[redacted]

M-d

GOLDFIELD CONSOLIDATED #6 8-14
NE/NW Sec 23-T29N-R21W, Mohave Co.

County Mohave

Area Detrital Valley

Lease No.

Well Name Goldfield Consolidated #6 Fed

Location Ne/NW Sec 23 Twp 29N Range 21W Footage 615 FNL - 2245 FWL

Elev 1882 Gr KB Spud Date ~~10-29-57~~ Completed Abandon ~~11-25-57~~ Total Depth 1136'

Contractor

Drilled by Rotary
Cable Tool

Casing Size	Depth	Cement

Production Horizon

Initial Production

REMARKS Top Salt 773'

Qal	0
T-older alluvium	120
Muddy Crk	410
Salt	773
T.D. in Salt	1136

Elec Logs

Applic. to Plug Plugging Record Completion Report

Sample Log
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

Loc. Plat Dedication

API NO.

Permit Number Date Issued

8-14

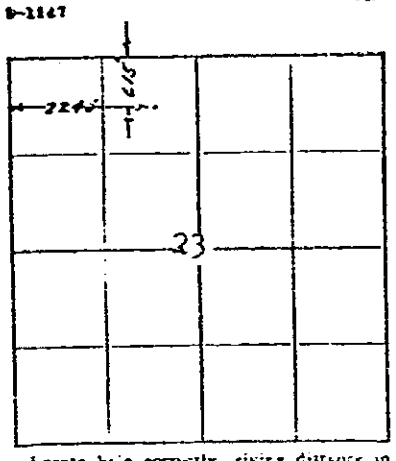
C #6 C 9-14 23-29N-21W #6 + 6A.

9-1147

Budget Bureau No. 42-R352.2
Approval expires Dec. 31, 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

U.S. Land Office Phoenix
Serial Number 07753
Date effective February 26, 1956



Locate hole correctly, giving distance in feet from N. or S. and E. or W. line of section; when hole is not vertical, give direction and angle.

LOG OF PROSPECT BORE HOLE

Logs of prospect bore holes are to be transmitted in duplicate to the regional mining supervisor immediately upon completion of hole or shaft, or when work has been suspended indefinitely.

Lessee or permittee Keegel, assigned to The Goldfield Consolidated Mines Company
Address One Montgomery Street, San Francisco 4, Cal.
Driller Bagles Brothers Drilling Company
Commenced drilling October 29, 1958 Finished November 25, 1957
Hole No. 6 & 6A Sec. 23 T. 29N R. 21W M.G.&S.R.B State Ariz.
Method of drilling Rock bit & core Logged by A. J. Graves

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

(Signed) Herbert K. Witt
Herbert K. Witt
(Title) Consulting Geologist

Date November 30, 1957

Section 35(A) of the United States Criminal Code, 18 U. S. C. 80, makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

Elevation of top of hole relative to sea level 1882

FORMATION RECORD

	DEPTH From— Feet Inches	DEPTH To— Feet Inches	Thickness of stratum Feet Inches	Geologic formations; character of rock; oil, gas and water horizons; coal and other mineral occurrences
Qal	0	120	120	Recent unconsolidated valley fill.
T	+1762 -120	190	70	Interbedded boulder conglomerate and sands.
	190	410	220	Boulder conglomerate, probably well cemented.
Middle Cak	410	688	278	+1472 Clays and gypsum.
	688	773	85	Clays and anhydrite.
	773	785	12	+1109 Halite, 5% anhydrite, trace brown clay.
	785	805	20	Halite, trace brown and gray clays.

8-14

GPO-83-38570

8-14

DRILL LOG

GOLDFIELD, DETRITAL VALLEY SALINE - HOLE NO. 6A

Location: NE¼, NW¼ Section 23, Township 29N., Range 21W., Gila and Salt River Meridain

Elevation: 1682 Feet

Inclination: Vertical Depth: 1136 Feet (+746)

Type of Drills: Portadrill and Boyles - Joy 22 Diamond Drill

Date Started: 1st Drilling, October 29, 1957
Date Completed: 1st Drilling, November 25, 1957

Date Started: 2nd Drilling, October 30, 1958
Date Completed: 2nd Drilling, November 8, 1958

Logged by: A. J. Graves, 0 to 805 Feet
William H. Hisle, 803 to 1136 Feet

Feet From - To	Core Recovery, %	Bit Type & Size		Description and Remarks
0 - 120	—	—		Recent unconsolidated Valley Fill.
120 - 190	—	—		Interbedded boulder conglomerates and sands.
190 - 410	—	—		Boulder Conglomerate, probably well cemented.
410 - 688	—	—		Clay and Gypsum
688 - 773	—	—		Clay and Anhydrite
773 - 785	—	—	12'	Halite, 5% Anhydrite, trace of Brown Clay.
785 - 805	—	—	20'	Halite, trace of Brown and Gray Clay.

A difference of 2 feet exists between reported depth of the hole at the completion of the first drilling and the depth at the beginning of the second drilling. (In the following descriptions, predominate impurity listed first.)

803 - 806	100	NX - D.D.	3'	Halite, ±20% Clay, minor Anhydrite
806 - 807½	90	NX - D.D.	1½	Halite, ±5% Clay
807½ - 808½	90	NX - D.D.	1'	Halite, ±20% Clay

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~~00368~~
8-14

Feet From - To	Core Recovery, %	Bit Type & Size	Description and Remarks
808½ - 818	95	NX - D.D.	Halite, ±5% Clay
818 - 819	100	NX - D.D.	Halite, ±10% Clay
819 - 823½	100	NX - D.D.	Halite, ±5% Clay
823½ - 838	95	NX - D.D.	Halite, ±20% Clay, minor Anhydrite
838 - 840	100	NX - D.D.	Halite, ±10% Clay
840 - 842	100	NX - D.D.	Halite, ±5% Clay
842 - 844	100	NX - D.D.	Halite, ±10% Clay
844 - 846	100	NX - D.D.	Halite, ±20% Clay and Anhydrite
846 - 849	100	NX - D.D.	Halite, ±30% Clay and Anhydrite
849 - 853	100	NX - D.D.	Halite, ±15% Clay and Anhydrite
853 - 855	100	NX - D.D.	Halite, ±10% Clay and Anhydrite
855 - 856	100	NX - D.D.	Halite, ±40% Clay and Anhydrite
856 - 858	100	NX - D.D.	Halite, ±15% Clay
858 - 859	100	NX - D.D.	Halite, ±30% Clay, minor Anhydrite
859 - 866	100	NX - D.D.	Halite, ±15% Clay
866 - 870	100	NX - D.D.	Halite, ±10% Clay
870 - 873	100	NX - D.D.	Halite, ±15% Clay, minor Anhydrite
873 - 876	100	NX - D.D.	Halite, ±20% Clay and Anhydrite
876 - 882	100	NX - D.D.	Halite, ±15% Clay
882 - 886	100	NX - D.D.	Halite, ±10% Clay
886 - 890	100	NX - D.D.	Halite, ±15% Clay
890 - 900	95	NX - D.D.	Halite, ±10% Clay
900 - 903	90	NX - D.D.	Halite, ±30% Clay
903 - 907½	95	NX - D.D.	Halite, ±1% visible impurities
907½ - 908	90	NX - D.D.	Clay, minor Anhydrite

~~00369~~
8-14

Feet From - To	Core Recovery, %	Bit Type & Size	Description and Remarks
908 - 912	95	NX - D.D.	Halite, ±5% Clay
912 - 919	100	NX - D.D.	Halite, ±10% Clay, minor Anhydrite
919 - 922	100	NX - D.D.	Halite, ±20% Clay and Anhydrite
922 - 926	100	NX - D.D.	Halite, ±40% Clay and Anhydrite
926 - 927½	85	NX - D.D.	Halite, ±30% Clay
927½ - 931	85	NX - D.D.	Halite, ±5% Clay
931 - 936½	90	NX - D.D.	Halite, ±10% Clay
936½ - 939½	90	NX - D.D.	Halite, ±15% Clay, minor Anhydrite
939½ - 941	85	NX - D.D.	Halite, ±40% Clay and Anhydrite
941 - 942	60	NX - D.D.	Clay, minor Halite and Anhydrite
942 - 945	90	NX - D.D.	Halite, ±20% Clay, minor Anhydrite
945 - 947	95	NX - D.D.	Halite, ±5% Clay
947 - 952	100	NX - D.D.	Halite, less than 1% impurities
952 - 956	100	NX - D.D.	Halite, ±10% Clay
956 - 961	100	NX - D.D.	Halite, ±15% Clay and Anhydrite
961 - 966	100	NX - D.D.	Halite, ±20% Clay and Anhydrite
966 - 969	100	NX - D.D.	Halite, ±5% Clay
969 - 971	100	NX - D.D.	Halite, ±15% Clay, minor Anhydrite
971 - 975½	100	NX - D.D.	Halite, ±20% Clay and Anhydrite
975½ - 976	60	NX - D.D.	½ Clay, minor Anhydrite and Halite
976 - 978	100	NX - D.D.	Halite, ±50% Anhydrite and Clay
978 - 984	100	NX - D.D.	Halite, ±30% Clay, minor Anhydrite
984 - 986	100	NX - D.D.	Halite, ±20% Clay
986 - 987	100	NX - D.D.	Halite, ±10% Clay

00970
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Page 4. Drill Log - Hole No. 6A

Feet From - To	Core Recovery, %	Bit Type & Size	Description and Remarks
987 - 989	95	NX - D.D.	Halite, ±30% Clay - 3" Clay seam at ± 988
989 - 991	100	NX - D.D.	Halite, ±20% Clay
991 - 994	100	NX - D.D.	Halite, ±15% Clay, minor Anhydrite
994 - 996	100	NX - D.D.	Halite, ±20% Clay and Anhydrite
996 - 1004	100	NX - D.D.	Halite, ±30% Clay and Anhydrite
1004 - 1006	100	NX - D.D.	Halite, ±5% Clay
1006 - 1010	100	NX - D.D.	Halite, ±30% Clay and Anhydrite
1010 - 1012	100	NX - D.D.	Halite, ±40% Anhydrite, minor Clay
1012 - 1013½	100	NX - D.D.	Anhydrite
1013½ - 1019	100	NX - D.D.	Halite, ±20% Clay and Anhydrite
1019 - 1024	100	NX - D.D.	Halite, ±10% Clay and Anhydrite
1024 - 1030	95	NX - D.D.	Halite, ±20% Anhydrite and Clay
1030 - 1031	100	NX - D.D.	Halite, ±5% Clay
1031 - 1033	100	NX - D.D.	Halite, ±20% Clay
1033 - 1036	95	NX - D.D.	Halite, ±15% Clay
1036 - 1046½	95	NX - D.D.	Halite, ±30% Clay, minor Anhydrite
1046½ - 1048	100	NX - D.D.	Halite, ±10% Clay
1048 - 1057	95	NX - D.D.	Halite, ±20% Clay and Anhydrite
1057 - 1059	100	NX - D.D.	Halite, ±10% Clay
1059 - 1064	100	NX - D.D.	Halite, ±20% Clay and Anhydrite
1064 - 1067½	100	NX - D.D.	Halite, ±15% Clay, minor Anhydrite
1067½ - 1075	100	NX - D.D.	Halite, ±20% Clay and Anhydrite 4" Clay seam at ±1070
1075 - 1076	100	NX - D.D.	Halite, ±15% Clay

Page 5. Drill Log - Hole No. GA

Feet From - To	Core Recovery, %	Bit Type & Size	Description and Remarks
1076 - 1082	90	NX - D.D.	Halite, ±40% Clay and Anhydrite
1082 - 1086	90	NX - D.D.	Halite, ±40% Anhydrite and Clay
1086 - 1089½	100	NX - D.D.	Halite, ±10% Clay, minor Anhydrite
1089½ - 1092	100	NX - D.D.	Halite, ±15% Clay, minor Anhydrite
1092 - 1104½	100	NX - D.D.	Halite, ±30% Clay and Anhydrite
1104½ - 1106	100	NX - D.D.	Halite, ±20% Clay and Anhydrite
1106 - 1111	95	NX - D.D.	Halite, ±15% Clay
1111 - 1118	90	NX - D.D.	Halite, ±40% Anhydrite and Clay
1118 - 1131	80	NX - D.D.	Anhydrite and Clay, minor Halite
1131 - 1136 T.D.	60	NX - D.D.	Halite, ±30% Clay and Anhydrite

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine: Salt Deposits | Date: July 16, 1959

District: Gold Basin, Mohave County | Engineer: Travis P. Lane

Subject: Information obtained in Kingman

I visited Mr. Bert Coleman, Mgr. of the Mohave County Chamber of Commerce in Kingman on July 8th concerning possible miner-cattleman conflict of interest on grazing ranges; and at the same time I inquired re the salt deposit exploration being conducted by Goldfield Consolidated Mining Co. in the region near Temple Bar. Mr. Coleman said that he had visited the area following receipt of a letter addressed to the Chamber of Commerce by Mr. H. Hisle of Goldfield Consolidated Mining Co. He showed me the letter, dated Feb. 2, 1959, and I summarized it as follows:

Goldfield Consolidated Mining Co. is a Wyoming Corporation with offices at :

No. 1 Montgomery St., San Francisco, Calif. and 206 N. Virginia St., Reno, Nevada

Property: Early in 1957 the Company obtained a lease on 24 sections (15,360 acres) of potential salt bearing ground. The leasing agency was the Lake Mead National Recreation Area administered by the National Park Service. The center of the area is approximately 55 miles southeasterly from Boulder City -- 40 miles on Highway 93 and then 15 miles on the Temple Bar road. It is about the same distance northerly from Kingman.

To date 11 holes have been drilled for a total footage of 10,800 feet. 8 of the holes have partially delimited a salt deposit of high purity with length of 3 miles, width of at least 1 mile and an assured thickness of 500 feet. Additional drilling is planned. Salt recovery by brining and solar evaporation is proposed.

The letter stated that a market for 400 to 500 TPD exists at Henderson, Nevada, with Stauffer Chemical Co. accounting for the bulk of this use. That Company presently has a long term contract with the Leslie Salt Co. of Calif. to supply its needs. The letter also spoke of 2 firms having prospective plans for plants near Henderson to produce perchlorates for use in solid fuels. Also, the Hooker Electro-Chemical is reported to be considering the construction of a large chlorine plant in the Salt Lake City area.

The purpose of the letter was to apprise the Chamber of Commerce of the Company's favorable opinion as to the long range outlook for a regional salt industry and to enlist the Chamber's support in publicizing the advantages for plants, such as Hooker Electro-Chemical proposes, to locate near Boulder City because this location would be not far distant from large users on the west coast. Cheap Hoover dam power was cited as another attraction.

Mr. Coleman said he understood that Phelps Dodge was associated with Goldfield in the venture but said he could not vouch for the authenticity of this information.

Also report (to date) over [illegible]

8-14

June 23, 1959

Mr. D.R.M. Mahoney
11910 Laurie Lane
Houston, 24, Texas

Dear Mr. Mahoney:

In regard to your inquiry of June 20th about the geology, production and consumption of Salt in Arizona:

As of September, 1959, Goldfield Consolidated (now merged into American Chrome Company) had drilled extensive halite beds in the Detrital Wash area near Hualpai's Landing opposite the mouth of the Virgin River at Lake Mead. A halite thickness exceeding 500 feet reportedly was drilled. A pilot plant had been constructed. Work had been discontinued through the summer, and our field engineers found no sign of reconstructivity when in the area in March of this year.

Other parties reportedly are interested in the plays both of this area.

The enclosed photocopy of a 1918 article by J. R. [illegible] covers other areas from which no recent production is known to us.

Other references are:

Phalen, W. C., Salt Resources of the U.S., U.S.G.S Bull. 669, 1919

Young, G. J. Preliminary mining for rock salt at Camp Verde; Eng.Min.Jour., vol 124, p. 16, 1927.

Consumption in Arizona has increased with the recent announcement of a plant using a salt-coke segregation process for extraction of copper from oxide ores. Another development is a planned pulp mill to be built by the largest lumber company in Arizona. 1958 shipments of evaporated and rock salt from U. S. producers to Arizona were 14,000 and 13,000 short tons respectively.

If we can be of further service, please do not hesitate to call on us.

Very truly,

[redacted]

[redacted]

Dist. + N.+ R.S.

8-14

MOHAVE COUNTY

Thursday: Visited Detrital Wash area near Bonnelli's Landing. Goldfield Consolidated has drilled salt beds here and has constructed a pilot evaporative plant which includes vats and pumping system -- pumping water into a drill hole and returning brine to 6 evaporation vats. No one was present at the time of visit. I drove on to the Temple Bar ranger station where I interviewed Mr. Sutherland, the ranger. He described the work of Goldfield Consolidated and said work was suspended at the beginning of summer and was expected to resume about now. Mr. Meisel directed the work for the company. T.P.LANE - WR - 9-28-59

The merger of Goldfield Consolidated Mines Company and American Chrome Company has been approved by stockholders. Two shares of Goldfield stock will be exchanged for each share of American Chrome.

Taken from MINING WORLD, January, 1960, p 68.

SALT DEPOSITS

MOHAVE COUNTY
GOLD BASIN DISTRICT

Visited site of the Goldfield Consolidated salt project in Detrital Wash near Temple Bar on Lake Mead. There has been no recent company activity.

Visited Mr. Sutherland, the ranger stationed at Temple Bar. He reported that he had just received notice from the Park Service of an application for a sodium lease in Detrital Wash entered by a Mr. L. P. Corbin, Jr. The new lease application appears to overlap in some places the ground of the Goldfield Consolidated lease hold.

T. P. LANE - WR-3-19-60

8-14

[redacted]

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T. F. LANE - WR-3-19-60

8-14

DETRITAL WASH SALT DEPOSITS

MOHAVE COUNTY

GOLDFIELD CONSOLIDATED MINES CO. (Wyoming Corp.)
W. A. Swan, V. Pres. and No. 1 Montgomery St.
206 N. Virginia St., San Francisco, Calif.
Reno, Nevada

W. A. Swan, also V. Pres. AMERICAN CHROME CO., Nye, Mont.
John L. Lukens, Treas. " "

4-22-58 - FPK night

Mr. W. H. Hisle was in relative to the salt well drilling his company, the Goldfield Consolidated Mines Company (American Chrome Co. of Montana). They have drilled 7 holes in the halite area at a place 7 miles south of Bonelli Landing, northwestern Mohave County. Their plans are for utilization of the deposit ore, as yet, are tenative dependent upon the selection of a proper mining method.

LEWIS A. SMITH-WR 4-4-58
Geologist Dept. of Natural Resources

Mr. W.H.Hisle, engineer in charge of Gold Field Consolidated Mines (American Chrome Co. of Montana) report that 7 holes had been drilled in the salt beds in northern Mohave County, 10 miles from Hualey Landing, south. They have sunk 7 holes and disclosed 500 feet of halite with about 500 feet of overburden. The area drilled covers about 3 miles long by one mile wide. He was in to confer on salt markets and the best mining method. They plan to develop and ship salt to the chemical plant near Las Vegas. He will submit a Mine Owner's Report later.

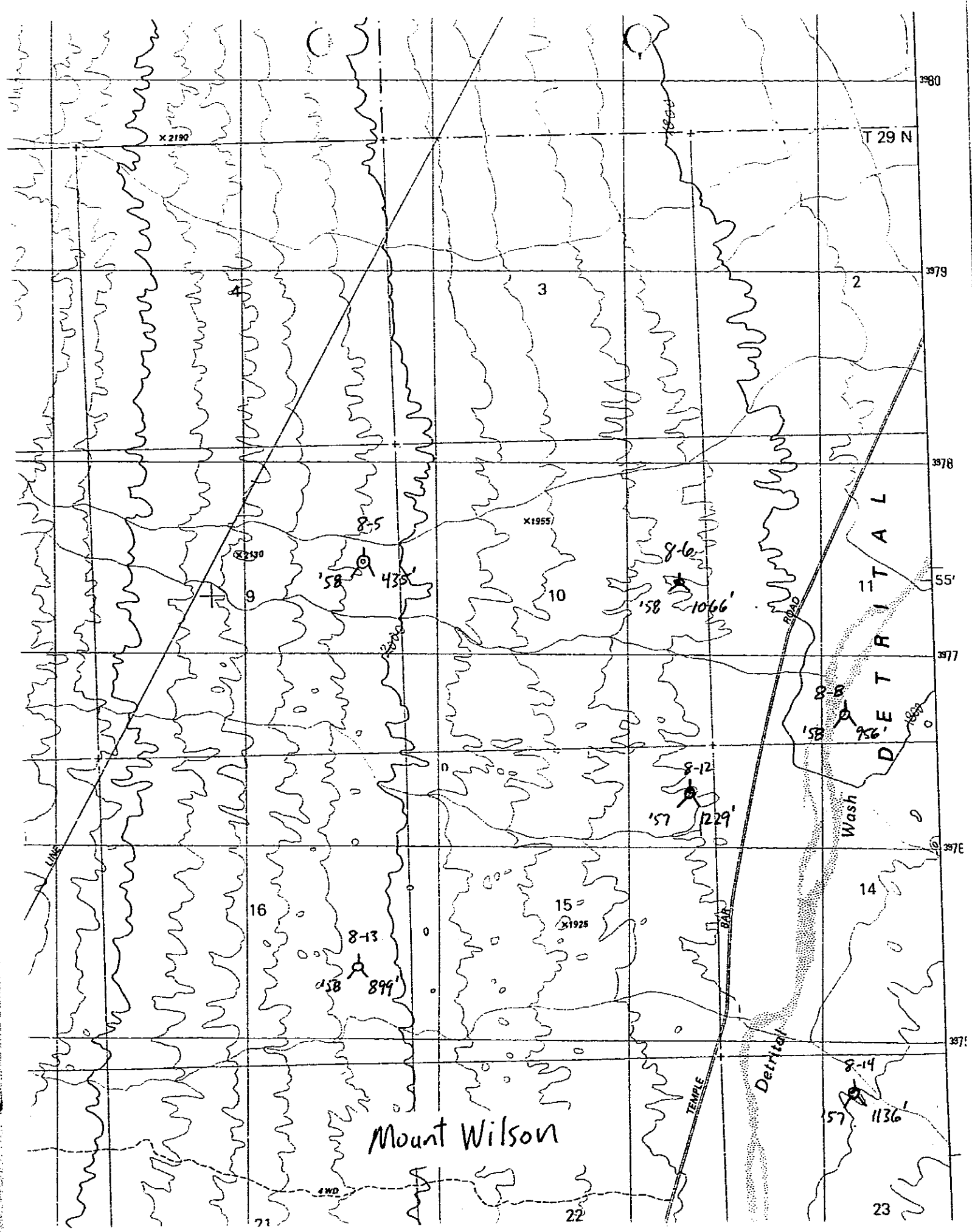
LEWIS A. SMITH - WR - 4-5-58

KINGMAN, ARIZONA - Phelps Dodge Corporation is drilling for borax on Goldfield Consolidated Mines Company's Detrital Valley Saline project.

Taken from MINING WORLD, May 1959, p 31

See Article MINING WORLD, June, 1959, p 73

8-14



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