



SEK-
ILLS-LANDRUM! SANTA FE
W SW 1-19N-22E NAVAJO CO. 26



County Navajo

Area _____

Lease No. Santa Fe Fee

Well Name Hager, Mills & Landrum / Santa Fe 330FWL-1650FSL see plat

Location NW SW Sec 1 Twp 19N Range 22E Footage* 330' FWL - 330' FSL of
Elev 5670' Gr _____ KB Date 12-16-54 ~~XXXXXXXX~~ Abandon 1-5-55 Total NW/4 SW/4 Depth 1182'

Contractor Driller: Bud Cowlry; Rotary to 931'
Ed Cowlry; Spudder to 1182'

Casing Size 10" Depth 23' Cement _____ Drilled by Rotary X
Cable Tool _____

10" 23' Production Horizon _____

7" 930' 35 sx. Initial Production P & A

REMARKS 7" casing cut off at 518' and pulled prior to plugging.

* per 7.5' top sheet = 1225 fsl 370 fwl

Elec _____
Logs _____
Applic. Plugging Completion Sample Log AmStrat!
to Plug X Record X Report _____ Sample Descript. X
Sample Set X T-371 P-129
Core Analysis _____
DSTs _____

Water well accepted by _____

Bond Co. & No. Maryland Casualty Company Bond No. 92297761

Bond Am't \$ 2,500 Cancelled 7-22-55 Date _____ Organization Report X

Filing Receipt 16569 Dated 12-15-54 Well Book X Plat Book X

API No. 02-017-05053 ~~none~~ Loc. Plat X Dedication W/2 SW/4

Sample 129

Permit Number 26

Date Issued 12-10-54

Form Prescribed Under Oil and Gas Conservation Act of 1951

ABANDONMENT AND PLUGGING RECORD

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

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

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

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

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

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

Operator Hager, Mills & Landrum Field Wildcat
Pool Wildcat
County Navajo County, Arizona

Address all correspondence concerning this form to: Dilworth S. Hager

Street: 1301 Mercantile Securities Bldg. City Dallas, State Texas

Lease Name Santa Fe R. R. Co. Well No. 1 Sec. 1, Twp. 19N., Rge. 22E.

Date well was plugged _____, 19____ Drilling completed: 1-7-55

Was the well plugged according to regulations of the Commissioner? _____

Set out method used in plugging well and record of casing pulled: _____

Seven sacks of cement set for plug @ 520 feet; then hole filled with mud to top and three sacks of cement set for plug at top with pipe sticking up.

518.8 feet of 7 inch casing pulled.

No fresh water was encountered in this hole.

Hole is cased and cemented from 520' to 930'.

(AFFIDAVIT)

STATE OF ARIZONA _____

COUNTY OF Apache

Hager, Mills & Landrum
(Operator)

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

Subscribed and sworn to before me this the 1st day of July, 1955 by Graham J. Cowley (Partner)

Paul Platt

My commission expires: March 14, 1959 Notary Public in and for Apache County

B 26

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JUL 13 1911
STATE LAND DEPT.
1911

RECEIVED
MAY 11 1915
STATE LAND DEPT.
1915

STATE LAND DEPARTMENT
STATE OF ARIZONA

Form O&G 55

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

(After Well Has Once Been Completed)

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

FIELD: Wildcat
OPERATOR: Hager, Mills & Landrum ADDRESS 1301 Mercantile Securities Bldg., Dallas
LEASE: Santa Fe R. R. Co. WELL NO. 1 COUNTY Navajo
SURVEY: SECTION 1-T19N-R22E DRILLING PERMIT NO.:
LOCATION: 15 miles northeast of the town of Holbrook

TYPE OF WELL: Dry Hole TOTAL DEPTH 1182 feet
(Oil, Gas or Dry Hole)

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

PRODUCING HORIZON PRODUCING FROM: TO

1. COMPLETE CASING RECORD: 23.3 feet of 10 inch surface pipe
930 feet of 7 inch casing set with 35 sacks of cement
No fresh water was encountered in this hole.

Cemented
2. FULL DETAILS OF PROPOSED PLAN OF WORK: Hole is cased and cemented from 520'
to 930'. No fresh water was encountered in this hole.
Seven sacks of cement was put in above the casing, and filled with mud
to top of hole. At top three sacks of cement holding a pipe as a marker.

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

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

DATE COMMENCING OPERATIONS: December 16, 1954
NAME OF PARTY DOING WORK: Cowley Brothers, Drlg. Cont. ADDRESS St. Johns, Arizona
CORRESPONDENCE SHOULD BE SENT TO: Dilworth S. Hager, 1301 Mercantile Securities Bldg.,
Dallas, Texas

NAME: Hager, Mills & Landrum
By Austin Crow
TITLE: Land Man for Dilworth S. Hager

APPROVED: 27nd DAY OF July 1955 BY Graham L. Cowley
DENIED: DAY OF 19 BY Graham L. Cowley (Partner)

[Signature]
STATE LAND COMMISSIONER

BY:

3
B 26



Faint, illegible text and lines, possibly representing a ledger or form with multiple rows of data.



LITHOLOGIC LOG

NAVAJO COUNTY

U.S. Geological Survey
Ground Water Branch
Navajo Project

Location: Section 1, T. 19 N., R. 22. E. HAGER OIL WELL TEST

Well started: 12/16/54

Well finished: 1/5/55

Samples described by: William Kam

Stratigraphic correlation by: William Kam

Date: 1/7/55

Date: 1/13/55

	Thickness (feet)	Depth (feet)
QUATERNARY:		
ALLUVIUM:		
Sand: Grayish-orange pink 5YR-7/2; very coarse to fine subrounded to subangular; clear quartz with silt; poor sorting; limestone and jasper fragments; calcareous cement.	20	20
TRIASSIC:		
CHINLE FORMATION:		
Petrified Forest member:		
Siltstone and mudstone: Light gray N7 and medium light gray N6; silt and clay with very coarse to fine-grained quartz; rounded jasper and limestone fragments; calcareous and argillaceous cement.	10	30
Siltstone and mudstone: Light gray N7; medium light gray N6; light greenish-gray 5GY-8/1 and pale red 5R-6/2; silt and clay with very coarse to fine-grained quartz; limestone fragments; calcareous and argillaceous cement.	10	40
Siltstone and mudstone: Light greenish-gray 5GY-8/1; and grayish-red purple 5RP-3/2; silt and clay with limestone and calcite fragments; coarse to fine-grained quartz rare; calcareous and argillaceous cement.	10	50
Silty sandstone: Grayish-red purple 5RP-3/2; light greenish-gray 5GY-8/1, and grayish-orange pink 5YR-7/2; coarse to very fine grained; subrounded to subangular; clear and stained quartz; poor sorting; mudstone fragments common; limestone fragments rare; calcareous cement.	10	60
Mudstone and siltstone: Pale red purple 5RP-7/2; silt and clay; limestone fragments rare; calcareous and argillaceous cement.	20	80
Mudstone and siltstone: Pale red purple 5RP-7/2 and very light gray N=7.5; silt and clay; limestone fragments rare; mica rare; coarse to fine-grained quartz rare; calcareous and argillaceous cement.	10	90
Mudstone and siltstone: Pale red purple 5RP-7/2; silt and clay with medium to fine-grained quartz; poor sorting; limestone fragments and mica rare to absent; calcareous and argillaceous cement.	40	130
Arenaceous siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay with coarse to very fine grained; subangular to angular; clear and stained quartz; poor sorting; mica rare; calcite.	40	170
Siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay with medium to very fine-grained quartz; mica rare; calcareous and argillaceous cement.	40	210
Arenaceous siltstone and mudstone: Grayish-red purple 5RP-3/2 and pale red purple 5RP-7/2; silt and clay with very coarse to very fine grained; subrounded to angular; clear, stained, amber and frosted quartz; poor sorting; calcareous and argillaceous cement.	70	280

HAGER OIL WELL TEST

NAVAJO COUNTY

Siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay; mica rare; calcareous and argillaceous cement.	50	330
Arenaceous siltstone: Pale red purple 5RP-7/2; silt and clay with coarse to very fine-grained quartz; mica rare; calcareous and argillaceous cement.	50	380
Mudstone and siltstone: Pale red purple 5RP-7/2 and light greenish-gray 5GY-8/1; silt and clay with very coarse to fine-grained quartz; marcasite rare; limestone fragments rare; carbonaceous material rare; calcareous and argillaceous cement	10	390
Silty sandstone: Grayish-orange pink 5YR-7/2, pale red purple 5RP-7/2 and light greenish-gray; coarse to very fine grained; subrounded to subangular; clear, stained and frosted quartz; poor sorting; siltstone and mudstone fragments abundant; mica rare; limestone fragments rare; calcareous and argillaceous cement.	10	400
Arenaceous mudstone: Grayish-purple 5P-4/2; medium dark gray N4 and grayish-red purple 5RP-3/2; clay with very coarse to fine grained; subrounded to angular; clear, stained and frosted quartz with silt; poor sorting; limestone fragments rare; pyrite rare to absent; calcareous and argillaceous cement	50	450
Mudstone: Grayish-purple 5P-4/2, medium dark gray N4 and grayish-red purple 5RP-3/2; clay with silt; calcareous and argillaceous cement.	30	480
Arenaceous mudstone: Grayish-purple 5P-4/2 and medium dark gray N4; clay with medium to very fine-grained quartz with silt; calcareous and argillaceous cement.	70	550
Arenaceous mudstone: Grayish-purple 5P-4/2 and medium dark gray gray N4; clay with very coarse to very fine-grained quartz rare; angular chert fragments common to absent; gypsum rare to absent; calcareous and argillaceous cement.	35	585
Arenaceous siltstone and mudstone: Pale red 1OR-6/2; silt and clay with very coarse to fine grained; angular to subangular; clear stained and frosted quartz; poor sorting; chert common; mica rare; calcareous and argillaceous cement.	35	620
Arenaceous siltstone and mudstone: Grayish-red 1OR-4/2; silt and clay; coarse to fine-grained quartz; common; mica rare; calcareous and argillaceous cement.	10	630
Arenaceous siltstone and mudstone: Grayish-red purple 5RP-3/2; silt and clay; coarse to fine-grained quartz common; mica rare to absent; pyrite rare to absent; calcareous and argillaceous cement.	160	790
Arenaceous siltstone and mudstone: Grayish-red purple and light brown 5YR-6/4; silt and clay; coarse to fine-grained quartz common; calcareous and argillaceous cement	130	920
Mudstone and siltstone: Grayish-red purple 5RP-3/2; silt and clay; calcareous and argillaceous cement.	20	940
TRIASSIC:		
MOENKOPI FORMATION:		
Siltstone: Grayish-orange pink 5YR-7/2; silt; micaceous mudstone fragments common; gypsum rare; calcareous and argillaceous cement.	20	960

HAGER OIL WELL TEST

NAVAJO COUNTY

Siltstone; Pale brown, 5YR-6/2; silt, micaceous mudstone fragments common; gypsum abundant; calcareous and argillaceous cement.	50	1,010
Siltstone: Pale brown 5YR-6/2 and light greenish-gray 5G-8/1; silt; micaceous mudstone fragments common; gypsum common to abundant; calcareous and argillaceous cement.	35	1,045
Arenaceous siltstone: Pale brown 5YR-6/2 and light greenish-gray 5G-8/1; silt with fine to very fine grained; subangular to angular; clear and stained quartz; micaceous mudstone common to rare; calcareous and argillaceous cement.	5	1,050
Sandstone: Grayish-orange pink 5YR-6/2; fine to very fine grained; subangular to angular; clear and stained quartz; good sorting; reddish-brown and blue-green mudstone fragments 9 rare; firm calcareous cement.	15	1,065

SAMPLES CONTAMINATED	15	1,080
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PERMIAN:

COCONINO SANDSTONE:

Sandstone: Moderate orange pink 5YR-8/4; fine to very fine grained; subangular to angular; clear quartz; good sorting; water bearing; weak calcareous cement.	100	1,180
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HYDROLOGIC DATA:

Total depth	1,182 feet
Water bearing fm.	Coconino sandstone
Water bearing zone	1,081 to 1,180 feet
Driller	Bud Cowley, Rotary to 931 feet Ed Cowley, spudder to 1,182 feet

No other hydrologic data available.

LITHOLOGIC LOG

U. S. Geological Survey
Ground Water Branch
Navajo Project

OFF RESERVATION

Location: Section 1, T. 19N, R. 22E, Navajo County, Arizona
Hager Oil Well Test

Well started: 12/16/54

Well finished: 1/5/55

Samples described by: William Kam

Stratigraphic correlation by: William Kam

Date: 1/7/55

Date: 1/13/55

	Thickness (feet)	Depth (feet)
QUATERNARY:		
ALLUVIUM:		
Sand: Grayish-orange pink 5YR-7/2; very coarse to fine; subrounded to subangular; clear quartz with silt; poor sorting; limestone and jasper fragments; calcareous cement.	20	20
TRIASSIC:		
CHINLE FORMATION:		
Petrified Forest member:		
Siltstone and mudstone: Light gray N7 and medium light gray N6; silt and clay with very coarse to fine-grained quartz; rounded jasper and limestone fragments; calcareous and argillaceous cement.	10	30
Siltstone and mudstone: Light gray N7; medium light gray N6; light greenish-gray 5GY-8/1 and pale red 5R-6/2; silt and clay with very coarse to fine-grained quartz; limestone fragments; calcareous and argillaceous cement.	10	40
Siltstone and mudstone: Light greenish-gray 5GY-8/1; and grayish-red purple 5RP-3/2; silt and clay with limestone and calcite fragments; coarse to fine-grained quartz rare; calcareous and argillaceous cement.	10	50
Silty sandstone: Grayish-red purple 5RP-3/2; light greenish-gray 5GY-8/1, and grayish-orange pink 5YR-7/2; coarse to very fine grained; subrounded to subangular; clear and stained quartz; poor sorting; mudstone fragments common; limestone fragments rare; calcareous cement.	10	60
Mudstone and siltstone: Pale red purple 5RP-7/2; silt and clay; limestone fragments rare; calcareous and argillaceous cement.	20	80
Mudstone and siltstone: Pale red purple 5RP-7/2 and very light gray N-7.5; silt and clay; limestone fragments rare; mica rare; coarse to fine-grained quartz rare; calcareous and argillaceous cement.	10	90
Mudstone and siltstone: Pale red purple 5RP-7/2; silt and clay with medium to fine-grained quartz; poor sorting; limestone fragments and mica rare to absent; calcareous and argillaceous cement.	40	130

R 21

Hager Oil Test cont'd.

-2-

	Thickness (feet)	Depth (feet)
Arenaceous siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay with coarse to very fine grained; subangular to angular; clear and stained quartz; poor sorting; mica rare; calcite	40	170
Siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay with medium to very fine-grained quartz; mica rare; calcareous and argillaceous cement.	40	210
Arenaceous siltstone and mudstone: Grayish-red purple 5RP-3/2 and pale red purple 5RP-7/2; silt and clay with very coarse to very fine grained; subrounded to angular; clear, stained, amber and frosted quartz; poor sorting; calcareous and argillaceous cement.	70	280
Siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay; mica rare; calcareous and argillaceous cement.	50	330
Arenaceous siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay with coarse to very fine-grained quartz; mica rare; calcareous and argillaceous cement.	50	380
Mudstone and siltstone: Pale red purple 5RP-7/2 and light greenish-gray 5GY-8/1; silt and clay with very coarse to fine-grained quartz; marcasite rare; limestone fragments rare; carbonaceous material rare; calcareous and argillaceous cement	10	390
Silty sandstone: Grayish-orange pink 5YR-7/2, pale red purple 5RP-7/2 and light greenish-gray; coarse to very fine grained; subrounded to subangular; clear, stained and frosted quartz; poor sorting; siltstone and mudstone fragments abundant; mica rare; limestone fragments rare; calcareous and argillaceous cement.	10	400
Arenaceous mudstone: Grayish-purple 5P-4/2; medium dark gray N ₄ and grayish-red purple 5RP-3/2; clay with very coarse to fine grained; subrounded to angular; clear, stained and frosted quartz with silt; poor sorting; limestone fragments rare; pyrite rare to absent; calcareous and argillaceous cement.	50	450
Mudstone: Grayish-purple 5P-4/2, medium dark gray N ₄ and grayish-red purple 5RP-3/2; clay with silt; calcareous and argillaceous cement	30	480
Arenaceous mudstone: Grayish-purple 5P-4/2 and medium dark gray N ₄ ; clay with medium to very fine-grained quartz with silt; calcareous and argillaceous cement.	70	550
Arenaceous mudstone: Grayish-purple 5P-4/2 and medium dark gray N ₄ ; clay with very coarse to very fine-grained quartz rare; angular chert fragments common to absent; gypsum rare to absent; calcareous and argillaceous cement.	35	585
Arenaceous siltstone and mudstone: Pale red 10R-6/2; silt and clay with very coarse to fine grained; angular to subangular; clear stained and frosted quartz; poor sorting; chert common; mica rare; calcareous and argillaceous cement.	35	620
Arenaceous siltstone and mudstone: Grayish-red 10R-4/2; silt and clay; coarse to fine-grained quartz; common; mica rare; calcareous and argillaceous cement.	10	630
Arenaceous siltstone and mudstone: Grayish-red purple 5RP-3/2; silt and clay; coarse to fine-grained quartz common; mica rare to absent; pyrite rare to absent; calcareous and argillaceous cement.	160	790

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County: NAVAJO, ARIZONA

Company: HAGER, HILLS & LINDBERG Lease: Santa Fe Railroad Co. Well No. 1

Foot Location: 330' out of the SW Corner of the NW/4, SW/4 Section 1 - T19N-R22E, Navajo County, Arizona

Elevation: 5670' (ground) Commenced: 12-16-54 Completed: 1-7-55

Casing Record: 930' of 7" casing set using 35 sacks of cement. 23.3' of 10" surface.

Drilling Contractor: Cowley Brothers, St. Johns, Arizona

Drilled with Rotary Tools to a depth of 930' - Drilled with Cable Tools from 930' to total depth of 1182'

Dry and Abandoned.

Remarks: Samples described by: William Kam
Stratigraphic correlation by: William Kam

U. S. Geological Survey
Ground Water Branch
Navajo Project
Holbrook, Arizona

	Thickness (Feet)	Depth (Feet)
QUATERNARY:		
ALUVIUM:		
Sands: Grayish-orange pink 5XR-7/2; very coarse to fine; subrounded to subangular; clear quartz with silt; poor sorting; limestone and jasper fragments; calcareous cement.	20	20
TRIASSIC:		
CHINLE FORMATION:		
Petrified Forest member:		
Siltstone and mudstone: Light gray N7 and medium light gray N6; silt and clay with very coarse to fine-grained quartz; rounded jasper and limestone fragments; calcareous and argillaceous cement.	10	30
Siltstone and mudstone: Light gray N7, medium light gray N6; light greenish-gray 5GY-3/1 and pale red 5R-6/2; silt and clay with very coarse to fine-grained quartz; limestone fragments; calcareous and argillaceous cement.	10	40
Siltstone and mudstone: Light greenish-gray 5GY-8/1; and grayish-red purple 5RP-3/2; silt and clay with limestone and calcite fragments; coarse to fine-grained quartz rare; calcareous and argillaceous cement.	10	50

	Thickness (feet)	Depth (feet)
Silty sandstone: Grayish-red purple 5RP-3/2, light greenish-gray 5GY-3/1, and grayish-orange pink 5YR-7/2; coarse to very fine grained; subrounded to subangular; clear and stained quartz; poor sorting; mudstone fragments common; limestone fragments rare; calcareous cement.	10	60
Mudstone and siltstone: Pale red purple 5RP-7/2; silt and clay; limestone fragments rare; calcareous and argillaceous cement.	20	80
Mudstone and siltstone: Pale red purple 5RP-7/2 and very light gray N7.5; silt and clay; limestone fragments rare; mica rare; coarse to fine-grained quartz rare; calcareous and argillaceous cement.	10	90
Mudstone and siltstone: Pale red purple 5RP-7/2; silt and clay with medium to fine-grained quartz; poor sorting; limestone fragments and mica rare to absent; calcareous and argillaceous cement.	40	130
Arenaceous siltstone and mudstone: Pale purple 5RP-7/2; silt and clay with coarse to very fine grained; subangular to angular; clear and stained quartz; poor sorting; mica rare; calcite fragments rare; calcareous and argillaceous cement.	40	170
Siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay with medium to very fine-grained quartz; mica rare; calcareous and argillaceous cement.	40	210
Arenaceous siltstone and mudstone: Grayish-red purple 5RP-3/2; and pale red purple 5RP-7/2; silt and clay with very coarse to very fine grained; subrounded to angular; clear, stained, amber and frosted quartz; poor sorting; calcareous and argillaceous cement.	70	280
Siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay; mica rare; calcareous and argillaceous cement.	50	330
Arenaceous siltstone and mudstone: Pale red purple 5RP-7/2; silt and clay with coarse to very fine-grained quartz; mica rare; calcareous and argillaceous cement.	50	380
Mudstone and siltstone: Pale red purple 5RP-7/2 and light greenish-gray 5GY-3/1; silt and clay with very coarse to fine-grained quartz; marcasite rare; limestone fragments rare; carbonaceous material rare; calcareous and argillaceous cement.	10	390
Silty sandstone: Grayish-orange pink 5YR-7/2; pale red purple 5RP-7/2 and light greenish-gray; coarse to very fine grained; subrounded to subangular; clear, stained and frosted quartz; poor sorting; siltstone and mudstone fragments abundant; mica rare; limestone fragments rare; calcareous and argillaceous cement.	10	400
Arenaceous mudstone: Grayish-purple 5P-4/2; medium dark gray M4 and grayish-red purple 5RP-3/2; clay with very coarse to fine grained; subrounded to angular; clear, stained and frosted quartz with silt; poor sorting; limestone fragments rare; pyrite rare to absent; calcareous and argillaceous cement.	50	450

	Thickness (Feet)	Depth (Feet)
Mudstone: Grayish-purple 5P-4/2, medium dark gray M ₁ and grayish-red purple 5RP-3/2; clay with silt; calcareous and argillaceous cement.	30	480
Arenaceous mudstone: Grayish-purple 5P-4/2 and medium dark gray M ₁ ; clay with medium to very fine-grained quartz; with silt; calcareous and argillaceous cement.	70	550
Arenaceous mudstone: Grayish-purple 5P-4/2 and medium dark gray M ₁ ; clay with very coarse to very fine-grained quartz; rare; angular chert fragments common to absent; gypsum rare to absent; calcareous and argillaceous cement.	35	585
Arenaceous siltstone and mudstone: Pale red 10R-6/2; silt and clay with very coarse to fine grained; angular to subangular; clear stained and frosted quartz; poor sorting; chert common, mica rare; calcareous and argillaceous cement.	45	620
Arenaceous siltstone and mudstone: Grayish-red 10R-4/2; silt and clay; coarse to fine-grained quartz; common; mica rare; calcareous and argillaceous cement.	10	630
Arenaceous siltstone and mudstone: Grayish-red purple 5RP-3/2 silt and clay; coarse to fine-grained quartz common; mica rare to absent; pyrite rare to absent; calcareous and argillaceous cement.	160	790
Arenaceous siltstone and mudstone: Grayish-red purple and light brown 5YR-6/4; silt and clay; coarse to fine-grained quartz common; calcareous and argillaceous cement.	130	920
Mudstone and siltstone: Grayish-red purple 5RP-3/2; silt and clay; calcareous and argillaceous cement.	20	940

TRIASSIC:

HOENKOPF FORMATION:

Siltstone: Grayish-orange pink 5YR-7/2; silt; micaceous mudstone fragments common; gypsum rare; calcareous and argillaceous cement.	20	960
Siltstone: Pale brown 5YR-6/2; silt, micaceous mudstone fragments common; gypsum abundant; calcareous and argillaceous cement.	50	1010
Siltstone: Pale brown 5YR-6/2 and light greenish-gray 5G-8/1; silt; micaceous mudstone fragments common; gypsum common to abundant; calcareous and argillaceous cement.	35	1045
Arenaceous siltstone: Pale brown 5YR-6/2 and light greenish gray 5G-8/1; silt with fine to very fine grained; subangular to angular; clear and stained quartz; micaceous mudstone common to rare; calcareous and argillaceous cement.	5	1050
Sandstone: Grayish-orange pink 5YR-6/2; fine to very fine grained; subangular to angular; clear and stained quartz; good sorting; reddish-brown and blue green mudstone fragments rare; firm calcareous cement.	15	1065
SAMPLES CONTAMINATED	15	1080

STATE LAND DEPARTMENT
STATE OF ARIZONA

Form OG 51

Form Prescribed Under Oil and Gas Conservation Act of 1951

NOTICE OF INTENTION TO DRILL NEW WELL

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

Phoenix, Arizona. December 6, 1954

State Land Commissioner

In compliance with Statewide Rule 3, notice is hereby given that it is our intention to commence the work of drilling well No. 1 Sec. 1, T. 19N., R. 22E., G. & S. R. B. & M., Field, Navajo County.

Legal description of lease L. 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ & SW $\frac{1}{4}$ Sec. 1, N $\frac{1}{2}$ SW $\frac{1}{4}$ Sec. 11, & N $\frac{1}{2}$ & SW $\frac{1}{4}$ Sec. 13 T. 19N., R. 22E., & L. 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ & SW $\frac{1}{4}$ Sec. 5, & L. 1,2,3,4, NE $\frac{1}{4}$ & E $\frac{1}{2}$ W $\frac{1}{2}$ Sec. 7, T. 19N., R. 23 E.

Location of Well: 330' E. from the W. line of Sec. 1, & 330' N. of the S. line of the NW 40 acres of the SW $\frac{1}{4}$ of Sec. 1, T. 19N., R. 22 E.

Proposed drilling depth 1200 feet. Acres in drilling unit not unitized. Has surety bond been filed? yes. Is location a regular or exception to spacing rule? Regular.

Elevation of ground above sea level feet.

All depth measurements taken from top of Ground level which is feet above the ground.

PROPOSED CASING PROGRAM

Size of Casing Inches A.P.I.	Weight	Grade and Type	Top	Bottom	Cementing Depths
9 5/8"		surface casing to 20'			20'
7"	19 lb.	Seamless 	app. 750'		app. 750'
5"	15 1/2 lb.	Seamless 	app. 1100'		app. 1100' if productive

Intended Zone or Zones of completion:

Name Perforated Interval
Coconino S. S.

AFFIDAVIT:

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

Hager, Mills and Landrum
(applicant)
By [Signature] Agent

Application approved this 10 day of December 19 54

Permit NO. B-26

State Land Commissioner

12

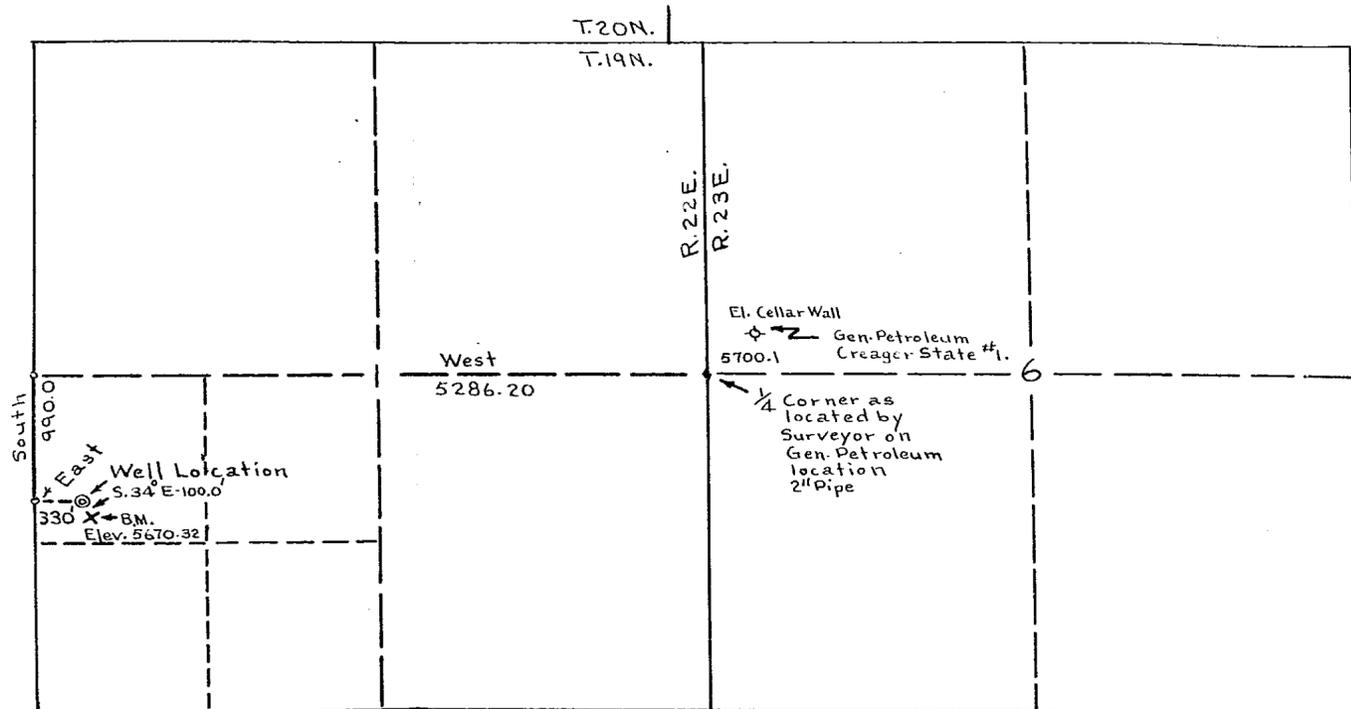


11628



SURVEY OF PROPOSED
OIL WELL IN SECTION 1, TOWNSHIP 19 NORTH, RANGE 22 EAST,
GILA & SALT RIVER MERIDIAN

SURVEYED FOR
GEORGE C. CREAGER



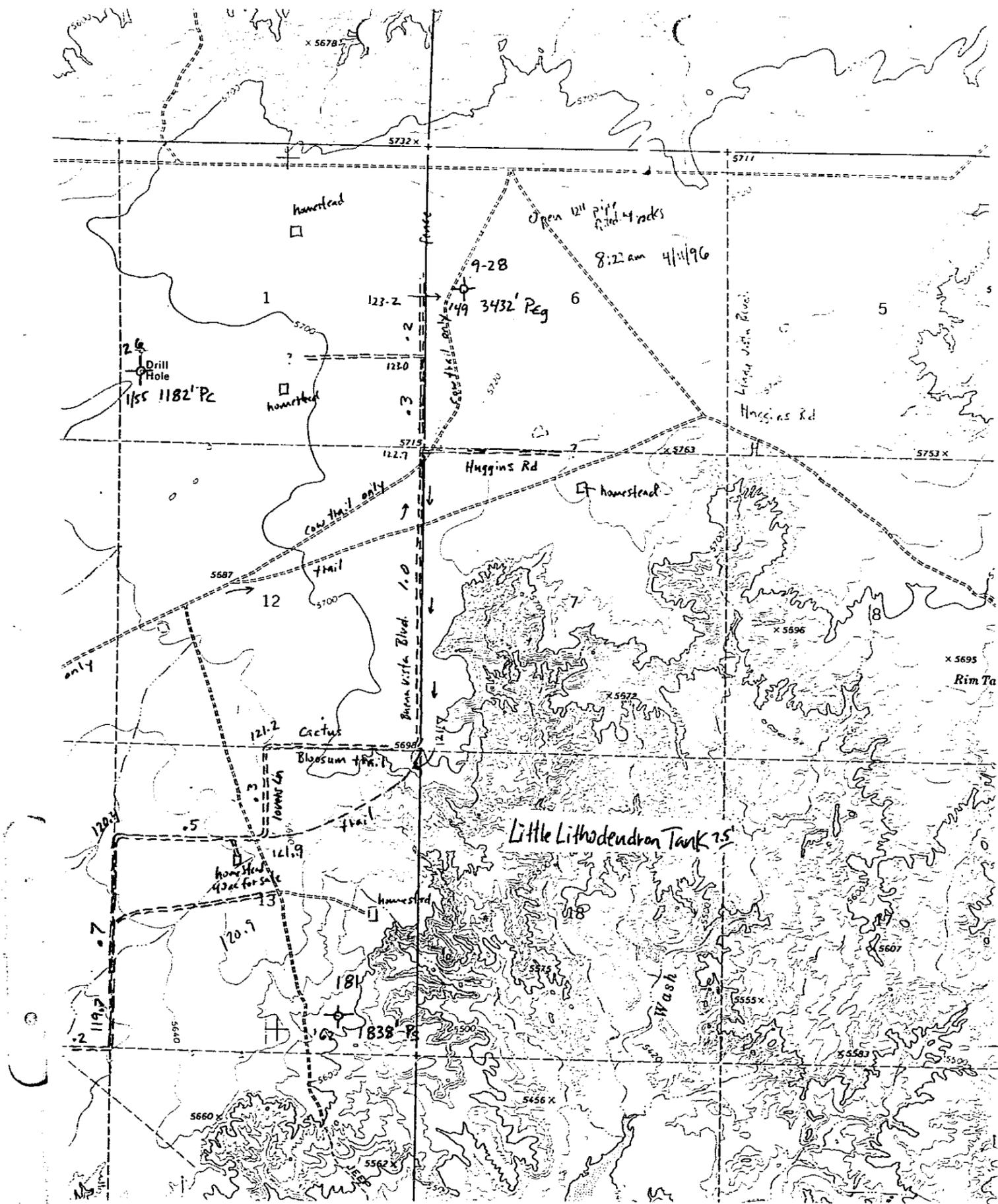
Description of Survey
Commencing at the East $\frac{1}{4}$ corner of Section 1, Township 19 North, Range 22 East, of the Gila & Salt River Meridian.
Thence West a distance of 5286.20 feet.
Thence South a distance of 990.0 feet.
Thence East a distance of 330.0 feet.
to the location of the proposed oil well.

This plat is from a field survey made by me & is correct to the best of my knowledge.

Frederic F. Mc Nabt
Registered Land Surveyor
Certificate No. 1651
Dec. 7, 1954

SANTA FE
SW 1-19N-22E NAVAJO CO.

STATE OF ARIZONA
STATE LAND DEPARTMENT
BOND FOR DRILLING OIL OR GAS WELL



STATE OF ARIZONA
STATE LAND DEPARTMENT

BOND FOR DRILLING OIL OR GAS WELL

State of Arizona)
County of Maricopa)

KNOW ALL MEN BY THESE PRESENTS:

That we, Dilworth S. Hager, John B. Mills, and N.G. Landrum,

hereinafter called Principal, and Maryland Casualty Company, hereinafter called the Surety, are held and firmly bound unto the State of Arizona in the sum of Twenty-Five Hundred Dollars (\$2,500) for the payment of which the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas the Principal has obtained a permit from the State Land Commissioner to drill a well in search of oil or gas, and whereas said Principal is required by provisions of the Oil and Gas Conservation Act of 1951 to deposit with the said Commissioner a good and sufficient bond:

Now, therefore, the condition of the foregoing obligation is such that if the Principal shall drill, case and plug said well drilled by said Principal in such manner as to prevent the escape of oil or gas from one stratum to another and to prevent the intrusion of water into an oil or gas stratum from a separate stratum, and to prevent the pollution of fresh water supplies by oil, gas or salt water and in such manner as to prevent waste, and shall make such reports to the Commissioner as are required by the Oil and Gas Conservation Act of 1951 by said Principal, and shall file the log and drilling record kept by said Principal within six (6) months from the time of the completion or abandonment of said well drilled for oil or gas and shall plug the same in the manner provided by the rules and regulations adopted by said Commissioner, then this obligation to be null and void, otherwise to be and remain in full force and effect.

Witness our hands and seals this 6th day of December, 1954.

John B. Mills
Dilworth S. Hager, John B. Mills and N.G. Landrum

By: _____
Principal

MARYLAND CASUALTY COMPANY

Bernard W. Burns
Surety

Bernard W. Burns, Attorney-in-Fact

Approved this 10th day of December, 1954.

Ray G. Galt
State Land Commissioner

CANCELLED
July 22, 1955



11653

July 22, 1955

Mr. Dilworth S. Hager
1301 Mercantile Securities Building
Dallas, Texas

Dear Mr. Hager:

We are inclosing herewith completed copies for your files of our forms O&G 55 and 56 covering the drilling operation of the well located in Section 1, Township 19 North, Range 22 East, Navajo County, Arizona, together with a copy of our letter to the Maryland Casualty Company regarding the termination of the bond, which is self-explanatory.

We would like to express our appreciation for the splendid cooperation this Department has received in complying with all of the necessary requirements pertaining to the drilling and abandonment of this well. If at some future date drilling operations may once again be contemplated by you, or your associates, please be assured that this Department will assist you in every way possible.

Sincerely yours,

Roger Ernst,
State Land Commissioner

RE:mb
cc - George C. Greager
P. W. Johnson
Encl. (2)

C
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P
Y

BJ 26

July 22, 1955

Mr. F. B. Gray
Maryland Casualty Company
Bond Department
634 S. Spring Street
Los Angeles 14, California

Dear Mr. Gray:

Re: Bond No. 92-297761

The bond in the amount of \$2,500.00 was issued on December 6, 1954 to cover the well for drilling of oil and gas in the State of Arizona by Dilworth S. Hager, John B. Mills and N. G. Landrum as principal, and the Maryland Casualty Company as surety, which bond was conditioned upon the drilling, casing and plugging of all oil and gas wells drilled to prevent the escape of oil or gas from one stratum to another, to prevent intrusion of water into an oil or gas stratum from a separate stratum, to prevent the pollution of fresh water supplies by oil, gas or salt water and to prevent waste.

In addition said bond was conditioned upon the submission of all reports required by the Oil and Gas Conservation Act of 1951 of the State of Arizona, and the Rules and Regulations of the State Land Department, such logs, drilling records, and the receipt of samples as are required by said Rules and Regulations of the Oil and Gas Conservation Law of Arizona.

The records of the Department indicate that with respect to the well drilled by Dilworth S. Hager, John B. Mills and N. G. Landrum, located in Section 1, Township 19 North, Range 22 East, Navajo County, that all requirements as contained in said Oil and Gas Conservation Law of Arizona and the Rules and Regulations of the State Land Department, have been met and fully complied with by the said D. S. Hager, John Mills and N. G. Landrum and therefore, the bond heretofore described may be terminated as of July 22, 1955.

Very truly yours,

Roger Ernst,
State Land Commissioner

cc - Dilworth S. Hager
George C. Creager
P. W. Johnson

RE:mb

C
O
P
Y

July 13, 1955

Mr. Phillip W. Johnson
P. O. Box 2270
Tucson, Arizona

Dear Phil:

I am transmitting herewith one copy each of our forms 55 and 56 for the Hager, Mills & Landrum well to be approved and returned to me for processing. My file shows that you have already received the samples.

I have received a request from a Mr. Louis C. Conant, Geologist in Charge, Resources Office, Fuels Branch, U.S.D. I., Geological Survey, Washington D. C. for a list of wells drilled. I'll answer it from here and send him what we have, telling him that we'll send him a revised copy when completed. OK ?

Very truly yours,

Muriel R. Bates

mb
Encl. (2)

C
O
P
Y



OFFICE OF
State Land Department

STATE OF ARIZONA
Phoenix, Arizona

July 13, 1955

ROGER ERNST
STATE LAND COMMISSIONER

JAH
LAH
PWJ
CAA
MBB
OJC
MFH
MAK
CTP
NLW
PHX
FILE

RECEIVED

JUL 14 1955

WATER RESOURCES DIVISION
U. S. GEOLOGICAL SURVEY
GROUND WATER BRANCH

Mr. Phillip W. Johnson
P. O. Box 2270
Tucson, Arizona

Dear Phil:

I am transmitting herewith one copy each of our forms 55 and 56 for the Hager, Mills & Landrum well to be approved and returned to me for processing. My file shows that you have already received the samples.

I have received a request from a Mr. Louis C. Conant, Geologist in Charge, Resources Office, Fuels Branch, U.S.D. I., Geological Survey, Washington D. C. for a list of wells drilled. I'll answer it from here and send him what we have, telling him that we'll send him a revised copy when completed. OK ?

Very truly yours,

Muriel
Muriel R. Bates

mb
Encl. (2)

B 26

June 14, 1955

Cowley Brothers
Drilling Company
St. Johns, Arizona

Gentlemen:

On May 17th, 1955 this office sent you four copies of our forms O&G 55-56 regarding the Hager, Mills, Landrum, Santa Fe #1 well, which was drilled by your Company in Section 1, Township 19N., Range 22 E., Navajo County, Arizona. We requested that you fill in certain information pertaining to this well.

Would it be possible for you to complete these forms and return to this office as soon as possible in order that we may release the bond in connection with the drilling of this well?

Very truly yours,

Phillip W. Johnson, Geologist

By: _____
Secretary

C
O
P
Y

mb

B 26

DORSEY HAGER
CONSULTING GEOLOGIST
908-909 CONTINENTAL BANK BUILDING
SALT LAKE CITY 1, UTAH
TELEPHONE 5-9832

May 19, 1955

Mr. Philip W. Johnson, Geologist
State Land Department, State of Arizona
Phoenix, Arizona

Dear Mr. Johnson:

Mr. Hager is out of town and will be until next week but he asked that the samples from the Hager, Mills & Landrum #1 Santa Fe, Navajo County, Arizona, be sent to you. I am mailing these to you today.

Mr. Hager also stated that other information was to be sent to you which will be forwarded when he returns to the office.

Very truly yours,

Phyllis A. Chatwin
(ms) Phyllis A. Chatwin,
Secretary to Mr. Hager

PC



*Sample Recd.
5/23/55
In receipt
7/27/55
Phil took
these
T.M.
MB*

May 17, 1955

Cowley Brothers
Drilling Company
St. Johns, Arizona

Gentlemen:

Inclosed please find a duplicate copy of a letter received from Mr. D. S. Hager regarding the filing of our forms 55-56 in conjunction with the Hager, Mills, and Landrum well, which was drilled by your Company on Section 1, Township 19N., Range 22E., Navajo County, Arizona.

Would you kindly fill in the desired information on the inclosed forms and return all four copies to us in order that we may process them. Thank you very much.

Very truly yours,

Phillip W. Johnson,
Geologist

By: _____
Secretary

C
O
P
Y

mb
Encl. (5)

See "Verifal" of Hager letters.

B 26

DILWORTH S. HAGER

1301 MERCANTILE SECURITIES BUILDING

DALLAS, TEXAS

May 9, 1955



Mr. Roger Ernst
State Land Commissioner
State Land Department
Phoenix, Arizona

Dear Mr. Ernst:

This acknowledges receipt of your letter of the 6th addressed to Mr. Hager, which is appreciated.

The forms enclosed with your letter have been filled in as best we can, all questions on Form 55 being answered except the one telling whether proposed work "conform with requirements of SW Rule 26", and all questions on Form 56 being answered except date well was plugged and whether such plugging was in accordance with regulations of the Commissioner. Original and carbon copy of each form is enclosed.

Form 55 has been signed by me as Land Man for Dilworth S. Hager but I hesitate to make affidavit to the statements on Form 56 because I do not have personal knowledge of the facts stated, such information having been furnished to us by Cowley Brothers, drilling contractors of St. Johns, Arizona, who drilled the well.

Drilling was completed on January 7, 1955 but there were a few weeks delay in plugging the well, as I recall, and Cowley Brothers are the ones who can give the exact date. Also, they can advise whether the well was plugged according to regulations of the Commissioner, as we do not know what the regulations are and Cowley Brothers were instructed to plug the well as the State requires. Therefore, if you will send Form 56, as filled in by me but with the two above questions unanswered, to Cowley Brothers, I am sure they will answer the questions and make affidavit to the facts stated therein.

If there is anything further we can do, please call on us.

Very truly yours,

Austin Crow
for DILWORTH S. HAGER

AustinCrow.c
Encl.

B 26

5/14/55

Phil took samples.

M/B
10

4/22/55

Phil took 2nd Box
of samples.

M/B
5

May 6, 1955

Mr. Elizabeth S. Hager
1301 Mercantile Securities Building
Dallas, Texas

Dear Mr. Hager:

We have been requested by the Maryland Casualty Company of Los Angeles, California to release your bond in the amount of \$2,500.00 in conjunction with the drilling of the Hager, Mills, and Landrum, Santa Fe #1, located in Section 1, Township 19 N., Range 22 E., Navajo County, Arizona.

On April 5th, we wrote to Mr. George Greager, Agent, of Salt Lake City, Utah regarding the filling of our forms 55 and 56 covering the plugging and abandonment program on this well, and asked that a log and samples be filed with this Department.

On April 20th, we received a log giving a description of the samples taken from surface to a depth of 1180'. We noted at the bottom of this log a brief statement regarding the plugging of this well. On April 30th this Department received from the Four Corners Sample Out a set of samples on the above described well. However, for our records we must have the inclosed forms filled out, signed and duly executed before we can release the bond.

This office fully appreciates the splendid cooperation given us in fulfilling all of the requirements specified by State Law, and as soon as this last regulation has been complied with we shall be happy to terminate the bond.

Very truly yours,

Roger Ernst,
State Land Commissioner

RE:tab
cc - Maryland Casualty Company
George C. Greager
P. W. Johnson
Forms 55 - 56

C
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26

MARYLAND CASUALTY COMPANY

WILLIAM T. HARPER, CHAIRMAN OF THE BOARD AND PRESIDENT

JOHN S. MEE
RESIDENT MANAGER

LOS ANGELES OFFICE
BANKS-HUNTLEY BUILDING 634 S. SPRING STREET
TRINITY 6581 LOS ANGELES 14, CALIF.

April 28, 1955

State Land Commissioner,
State of Arizona,
Phoenix, Arizona.

Re: Bond No. 92-297761
Dilworth S. Hager, John B. Mills
and N. G. Landrum, Dallas, Texas

Gentlemen:

Your records will show that on or about December 6 our company executed a Drillers bond in connection with well designated as Santa Fe #1, located in Section 1, Township 19, North Range 22 East, Navajo County, Arizona.

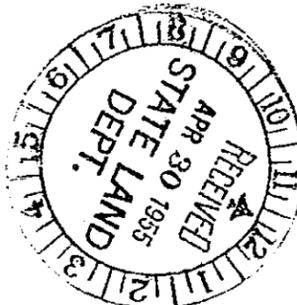
Information has come to us that the log and plugging record has been furnished to your department, together with request to terminate our liability under this bond.

It will be appreciated if you will refer to your records in this connection and inform us as to the date on which we may terminate our liability on account of the execution of this bond.

Yours very truly,

F. B. Gray
Bond Department

FBC/lg



B 26

26 West Broadway
Salt Lake City, Utah

26 April 1955

MR. PHILLIP W. JOHNSON, Geologist
State Land Department
State of Arizona
Phoenix, Arizona

Dear Phil:

I have discussed your letter of 5 April 1955 with Mr. Dorsey Hager,
and he is writing regarding the plugging forms on the Santa Fe #1 test.

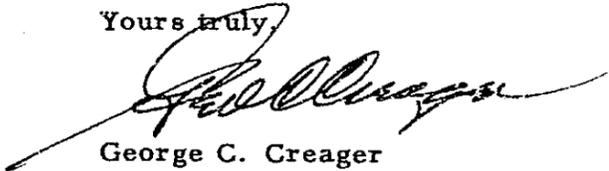
They had some difficulty getting the pipe out of the hole, and I have
not heard from them as to whether or not the job was actually completed.

Mr. Hager is also writing to Paul Lewis with reference to the logs and
samples.

It was not intended that those samples be picked up by anyone but you
or your representative, according to my understanding, but I expect
that you will hear from Mr. Dorsey Hager direct on the matter.

With kind personal regards, I am

Yours truly,



George C. Creager

GCC:dbd





OFFICE OF
State Land Department

STATE OF ARIZONA
Phoenix, Arizona

April 20, 1955

ROGER ERNST
STATE LAND COMMISSIONER

JAH
LAH
PWJ
CAA
KBB
OJC
MFH
MAK
CJP
NEW
PEX
FILE

Mr. Phillip W. Johnson
P. O. Box 2270
Tucson, Arizona

Dear Mr. Johnson:

Enclosed please find letter and attached log for the Hager, Mills and Landrum well from Mr. Hager. I am also sending letter from Mr. Lewis, oil scout for Stanolind Oil Company. I have not as yet received any samples here, nor any O&G forms from Mr. Creager. I was wondering if he sent the forms to you.

If we do not receive any forms I believe it would be best to send an additional set direct to Mr. Hager. They evidently thought it would serve the purpose to note their plugging program on last sheet of log, which of course is not sufficient.

I have cut the stencil for your index of current information, sample inclosed, and have started down the list filling in what information I can. I know you will have to fill in the "brainy" info.

no
yes
Good

Sincerely,

Muriel
Muriel R. Bates

RECEIVED

APR 21 1955

WATER RESOURCES DIVISION
U. S. GEOLOGICAL SURVEY
GROUND WATER BRANCH

P.S. Please send all correspondence and log back to me.
Thanks

*I'll return Stanolind
letter later Phil*

Encls.

B 26

DILWORTH S. HAGER
1301 MERCANTILE SECURITIES BUILDING
DALLAS, TEXAS

April 18, 1955

State Land Commissioner
State of Arizona
Phoenix, Arizona

Dear Sir:

We attach complete written log and plugging record of No. 1 Santa Fe Railroad Company well drilled by Dilworth S. Hager, John B. Mills and N. G. Landrum in Section 1, Township 19 North, Range 22 East, Navajo County, Arizona, commenced December 16, 1954 and completed January 7, 1955.

Will you please advise if Bond for Drilling Oil or Gas Well dated December 6, 1954, executed by the three above mentioned men as Principal and Bernard W. Burns, Attorney in Fact for Maryland Casualty Company as Surety in favor of the State of Arizona may now be released.

*not until
we receive
all our info*

Very truly yours,

Gwendolyn Stone

Gwendolyn Stone
Secretary

enc.
C. C. Mr. B. W. Burns
402 Luhrs Building
Phoenix, Arizona

4792



B 26

STANOLIND OIL AND GAS COMPANY

P. O. Box 335
Albuquerque, New Mexico

April 11, 1955

Mr. Roger Ernst
State Land Commissioner
State Land Department
Phoenix, Arizona

Dear Sir:

This is to confirm our telephone conversation of this morning concerning the samples from the Hager, Mills, Landrum No. 1 Santa Fe, Section 1, T-19-N, R-22-E, Navajo County, Arizona. Pursuant to our conversation, I will take the samples to the Four Corners Sample Cut, Inc., Farmington, New Mexico. They will cut the samples and mail a set to you and also a set to Mr. Hager in Salt Lake City, Utah.

I hope that no inconvenience has been caused to Mr. Hager or your Department because of our having these samples. We appreciate your calling the matter to our attention and hope that arrangements may be worked out whereby the Four Corners Sample Cut, Inc. may do the sample cutting of the wells in Arizona.

Very truly yours,

STANOLIND OIL AND GAS COMPANY



Paul W. Lewis

PWL:jis

4485



April 5, 1955

Mr. George Greager
Atlas Building
Salt Lake City, Utah

Dear George:

In checking our files I find that we have not received copies of our forms 034 55 and 56 covering the plugging and abandonment of the recent Hager, Mills, Landrum, Santa Fe #1 test. We also have not received any logs and would appreciate your help in seeing that this information reaches us.

The samples were originally given to the U.S.G.S. office in Holbrook, but I am told by them that a Mr. Paul Lewis, oil scout for the Stanolind Oil Company picked up these samples on January 21st. We are now without any state samples. If you know Mr. Lewis or any of the arrangements that were made with Stanolind Oil I would appreciate hearing from you in order that we might complete our files and records on this well.

Very truly yours,

Phillip W. Johnson,
Geologist

PWJ:mb
Encls. Forms 55-56

B 26

32 x 0

April 5, 1955

Stanolind Oil Company
Box 335
Albuquerque, New Mexico

Dear Sirs:

On January 21st Mr. Paul Lewis, oil scout, for your Company picked up at the U.S.G.S. office in Holbrook, Arizona a set of samples from the recent Hager, Mills, Landrum, Santa Fe, #1 oil test located in Section 1, Township 19N., Range 22 E., Navajo County, Arizona. These samples were the property of the State Land Department, State of Arizona and were not the property of the U.S.G.S. Mr. Lewis told those in charge at the U.S.G.S. office that he had authority from Mr. Hager to take these samples. However, these samples were no longer under the jurisdiction of Mr. Hager, and I would like to have your cooperation in seeing that we receive these samples uncut at the earliest possible date.

In accordance with the State Law, no action can be taken to release the bond until these samples are received.

Very truly yours,

Roger Ernst,
State Land Commissioner

RE:mb

C
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B 26

32 x 11

CREAGER CORPORATION

SALEM ILLINOIS

PETROLEUM PRODUCTION

PLEASE ADDRESS REPLY TO:

George C. Creager
Atlas Bldg.
Salt Lake City, Utah

December 10, 1954

State Land Department
State of Arizona
Phoenix, Arizona

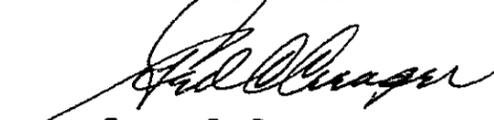
Attention: ~~L. N.~~ N. Duncan

Dear Sir:

Enclosed herewith is surveyor's plat showing the location of the Hager, Mills and Landrum Santa Fe #1. It is requested that you place this plat with the well permit application mailed to you earlier.

Thank you very much for your cooperation in this matter.

Yours very truly,


George C. Creager

GCC/mc

Encl.

11794





OFFICE OF
State Land Department
STATE OF ARIZONA
Phoenix, Arizona

ROGER ERNST
STATE LAND COMMISSIONER

December 8, 1954

Mr. Dorsey Hager
Continental Bank Building
Salt Lake City, Utah

Dear Mr. Hager:

Mr. George Creager just informed me of the new test well that is going to be drilled in Section 1, Township 19N., Range 22E., and of your interest in it as geologist-in-charge. When I questioned Mr. Creager concerning the samples, he suggested I write you in order to make arrangements for obtaining them. The State would like to have samples at 10' intervals or less from the surface to the total depth. Because of our sample program it is necessary to have a large enough sample for us to cut it three ways. Therefore, I would like to request a separate small sample in a 3rd sample bag to be saved for the State Land Department. We will be glad to furnish you with sample bags if necessary. I will plan to pick these samples up at the rig or send a representative to do so. I sincerely hope this arrangement will prove satisfactory to you. Am looking forward to meeting you and wish you success in this test.

Very truly yours,

Phillip W. Johnson,
Geologist

C
O
P
Y

PWJ:mb

B 26

CREAGER CORPORATION

SALEM ILLINOIS

PETROLEUM PRODUCTION

PLEASE ADDRESS REPLY TO:

Geo. C. Creager
535 Atlas Bldg.
Salt Lake City, Utah

December 6, 1954

The State Land Department
State of Arizona
Phoenix, Arizona

Gentlemen:

Enclosed herewith is application in duplicate for permit to drill a test well for oil or gas.

The bond is to be mailed direct to you and it is requested that you place the bond with this application.

The elevation will be furnished to you later; however it is requested that this permit be issued as quickly as possible without waiting for this elevation.

I have discussed the casing program with Mr. Phil Johnson and he understands that Mr. Dorsey Hager, geologist, will be present during the drilling of this well.

Will you kindly send the permit to me at the Salt Lake City address in the self-addressed stamped Air Mail envelope enclosed.

We will sincerely appreciate your cooperation in this matter.

Enclosed is my check in the amount of \$25.00 to pay for this permit.

Yours very truly,

Geo. C. Creager
George C. Creager

GCC/mc

Enclosures (3)

1-1-1972

51071

Sand Lake Wash

517.31 pounds sand

326

MSP

OFFICE OF
STATE LAND DEPARTMENT
STATE OF ARIZONA
Phoenix, Arizona

16 - 3^N - 4^E

You are hereby advised that rental in the amount of \$.....

will be due and payable at this office.....

on the leases listed below. IF SAID RENTAL IS NOT RECEIVED ON OR BEFORE THE DUE DATE, PENALTY AND INTEREST WILL BE ADDED THERETO.

Lease No. Descr. Sec. Twp. Rge. Pays to Rental Pen. Int.

80
60
80
Al 27115
7962 } 85235

This is OK I talked to George
about it.

PMJ

B 26

