35-T20N-R27E, Apache County
File 150. Bond number unknown.

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

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

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

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

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

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

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

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

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

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Maryland Casualty Company Page 3

June 21, 1965

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

Santa Fe Gas #11, SW/4NE/4 25-T20N-R27E, Apache County
Our File 182. Your Bond 92-756110

Our file reveals that this well has been completed and this bond released May 27, 1962.

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

Yours very truly,

John Bannister
Executive Secretary

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

June 7, 1965

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

Re: Crest Oil Company Santa Fe #9 NE/4-SW/4 24-T20N-R27E
Apache County, Arizona
Permit 203

Gentlemen:

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

Well Completion Report and copies of all logs
Plugging Record

Forms are enclosed for your convenience.

Your earliest cooperation is appreciated.

Yours very truly,

John Bannister
Executive Secretary

Enclosure
cb

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August 6, 1964

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

Dear Dr. Swain:

In reviewing the files of the wells drilled by your company I find that a few of the required forms necessary to complete a well file are missing. For your convenience I am enclosing these forms so that the files may be closed on these wells.

RE: File #131 Crest Oil Company Santa Fe Fee #4
Completion and Logs are needed.

RE: File #203 Crest Oil Company Santa Fe Fee #9
Completion and Logs are needed.

RE: File #182 Crest Oil Company Santa Fe Fee #11
Completion Needed.

Your past cooperation has been noted and your early assistance in this matter will be greatly appreciated. If I may be of service to you, will you please advise.

Very truly yours,

Bill Cooper
Records Section

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November 7, 1962

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

Re: Crest Oil Co - Santa Fe No. 9 - SW $\frac{1}{4}$ Sec. 24
T 20 N, R 27 E, Apache County, Arizona

Dear Dr. Swain:

Ted Spürlock sent the well transfer forms accepting the abandoned Crest Oil Company #9 Santa Fe Fee well in Section 24, 20N, 27E, Apache County, Arizona as a water well. A copy is enclosed for your files.

In regard to the drilling and completion of this well, all the requirements of our rules and regulations have been fulfilled thus we can release you of the responsibilities per your bond.

Yours truly,

John K. Petty
Petroleum Geologist

enc

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August 7, 1962

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

Re: Crest Oil Santa Fe No. 9 - Sec. 24, T20N, R27E &
Crest Oil Santa Fe No. 7 - Sec. 6, T19N, R27E, both
in Apache County, Arizona

Dear Dr. Swain:

Enclosed are your approved copies of application for permit to drill the above named tests as well as your receipt for the permit fees.

As per your recent request, we are forwarding to you via parcel post, 25 copies each of the following forms:

Bond Application
Application to Drill
Application to Plug and Abandon
Plugging Record
Well Completion Record

We are also enclosing two copies of our new rules which you may not have.

Presumably you have not heard, but Mr. Jerome is no longer with this commission. He has gone into private business as a Petroleum Consultant and will work out of Scottsdale, Arizona. In case you would ever want to contact him, his telephone No. is WHitney 6-2954 and P. O. Box No. is 701, Scottsdale, Arizona.

We wish you the best of success in your Arizona ventures.

Yours very truly,

Helen M. Eremie
secretary

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C. F. SWAIN

Alton
GREAT OIL COMPANY

BOX 57
ALTON, ILLINOIS

PHONE HO 2-5346

July 21, 1957

Mr. A. J. ... Executive Secretary
Illinois State Pollution Commission
State of Illinois
1500 N. Central
Phoenix, Arizona

Dear Mr. ...

Enclosed are two forms, No. P-1, Application for
Permit to Drill, Pore or Plug Back, with one
copy of each. These forms relate to two oil
wells in ... There is also a ...
... ..

They have been mailed for delivery to you
directly to you, by the Post in care of the
Maryland Laundry Company. ...

Drilling operations should commence at these
locations on or before September 1st, and
therefore we will appreciate again receiving
the promptness of processing of application
that you have always so courteously given us
in the past.

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

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