P-W

Casa Grande Dev. Co. Laveen #1
SE/4-SE/4 Sec25-Twp6S-R7E
Pinal, County No Permit 11-9

32 x

11-9

County Final

Area

Lease No.

Well Name Casa Grande Devl ~~Company~~ Assoc. Laveen #1
Valley Oil +
O.W. Rugg, Box 1146 Casa Grande, Ariz.

Location SE SE Sec 25 Twp 6S Range 7E Footage

Elev Gr KB Spud Date 9-11-44 Complete 5-24-45 Abandon ~~10-24-44~~ Total Depth 4742

Contractor: Approx. Cost $

Drilled by Rotary
Cable Tool

Casing Size	Depth	Cement

Production Horizon

Initial Production D & A

REMARKS:

Elec. Logs L-W. Electrolog

Sample Log
Sample Descript X
Sample Set
Cores

Applic to Plub Plugging Record Completion Report

Water well - accepted by

Bond Co. & No.

Bond Am't $ Cancelled Date Organization Report

Filing Receipt dated Well Book Plat Book

Loc. Plat Dedication

API # 02-021-05009

PERMIT NO. None Date Issued

11-9

32 ×

FORM O. & G. 2

16

Locate well correctly

ARIZONA
STATE LAND DEPARTMENT

Lease or Permit No.....

Log of Oil or Gas Well

Company Casa Grande Oil Development Co. Address Casa Grande

Lessor or Tract Leroy Hoeksler Field 11 Mi East of Casa Grande

Well No. 1 Section 25 Township 6 S. Range 7 E.

Meridian Gila and Salt River Base and Meridian County Pinal

Location S.E. Corner of S.E. 1/4 of (N) Sec. 25-6-7 feet (S) of ..... Line and ..... feet (W) (E) of ..... Line of .....

Elevation 1350 (Derrick floor relative to sea level). U.S.G.S. 1474 from new topog sheet — EAK 9-24-71

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed Lester B. Roberts

Date Sept. 21 - 1944 Title Driller

The summary on this page is for the condition of the well at above date.

Commenced drilling Sept. 11 - 1944 Finished drilling ..... 19.....

OIL OR GAS SANDS OR ZONES
(Denote Gas By G)

No. 1, from ..... to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

No. 1, from ..... to ..... No. 3, from ..... to .....

No. 2, from ..... to ..... No. 4, from ..... to .....

CASING RECORD

Size Casing	Weight per Foot	Threads per Inch	Make	Amount	Kind of Shoe	Cut and Pulled From	Perforated From	Perforated To	Purpose
13 3/8	54.5	10	Youngstown	62 ft.	Notched	none	none		Surface conductor
			Cemented with 45 sacks of construction cement.						

MUDDING AND CEMENTING RECORD

Size Casing	Where Set	Number of Sacks of Cement	Method Used	Mud Gravity	Amount of Mud Used

PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....

Adapters—Material ..... Size .....

No permit

SHOOTING RECORD

Size	Shell Used	Explosive Used	Quantity	Date	Depth Shot	Depth Cleaned Out

TOOLS USED

Rotary tools were used from.....feet to.....feet, and from.....feet to.....feet

Cable tools were used from.....feet to.....feet, and from.....feet to.....feet

DATES

..... Put to producing.....

The production for the first 24 hours was.....fluid, of which.....percent was.....,

.....per cent was emulsion,.....per cent water, and.....sediment.

Gravity Deg. Be.....

If gas well, cubic feet per 24 hours.....Gallons gasoline per 1,000 cubic feet of gas.....

Rock pressure, pounds per square inch.....

EMPLOYEES:

....., Driller ....., Driller

....., Driller ....., Driller

FORMATION RECORD

From	To	Total Feet	Formation

Approved:

.....
Date

.....
Company

By .....
Title

.....
Address

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give size and location. If the well has been dynamited, give size, date, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

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FORM O. & G. 2

16

Locate well correctly

ARIZONA
STATE LAND DEPARTMENT

Lease or Permit No.....

Log of Oil or Gas Well

Company CASA GRANDE VALLEY OIL AND DEV ASSO Address CASA GRANDE ARIZONA

Lessor or Tract LEROY HECKLER - LEASE Field CASA GRANDE

Well No. 1 Section 25 Township 6 SOUTH Range 7 EAST

Meridian G AND S.R. MER County PINAL

Location APROX 1474 ~~feet~~ SEA-LEVEL (N) (S) of ..... Line and ..... feet (E) (W) of ..... Line of .....

Elevation 122 (Derrick floor relative to sea level).

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed Walter E. Hansen

Date..... Title Pres.

The summary on this page is for the condition of the well at above date.

Commenced drilling SEPTEMBER-13 1944 Finished drilling SEPTEMBER-16 1945

OIL OR GAS SANDS OR ZONES
(Denote Gas By G)

No. 1, from 716 806 — 1023 — to 717 810 SLIGHT 1030

No. 2, from 1580 1705 — to 1586 1921 — SLIGHT 1950

No. 3, from 2100 — 2500 to 2110 2504 SLIGHT 2180 2550

No. 4, from 2570 3620.50 BEST-OIL SHO to 2600 SLIGHT- 3690.50 - TO 3700

No. 5, from 3800 — 4064 — to 3870 LIGHT OIL SHO 4067

No. 6, from 4268 — 4715 — to 4595 FRACTURED AREA STKS-FINE LIME 4742 LIGHT GAS BUFF LIME

IMPORTANT WATER SANDS

No. 1, from 380 1100 to 420 1350

No. 2, from 2440 to 2490

No. 3, from 2504 to 2980

No. 4, from 4070 to 4380

ELECTRO LOG-LANE-WELLS-3000-4742.

SHOW-SULPHUR-GAS-WATER AFTER-TESTING

CASING RECORD

Size Casing	Weight per Foot	Threads per Inch	Make	Amount	Kind of Shoe	Cut and Pulled From	Perforated From	Perforated To	Purpose
SURFACE CASING O.D 13 5/8" I.D. 12.415"	68 cup	8	NON-UPSET	62		✓	✓	✓	HOLD-SURFACE VALLEY-FILL.
	66.11	PLAIN.							
O.D.-7" I.D.-6.154"	30 COUPLINGS 29.70	PLAIN. 10		3033		INTACT IN-HOLE			TO HOLD-TWO-FISHES KEY-SEATED IN-WALL 3 DRILL COLLARS-40 FEET 7" O.D. WASH OVER PIPE 490 feet DRILL STEM-AND-SWELLING GROUND.
O.D. 4 3/4" I.D. 4.082"	16-COUPLINGS 13.75	PLAIN 10		3700			→		TO SWABB AND TEST 3689-SD.

MUDDING AND CEMENTING RECORD

Size Casing	Where Set	Number of Sacks of Cement	Method Used	Mud Gravity	Amount of Mud Used
7" O.D	3033		SQUEEZ-JOB 3033-2733	CEMENT	300' up.
4 3/4	3700		SQUEEZ JOB. 3540-3440	" "	100' up.
"	3033 - OF 3700+		3033-2933		100' up.

PLUGS AND ADAPTERS

Heaving plug—Material BAKER PLUG AND BASKET Length PLUG 18" - BASKET 5 FEET Depth set 3540

Adapters—Material BASKET AND PLUG. WAS - ~~Size~~ USED. TO BACK UP CEMENT FROM - 3540 - ~~up~~ TO 3440

CEMENT. PLUG 3733 TO 3815
" " 4064 TO 4140
" " 4330 TO 4420

FOR PURPOSE ISOLATING-SECTIONS-OF HOLE-AND-TO REST.- PERFORATED-PACKER DRILL STEM. TO CLOSE PACKER VALVE AND-TO TEST ONLY-THE SECTION. WANTED-WITH-OWEN'S OPEN HOLE AND LANE WELLS'S CASING PACKERS-ON DRILL STEM-TESTS

No permit

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SHOOTING RECORD

Size	Shell Used	Explosive Used	Quantity	Date	Depth Shot	Depth Cleaned Out
LANE WELLS	SHOT GUN PEAR	CARTRAGES	1 U FOOT-20-SHOTS	JUNES-(?-45)	5917 / 2794	DRILL-STEM CIRCULATION DESCLOSED SLIGHT SHOW
"	ELECTRIC	" " "	" " "			
"	TORPEDOS-DETRONATOR	NITROGELLIN	[illegible]		1796	
"		" " "	[illegible]		2187	
LANE WELLS	TORPEDOS	" " "	[illegible]	" "	2589	
10-FOOT	" "	NITROGELLIN	" " "	JUNE-9-45	4255 / 4265	FULL-DEPT B-DRILL-STEM-CIRCULATION
" "	" "	" "	" " "	" " "	4125 / 4135	
3 INCH 20 FOOT	GALVONIZED ELEC. DET	GELLITAN.	100 POUNDS.	SEPT. 12. "	3680 / 3700	CIRCULATED-WITH CLEAR-WATE.
3 " "	" " "	" "	" "	JUNE 9.45	3675 / 3695	THESE ZONES-WERE SWABBED-WITH 4 INCH
3 INCH 20 FOOT.	" " "	" "	100 POUNDS	SEPT. 17	3565 / 3575	AND-2½-SWABBS JARR AND SUCTION TYPE.

ALEXANDER TORD OIL-WELL SHOOTING LONG BEACH-CALIF.

TOOLS USED

Rotary tools were used from SURFACE feet to 4742 feet, and from ..... feet to ..... feet

Cable tools were used from NONE feet to NONE feet, and from ..... feet to ..... feet

DATES

NONE Put to producing NONE

The production for the first 24 hours was NONE fluid, of which ✓ percent was ✓, ✓ per cent was emulsion, ✓ per cent water, and ✓ sediment.

Gravity Deg. Be ✓

If gas well, cubic feet per 24 hours NONE Gallons gasoline per 1,000 cubic feet of gas NONE

Rock pressure, pounds per square inch ✓

EMPLOYEES:

MARSHALL SHIFLET-ACT. SUPT AND, Driller REN ELVIS LESTER ROBERTS-ACT. SUPT. AND —, Driller

MEL. GREEN. CLOREN-SHIFLET, Driller AL. SISEMORE. TO DATE OF SHUT DOWN, Driller

FORMATION RECORD

From	To	Total Feet	Formation
	380	380	VALLEY-FILL
380	420	40	WATER GRAVEL AND SAND.
420	2290	1870	GYPSUM-RED. BEDS
2290	3250	960	GLACIAL-LAY-DOW GRAVEL N. BOLDERS
3250	3460	210	SILT. FINE-AMBCER-LIME SD.
3460	3670	200	BROWN-CONGLORMATE.
3689	4715	1026	ANDERSITE
4715	4742	27	

4693-SOLID F.M. 49 FEET FRACTURED FM. TOTAL-DEPT. 4742

Approved:

Date

Company

By

Title

Address

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give size and location. If the well has been dynamited, give size, date, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

CORES-AND SAMPLES STORED ON LEASE. SMITH EMERY-ANALYAS-ATTACHED-TO LOG-CERTIFIED CERTIFICATES ON FILE WITH ASSOCIATION SEC. EFFORTS TO-SALVAGE CASING.-WAS ABONDONED-SAME INTACK. IN-HOLE CEMENT PLUGS BELOW 3733- STILL IN-PLACE.- 4330 TO 4420 " " 4060-4140 " " 3733-3815- 8 INCH HUGHES BIT AND SUB WERE-BYPASSED-WITH A TRICONE-HUGHES 6 INCH BIT. AS-HOLE WAS-REDUSED 4064. A 20 FOOT. 5 INCH BAILER-LOST IN-HOLE AT 4742. HAZARDS DRILLING AND HIGH COST OF CARRING THIS WELL DOWN BELOW 4742, CONTRIBUTED MUCH. TOGETHER WITH OTHER ELEMENTS-WAR TIME CONDITIONS-. CAUSED-THE SUSPENSION OF DRILLING OPERATIONS.

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PERSONAL LOG KEPT BY

H. A. PORTERIE
Analytic Geologist

Sec 25 6S-7E

WILDCAT WELL NO. 1
CASA GRANDE VALLEY OIL & DEVELOPMENT
ASSOCIATION -- A LIMITED PARTNERSHIP
CASA GRANDE, ARIZ.

1 - 60	13-5/8 Surface casing
60 - 390	Soft sandy clay
390 - 400	Coarse water gravel
400 - 410	Blue clay
410 - 491	Tough brown clay
491 - 653	Hard red brown shale
653 - 674	Soft red brown shale
674 - 716	Brown gypsum shale - streaks lime, clay
716 - 717	Slight show oil and gas - tar, sand very meek
717 - 800	Soft sandy brown gypsum shale - gas and oil showings
800 - 806	" " " " " - light gas and oil showings
806 - 860	Brown shaley sandy conglomerate - light gas and oil showings
860 - 1000	Red and brown gypsum shale - streaks of green-lime sandy clay
1000 - 1021	Gypsum, red shale
1021 - 1023	Fine sandy lime, soft and granular - gas showings
1023 - 1100	Red gypsum ground shale - light gas and oil showings
1100 - 1112	Sandy shore clay
1112 - 1150	Brown gypsum shale
1150 - 1160	" " "
1160 - 1185	Cored, soft sandy lime, brown shale and gypsum
1185 - 1340	" " " " " " " (light rainbow and gas)
1340 - 1350	Red sandy gypsum shale
1350 - 1460	Red sandy lime shale
1460 - 1520	" " " "
1520 - 1523	Light gas and oil showings - slight trace in ditch
1523 - 1570	Red gypsum, lime, sulphur, shale
1570 - 1580	Brown gypsum, lime, sulphur, shale
1580 - 1585	Slight showing gas and oil
1585 - 1900	Brown reddish gypsum, shaley clay
1900 - 1905	" " " " " - oil rainbow with gas
1905 - 1950	Sandy conglomerate, red shale and sub-round, hard pack-showing oil
1950 - 2090	Gypsum, lime, shale
2090 - 2100	10' soft sandy phase
2100 - 2300	Red sandy gypsum, shale - streaks of lime - light gas and oil showings
2300 - 2440	Gray lime, sandy shale
2440 - 2450	Sub-round gravel
2450 - 2490	Hard gray sand and gravel pack
2490 - 2504	14' gas showings in ditch
2504 - 2700	Fine and coarse sand, gravel, glacial laydown, sulphur, gas in ditch
2700 - 2970	" " " " " " " " " "
2970 - 2980	Gravel and sand cored, 1 foot recovery
2980 - 3000	Red gypsum shale, streaks of lime, gray, sandy clay
3000 - 3050	Streaks of gray lime, sand and gravel
3050 - 3080	Dark brownish, red shale, buff sandy lime, sub-round Jasper Hemitite(3070)
3080 - 3176	" " " " " " " " " "
3176 - 3270	Fine amber sand
3270 - 3350	Hard sandy pack with streaks of lime and brown clay
3350 - 3380	Reddish brown conglomerate, cored, poor recovery andersite wash
3380 - 3495	" " " " " " " "
3495 - 3680	Porphery andersite streaks of Diorite in fracture planes
3680 - 3690	Gas showings 1/2 hr. 2 flares in dtich
3690 - 3700	Monsonite andersite

No permit

32 ×

3700 - 3850	Andersite streaks, brown lime - light showings oil and gas
3850 - 3870	Calcium contents increasing in drilling fluid, hi-temp, gray sandy lime, light showings oil and gas
3870 - 3930	Buff, sandy lime
3930 - 4000	Monsonite, andersite
4000 - 4010	" "
4010 - 4030	" "
4030 - 4040	Spar andersite, streaks of Diorite, Biotite and Moscovite in a ground mass with Bentonite in conglomerate pack
4040 - 4064	Andersite. Hole reduced to 6" inside diameter, 7" outside diameter
4064 - 4067	Hard andersite
4067 - 4093	" " - streaks sandy lime
4093 - 4098	Cored. Disclosed fractured andersite, 3' recovery
4098 - 4125	Formation changing - lime phase
4125 - 4160	Brown sandy lime streaks, shale
4160 - 4183	Hard sandy lime, streaks andersite
4183 - 4210	" " " " " - uninflammable gas
4210 - 4252	Buff, sandy lime, andersite
4252 - 4268	Quartzite, Monsonite, Andersite, streaks buff sandy lime
4268 - 4278	Hard drab lime, streaks of silicious shale
4278 - 4296	Gray sandy lime, streaks brown sand
4296 - 4300	Hard gray and brown sandy lime
4300 - 4312	Hard gray sandy lime
4312 - 4319	Hard gray silicious lime
4319 - 4330	Brown cast sandy lime
4330 - 4351	Gray sandy lime, streaks of Monsonite
4351 - 4367	Gray sandy lime, soft streaks of silica
4367 - 4377	Gray and brownish shale, soft streaks sandy lime - light showing oil and gas
4377 - 4387	" " " " " " " "
4387 - 4417	" " " " " " " " - formation softer
4417 - 4445	Gray sandy lime, streaks gray clay, thin lenses black shale 4429-4435 - hard and abrasive 4435-4445 - very soft
4445 - 4477	Dioritic streaks of andersite, streaks sandy lime and arcoid
4477 - 4489	Hard gray silicious andersite, streaks Monsonite, drilling 1' per hour, Hughes Bit W7R
4489 - 4502	Gray sandy lime
4502 - 4512	" " " - streaks of andersite
4512 - 4525	Hard sandy pack, streaks of gray lime
4525 - 4528	Hard sandy gray lime
4528 - 4536	" " " "
4536 - 4539	Hard gray sandstone
4539 - 4547	" " "
4547 - 4551	Sandy, lime, streaks of Quartzite
4551 - 4562	" " " "
4562 - 4567	Hard streaks Andersite Wash, streaks buff and gray lime
4567 - 4572	" " " " " " " "
4572 - 4575	" " " " " " " "
4575 - 4586	" " " " " " " "
4586 - 4595	Sandy lime, streaks of Andersite
4595 - 4601	" " " "
4601 - 4606	Cored - poor recovery, fine sandy lime, Bentonite Ball clay
4606 - 4609	Hard sandy lime, streaks of Andersite
4609 - 4613	" " " " "
4613 - 4614½	Fine " " " "
4614 - 4616	Hard sandy lime
4616 - 4618	Very hard lime
4618 - 4624	Hard lime
4624 - 4632	Sandy hard lime
4632 - 4637	Andersite, Quartzite
4637 - 4647	SS between 4642-4645 - 3' soft, sandy lime
4647 - 4656	SS with streaks Quartzite and lime
4656 - 4661	Gray Quartzite, streaks of hard sand
4661 - 4664	" " " " " "
4664 - 4668	Soft, drab clay - light showings gas and oil
4668 - 4670	Gray, drab clay, lime, sand

No permit

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4670 - 4678	Gray SS streaks soft shale
4678 - 4685	" " " " "
4685 - 4691	Very hard abrasive sand
4691 - 4696	Soft clay, formation thickening - drilling fluid
4696 - 4700	Very hard abrasive sand SS
4700 - 4715	Bracca, Arcoid, Bentonite, streaks of gray coarse sand
4715 - 4723	Gray coarse sandy lime
4723 - 4729	" " " " - showings gas and oil
4729 - 4731	Gray sandy lime, streaks of buff calcious SS, characteristic of Dolomonite
4731 - 4742	" " " " " " " " " " - streaks of sulphur casts

Continuation of Assay dated June 16, 1945

We cleaned portions of each oil and made the following tests:

FUEL	"TUCSON"	WELL
Flash point	245° F.	380° F.
Distillation Initial boiling point	380° F.	400° F.
5% over at	435° F.	540° F.
10% " "	465° F.	570° F.
20% " "	* 525° F.	590° F.

* Note - Began to crack

LICENSE SEAL

Respectfully submitted

SMITH EMERY COMPANY
Chemists and Engineers

These samples were taken on the ditch by circulating clear water, after shooting with Nitro-Jell at 3689 -
Witnesses: Henry Porterie
Art Houser
Holmes Galloway
Tommie Wheelis
and drilling crews.

Not permit

5

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS

REPORT OF DETERMINATION

Determination of Water from Casa Grande Valley Development Association Well No. 1 - No. 254100

Total Solids	1350.0 PPM
Calcium Bicarbonate	98.8 PPM
Magnesium Bicarbonate	36.6 PPM
Sodium Bicarbonate	359.6 PPM
Sodium Carbonate	212.0 PPM
Sodium Chloride	560.7 PPM

LICENSE SEAL
COPY OF SIGNATURE
LOS ANGELES, CALIF

SMITH EMERY CO
CHEMISTS & ENGINEERS
E.O.S.

Drilling Fluid
RECEIVED 4/12/45

Date of Assay Certificate - 4/25/45
This sample was taken from packer drill stem test 4067-4125.75

* *

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS
LOS ANGELES, CALIF.

REPORT OF DETERMINATION

Determination of Water and Mud from Casa Grande Valley Development Association Well No. 1 - Same as 254100

Weight per cubic foot	66.0#
Viscosity Stormer	28.5 Centipoises
Sand	0.6% by weight
Wall Building properties	100# pressure-100° F. for 30 Min. 10/32 Thickness
Water Recovery	53.0 C.C.
Salt Contents	58.5 grains per gallon
Sheer strength	7.0# per 100 Sq. Ft.
Phosphates Value	10.3
Petroleum Oil	0.05% by weight

Drilling Fluid Rec'd 4/12/45
Date of Assay April 18, 1945

LICENSE SEAL
COPY OF SIGNATURE
LOS ANGELES, CALIF

Respectfully submitted
SMITH EMERY COMPANY
CHEMISTS AND ENGINEERS

Continuation of Assay dated April 18, 1945

This sample was taken from packer (run in hole) by John Owen Formation Testing Company, Long Beach, Calif. April 11, 1945 at the following depth - 4067- 1125.75

* *

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS
LOS ANGELES, CALIFORNIA

April 18, 1945

No. 254201 - Drilling Fluid
Packer in Aqua Jell Sample B-1
Taken by Owens Formation Testing
Company from Casa Grande Valley
Oil Development Association
Well No. 1

REPORT OF DETERMINATION

Weight per cubic foot	68.0
Viscosity stormer	159.0 Centerpoise
Sand	0.5 By Weight
Wall building properties 100# pressure, 100° F. for 30 Min.	14/32 Thickness
Water Recovery	46.0 C.C.
Salt Contents	60.0 Grains per Gallon

Sheer strength greater than 50# per 100 Sq. Ft.	
Phospherous Value	10.2
Petroleum Oil	0.09% by weight

LICENSE SEAL
LOS ANGELES CALIF

COPY OF SIGNATURE

SMITH EMERY COMPANY
CHEMISTS AND ENGINEERS

* *

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS
LOS ANGELES, CALIF.

LABORATORY REPORT
June 18, 1945

SAMPLE OIL NO. 255810 REC'D JUNE
16, 1945 - SUBMITTED BY CASA GRANDE
VALLEY OIL & DEVELOPMENT COMPANY
CASA GRANDE, ARIZONA

You submitted sample of oil marked "Fuel" and "From the Well" and asked us to examine or determine whether they were the same or different, with the purpose of learning whether the sample from the well might be a crude oil produced from the well.

the permit

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Phoenix, Arizona
October 26, 1945

Mr. O. C. Williams, Commissioner
State Land Department
Capitol Annex
Phoenix, Arizona

Dear Mr. Williams:

Herewith I am submitting personal log kept by me for the Casa Grande Valley Oil & Development Association Well No. 1, together with copy of the Log and special comments.

The Gypsum lime sandy shales which are recorded in the Log are commonly classified as the Gypsum redbeds. I am of the belief that at an erosional period, when the structure projected far above the valley, the red shale and gypsum deposits were laid down as a ground mass in the lower elevations overlying the big limes of the Pernineum carboniferous and Devonian periods, embedded together among the Cretaceous, Andersitic, Aqua Agneous and Basalt flow.

It is not impossible to locate shallow oil where the traps are favorable in folded structure areas, and the perosity of the sands are such as to carry oil, especially on the contacts of the structure formation and the conglomerates, but let me also state that deep oil will also be discovered in the Casa Grande Valley and its immediate vicinity, below the 5000 foot.

In my Diary I made the following notes as to oil showings, which are far more in detail than in the Log.

717 - 810	The morning tower informed me that streaks of tar sand had been encountered too small to be of any important consequences.
--- 1023	A brown sandy lime shale showed light oil and gas.
--- 1585	Brown gypsum lime shale showed the same.
1905 -1975	lenses of sandy lime embedded in a dark brown gypsum clay showed characteristics of shale, also showed light rainbow and gas in the ditch.

At this point I ordered Mr. Mel Green, who was at the drawbar, to suspend drilling operations, thin the drill fluid and circulate for an hour to see if the oil show would increase, but it showe no appreciable change. Tommie Wheelis, an investor, and our drilling crew witnessed the same.

--- 2180	A dark brown gypsum clay with streaks of lime showed light oil and gas.
2500 -2504	An amber and gray sand - best gas show to date. That was Oct. 20, 1944. Morning tower Mel Green furnished the data.
2505-2550	Brown and gray sand with sub-ground and pebbles embedded in a ground conglomerate, showed slight gas.
2570-2600	A heavy flow of sulphur gas began to be very noticeable and the temperature of the drilling fluid increased.
--- 3689	A very heavy flow of gas and light oil was noticed in the ditch. From this depth to bottom I continued to compare the daily Log, with shows and correlation of Ransom's Geological Report, Bulletin 112 Ray Quadrant, where the Pennsylvanian big limes are very prominent on the Toronto Peak, and are overlaid by the Andersitic flow.

Upc Dcmnt

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This information, coupled with the outcroppings of these Pennsylvanian lime caps in the vicinity of Dos Cabezos, the Winchester mountains, the Calciuro mountains, the Silver Bell mountain, the Vekol, the Waterman, the Sierra Blanca, the Crawler, the Haquahala and the Hercuvora Mountains, lead me to believe that in these desert provinces the Pennsylvanian lime caps would be pierced by the drill.

This well was grounded at 4742' in a dark buff limestone resembling much a Dolomite lime. The high cost of drilling, due to wartime conditions, quality of bits available, pipe, rubber pump inserts, liners, slow delivery and too long a haul from the center supply oil field Supply Houses, long fishing jobs and breakdowns, contributed much to a hazardous handicap in drilling this particular well.

3800-3870	There were other notations of oil shows following the 3800.
4064-4067	Some gas and oil and sandy lime shales within the Monsonitic, Andersitic stratification.
4268-4278	A gas flow was noticed, presumably was broken in from 3800'.
4278-4595	Showed a broken fractured formation composed of Andersitic, Dioritic, Moscovite, Monsonite, Biotite, Felspar, and thin streaks of silt and lime with a light show of gas and oil.
4595-4715	Brecca, Arkose, Bentonite, and streaks of gray coarse sand
4715-4742	Dark Buff lime.

November 6, 1945

On September 13, 1945, I had the pleasure to examine an area in the vicinity of the Marana Air Field, situated within the following Township 11 East, Range 10 South and Township 12 East, Range 10 South - together with a group of Casa Grande Valley Cattle and Business Men; within this area is situated a very prominent surface high. The out cropping of Marine lime stone together with soil analysis - geologically it is very interesting - and surely merits prospecting (for oil and gas) in this area. No doubt the drill will penetrate the structure very shallow here as well as the Pichico and Red Rock structure all lies within the South easterly trend of the Santa Cruz structural area.

3689-3700	Gas and oil show was encountered April 15, 1945. Testing of this particular strata began on June 18, 1945. The long period between the time it was encountered and the time tested, it would be natural to assume that oil was pushed back so far in the formation that all the testing efforts to bring this sand in at this depth by the Owens Formation Testing Company of Long Beach, and the Haliburtion Cementing Company of Los Angeles, proved to be a failure, and the well was ordered shut down pending later development by the Casa Grande Valley Oil & Development Association.

Respectfully submitted,

/s/ H. A. Porterie
/t/ H. A. Porterie, A.G.

the permit

C O P Y

PERSONAL LOG KEPT BY

H. A. PORTERIE
Analytic Geologist

WILDCAT WELL NO. 1 - Laveen #1
CASA GRANDE VALLEY OIL & DEVELOPMENT
ASSOCIATION -- A LIMITED PARTNERSHIP
CASA GRANDE, ARIZ.
PINAL CO., ARIZ.
SEC. 25 - T6S R 7E

1 - 60 13-5/8 Surface casing
60 - 390 Soft Sandy Clay
390 - 400 Coarse water gravel
400 - 410 Blue clay
410- 491 Tough brown clay
491 - 653 Hard red brown shale
653 - 674 Soft red brown shale
674 - 716 Brown gypsum shale - streaks lime, clay
716 - 717 Slight show oil and gas - tar, sand very meek
717 - 800 Soft sandy brown gypsum shale - gas and oil showings
800 - 806 " " " " " - light gas and oil showings
806 - 860 Brown shaley sandy conglomerate - light gas and oil showings
860 - 1000 Red and brown gypsum shale - streaks of green-lime sandy clay
1000 - 1021 Gypsum, red shale
1021 - 1023 Fine sandy lime, soft and granular - gas showings
1023 - 1100 Red gypsum ground shale - light gas and oil showings
1100 - 1112 Sandy shore clay
1112 - 1150 Brown gypsum shale
1150 - 1160 " " "
1160 - 1185 Cored, soft sandy lime, brown shale and gypsum
1185 - 1340 " " " " " " " " (light rainbow and gas)
1340 - 1350 Red sandy gypsum shale
1350 - 1460 Red sandy lime shale
1460 - 1520 " " " "
1520 - 1523 Light gas and oil showings - slight trace in ditch
1523 - 1570 Red gypsum, lime, sulphur, shale
1570- 1580 Brown gypsum, lime, sulphur, shale
1580 - 1585 Slight showing gas and oil
1585 - 1900 Brown reddish gypsum, shaley clay
1900 - 1905 " " " " " - oil rainbow with gas
1905 - 1950 Sandy conglomerate, red shale and sub-round, hard pack-showing oil
1950 - 2090 Gypsum, lime, shale
2090 - 2100 10' soft sandy phase
2100 - 2300 Red sandy gypsum, shale - streaks of lime - light gas and oil showings
2300 - 2440 Gray lime, sandy shale
2440 - 2450 Sub-round gravel
2450 - 2490 Hard gray sand and gravel pack
2490 - 2504 14' gas showings in ditch
2504 - 2700 Fine and coarse sand, gravel, glacial laydown, sulphur, gas in ditch
2700 - 2970 " " " " " " " " " " "
2970 - 2980 Gravel and sand cored, 1 foot recovery
2980 - 3000 Red gypsum shale, streaks of lime, gray, sandy clay
3000 - 3050 Streaks of gray lime, sand and gravel
3050 - 3080 Dark brownish, red shale, buff sandy lime, sub-round Jasper Hemitite (3070)
3080 - 3176 " " " " " " " " " "
3176 - 3270 Fine amber sand
3270 - 3350 Hard sandy pack with streaks of lime and brown clay
3350 - 3380 Reddish brown conglomerate, cored, poor recovery andersite wash
3380 - 3495 " " " " " " " "
3495 - 3680 Porphery andersite streaks of Diorite in fracture planes
3680 - 3690 Gas showings 1/2 hr. 2 flares in ditch
3690 - 3700 Monsonite andersite

1/20 permit

3700 - 3850 Andersite streaks, brown lime - light showings oil and gas
3850 - 3870 Calcium contents increasing in drilling fluid, hi-temp, gray sandy lime, light showings oil and gas
3870 - 3930 Buff, sandy lime
3930 - 4000 Monsonite, andersite
4000 - 4010 " "
4010 - 4030 " "
4030 - 4040 Spar andersite, streaks of Diorite, Biotite and Moscovite in a ground mass with Bentonite in conglomerate pack
4040 - 4064 Andersite. Hole reduced to 6" inside diameter, 7" outside diameter
4064 - 4067 Hard andersite
4067 - 4093 " " - streaks sandy lime
4093 - 3098 Cored. Disclosed fractured andersite, 3' recovery
4098 - 4125 Formation changing - lime phase
4125 - 4160 Brown sandy lime streaks, shale
4160 - 4183 Hard sandy lime, streaks andersite
4183 - 4210 " " " " " - uninflammable gas
4210 - 4252 Buff, sandy lime, andersite
4252 - 4268 Quartzite, Monsonite, Andersite, streaks buff sandy lime
4268 - 4278 Hard drab lime, streaks of silicious shale
4278 - 4296 Gray sandy lime, streaks brown sand
4296 - 4300 Hard gray and brown sandy lime
4300 - 4312 Hard gray sandy lime
4312 - 4319 Hard gray silicious lime
4319 - 4330 Brown cast sandy lime
4330 - 4351 Gray sandy lime, streaks of Monsonite
4351 - 4367 Gray sandy lime, soft streaks of silica
4367 - 4377 Gray and bronish shale, soft streaks sandy lime - light showing oil and gas
4377 - 4387 " " " " " " " "
4387 - 4417 " " " " " " " " - formation softer
4417 - 4445 Gray sandy lime, streaks gray clay, thin lenses black shale
4429-4435 - hard and abrasive
4435-4445 - very soft
4445 - 4477 Dioritic streaks of andersite, streaks sandy lime and arcoid
4477 - 4489 Hard gray silicious andersite, streaks Monsonite, drilling 1' per hour, Hughes Bit W7R
4489 - 4502 Gray sandy lime
4502 - 4512 " " " - streaks of andersite
4512 - 4525 Hard sandy pack, streaks of gray lime
4525 - 4528 Hard sandy gray lime
4528 - 4536 " " " "
4536 - 4539 Hard gray sandstone
4539 - 4547 " " "
4547 - 4551 Sandy, lime, streaks of Quartzite
4551 - 4562 Sandy lime, streaks of Quartzite
4562 - 4567 Hard streaks Andersite Wash, streaks buff and gray lime
4567 - 4572 " " " " " " " " "
4572 - 4575 " " " " " " " " "
4575 - 4586 " " " " " " " " "
4586 - 4595 Sandy lime, streaks of Andersite
4595 - 4601 " " " " "
4601 - 4606 Cored - poor recovery, fine sandy lime, Bentonite ball clay
4606 - 4609 Hard sandy lime, streaks of Andersite
4609 - 4613 " " " " " "
4613 - 4614½ Fine " " " " "
4614 - 4616 Hard sandy lime
4616 - 4618 Very hard lime
4618 - 4624 Hard lime
4624 - 4632 Sandy hard lime
4632 - 4637 Andersite, Quartzite
4637 - 4647 SS between 4642-4645 - 3' soft, sandy lime
4647 - 4656 SS with streaks Quartzite and lime
4656 - 4661 Gray Quartzite, streaks of hard sand
4661 - 4664 " " " " " "
4664 - 4668 Soft, drab clay - light showings gas and oil
4668 - 4670 Gray, drab clay, lime, sand

No permeability

32 × 6

4670 - 4678	Gray SS streaks soft shale
4678 - 4685	" " " " "
4685 - 4691	Very hard abrasive sand
4691 - 4696	Soft clay, formation thickening - drilling fluid
4696 - 4700	Very hard abrasive SS
4700 - 4715	Bracca, Arcoid, Bentonite, streaks of gray coarsesand
4715 - 4723	Gray coarse sandy lime
4723 - 4729	" " " " - showings gas and oil
4729 - 4731	Gray sandy lime, streaks of buff calcious SS, characteristic of Dolomonite
4731 - 4742	" " " " " " " " " " - streaks of sulphur casts

No permit

32×

COPY

Continuation of Assay dated June 16, 1945

We cleaned portions of each oil and made the following tests:

FUEL	"TUCSON"	WELL
Flash Point	245° F.	380° F.
Distillation Initial boiling point	380° F.	400° F.
5% over at	435° F.	* 540° F.
10% " "	465° F.	570° F.
20% " "	* 525° F.	590° F.

* Note - Began to crack

LICENSE SEAL

Respectfully submitted

SMITH EMERY COMPANY
Chemists and Engineers

These samples were taken on the ditch by circulating clear water, after shooting with Nitro-Jell at 3689 -
Witnesses: Henry Porterie
Art Houser
Holmes Galloway
Tommie Wheelis
and drilling crews.

the permit

32 ×

COPY

Continuation of Assay dated April 18, 1945

This sample was taken from packer (run in hole) by John Owen Formation Testing Company, Long Beach, Calif. April 11, 1945 at the following depth - 4067-125.75

* *

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS
LOS ANGELES, CALIFORNIA

APR. 18, 1945

No. 254201 - Drilling Fluid
Packer in Aqua Jell Sample B-1
Taken by Owens Formation Testing
Company from Casa Grande Valley
Oil Development Association
Well No. 1

REPORT OF DETERMINATION

Weight per cubic foot	68.0#
Viscosity stormer	159.0 Centerpoise
Sand	0.5 By Weight
Wall building properties 100# pressure, 100° F. for 30 Min.	14/32 Thickness
Water Recovery	46.0 C.C.
Salt Contents	60.0 Grains per Gallon
Sheer strength greater than 50# per 100 Sq. Ft.	
Phospherous Value	10.2
Petroleum Oil	0.09% by weight

LICENSE SEAL
LOS ANGELES CALIF

COPY OF SIGNATURE

SMITH EMERY COMPANY
CHEMISTS AND ENGINEERS

* *

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS
LOS ANGELES, CALIF.

LABORATORY REPORT
June 18, 1945

SAMPLE OIL NO. 255810 REC'D JUNE 16, 1945 - SUBMITTED BY CASA GRANDE VALLEY OIL & DEVELOPMENT COMPANY CASA GRANDE, ARIZONA

You submitted sample of oil marked "Fuel" and "From the Well" and asked us to ecamine or determine whether they were the same or different, with the purpose of learning whether the sample from the well might be a crude oil produced from the well.

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS

REPORT OF DETERMINATION

Determination of Water from Casa Grande Valley Development Association Well No. 1 - No. 254100

Total Solids	1350.0 PPM
Calcium Bicarbonate	98.8 PPM
Magnesium Bicarbonate	36.6 PPM
Sodium Bicarbonate	359.6 PPM
Sodium Carbonate	212.0 PPM
Sodium Chloride	560.7 PPM

LICENSE SEAL
COPY OF SIGNATURE
LOS ANGELES, CALIF

SMITH EMERY CO.
CHEMISTS & ENGINEERS
E.O.S.

Drilling Fluid
RECEIVED 4/12/45

Date of Assay Certificate - 4/23/45

This sample was taken from packer drill stem test 4067-4125.75

* *

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS
LOS ANGELES, CALIF.

REPORT OF DETERMINATION

Determination of Water and Mud from Casa Grande Valley Development Association Well No. 1 - Same as 254100

Weight per cubic foot	66.0#
Viscosity Stormer	28.5 Centipoises
Sand	0.6% by weight
Wall building properties	100# pressure - 100° F. for 30 Min. 10/32 Thickness
Water Recovery	53.0 C.C.
Salt Contents	58.5 grains per gallon
Shear strength	7.0# per 100 Sq. Ft.
Phosphates Value	10.3
Petroleum Oil	0.05% by weight

Drilling Flud Rec'd 4/12/45
Date of Assay April 18, 1945

LINCENSE SEAL
COPY OF SIGNATURE
LOS ANGELES, CALIF.

Respectfully submitted
SMITH EMERY COMPANY
CHEMISTS AND ENGINEERS

the permit

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Phoenix, Arizona
October 26, 1945

Mr. O.C. Williams, Commissioner
State Land Department
Capitol Annex
Phoenix, Arizona

Dear Mr. Williams:

Herewith I am submitting personal Log kept by me for the Casa Grande Valley Oil & Development Association Well No. 1, together with copy of the Log and special comments.

The Gypsum lime sandy shales which are recorded in the Log are commonly classified as the Gypsum redbeds. I am of the belief that at an erosional period, when the structure projected far above the valley, the red shale and gypsum deposits were laid down as a ground mass in the lower elevations overlying the big limes of the Pernineum carboniferous and Devonian periods, embedded together among the Cretaceous, Andersitic, Aqua Agneous and Basalt flow.

It is not impossible to locate shallow oil where the traps are favorable in folded structure areas, and the porosity of the sands are such as to carry oil, especially on the contacts of the structure formation and the conglomerates, but let me also state that deep oil will also be discovered in the Casa Grande Valley and its immediate vicinity, below the 5000 foot [illegible].

In my Diary I made the following notes as to oil showings, which are far more in detail than in the Log.

717- 810 - The morning tower informed me that streaks of tar sand had been encountered too small to be of any important consequences.

--- 1023 - A brown sandy lime shale showed light oil and gas.

--- 1595 - Brown gypsum lime shale showed the same.

1905-1975 - Lenses of sandy lime embedded in a dark brown gypsum clay showed characteristics of shale, also showed light rainbow and gas in the ditch.

At this point I ordered Mr. Mel Green, who was at the drawbar, to suspend drilling operations, then the drill-

No permit

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fluid and circulate for an hour to see if the oil show would increase, but it showed no appreciable change. Tommie Wheelis, an investor, and our drilling crew witnessed the same.

--- -2180 A dark brown gypsum clay with streaks of lime showed light oil and gas.

2500-2504 An amber and gray sand - best gas show to date. That was Oct. 20, 1944. Morning tower Mel Green furnished the data.

2505-2550 Brown and gray sand with sub-round and pebbles embedded in a ground conglomerate, showed slight gas.

2570-2600 A heavy flow of sulphur gas began to be very noticeable and the temperature of the drilling fluid increased.

--- 3689 A very heavy flow of gas and light oil was noticed in the ditch.

From this depth to bottom I continued to compare the daily Log, with shows and correlation of Ransom's Geological Report, Bulletin 112 Ray Quadrant, where the Pennsylvanian big limes are very prominent on the Toronto Peak, and are overlaid by the Andersitic flow.

This information, coupled with the outcroppings of these Pennsylvanian lime caps in the vicinity of Dos Cabezos, the Winchester mountains, the Calciuro mountains, the Silver Bell mountain, the Tekol, the Waterman, the Sierra Blanca, the Crawler, the Haquahala and the Hercuvora Mountains, lead me to believe that in these desert provinces the Pennsylvanian lime caps would be pierced by the drill.

This well was grounded at 4742' in a dark buff limestone resembling much a Dolomite lime. The high cost of drilling, due to wartime conditions, quality of bits available, pipe, rubber pump inserts, liners, slow delivery and too long a haul from the center supply oil field Supply Houses, long fishing jobs and breakdowns, contributed much to a hazardous handicap in drilling this particular well.

3800-3870 There were other notations of oil shows following the 3800.

4064-4067 Some gas and oil and sandy lime shales within the Monsonitic, Andersitic stratification.

4268-4278 A gas flow was noticed, presumably was broken in from 3800'.

4278-4595 Showed a broken fractured formation composed of Andersitic, Dioritic, Moscovite, Monsonite, Biotite, Felspar, and thin streaks of silt and lime with a light show of gas and oil.

4595-4715 Brecca, Arkose, Bentonite, and streaks of gray coarse sand

4715-4742 Dark Buff lime.

The permit

November 6, 1945

On September 15, 1945, I had the pleasure to examine an area in the vicinity of The Marina Air Field, situated within the following Township 11 East, Range 10 South and Township 12 East, Range 10 South - together with a group of Casa Grande Valley Cattle and Business Men;within this area is situated a very prominent surface high. The out cropping of Marine lime stone together with soil analysis - geologically it is very interesting - and surely merits prospecting (for oil and gas) in this area. No doubt the drill will penetrate the structure very shallow here as well as the Pichico and Red Rock structure all lies within the South easterly trend of the Santa Crus structural area.

5689-5700 Gas and oil show was encountered April 15, 1945. Testing of this particular strata began on June 18, 1945. The long period between the time it was encountered and the time tested, it would be natural to assume that oil was pushed back so far in the formation that all the testing efforts to bring this sand in at this depth by the Owens Formation Testing Company of Long Beach, and the Haliburton Cementing Company of Los Angeles, proved to be a failure, and the well was ordered shut down pending later development by the Casa Grande Valley Oil & Development Association.

Respectfully submitted,

H. A. Porterie

H. A. Porterie, A.G.

No permit

32 × 1

RECEIVED
NOV 28 1945
STATE LAND DEPT.
OF ARIZONA

PERSONAL LOG KEPT BY

H.A. PORTERIE
Analytic Geologist

WILDCAT WELL NO. 1 - Laveen #1
CASA GRANDE VALLEY OIL & DEVELOPMENT
ASSOCIATION -- A LIMITED PARTNERSHIP
CASA GRANDE, ARIZ.
Pinal Co, Ariz.
Sec 25 - T6S R7E

1 - 60	13-5/8 Surface casing
60 - 390	Soft Sandy Clay
390 - 400	Coarse water gravel
400 - 410	Blue clay
410 - 491	Tough brown clay
491 - 653	Hard red brown shale
653 - 674	Soft red brown shale
674 - 716	Brown gypsum shale - streaks lime, clay
716 - 717	Slight show oil and gas - tar, sand very meek
717 - 800	Soft sandy brown gypsum shale - gas and oil showings
800 - 806	" " " " " - light gas and oil showings
806 - 860	Brown shaley sandy conglomerate - light gas and oil showings
860 - 1000	Red and brown gypsum shale - streaks of green-lime sandy clay
1000 - 1021	Gypsum, red shale
1021 - 1023	Fine sandy lime, soft and granular - gas showings
1023 - 1100	Red gypsum ground shale - light gas and oil showings
1100 - 1112	Sandy shore clay
1112- 1150	Brown gypsum shale
1150 - 1160	" " "
1160 - 1185	Cored, soft sandy lime, brown shale and gypsum
1185 - 1340	" " " " " " " " (light rainbow and gas)
1340 - 1350	Red sandy gypsum shale
1350 - 1460	Red sandy lime shale
1460 - 1520	" " " " [redacted]
1520 - 1523	Light gas and oil showings - slight trace in ditch
1523 - 1570	Red gypsum, lime, sulphur, shale
1570 - 1580	Brown gypsum, lime, sulphur, shale
1580 - 1585	Slight showing gas and oil
1585 - 1900	Brown reddish gypsum, shaley clay
1900 - 1905	" " " " " - oil rainbow with gas
1905 - 1950	Sandy conglomerate, red shale and sub-round, hard pack-showing oil
1950 - 2090	Gypsum, lime, shale
2090 - 2100	10' soft sandy phase
2100 - 2300	Red sandy gypsum, shale - streaks of lime - light gas and oil showings
2300 - 2440	Gray lime, sandy shale
2440 - 2450	Sub-round gravel
2450 - 2490	Hard gray sand and gravel pack
2490 - 2504	14' gas showings in ditch
2504 - 2700	Fine and coarse sand, gravel, glacial laydown, sulphur, gas in ditch
2700 - 2970	" " " " " " " " " " "
2970 - 2980	Gravel and sand cored, 1 foot recovery
2980 - 3000	Red gypsum shale, streaks of lime, gray, sandy clay
3000 - 3050	Streaks of gray lime, sand and gravel
3050 - 3080	Dark brownish, red shale, buff sandy lime, sub-round Jasper Hemitite(3070)
3080 - 3176	" " " " " " " " " "
3176 - 3270	Fine amber sand
3270 - 3350	Hard sandy pack with streaks of lime and brown clay
3350 - 3380	Reddish brown conglomerate, cored, poor recovery & andersite wash
3380 - 3495	" " " " " " " " "
3495 - 3680	Porphery andersite streaks of Diorite in fracture planes
3680 - 3690	Gas showings 1/2 hr. 2 flares in ditch
3690 - 3700	Monsonite andersite

No permit

[redacted]

32 × [redacted]

3700 - 3850	Andersite streaks, brown lime - light showings oil and gas
3850 - 3870	Calcium contents increasing in drilling fluid, hi-temp, gray sandy lime, light showings oil and gas
3870 - 3930	Buff, sandy lime
3930 - 4000	Monsonite, andersite
4000 - 4010	" "
4010 - 4030	" "
4030 - 4040	Spar andersite, streaks of Diorite, Biotite and Moscovite in a ground mass with Bentonite in conglomerate pack
4040 - 4064	Andersite. Hole reduced to 6" inside Diameter, 7" outside diameter
4064 - 4067	Hard andersite
4067 - 4093	" " - streaks sandy lime
4093 - 3098	Cored. Disclosed fractured andersite, 3' recovery
4098 - 4125	Formation changing - lime phase
4125 - 4160	Brown sandy lime streaks, shale
4160 - 4183	Hard sandy lime, streaks andersite
4183 - 4210	" " " " " - uninflammable gas
4210 - 4252	Buff, sandy lime, andersite
4252 - 4268	Quartzite, Monsonite, Andersite, streaks buff sandy lime
4268 - 4278	Hard drab lime, streaks of silicious shale
4278 - 4296	Gray sandy lime, streaks brown sand
4296 - 4300	Hard gray and brown sandy lime
4300 - 4312	Hard gray sandy lime
4312 - 4319	Hard gray silicious lime
4319 - 4330	Brown cast sandy lime
4330 - 4351	Gray sandy lime, streaks of Monsonite
4351 - 4367	Gray sandy lime, soft streaks of silica
4367 - 4377	Gray and bronish shale, soft streaks sandy lime - light showing oil and gas
4377 - 4387	" " " " " " " "
4387 - 4417	" " " " " " " " - formation softer
4417 - 4445	Gray sandy lime, streaks gray clay, thin lenses black shale 4429-4435 - hard and abrasive 4435-4445 - very soft
4445 - 4477	Dioritic streaks of andersite, streaks sandy lime and arcoid
4477 - 4489	Hard gray silicious andersite, streaks Monsonite, drilling 1' per hour, Hughes Bit W7R
4489 - 4502	Gray sandy lime
4502 - 4512	" " " - streaks of andersite
4512 - 4525	Hard sandy pack, streaks of gray lime
4525 - 4528	Hard sandy gray lime
4528 - 4536	" " " "
4536 - 4539	Hard gray sandstone
4539 - 4547	" " "
4547 - 4551	Sandy, lime, streaks of Quartzite
4551 - 4562	Sandy lime, streaks of Quartzite
4562 - 4567	Hard streaks Andersite Wash, streaks buff and gray lime
4567 - 4572	" " " " " " " " "
4572 - 4575	" " " " " " " " "
4575 - 4586	" " " " " " " " "
4586 - 4595	Sandy lime, streaks of Andersite
4595 - 4601	" " " " "
4601 - 4606	Cored - poor recovery, fine sandy lime, Bentonite Ball clay
4606 - 4609	Hard sandy lime, streaks of Andersite
4609 - 4613	" " " " " "
4613 - 4614½	Fine " " " " "
4614 - 4616	Hard sandy lime
4616 - 4618	Very hard lime
4618 - 4624	Hard lime
4624 - 4632	Sandy hard lime
4632 - 4637	Andersite, Quartzite
4637 - 4647	SS between 4642-4645 - 5' soft, sandy lime
4647 - 4656	SS with streaks Quartzite and lime
4656 - 4661	Gray Quartzite, streaks of hard sand
4661 - 4664	" " " " " "
4664 - 4668	Soft, drab clay - light showings gas and oil
4668 - 4670	Gray, drab clay, lime, sand

Mr Permit

4678 - 4685	Gray SS streaks soft shale
4678 - 4685	" " " " "
4685 - 4691	Very hard abrasive sand
4691 - 4696	Soft clay, formation thickening - drilling fluid
4696 - 4700	Very hard abrasive SS
4700 - 4715	Bracca, Arcoid, Bentonite, streaks of gray coarse sand
4715 - 4723	Gray coarse sandy lime
4723 - 4729	" " " " - showings gas and oil
4729 - 4731	Gray sandy lime, streaks of buff calcious SS, characteristic of Dolomonite
4731 - 4742	" " " " " " " " " " - streaks of sulphur casts

No permit

32 ×

Continuation of Assay dated June 16, 1945

We cleaned portions of each oil and made the following tests:

FUEL	"TUCSON"	WELL
Flash Point	245° F.	380° F.
Distillation Initial boiling point	380° F.	400° F.
5% over at	435° F.	* 540° F.
10% " "	465° F.	570° F.
20% " "	* 525° F.	590° F.

* Note - Began to crack

Then

LICENSE SEAL

Respectfully submitted

SMITH EMERY COMPANY
Chemists and Engineers

These samples were taken on the ditch by circulating clear water, after shooting with Nitro-Jell at 3689 -
Witnesses: Henry Porterie
Art Rouser
Holmes Galloway
Tommie Whealis
and drilling crews.

No permit

Continuation of Assay dated April 18, 1945

This sample was taken from packer (run in hole) by John Owen Formation Testing Company, Long Beach, Calif. April 11, 1945 at the following depth - 4067-4125.75

* *

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS
LOS ANGELES, CALIFORNIA

APR. 18, 1945

No. 254201 - Drilling Fluid
Packer in Aqua Jell Sample B-1
Taken by Owens Formation Testing
Company from Casa Grande Valley
Oil Development Association
Well No. 1

REPORT OF DETERMINATION

Weight per cubic foot	68.0#
Viscosity ~~setmer~~ STORMER	159.0 Centerpoise
Sand	0.5 By Weight
Wall building properties 100# pressure, 100° F. for 30 Min.	14/32 Thickness
Water Recovery	45.0 C.C.
Salt Contents	60.0 Grains per Gallon
Sheer strength greater than 50# per 100 Sq. Ft.	
Phospherous Value	10.2
Petroleum Oil	0.09% by weight

LICENSE SEAL
LOS ANGELES CALIF

COPY OF SIGNATURE

SMITH EMERY COMPANY
CHEMISTS AND ENGINEERS

* *

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS
LOS ANGELES, CALIF.

LABORATORY REPORT
June 18, 1945

SAMPLE OIL NO. 255910 REC'D JUNE
16, 1945 - SUBMITTED BY CASA GRANDE
VALLEY OIL & DEVELOPMENT COMPANY
CASA GRANDE, ARIZONA

You submitted sample of oil marked "Fuel" and "From the Well" and asked us to examine or determine whether they were the same or different, with the purpose of learning whether the sample from the well might be a crude oil produced from the well.

No permit

32 x

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS

REPORT OF DETERMINATION

Determination of Water from Casa Grande Valley Development Association Well No. 1 - No. 254100

Total Solids	1350.0 PPM
Calcium Bicarbonate	98.8 PPM
Magnesium Bicarbonate	36.6 PPM
Sodium Bicarbonate	359.8 PPM
Sodium Carbonate	212.0 PPM
Sodium Chloride	560.7 PPM

LICENSE SEAL
COPY OF SIGNATURE
LOS ANGELES, CALIF

SMITH EMERY CO
CHEMISTS & ENGINEERS
E.O.S.

Drilling Fluid
RECEIVED 4/12/45

Date of Assay Certificate - 4/23/45

This sample was taken from packer drill stem test 406704125.75

* *

SMITH EMERY COMPANY
CHEMICAL ENGINEERS AND CHEMISTS
LOS ANGELES, CALIF.

REPORT OF DETERMINATION

Determination of Water and Mud from Casa Grande Valley Development Association Well No. 1 - Same as 254100

Weight per cubic foot	66.0#
Viscosity Stormer	28.5 Centipoises
Sand	0.6% by weight
Wall building properties	100# pressure-100° F. for 30 Min. 10/32 Thickness
Water Recovery	53.0 C.C.
Salt Contents	58.5 grains per gallon
Sheer strength	7.0# per 100 Sq. Ft.
Phosphates Value	10.3
Petroleum Oil	0.05% by weight

DRilling Fluid Rec'd
4/12/45
Date of Assay April 18, 1945

LICENSE SEAL
COPY OF SIGNATURE
LOS ANGELES, CALIF

Respectfully submitted
SMITH EMERY COMPANY
CHEMISTS AND ENGINEERS

32 × 1

O. W. Rugg, P. O. Box 1146, Casa Grande, Arizona

LOG OF WELL DRILLED SOUTH OF THE 11-MILE CORNER - OIL EXPLORATION - 1944

Driller - L. Roberts - Record taken from Drillers Daily Report Book

Began drilling Sept. 11, 1944:

Date	Depth	Formation
Sept. 11	0-60	Coarse sand, streaks hard sand
12-13	60-223	Sand & gravel, streaks of clay
14	223-391	Sand, clay, streaks of gravel
15	391-398	Hard coarse water sand and gravel
15	398-445	Sand and clay
15	445-491	Blue clay
16	491-498	Tough brown shale
16	498-570	Clay
17	570-590	Clay
17	590-622	Tough brown shale
18	622-653	Hard brown shale
19	653-705	Soft brown shale
19	705-716	Hard brown shale
20	716-736	Hard shale, streaks of sandy shale
21-22	736-761	Hard shale, streaks of limestone shell
23-25	761-854	Hard shale, streaks conglomerate & lime
26-28	854-940	Hard brown shale
28	940-945	Shale & limestone
28	945-969	Sandy shale
29-30	969-1001	Hard brown shale, streaks of lime
Oct. 1-2	1001-1022	Tough reddish brown shale
3	1022-1023	Sand
3	1023-1033	Hard brown shale
7	1033-1092	Tough reddish brown shale
8	1092-1102	Sandy shale
8	1102-1118	Reddish brown shale
9	1118-1125	Sandy shale
9	1125-1137	Tough brown shale
9	1137-1167	Sandy shale
10	1167-1198	Reddish brown shale, streaks of lime
11-12	1198-1230	Reddish brown shale, sk
12	1230-1267	Sandy brown shale
12-13	1267-1305	Sandy shale, with sticky streaks
13-14	1305-1335	Hard shale
14	1335-1366	Sandy shale, streaks of hard shale
14	1366-1450	Sandy shale, streaks of hard shale
15	1450-1530	Shale
15	1530-1533	Hard sandy lime
16	1533-1625	Shale
17	1625-1702	Shale
18	1702-1739	Shale with hard shells
19-20	1739-1889	Shale with hard shells
20	1889-1922	Shale with hard shells, lime streaks
21-23	1922-2064	Hard lime shale
23	2064-2080	Shale - conglomerate

32 ×

Date		Depth	Formation
Oct.	23	2064-2080	Shale - conglomerate
	23	2080-2118	Shale
	24	2118-2156	Hard shell shale
	24	2156-2196	Shale
	25	2196-2283	Shale
	26	2283-2321	Shale & conglomerate
	26	2321-2357	Shale & gypsum - lime - silt
	27	2357-2392	Shale with streaks of gravel
	27	2392-2425	Shale with fine sand
	27	2425-2429	Soft shale and lime
	28	2429-2462	Shale with sand and gravel streaks
	28	2464-2493	Hard grey & brown sandstone, lime streaks
	29	2493-2500	Hard sandstone
	29	2500-2504	Sandstone & shale
	29	2504-2548	Hard, grey & brown sandstone
Nov.	1	2548-2597	Hard shale & sandstone
	2-3	2597-2619	Shale and hard shells
	3	2619-2690	Hard grey sand, streaks of lime and shale
	4	2690-2707	Hard grey sand, wash gravel, streaks of lime
	5	2707-2737	Hard sand
	5	2737-2770	Coarse grey shale, streaks of sand and gravel
	6	2770-2779	Sand
	7	2779-2800	Sand and gravel
	7	2800-2808	Brown limey shale with streaks of sand
	11	2808-2814	Shale
	11-12	2814-2858	Sand and gravel
	12	2858-2866	Limey shale
	13	2866-2913	Shale with gravel streaks
	13	2913-2933	Sand with streaks of lime and gravel
		2933-3177	No record
Dec.	26	3177-3203	Sharp fine sand
	26	3203-3228	Fine hard sand
		3228-3247	No record
	28	3247-3277	Conglomerate
	28	3277-3317	Sandy clay, streaks of sand and gravel
	30	3317-3348	Sandy clay, streaks of rocks and conglomerate
	30	3348-3350	Shale
		3350-3373	No record
	31	3373-3375	Rocks
Jan.	2	3375-3429	Soft sandy clay
	2	3429-3460	Sand and shale
	2	3460-3489	Hard sandy clay
	6	3489-3495	Hard sand
	7	3495-3503	Hard lime and sea shells
	10	3503-3507	Hard lime and sea shells
	10	3507-3524	Hard sandy lime
	11-13	3524-3567	Hard shale and lime
	13-17	3567-3688	Hard shale with streaks of lime and sand
	18-20	3688-3705	Hard sandy lime
	20-23	3705-3727	Quartzsite
	23	3727-3742	Quartzite with streaks of bentonite
	24	3742-3751	Lime and sand

Unpermitted

Date	Depth	Formation
Jan. 26	3751-3774	Quartzite with streaks of tufa
27	3774-3777	Andesite
28	3777-3783	Andesite with streaks hard sandy lime
28	3783-3798	Andesite with streaks bentonite and tufa
29	3798-3807	Andesite with streaks lime and sand
Feb. 1-3	3807-3899	Hard lime with streaks sand
4	3899-3908	Hard lime with streaks andesite
4-7	3908-3946	Hard lime with streaks sand
7	3946-3951	Hard lime with streaks dolomite
8-10	3951-3982	Hard lime with streaks sand
10	3982-4001	Hard lime with streaks quartzite and sand
11	4001-4012	Hard lime with [illegible]esite
12-13	4012-4046	Hard sand lime
Mar. 30	4046-4077	Hard sand lime
	4077-4115	No record
April 11	4115-4124	Andesite
15	4124-4147	Hard shells
15	4147-4161	Shells of lime and shale
16	4161-4175	Lime and hard shells streaks of andesite
17-19	4175-4249	Andesite with streaks of lime
19-20	4249-4271	Andesite
May 1	4271-4477	Sandy lime
1-5	4477-4525	Hard sand
5	4525-4536	Hard sandy lime
5	4526-4539	Quartzite
5-9	4539-4592	Sandy lime - streaks of andesite
10-13	4592-4618	Hard sand and lime
13	4618-4623	Hard fine grain sandstone
14-15	4623-4637	Hard sand
16-18	4637-4688	Sandstone with streaks of lime
19	4688-4691	Quartzite and sandstone
20	4691-4696	Sandy lime
20	4696-4714	Sand with streaks of lime and sandstone
21-23	4714-4729	Hard sand
23	4729-4731	Sandstone
24	4731-4742	Sandy lime

No permit

Date	Depth	Formation
Jan. 26	3751-3774	Quartzite with streaks of tufa
27	3774-3777	Andesite
28	3777-3783	Andesite with streaks hard sandy lime
28	3783-3798	Andesite with streaks bentonite and tufa
29	3798-3807	Andesite with streaks lime and sand
Feb. 1-3	3807-3899	Hard lime with streaks sand
4	3899-3908	Hard lime with streaks andesite
4-7	3908-3946	Hard lime with streaks sand
7	3946-3951	Hard lime with streaks dolomite
8-10	3951-3982	Hard lime with streaks sand
10	3982-4001	Hard lime with streaks quartzite and sand
11	4001-4012	Hard lime with streaks andesite
12-13	4012-4046	Hard sand lime
Mar. 30	4046-4077	Hard sand lime
	4077-4115	No record
April 11	4115-4124	Andesite
15	4124-4147	Hard shells
15	4147-4161	Shells of lime and shale
16	4161-4175	Lime and hard shells streaks of andesite
17-19	4175-4249	Andesite with streaks of lime
19-20	4249-4271	Andesite
May 1	4271-4477	Sandy lime
1-5	4477-4525	Hard sand
5	4525-4536	Hard sandy lime
5	4526-4539	Quartzite
5-9	4539-4592	Sandy lime - streaks of andesite
10-13	4592-4618	Hard sand and lime
13	4618-4623	Hard fine grain sandstone
14-15	4623-4637	Hard sand
16-18	4637-4688	Sandstone with streaks of lime
19	4688-4691	Quartzite and sandstone
20	4691-4696	Sandy lime
20	4696-4714	Sand with streaks of lime and sandstone
21-23	4714-4729	Hard sand
23	4729-4731	Sandstone
24	4731-4742	Sandy lime

No permit

CASA GRANDE DEVEL.-LAVENS #1

O. W. Rugg, P. O. Box 1146, Casa Grande, Arizona

SE SE 25-6s-7e

LOG OF WELL DRILLED SOUTH OF THE 11-MILE CORNER - OIL EXPLORATION - 1944

Driller: L. Roberts - Record taken from Drillers Daily Report Book.

Began drilling Sept. 11, 1944: 1493'

Date		Depth	Thickness	Formation
Sept.	11	0-60	60	Coarse sand, streaks hard sand
	12-13	60-223	163	Sand and gravel, streaks of clay
	14	223-391	168	Sand, clay, streaks of gravel
	15	391-398	7	Hard coarse water sand and gravel
	15	398-445	47	Sand and clay
	15	445-491	46	Blue clay
	16	491-498	7	Tough brown shale
	16	498-570	72	Clay
	17	570-590	20	Clay
	17	590-622	32	Tough brown shale
	18	622-653	31	Hard brown shale
	19	653-705	52	Soft brown shale
	19	705-716	11	Hard brown shale
	20	716-736	20	Hard shale, streaks of sandy shale
	21-22	736-761	25	Hard shale, streaks of limestone shell
	23-25	761-854	93	Hard shale, streaks conglomerate and lime
	26-28	854-940	86	Hard brown shale
	28	940-945	5	Shale and limestone
	28	945-969	24	Sandy shale
	29-30	969-1001	32	Hard brown shale, streaks of lime
Oct.	1-2	1001-1022	21	Tough reddish brown shale
	3	1022-1023	1	Sand
	3	1023-1033	10	Hard brown shale
	4-7	1033-1092	59	Tough reddish brown shale
	8	1092-1102	10	Sandy shale
	8	1102-1118	16	Reddish brown shale
	9	1118-1125	7	Sandy shale
	9	1125-1137	12	Tough brown shale
	9	1137-1167	30	Sandy shale
	10	1167-1198	31	Reddish brown shale, streaks of lime
	11-12	1198-1230	32	Reddish brown shale
	12	1230-1267	37	Sandy brown shale
	12-13	1267-1305	38	Sandy shale, with sticky streaks
	13-14	1305-1335	30	Hard shale
	14	1335-1366	31	Sandy shale, streaks of hard shale
	14	1366-1450	84	Sandy shale, streaks of hard shale
	15	1450-1530	80	Shale
	15	1530-1533	3	Hard sandy lime
	16	1533-1625	92	Shale
	17	1625-1702	77	Shale
	18	1702-1739	37	Shale with hard shells
	19-20	1739-1889	150	Shale with hard shells

No permit

32 × 1

CASA GRANDE DEVEL.-LAVEEN #1

Date		Depth	Thickness	Formation
Oct.	20	1889-1922	33	Shale with hard shells, lime streaks
	21-23	1922-2064	142	Hard lime shale
	23	2064-2080	16	Shale - conglomerate
	23	2080-2118	38	Shale
	24	2118-2156	38	Hard shell shale
	24	2156-2196	40	Shale
	25	2196-2283	87	Shale
	26	2283-2321	38	Shale and conglomerate
	26	2321-2357	36	Shale and gypsum - lime - silt
	27	2357-2392	35	Shale with streaks of gravel
	27	2392-2425	33	Shale with fine sand
	27	2425-2429	4	Soft shale and lime
	28	2429-2462 (2464)	33	Shale with sand and gravel streaks
	28	2464-2493	29	Hard gray and brown sandstone, lime streaks
	29	2493-2500	7	Hard sandstone
	29	2500-2504	4	Sandstone and shale
	29	2504-2548	44	Hard, gray and brown sandstone
Nov.	1	2548-2597	49	Hard shale and sandstone
	2-3	2597-2619	22	Shale and hard shells
	3	2619-2690	71	Hard gray sand, streaks of lime and shale
	4	2690-2707	17	Hard gray sand, wash gravel, streaks of lime
	5	2707-2737	30	Hard sand
	5	2737-2770	33	Coarse gray shale, streaks of sand and gravel
	6	2770-2779	9	Sand
	7	2779-2800	21	Sand and gravel
	7	2800-2808	8	Brown limey shale with streaks of sand
	11	2808-2814	6	Shale
	11-12	2814-2858	44	Sand and gravel
	12	2858-2866	8	Limey shale
	13	2866-2913	47	Shale with gravel streaks
	13	2913-2933	20	Sand with streaks of lime and gravel
		2933-3177	244	No record
Dec.	26	3177-3203	26	Sharp fine sand
	26	3203-3228	25	Fine hard sand
		3228-3247	93	No record
	28	3247-3277	30	Conglomerate
	28	3277-3317	40	Sandy clay, streaks of sand and gravel
	30	3317-3348	31	Sandy clay, streaks of rocks and conglomerate
	30	3348-3350	2	Shale
		3350-3373	23	No record
	31	3373-3375	2	Rocks
Jan.	2	3375-3429	54	Soft sandy clay
	2	3429-3460	31	Sand and shale
	2	3460-3489	29	Hard sandy clay
	6	3489-3495	6	Hard sand
	7	3495-3503	8	Hard lime and sea shells
	10	3503-3507	4	Hard lime and sea shells
	10	3507-3524	17	Hard sandy lime
	11-13	3524-3567	43	Hard shale and lime
	13-17	3567-3688	121	Hard shale with streaks of lime and sand
	18-20	3688-3705	17	Hard sandy lime
	20-23	3705-3727	22	Quartzite
	23	3727-3742	15	Quartzite with streaks of bentonite

No permit

CASA GRANDE DEVEL.-LAVEEN #1

Date		Depth	Thickness	Formation
Jan.	24	3742-3751	9	Lime and sand
	26	3751-3774	23	Quartzite with streaks of tufa
	27	3774-3777	3	Andesite
	28	3777-3783	6	Andesite with streaks hard sandy lime
	28	3783-3798	15	Andesite with streaks bentonite and tufa
	29	3798-3807	9	Andesite with streaks lime and sand
Feb.	1-3	3807-3899	92	Hard lime with streaks sand
	4	3899-3908	9	Hard lime with streaks andesite
	4-7	3908-3946	38	Hard lime with streaks sand
	7	3946-3951	5	Hard lime with streaks dolomite
	8-10	3951-3982	31	Hard lime with streaks sand
	10	3982-4001	19	Hard lime with streaks quartzite and sand
	11	4001-4012	11	Hard lime with streaks andesite
	12-13	4012-4046	34	Hard sand lime
Mar.	30	4046-4077	31	Hard sand
		4077-4115	38	No record
April	11	4115-4124	9	Andesite
	15	4124-4147	23	Hard shells
	15	4147-4161	14	Shells of lime and shale
	16	4161-4175	16	Lime and hard shells streaks of andesite
	17-19	4175-4249	74	Andesite with streaks of lime
	19-20	4249-4271	22	Andesite
May	1	4271-4477	206	Sandy lime
	1-5	4477-4525	48	Hard sand
	5	4525-4536	11	Hard sandy lime
	5	4536-4539	3	Quartzite
	5-9	4539-4592	53	Sandy lime - streaks of andesite
	10-13	4592-4618	26	Hard sand and lime
	13	4618-4623	5	Hard fine grain sandstone
	14-15	4623-4637	14	Hard sand
	16-18	4637-4688	51	Sandstone with streaks of lime
	19	4688-4691	3	Quartzite and sandstone
	20	4691-4696	5	Sandy lime
	20	4696-4714	18	Sand with streaks of lime and sandstone
	21-23	4714-4729	15	Hard sand
	23	4729-4731	2	Sandstone
	24	4731-4742	11	Sandy lime

32×

Gila Grande Eleven Mile Well

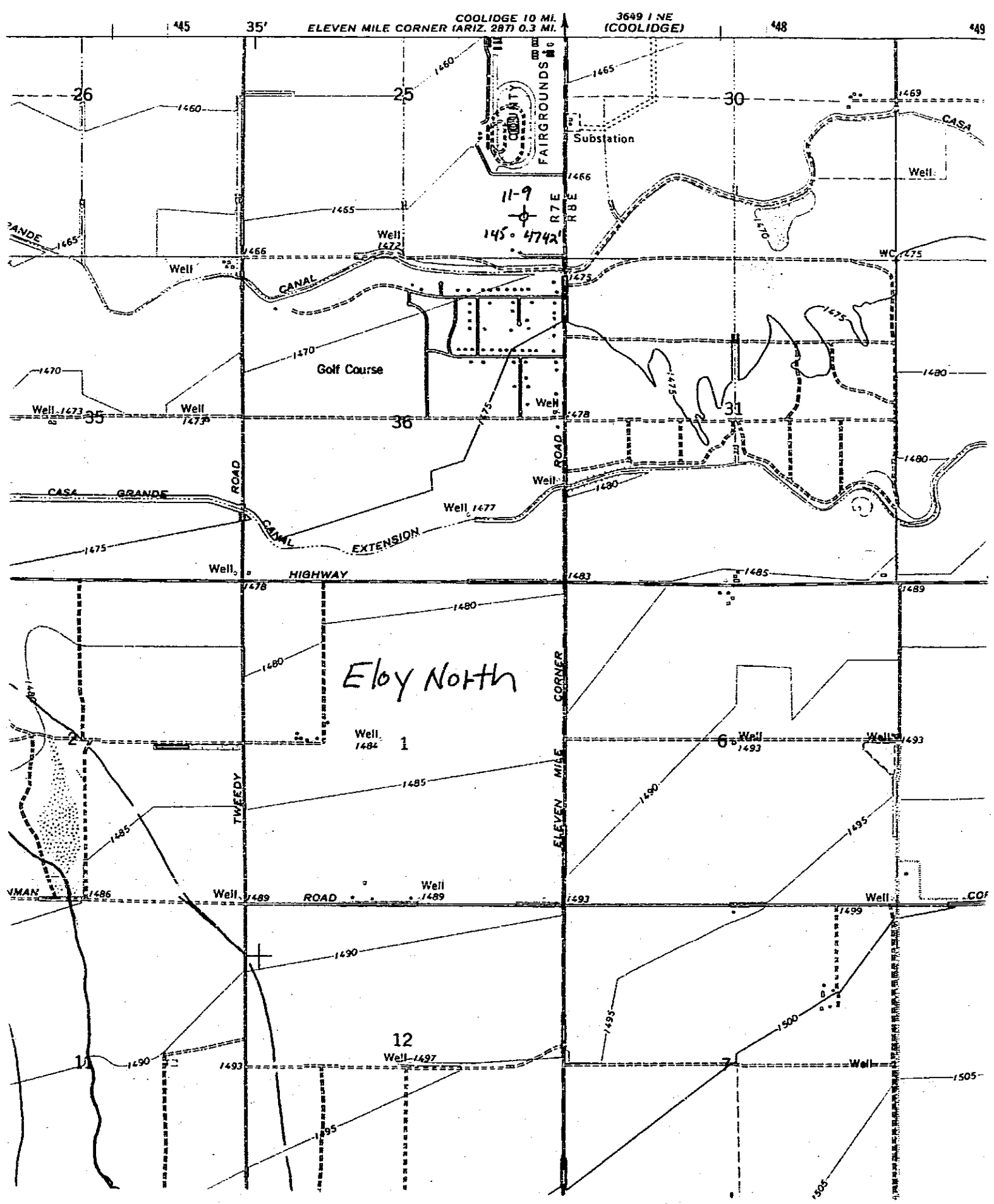
25-6s-7E Pinal Co

Note by LA Hemel.

Dr E. D. Wilson, Asst. Bureau of Mines, has stated that samples ~~[illegible]~~ reported to be from the bottom of this well were granitic.

No permit

32 × [illegible]


COOLIDGE 10 MI.
ELEVEN MILE CORNER (ARIZ. 287) 0.3 MI.
3649 I NE
(COOLIDGE)
35'
FAIRGROUNDS
Substation
Well
CANAL
Golf Course
CASA GRANDE
CANAL EXTENSION
HIGHWAY
ROAD
TWEEDY
ELEVEN MILE CORNER
R7E
R8E
11-9
145° 4742'
Eloy North

PN 11-9

Casa Grande Dev.-Laveen #1
O. W. Rugg, P.O. Box 1146, Casa Grande, Arizona
25-6S-7E, Pinal County, Arizona

LOG OF WELL DRILLED SOUTH OF THE 11-MILE CORNER - OIL EXPLORATION - 1944

Driller - L. Roberts - Record taken from Drillers Daily Report Book

Began drilling Sept. 11, 1944

Date	Depth	Formation
Sept. 11	0-60	Coarse sand, streaks hard sand
12-13	60-223	Sand & gravel, streaks of clay
14	223-391	Sand, clay, streaks of gravel
15	391-398	Hard, coarse water sand and gravel
15	398-445	Sand and clay
15	445-491	Blue clay
16	491-498	Tough brown shale
16	498-570	Clay
17	570-590	Clay
17	590-622	Tough brown shale
18	622-653	Hard brown shale
19	653-705	Soft brown shale
19	705-716	Hard brown shale
20	716-736	Hard shale, streaks of sandy shale
21-22	736-761	Hard shale, streaks of limestone shell
23-25	761-854	Hard shale, streaks conglomerate & lime
26-28	854-940	Hard brown shale
28	940-945	Shale & limestone
28	945-969	Sandy shale
29-30	969-1001	Hard brown shale, streaks of lime
Oct. 1-2	1001-1022	Tough reddish brown shale
3	1022-1023	Sand
3	1023-1033	Hard brown shale
4-7	1033-1092	Tough reddish brown shale
8	1092-1102	Sandy shale
8	1102-1118	Reddish brown shale
9	1118-1125	Sandy shale
9	1125-1137	Tough brown shale
9	1137-1167	Sandy shale
10	1167-1198	Reddish brown shale, streaks of lime
11-12	1198-1230	Reddish brown shale
12	1230-1267	Sandy brown shale
12-13	1267-1305	Sandy shale, with sticky streaks
13-14	1305-1335	Hard shale
14	1335-1366	Sandy shale, streaks of hard shale
14	1366-1450	Sandy shale, streaks of hard shale
15	1450-1530	Shale
15	1530-1533	Hard sandy lime
16	1533-1625	Shale
17	1625-1702	Shale
18	1702-1739	Shale with hard shells
19-20	1739-1889	Shale with hard shells
20	1889-1922	Shale with hard shells, lime streaks
21-23	1922-2064	Hard lime shale
23	2064-2080	Shale - conglomerate
23	2080-2118	Shale
24	2118-2156	Hard shell shale
24	2156-2196	Shale
25	2196-2283	Shale
26	2283-2321	Shale & conglomerate
26	2321-2357	Shale & gypsum - lime - silt
27	2357-2392	Shale with streaks of gravel
27	2392-2425	Shale with fine sand
27	2425-2429	Soft shale and lime
28	2429-2462	Shale with sand and gravel streaks
28	2464-2493	Hard grey & brown sandstone, lime streaks
29	2493-2500	Hard sandstone
29	2500-2504	Sandstone & shale

32×

Casa Grande Dev.-Laveen #1
O. W. Rugg, P.O. Box 1146, Casa Grande, Arizona
25-6S-7E, Pinal County, Arizona

Date		Depth	Formation
	29	2504-2548	Hard, gray & brown sandstone
Nov.	1	2548-2597	Hard shale & sandstone
	2-3	2597-2619	Shale and hard shells
	3	2619-2690	Hard grey sand, streaks of lime and shale
	4	2690-2707	Hard grey sand, wash gravel, streaks of lime
	5	2707-2737	Hard sand
	5	2737-2770	Coarse grey shale, streaks of sand and gravel
	6	2770-2779	Sand
	7	2779-2800	Sand and gravel
	7	2800-2808	Brown limey shale with streaks of sand
	11	2808-2814	Shale
	11-12	2814-2858	Sand and gravel
	12	2858-2866	Limey shale
	13	2866-2913	Shale with gravel streaks
	13	2913-2933	Sand with streaks of lime and gravel
		2933-3177	No record
Dec.	26	3177-3203	Sharp fine sand
	26	3203-3228	Fine hard sand
		3228-3247	No record
	28	3247-3277	Conglomerate
	28	3277-3317	Sandy clay, streaks of sand and gravel
	30	3317-3348	Sandy clay, streaks of rocks and conglomerate
	30	3348-3350	Shale
		3350-3373	No record
	31	3373-3375	Rocks
Jan.	2	3375-3429	Soft sandy clay
	2	3429-3460	Sand and shale
	2	3460-3489	Hard sandy clay
	6	3489-3495	Hard sand
	7	3495-3503	Hard lime and sea shells
	10	3503-3507	Hard lime and sea shells
	10	3507-3524	Hard sandy lime
	11-13	3524-3567	Hard shale and lime
	13-17	3567-3688	Hard shale with streaks of lime and sand
	18-20	3688-3705	Hard sandy lime
	20-23	3705-3727	Quartzite
	23	3727-3742	Quartzite with streaks of bentonite
	24	3742-3751	Lime and sand
	26	3751-3774	Quartzite with streaks of tufa
	27	3774-3777	Andesite
	28	3777-3783	Andesite with streaks hard sandy lime
	28	3783-3798	Andesite with streaks bentonite and tufa
	29	3798-3807	Andesite with streaks lime and sand
Feb.	1-3	3807-3899	Hard lime with streaks sand
	4	3899-3908	Hard lime with streaks andesite
	4-7	3908-3946	Hard lime with streaks sand
	7	3946-3951	Hard lime with streaks dolomite
	8-10	3951-3982	Hard lime with streaks sand
	10	3982-4001	Hard lime with streaks quartzsite and sand
	11	4001-4012	Hard lime with streaks andesite
	12-13	4012-4046	Hard sand lime
Mar.	30	4046-4077	Hard sand
		4077-4115	No record
April	11	4115-4124	Andesite
	15	4124-4147	Hard shells
	15	4147-4161	Shells of lime and shale
	16	4161-4175	Lime and hard shells streaks of andesite
	17-19	4175-4249	Andesite with streaks of lime
	19-20	4249-4271	Andesite
May	1	4271-4477	Sandy lime
	1-5	4477-4525	Hard sand
	5	4525-4536	Hard sandy lime
	5	4536-4539	Quartzite
	5-9	4539-4592	Sandy lime - streaks of andesite

32 ×

Casa Grande Dev.-Laveen #1
O. W. Rugg, P.O. Box 1146, Casa Grande, Arizona
25-6S-7E, Pinal County, Arizona

Date	Depth	Formation
10-13	4592-4618	Hard sand and lime
13	4618-4623	Hard fine grain sandstone
14-15	4623-4637	Hard sand
16-18	4637-4688	Sandstone with streaks of lime
19	4688-4691	Quartzite and sandstone
20	4691-4696	Sandy lime
20	4696-4714	Sand with streaks of lime and sandstone
21-23	4714-4729	Hard sand
23	4729-4731	Sandstone
24	4731-4742	Sandy lime

32 x

March 4, 1949

Mr. J. R. Storey
Selma Road
Casa Grande, Arizona

Dear Mr. Storey:

I am returning today under separate cover the well logs for 11-Mile Corner well.

I appreciate the use of these records and wish to thank you very much for your fine cooperation. As yet, I have not been able to locate the well samples but we have not given up hope.

Sincerely yours,

L. A. Heindl
Geologist

LAH:ld
c.c.- C.J. Moody, Project Engr.
U.S. Indian Irrigation Serv.
Coolidge, Ariz.

No permit

32 ×

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS
FIELD SERVICE
Coolidge, Arizona. February 19, 1949

RECEIVED
FEB 21 1949
STATE LAND DEPT.
OF ARIZONA

Mr. L. A. Heindl,
State Land Department,
Phoenix, Arizona.

Dear Mr. Heindl:

You called at the Coolidge office on the 18th to get the log of the test well at 11-Mile Corner. Shortly after you left Mr. C. C. Nolan located it in the storage vault and I am mailing it to you under separate cover.

It was wrapped and marked and apparently everything which was borrowed from Mr. Storey is in the package. I did not open it. If anything seems to be lacking please let me know.

Very truly yours,

C. J. Moody

C. J. Moody,
Project Engineer

cc- Mr. J. R. Storey,
Casa Grande, Ariz.

Log Returned to J. R. Storey

Uncement

December 29, 1948

Mr. J. R. Story
Casa Grande, Arizona

Dear Mr. Story:

Mr. Art Hauser of Eloy has referred me to you in regard to information regarding the well drilled by the Casa Grande Development Corporation. I understand that there exists a copy of the well log, and we would very much appreciate having a copy at the State Land Department. If there are any well samples still available I would be more than glad to come down sometime and take cuttings from them for the State's permanent record.

There is some confusion in our records as to the exact location of this well and I would appreciate having from you its exact location as well as its elevation. Also, Mr. Hauser was only able to give me a rough idea of the location of the well now being put down by the Eloy Oil Development Syndicate, and if you can let me have its exact location and elevation I would greatly appreciate it.

I stopped by in Casa Grande the other morning but was unable to locate you.

Very truly yours,

L. A. HEINDL
Geologist

Answered orally LAH

LAH:kb

No permit