

GERONIMO OIL-BRUNNING #1
COCHISE COUNTY, NO PERMIT # 2-10

P-W

6-14s-25E

County Cochise

Area Willcox

Lot 1

Lease No. _____

Moderately hot water?

Well Name Geronimo Oil Co. #1 N.G. Brunning

Location NE/NE Sec 6 Twp 14S Range 2SE Footage est. 660 fml 660 fel

Elev _____ Gr _____ KB _____ Date 10-23-30 Spud _____ Completed _____ Abandon 1-24-31 Total _____ Depth 770'

Contractor _____

Drilled by Rotary _____
Cable Tool _____

Casing Size Depth Cement

8 1/4" 127'4" _____

6 7/8" 769'10" _____

Production Horizon _____

Initial Production _____

REMARKS Log from Irving R. Borok's drilling records, Altadena, Cal. 10-25-38

"Oil colors, blue sticky shale 176-221" "Shale showing oil 645-50"

Artesian Water 100 gallons per minute Temp 98° - hd. rock conglomerate 767-770 T.P.

Elec _____

Logs NO

Applic. _____

to Plug _____

Plugging _____

Record _____

Completion _____

Report _____

Sample Log NO

Sample Descript. _____

Sample Set _____

Core Analysis _____

DSTs _____

Water well accepted by _____

Bond Co. _____

& No. _____

Bond Am't \$ _____

Cancelled _____

Date _____

Organization Report _____

Filing Receipt _____

Dated _____

Well Book _____

Plat Book _____

API No. 02-003-05016

Loc. Plat _____

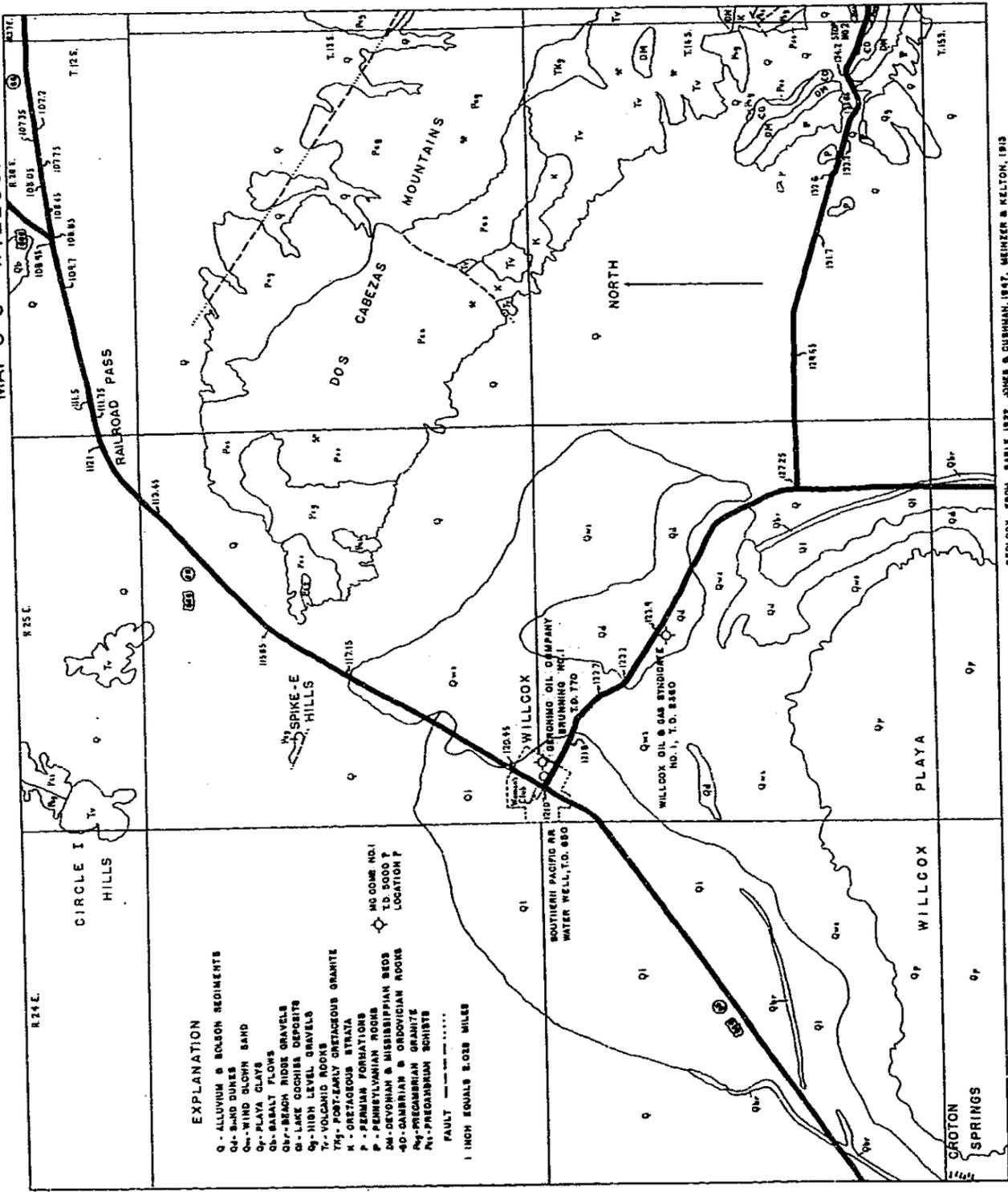
Dedication _____

Permit Number _____

Date Issued _____

2-10

MAP 3-6 WILLCOX



- EXPLANATION**
- Q - ALLUVIUM & BOLSON SEDIMENTS
 - Q1 - SAND DUNES
 - Q2 - WIND BLOWN SAND
 - Q3 - PLAYA CLAYS
 - Q4 - BARRETT FLOWS
 - Q5 - BEACH RIDGE GRAVELS
 - Q6 - LAKE COCHISE DEPOSITS
 - Q7 - HIGH LEVEL GRAVELS
 - T - VOLCANIC ROCKS
 - Y1 - POST-EARLY ORTHOGONOUS GRANITE
 - Y2 - ORTHOGONOUS STRATA
 - P - PENNSYLVANIAN ROCKS
 - P1 - MISSISSIPPIAN BEDS
 - P2 - CARBONIFEROUS & ORDOVICIAN ROCKS
 - P3 - PRECAMBRIAN GRANITE
 - P4 - PRECAMBRIAN SCHISTS
 - F - FAULT
- MC COMB NGL 1 LOCATION P
T.D. 5000 P
- 1 INCH EQUALS 2.028 MILES

SEDUCOY FROM BARLE, 1922, JONES & CUSHMAN, 1947, WEINER & KELTON, 1913

file 2-10

1953

LUNCH STOP: The caravan will stop for lunch in Willcox. Please follow Caravan Chairman's directions. Road log may be picked up at either 121.0 or 121.1 miles.

- 0.55 121.0 Center of Willcox; intersection of Maley Street and Haskell Avenue.
TURN LEFT.
- 0.1 121.1 Cross Southern Pacific Railroad tracks. Caution.
- 0.7 121.8 Road curves to left. Dos Cabezas Peaks at 11:00 o'clock; Little Dragoon Mountains at 3:00 o'clock; Dragoon Mountains at 4:00 o'clock; Willcox Playa in Sulphur Springs Valley at right. Six oil tests have been drilled in the vicinity of Willcox, three to more than 2300 feet. The McComb No. 1, 3 miles northeast of Willcox, reportedly drilled more than 5000 feet. Arzberger No. 1, 5½ miles south of the east-west road to Dos Cabezas, bottomed in "Red Lime, shale, and gravel", T.D. 3298 feet. Willcox Oil and Gas Syndicate No. 1, near the road at 12:00 o'clock, bottomed in "red sand and gravel", T.D. 2360 feet. The only "producer" was a water well of the Southern Pacific Railroad, drilled near the station at Willcox to T.D. 650 feet in sand and gravel. The well reportedly sold 2800 gallons of light oil to ranchers in 1928. The Brunning No. 1 of the Geronimo Oil Company, bottomed at 770 feet in consolidated alluvium, northeast of the railroad well, D. & A.
- 0.9 122.7 Junction; follow black top road to right.
- 0.5 123.2 Cross-bedded dune sands in road cut. Wind blown sand covers about 32 square miles on the northeast side of Willcox Playa; sand and silt having been blown from the alkali flat by the prevailing southwest winds. As seen along the road, the dunal area is characterized by hills and ridges arranged in a rather chaotic manner and separated by ponds and other undrained depressions. These sand hills were the favored sites of ancient Indian encampments. Many stone relics such as large metates (type of mortar), flint chips, arrowheads, spearheads, and pestles have been found with a white calcareous coating. (Meinzer and Kelton, 1913, p. 16).
- 0.7 123.9 Site of Willcox Oil and Gas Syndicate No. 1 buried amid dunes at right. Jones and Cushman (1947b, p. 31) listed the drillers log. Based only on this log, if any bedrock was encountered (T.D. 2360) it was probably volcanic rock.

Jones and Cushman (1947b, p. 4-5) have summarized the geologic history of the Willcox Basin area. The oldest rocks exposed in the adjoining mountains are low-grade Precambrian metasedimentary schists, intruded by a batholith of porphyritic granite. The Precambrian rocks were eroded to a relatively level surface, submerged beneath Paleozoic seas, and covered by a series of sandstones, shales, and limestone, predominantly calcareous. At least one period of widespread erosion or of non-deposition occurred during the Paleozoic in Silurian time. The maximum thickness of the Cambrian, Devonian, Carboniferous, and Permian sediments exceeds 5000 feet.

Post-Permian folding, faulting, and igneous intrusion occurred. The rocks were subjected to erosion, and intermediate volcanic rocks were extruded on the tilted Paleozoic strata. Thick deposits of clastic and marine Cretaceous sediments were laid down upon the older rocks.

Following Cretaceous sedimentation, the rocks were folded and faulted, intruded by magmas, and covered by a great thickness of volcanic flows, tuffs, and tuffaceous sediments. The greatest deformation in the region probably occurred after the Tertiary volcanic eruptions, when compressional forces thrust older rocks over younger rocks. Felsite was intruded along some of the fault planes.

Major gravity faulting then occurred along a northwest-southeast trend, causing the down-dropping of the valleys and the uplifting of the mountains. The stratigraphic throw of these faults may have

200 Stone

**IN
RY
W**

August Report of the Bear Springs Oil & Gas Company

SAN SIMON VALLEY—

San Simon Well, on SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 27; T. 13S., R. 30E.; Torrence ranch 2 miles west of San Simon. Walter Tuttle, driller, has the deepest oil well, drilling in Arizona, 4230 feet, now in hard black sand (Lime) Good oil showings; 170 degree water at 4056 ft.; 6 $\frac{1}{4}$ in. casing hanging at 4035 ft. Will underream to 4160 ft. to shut off water and dry hole.

Pinal Oil Co. Well No. 1 on Allen permit. SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 25; T. 10S., R. 28E., 17 miles north of Bowie. Sam Twentier, Field Supt. with crew of three has had a hard job to get two camps in shape to start active work. These two wells have been practically shut down for the past three years.

Whitlock Oil Co. Well No. 1, on NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 36, T. 10S., R. 28E.; State land 17 miles north of Bowie. Pinal Oil Co. in return for loan of National No. 2 drilling machine and 30 h. p. Buffalo Gasoline engine, owned by Whitlock Oil Co., have repaired and put in good working order to pull 5-8 in. casing and plug Whitlock No. 1 Well back to 1500 ft. before moving the above equipment to Pinal No. 1 Well.

Whitlock No. 2 Well, on NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 20, T. 10S., R. 29E., on Perrod permit, still shut down at 521 ft.

Fin No. 1 Well, 9 miles north of Bowie on SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 23, T. 11S., R. 28E. Reed permit, still negotiating with eastern capital to drill his permit.

Ryan et al Well on SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 34, T. 14S., R. 30E.; State Land 9 miles south of San Simon at 920 ft. Tentative option has been given a group of oil men, on the fifteen state land sections, held by R. J. Ryan and associates of Montebello, Calif. A "K" type Okell drilling machine is on location and the option calls for completion of the well.

SULPHUR SPRINGS VALLEY—

Benedum-Trees, Arzberger No. 1 Well on NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 19; T. 15S., R. 28E., 14 miles SE of Willcox. 4000 ft. 8 $\frac{1}{4}$ in. casing unloaded by S. P. Ry., and delivered to well; 10 in. set at 2348 ft. Depth 3140 ft. in hard

brown shale with shells. Little water in hole. Two towers with crew of five. R. W. Hickman in charge, making very good progress, considering the many delays. John Pugh of the Two John Drilling Co., contractors, made a flying trip from Shreveport, La., Denver, Willcox, and back to headquarters.

Geronimo Oil Co. No. 1, No. 2, and No. 3 Wells, in town of Willcox have shut down for the time being. Mr. I. R. Borck is in charge and expects a large heavy standard rig within 60 days. The splendid oil showings in their wells should warrant further explorations.

S. V. Windle, Riggs No. 1 Well N E $\frac{1}{4}$ Sec. 10, T. 17S., R. 28E., still waiting for equipment necessary to spud in.

Western Water Works of Alamo-gordo, N. M. was awarded the contract for drilling the state well for artesian water to irrigate 10,000 acres in the Stewart District. An appropriation of \$10,000.00 was allowed to do this drilling.

GILA VALLEY—

Gila Oil Syndicate Well No. 1 SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 20, T. 5S., R. 24E., 7 miles NW of Pima, shut down at 2630 ft.

Underwriters Syndicate Well No. 1 (Vaughn Oil Co.) 2 miles NW of Pima, on Mary Mack farm, NW $\frac{1}{4}$ N E $\frac{1}{4}$ Sec. 13, T. 8S., R. 24E., standing shut down at 3765 ft. Several deals pending to finish this well to completion.

SAN PEDRO VALLEY—

Century Petroleum Co. Well No. 1 on Colrazer permit, NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 17; T. 17S., R. 19E., 9 miles west of Benson, expecting to contract the deepening of this well, now shut down at 1550 ft.

Understand interested people are looking over this prospect with view of starting drilling.

San Pedro Oil Corp. No. 1 Well on Smith Bros. ranch 1 $\frac{1}{2}$ miles SE of Mammoth, shut down at 1400 ft.

CHINO VALLEY—

Pinal Oil Co. Lantz No. 1 Well NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 3, T. 16N., R. 2W., 19 miles north of Prescott spudded

in August 16th. Now about 300 feet All casing on rack, all supplies purchased, work is progressing in fine shape, with a steam Star rig, under supervision of Fred Womack, Supt. A water well was drilled to 305 ft. and 350 bbls. a day artesian flow of good water was encountered there, making drilling water for that district a certainty.

Yavapai Oil Development Co. Kissah No. 1 Well, Sec. 27; T. 18N., R. 2W., 29 miles north of Prescott, in charge of A. L. Kissah, who, I am told, has a number of Japanese clients interested in this development. Their No. 1 Well will be spudded in on the 30th, I hear.

There is a possibility of a third well being drilled on the Puntenney Ranch. I hear that all arrangements have been made and the rig is being shipped in from Los Angeles.

"Petroleum" a bulletin issued by the University of Arizona and prepared by Dr. G. M. Butler and J. E. Tenney, is now ready for state distribution. The bulletin treats of the origin of petroleum, methods of concentration, favorable structures, hints to prospectors and tests for petroleum.

NEW COMPANIES INCORPD.—

Blue Ribbon Refinery Co., capital 100,000 shares, no normal par. value. Incorporators, A. C. Hill, Robert U. Moore and R. H. Orkin.
National Carbonic Ice Co., capital 1,000,000 shares, no par value. Incorporators, R. M. Malone, H. A. Kehler and C. A. Winder, all of San Francisco.

Appointment of eight agents in Arizona was made yesterday by the Texas company, a foreign corporation, empowered to operate in Arizona. The agents are: Folsom Moore, Bisbee, Cochise Co.; Ed Matteson, Wenden, Yuma Co.; H. R. Sisk, Nogales, Santa Cruz Co.; J. Verne Pace, Safford, Graham Co.; L. F. Sweeting, Clifton, Greenlee Co.; A. W. Sydnor, Globe, Gila Co.; Kirk Moore, Tucson, Pima Co.; Ned Creighton, Phoenix, Maricopa Co.

BOB THOMAS,

Business Agent Bear Springs Oil & Gas Co., Bowie, Arizona.

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Graham County Guardian and Gila Valley Farmer (Safford, Ariz.);

38. June 5, 1931, p. 9: "Oil Activity Reported in Cochise Area" "Willcox - A general survey of work in the oil fields throughout this district shows considerable activity.

The Windle well has been spudded in on the Riggs ranch property between Willcox and Pearce and the Benedum Trees company is making considerable progress in drilling near here. Much interest is centered on these two projects as both are declared to be operating in choice locations.

The Bowie-San Simon Oil company declared to be operating at its well west of San Simon (garbled sentence). The Geronimo Oil company has added two more rigs for drilling with the Clark-Holiday drill suspended at 426 feet. The new rigs are on the Anna Bruning No. 1 and Keystone locations.

The Geronimo Oil company has drilled 221 feet in its third shallow well spudded in at Willcox and is now engaged in a production test with the hope of bringing in a five or ten-barrel well.

At the Anna Bruning well, No. 1, located half a mile southwest of Willcox, another production test is contemplated. Tests made at Los Angeles are reported as showing that the company has encountered a commercial oil sand but that much of the petroleum was washed out by warm artesian water, since shut off.

Deep Test Planned

The company is continuing drilling operations at another well, the first drilled by this concern, in Willcox, which is near 600 feet in depth.

New equipment to carry on production tests will be brought from Los Angeles soon, according to the Arizona Range News, Willcox newspaper. The company also proposes to initiate a deep test well with a standard rig soon on the east side of the Southern Pacific track south of Willcox, the newspaper states.

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3/23/31
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6/19/31
p. 2

LOG OF GERONIMO OIL COMPANY - N. C. BRUNNING WELL LOT 1, Willcox, Arizona

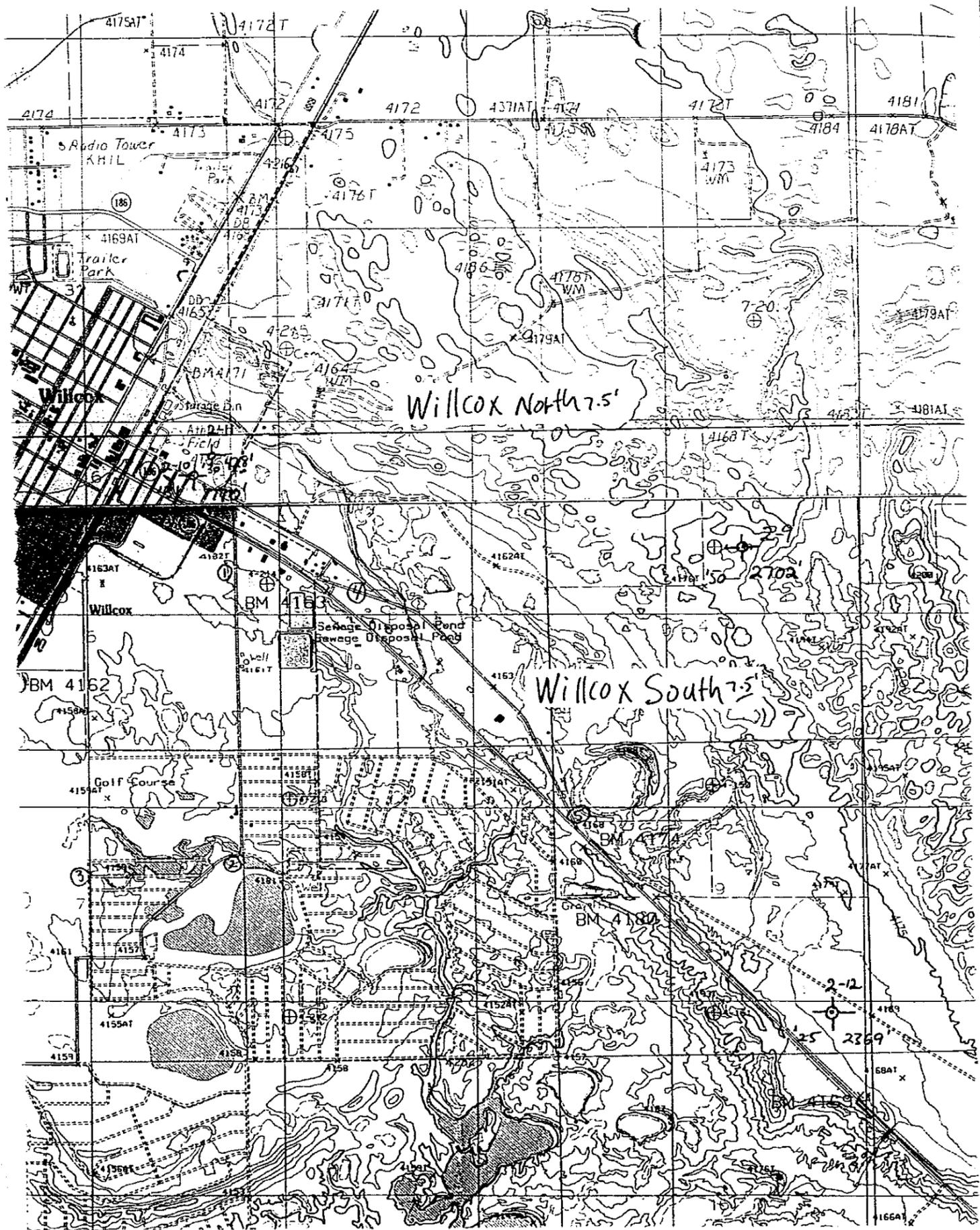
6-14S-25E COCHISE COUNTY

Drilling Commenced October 23, 1930
 Drilling Ceased January 24, 1931
 8 $\frac{1}{4}$ " casing set at 127'4"
 6-5/8" casing set at 769'10"

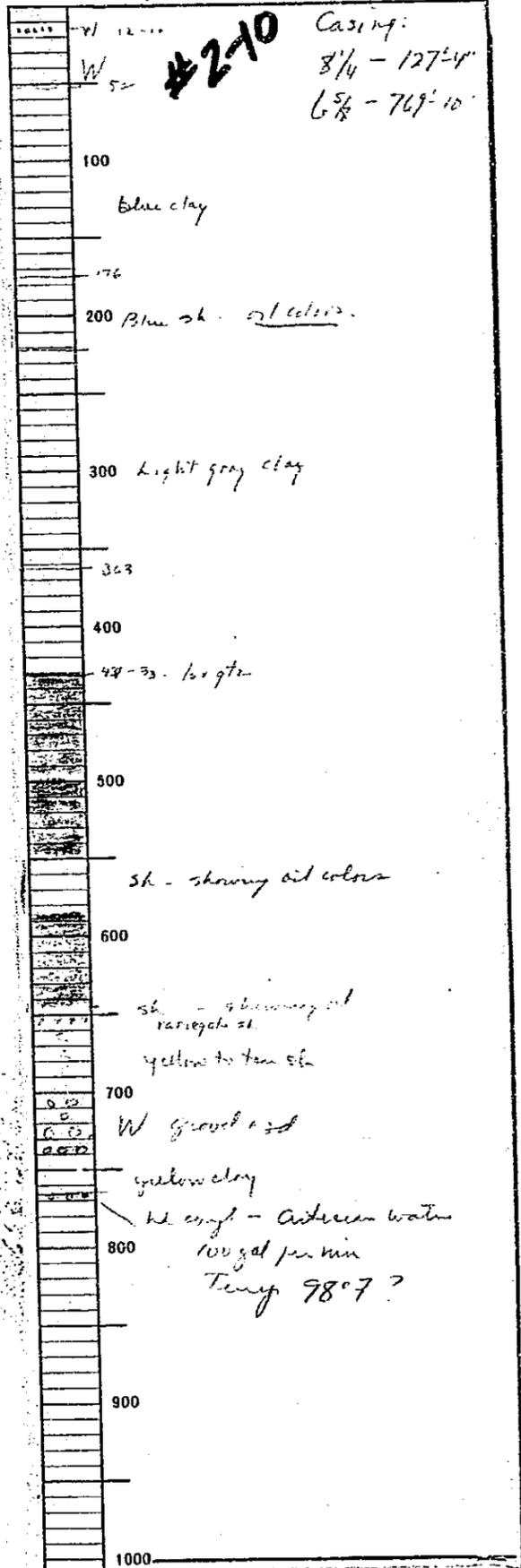
Log obtained from Irving R. Borck's drilling records
 Altadena, Calif., October 25, 1938.

<u>From</u>	<u>To</u>	<u>Formation</u>
0	1	Sand
1	4	Sandstone
4	4'6"	Brown coarse clay and sand
4'6"	5	Light blue clay and sand
5	8	Dark brown clay, little sand
8	12	Light brown clay, some sand and water
12	14	Quicksand
14	15	Coarse gravel - water
15	52	Quicksand - water
52	176	Light blue clay
176	221	Blue sticky shale, oil colors
221	363	Light gray clay
363	431	Shale and clay
431	433	Limestone and quartz
433	469	Limestone
469	471	Soft lime
471	494	Limestone
494	497	Hard rock
497	510	Soft white lime rock
510	548	Brown clay and shale
548	586	Shale, oil colors
586	645	Brown clay or shale
645	650	Shale showing oil
650	655	Varigated colored shale
655	700	Yellow to tan shale
700	735	Sand
735	740	Gravel-water
740	767	Yellowish clay
767	770	Hard rock conglomerate

Artesian water 100 gallons per min. Temp. 98 deg.



Lot 1 - Sec 6		Miller - Cochise Co	
T.	R.	Section	COMPANY
743	25E	Geronimo Oil	
		Anna C Bruning	NO. 1
		COMMENCED Oct 23	1930
		COMPLETED Jan 24	1931
ELEVATION		REMARKS:	
1		TD 770	



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6-14S-25E COCHISE COUNTY

Drilling Commenced October 23, 1930
 Drilling Ceased January 24, 1931
 8 1/4" casing set at 127'4"
 6-5/8" casing set at 769'10"

Log obtained from Irving R. Borek's drilling records
 Altadena, Calif., October 25, 1938.

<u>From</u>	<u>To</u>	<u>Formation</u>
0	1	Sand
1	4	Sandstone
4	4'6"	Brown coarse clay and sand
4'6"	5	Light blue clay and sand
5	8	Dark brown clay, little sand
8	12	Light brown clay, some sand and water
12	14	Quicksand
14	15	Coarse gravel - water
15	52	Quicksand - water
52	176	Light blue clay
176	221	Blue sticky shale, oil colors
221	363	Light gray clay
363	431	Shale and clay
431	433	Limestone and quartz
433	469	Limestone
469	471	Soft lime
471	494	Limestone
494	497	Hard rock
497	510	Soft white lime rock
510	548	Brown clay and shale
548	586	Shale, oil colors
586	645	Brown clay or shale
645	650	Shale showing oil
650	655	Varigated colored shale
655	700	Yellow to tan shale
700	735	Sand
735	740	Gravel-water
740	767	Yellowish clay
767	770	Hard rock conglomerate
		Artesian water 100 gallons per min. Temp. 98 deg.