Barron-Steele #1, Coconino Co. 3-3
SW/SW Sec 15-T27N-R9W

M-d

3-3

13

County Coconino

Area Gray Mountain

Lease No.

** Elev: 5093 GL from USGS fig. on Gray Mtn.

Well Name Barron-Steele #1 Babbitt

Location SW SW Sec 15 Twp 27N Range 9E Footage 660 FSL; 660 FWL

Elev 5400 Gr ?? KB Spud Date 7-1-47 Complete Abandon 7/48 ~~4-14-48~~ Total Depth 2165 Approx. ? 2300

** should be within 10' of Locke & Babbitt

Contractor: per Mc Govack USGS

Cost $

Drilled by Rotary

Cable Tool

Casing Size	Depth	Cement

Production Horizon

Initial Production

REMARKS:

~~Kaibab~~	~~surface~~
Coconino	340
Hermit	1740

Elec. Logs

Applic to Plub ___ Plugging Record ___ Completion Report ___

Sample Log

Sample Descript X

Sample Set T-10, P-119

Cores

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 # 02-005-05014

PERMIT NO. None Date Issued

3-3

Analyses by Geological Survey, United States Department of the Interior
(Parts per million)

Laboratory Number	13, 338	13,339
Date of collection	10/26/49	10/26/49
Silica (SiO_2)	---	---
Iron (Fe)	---	---
Calcium (Ca)	50	117
Magnesium (Mg)	3.9	4.4
Sodium (Na)	532	572
Potassium (K)		
(OH)		81
Bicarbonate (HCO_3)	178	---*
Sulfate (SO_4)	724	832
Chloride (Cl)	282	232
Fluoride (F)	---	---
Nitrate (NO_3)	1.8	1.9
Boron (B)	---	---
Dissolved solids:		
Sum - ppm.	1,680	1,910
- tons/a.ft.	2.28	2.60
Hardness as $CaCO_3$:		
Total	141	310
Noncarbonate	0	188
Specific conductance (Micromhos at 25° C.)	2,750	3,770
Percent sodium	89	80
pH	8.9	10.6

Lab. No. 13,338 - Barron-Steel Oil Test No. 1, sec. 15, T. 27-N, 9-E, Coconino Co., Ariz. 14 Mi. S. and 5 Mi. E. of Cameron, Ariz., Drilled well 2,300', 13" Diam.; Babbitt Ranch, Flagstaff, Ariz., WBF-Supai Fm. 1,280-W/1-1,280' below LSD; Casing: steel 300', sample Coll. from 1,350'.

" " 13,339-Barron-Steel Oil Test No. 1, 14 miles S., 5 Mi. E. of Cameron, Ariz. sec. 15, T-27-N, 9E, Coconino Co., Ariz.; Oil test well drilled 2,300', 13" dia., Babbitt Ranch, Flagstaff, Ariz.; WBF-1,280'; W/1-1,280' below LSD; casing: steel, 300'; Coll. from 2,075'

*Carbonate (CO_3) 73 p.p.m.

No permit

~~STEEL WELL, GRAY MOUNTAIN,~~ FLAGSTAFF, ARIZONA
Sec 15, T. 27 N, R. 9E.,
Coconino Co., Arizona
by C. S. Bromfield
s/a Babbitt Co. Bar #1 (Barron-Steele #1)

Colors based on Rock Color Chart-National Research Council
Size by estimate

Depth in feet

0	-	5	Soil
5	-	10	Calcareous sandstone; very pale orange, consists of very fine-grained, clear quartz particles, angular grains, lime cement, soft poorly consolidated material.
10	-	15	Do.
15	-	20	Do.
20	-	25	Do.
25	-	30	Do.
30	-	35	Calcareous sandstone: very pale orange, fine grained with some very coarse layers or lenses (2-4mm.), similar to 5-30'.
35	-	40	Do.
40	-	45	Do.
45	-	50	Calcareous sandstone: very pale orange, very fine grained, angular quartz grains, lime cement.
55	-	60	Calcareous sandstone: as 5-10'
60	-	65	Do.
65	-	70	Calcareous sandstone: white, very fine grained angular quartz particles, lime cement, poorly consolidated
70	-	75	Do.
75	-	80	Do.
80	-	85	Do.
85	-	90	Do.
90	-	95	Do.
95	-	100	Do.
100	-	105	Calcareous snadstone: white, very fine grained angular quartz grains, lime cement, poorly consolidated.
105	-	110	Do.
110	-	115	Do.
115	-	120	Do.
120	-	130	Do.
130	-	140	Do.
140	-	150	Do.
150	-	160	Missing
160	-	170	Missing
170	-	180	Calcareous sandstone: white, very fine grained angular quartz grains, lime cement, poorly consolidated.
180	-	190	Calcareous sandstone: very pale orange, fine grained.
190	-	200	Missing.
210	-	220	Calcareous sandstone: moderate orange pink, very fine grained clear angular grains, poorly consolidated.
220	-	230	Missing.
230	-	240	Calcareous sandstone: pale reddish brown, very fine to medium grained, less well sorted than preceding samples, poorly consolidated.
240	-	250	Missing
250	-	260	Calcareous sandstone: moderate orange pink, medium grained, angular quartz sands, loosely consolidated.
270	-	280	Sandstone: very pale ornage, medium grained, angular quartz grains, poorly consolidated.
300	-	310	Silty sandstone: grayish ornage, very fine grained, angular quartz grains, poorly consolidated.
310	-	320	Silty sandstone: very pale orange, fine grained, poorly consolidated
320	-	330	Sandstone: very pale orange, medium grained, angular quartz grains, slightly calcareous, poorly consolidated.
330	-	340	Sandstone: very pale orange, medium grained, angular quartz grains, poorly consolidated.
340	-	350	Do.
350	-	360	Do.
360	-	370	
370	-	380	

STEEL WELL, GRAY MOUNTAIN, FLAGSTAFF, ARIZONA

Depth in feet			
380	-	390	Sandstone: Very pale orange, fine grained angular quartz particles, poorly consolidated.
400	-	410	Do.
410	-	420	Do.
420	-	430	Sandstone:very pale ornage, very fine grained angular quartz particles, poorly consolidated.
470	-	480	Sandstone: very pale orange, fine grained, quartz grains angular to sub-angular, poorly consolidated.
480	-	490	Sandstone: very pale orange, fine grained quartz particles, angular to sub-angular, poorly consolidated.
490	-	500	Do.
500	-	510	Do.
520	-	530	Do.
530	-	540	Sandstone: very pale orange, very fine grained angular to sub-angular quartz grains, poorly consolidated.
540	-	550	As 530-540, but fine grained
550	-	560	Do.
570	-	580	Do.
590	-	600	Do.
640	-	650	Do.
650	-	660	Do.
660	-	670	Sandstone: very pale orange, very fine grained angular to sub-angular quartz grains, poorly consolidated.
680	-	690	Do.
690	-	700	Sandstone: very pale orange, fine grained.
700	-	710	Sandstone: very pale orange, very fine grained.
710	-	720	Sandstone: very pale orange, fine to very fine grained.
720	-	730	Sandstone: very pale orange, fine grained.
730	-	740	Do.
740	-	750	Sandstone: very pale orange, medium to fine.
750	-	760	Do.
760	-	770	Do.
770	-	780	Sandstone: very pale orange, very fine grained
800	-	810	Sandstone: grayish orange, fine grained, calcareous cement.
810	-	820	Do.
830	-	840	Sandstone: very pale ornage, very fine grained, calcareous cement.
840	-	850	Sandstone: very pale ornage, very fine grained, calcareous cement.
850	-	860	Do.
860	-	870	Do.
890	-	900	Sandstone: very pale orange, fine grained, calcareous cement.
900	-	910	Do.
910	-	920	Do.
920	-	930	Do.
930	-	940	Do.
940	-	950	Do.
950	-	960	Do.
960	-	970	Sandstone: light brown, fine grained, well sorted, angular quartz grains, calcareous.
970	-	980	Do.
980	-	990	Do.
990	-	1000	Do.
1000	-	1010	Do.
1010	-	1020	Sandstone: light brown, fine grained, contains small well rounded granules and very coarse size fragments of moderate reddish brown sandstone.
1020	-	1030	Do.
1030	-	1040	Do.
1040	-	1050	Do.
1050	-	1060	Do.
1060	-	1070	Do.
1070	-	1080	Do.
1080	-	1090	Sandstone: pale reddish brown, fine grained, angular quartz grains, calcareous.
1090	-	1100	Do.
1110	-	1120	Do.
1120	-	1130	Do.
1130	-	1140	Do.
1140	-	1150	Do.

15-27N-9E

STEEL WELL, GRAY MOUNTAIN, FLAGSTAFF, ARIZONA

Depth in feet			
1150	-	1160	Do.
1160	-	1170	Do.
1170	-	1180	Do.
1190	-	1200	Sandstone: grayish orange, fine grained.
1200	-	1210	Do.
1210	-	1220	Do.
1220	-	1230	Do.
1240	-	1250	Do.
1260	-	1270	Do.
1270	-	1280	Sandstone: grayish orange, very fine grained, calcareous.
1290	-	1300	Sandstone: grayish orange, fine grained, calcareous.
1300	-	1310	Do.
1310	-	1320	Do.
1320	-	1330	Do.
1330	-	1340	Do.
1340	-	1350	Do.
1350	-	1360	Do.
1360	-	1370	Do.
1370	-	1380	Do.
1380	-	1390	Sandstone: grayish orange, fine grained, calcareous.
1390	-	1400	Do.
1520	-	1530	Sandstone: grayish orange, fine to very fine, angular quartz grains, spotted with iron stain, calcareous
1530	-	1540	Do.
1540	-	1550	Do.
1560	-	1570	Do.
1570	-	1580	Do.
1580	-	1590	Do.
1590	-	1600	Do.
1600	-	1610	Sandstone: very pale orange, fine grained, angular quartz grains, spotted with iron oxide stain, calcareous.
1610	-	1620	Do.
1620	-	1630	Do.
1630	-	1640	Do.
1640	-	1650	Do.
1650	-	1660	Do.
1660	-	1670	Do.
1670	-	1680	Do.
1680	-	1690	Do.
1690	-	1700	Do.
1700	-	1710	Do.
1710	-	1720	Do.
1720	-	1730	Do.
1730	-	1740	Sandstone: very plae orange, medium grained, calcareous
1740	-	1750	Do.
1750	-	1760	Sandstone: dark yellowish orange, fine grained, clear angular quartz grains, calcareous.
1760	-	1770	Sandstone: very pale orange, medium grained, angular quartz Grains, calcareous.
1770	-	1780	Do.
1780	-	1790	Sandstone: very pale orange, medium grained, small knots or granules of white fine grained sandstone in a higher state of consolidation, calcareous.
1800	-	1810	Sandstone: grayish orange, fine grained, calcareous.
1810	-	1820	Sandstone: moderate brown, fine grained, lime cement, iron oxide pigment.
1820	-	1830	Sandstone: light brown, very fine grained, calcareous.
1830	-	1840	Do.
1840	-	1850	Sandstone: moderate orange pink, very fine grained, calcareous.
1850	-	1860	Sandstone: light brown, very fine grained, calcareous.
1860	-	1870	Do.
1870	-	1880	Sandstone: light brown, very fine grained, granules of pale reddish brown sandstone which are more highly consolidated.

15-27N-9E

From Steele (Geologist) Master Cut

STEEL WELL, GRAY MOUNTAIN, FLAGSTAFF, ARIZONA
Section 15, T. 27 N., R. 9 E.
by C. S. Bromfield

Colors based on Rock Color Chart-National Research Council
Size by estimate

Depth in feet	
0 - 5	Soil
5 -10	Calcareous sandstone: very pale orange, consists of very fine-grained, clear quartz particles, angular grains, lime cement, soft poorly consolidated material.
10- 15	Do.
15- 20	Do.
20- 25	Do.
25- 30	Do.
30-35	Calcareous sandstone: very pale orange, fine grained with some very coarse layers or lenses (2-4 mm.), similar to 5-30'.
35-40	Do.
40-45	Do.
45-50	Calcareous sandstone: very pale orange, very fine grained, angular quartz grains, lime cement.
55-60	Calcareous sandstone: as 5-10'.
60-65	Do.
65-70	Calcareous sandstone: white, very fine grained angular quartz particles, lime cement, poorly consolidated.
70-75	Do.
75-80	Do.
80-85	Do.
85-90	Do.
90-95	Do.
95-100	Do.
100-105	Calcareous sandstone: white, very fine grained angular quartz grains, lime cement, poorly consolidated.
105-110	Do.
110-115	Do.
115-120	Do.
120-130	Do.
130-140	Do.
140-150	Do.
150-160	Missing.
160-170	Missing.
170-180	Calcareous sandstone: white, very fine grained angular quartz grains, lime cement, poorly consolidated.
180-190	Calcareous sandstone: very pale orange, fine grained.
190-200	Missing.
210-220	Calcareous sandstone: moderate orange pink, very fine grained clear angular quartz grains, poorly consolidated.
220-230	Missing.
230-240	Calcareous sandstone: pale reddish brown, very fine to medium grained, less well sorted than preceding samples, poorly consolidated.
240-250	Missing.

No permit

Depth in feet	
250-260	Calcareous sandstone: moderate orange pink, medium grained, angular quartz sands, loosely consolidated.
270-280	Sandstone: very pale orange, medium grained, angular quartz grains, poorly consolidated.
300-310	Silty sandstone: grayish orange, very fine grained, angular quartz grains, poorly consolidated.
310-320	Silty sandstone: very pale orange, fine grained, poorly consolidated.
320-330	Sandstone: very pale orange, medium grained, angular quartz grains, slightly calcareous, poorly consolidated.
330-340	Sandstone: very pale orange, medium grained, angular quartz grains, poorly consolidated.
340-350	Do.
350-360	Do.
360-370	
370-380	
380-390	Sandstone: very pale orange, fine grained angular quartz particles, poorly consolidated.
400-410	Do.
410-420	Do.
420-430	Sandstone: very pale orange, very fine grained angular quartz particles, poorly consolidated.
470-480	Sandstone: very pale orange, fine grained, quartz grains angular to sub-angular, poorly consolidated.
480-490	Sandstone: very pale orange, fine grained quartz particles, angular to sub-angular, poorly consolidated.
490-500	Do.
500-510	Do.
520-530	Do.
530-540	Sandstone: very pale orange, very fine grained angular to sub-angular quartz grains, poorly consolidated.
540-550	As 530-540, but fine grained.
550-560	Do.
570-580	Do.
590-600	Do.
640-650	Do.
650-660	Do.
660-670	Sandstone: very pale orange, very fine grained angular to sub-angular quartz grains, poorly consolidated.
680-690	Do.
690-700	Sandstone: very pale orange, fine grained.
700-710	Sandstone: very pale orange, very fine grained.
710-720	Sandstone: very pale orange, fine to very fine grained.
720-730	Sandstone: very pale orange, fine grained.
730-740	Do.
740-750	Sandstone: very pale orange, medium to fine.
750-760	Do.
760-770	Do.
770-780	Sandstone: very pale orange, very fine grained.
800-810	Sandstone: grayish orange, fine grained, calcareous cement.
810-820	Do.
830-840	Sandstone: very pale orange, very fine grained, calcareous cement.

No permit

STEEL WELL, GRAY MOUNTAIN, FLAGSTAFF, ARIZONA-Cont.

Depth in feet	
840-850	Sandstone: very pale orange, very fine grained, calcareous cement.
850-860	Do.
860-870	Do.
890-900	Sandstone: very pale orange, fine grained, calcareous cement.
900-910	Do.
910-920	Do.
920-930	Do.
930-940	Do.
940-950	Do.
950-960	Do.
960-970	Sandstone: light brown, fine grained, well sorted, angular quartz grains, calcareous.
970-980	Do.
980-990	Do.
990-1000	Do.
1000-1010	Do.
1010-1020	Sandstone: light brown, fine grained, contains small well rounded granules and very coarse size fragments of moderate reddish brown sandstone.
1020-1030	Do.
1030-1040	Do.
1040-1050	Do.
1050-1060	Do.
1060-1070	Do.
1070-1080	Do.
1080-1090	Sandstone: pale reddish brown, fine grained, angular quartz grains, calcareous.
1090-1100	Do.
1110-1120	Do.
1120-1130	Do.
1130-1140	Do.
1140-1150	Do.
1150-1160	Do.
1160-1170	Do.
1170-1180	Do.
1190-1200	Sandstone: grayish orange, fine grained.
1200-1210	Do.
1210-1220	Do.
1220-1230	Do.
1230-1240	Do.
1240-1250	Do.
1250-1260	Do.
1260-1270	Do.
1270-1280	Sandstone: grayish orange, very fine grained, calcareous.
1290-1300	Sandstone: grayish orange, fine grained, calcareous.
1300-1310	Do.
1310-1320	Do.
1320-1330	Do.
1330-1340	Do.
1340-1350	Do.
1350-1360	Do.
1360-1370	Do.
1370-1380	Do.

No permit

STEEL WELL, GRAY MOUNTAIN, FLAGSTAFF, ARIZONA-Cont.

Depth in feet	
1380-1390	Sandstone: grayish orange, fine grained, calcareous.
1390-1400	Do.
1520-1530	Sandstone: grayish orange, fine to very fine, angular quartz grains, spotted with iron stain, calcareous.
1530-1540	Do.
1540-1550	Do.
1560-1570	Do.
1570-1580	Do.
1580-1590	Do.
1590-1600	Do.
1600-1610	Sandstone: very pale orange, fine grained, angular quartz grains, spotted with iron oxide stain, calcareous.
1610-1620	Do.
1620-1630	Do.
1630-1640	Do.
1640-1650	Do.
1650-1660	Do.
1660-1670	Do.
1670-1680	Do.
1680-1690	Do.
1690-1700	Do.
1700-1710	Do.
1710-1720	Do.
1720-1730	Do.
1730-1740	Sandstone: very pale orange, medium grained, calcareous.
1740-1750	Do.
1750-1760	Sandstone: dark yellowish orange, fine grained, clear angular quartz grains, calcareous.
1760-1770	Sandstone: very pale orange, medium grained, angular quartz grains, calcareous.
1770-1780	Do.
1780-1790	Sandstone: very pale orange, medium grained, small knots or granules of white fine grained sandstone in a higher state of consolidation, calcareous.
1800-1810	Sandstone: grayish orange, fine grained, calcareous.
1810-1820	Sandstone: moderate brown, fine grained, lime cement, iron oxide pigment.
1820-1830	Sandstone: light brown, very fine grained, calcareous.
1830-1840	Do.
1840-1850	Sandstone: moderate orange pink, very fine grained, calcareous.
1850-1860	Sandstone: light brown, very fine grained, calcareous.
1860-1870	Do.
1870-1880	Sandstone: light brown, very fine grained, granules of pale reddish brown sandstone which are more highly consolidated.

Chapernack

8

Sec. 15, T. 27N., R. 9E

INDIVIDUAL WELL RECORD
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY CONSERVATION BRANCH

PATENTED LAND

G&SR Mer.

September 3, 1948

Ref. No. 1

Lessee or owner: Babbitt State: Arizona County: Coconino
Operator: Barren-Steele Company Field: Wildcat District: Farmington

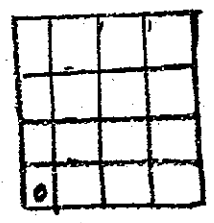
Well No.: 1 Subdivision: C SW¼ SW¼

Location: 660 feet from south and west lines
Drilling approved:
Drilling commenced: July 1, 1947
Drilling ceased : April 14, 1948

Well elevation:
Total Depth: 2165 feet

Geologic Formations

Surface	Lowest tested
Kaibab	Permian



WELL STATUS:
July, 1947-Drg.
April, 1948-Fg. July, 1948-Abd.

REMARKS: Geologic Tops:
Top Coconino 340' (SC)
Top Hermit Shale 1740' (SC)

Hermit

FORM O. & G. 1
18

ARIZONA STATE LAND DEPARTMENT

Sundry Notices and Reports on Wells

Lease or Permit No.

Notice of intention to drill	X
Notice of intention to change plans	
Notice of date for test of water shut-off	
Report on result of test of water shut-off	
Notice of intention to re-drill or repair well	
Notice of intention to shoot	
Subsequent record of shooting	
Record of perforating casing	
Notice of intention to pull or otherwise alter casing	
Notice of intention to abandon well	
Subsequent report of abandonment	
Supplementary well history	

(Indicate above by check mark nature of report, notice or other data)

19

Following is a (Notice of intention to do work) on land under (~~permit~~) described as follows:
(Report of work done) (lease)

Well No. #1 Sec 15 (Section) 27 N (Township) R 9 E (Range)

The well is located 660 feet (N) (~~S~~) of SW 1/4 of SW 1/4 line and 660 feet (E) (~~W~~) of SW 1/4 of SW 1/4 line of Section 15 - T 27 N - R 9 E

The elevation of the derrick floor above sea level is 5400' feet

DETAILS OF PLAN OF WORK

(State names of an expected depth to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other proposed work.)

4000'

Approved June 24, 1947 (Date)

O. C. Williams

State Land Commissioner
Arizona State Land Department

Address

Company Barron - Steele Co

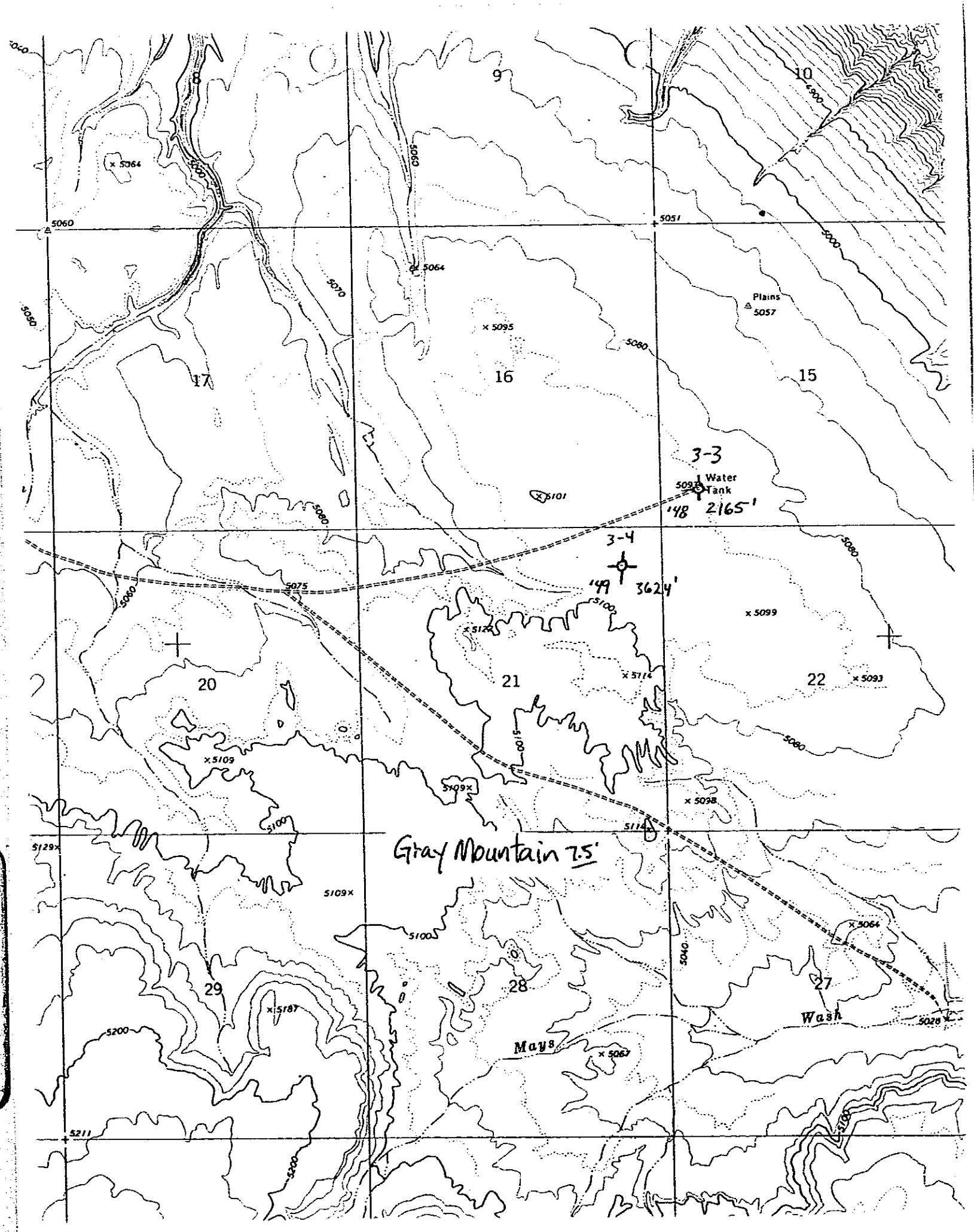
By [illegible]

Title

Address Hotel Last Frontier
Las Vegas Nev

NOTE:—Reports on this form to be submitted in triplicate to the Commissioner for approval.

No permit


8
9
10
17
16
15
20
21
22
29
28
27
Plains
5057
Water
Tank
3-3
'48 2165'
3-4
'49 3624'
Gray Mountain 7.5'
Mays
Wash

February 11, 1949

Mr. L. M. Lockhart
301-303 Subway Terminal Building
417 South Hill Street
Los Angeles 13, California

Dear Sir:

Authorized by Mr. O. C. Williams, State Land Commissioner, I visited the Babbitt #1 well being drilled by your company in section 21, T 29 N, R 9 E, on March 10, 1949 and found it apparently prepared to be abandoned. This was confirmed by persons residing in the vicinity of the well. I regret that this test turned out to be a dry hole.

In that we have not as yet received any notice from you regarding your intended abandonment of this well, I should like to outline the accepted procedure under the Operation Regulations to Govern the Production of Oil and Gas Under Articles 13-14, Arizona Code 1939, Section 3 (q). This section states "Before abandoning a well the Permittee or Lessee shall submit to the Commissioner a statement of reasons for abandonment and his detailed plans for carrying on the work, together with duplicate copies of the log, in case it has not already been submitted, and shall proceed with the abandonment only on receiving the written approval of the Commissioner in the manner prescribed by him."

To expedite the abandonment, telephonic approval from Mr. Williams may be obtained by calling Phoenix 3-6128, but the written forms are requested for confirmation and the completion of the record. Before approving an intention to abandon, Mr. Williams would like to be assured that Mr. Paul Babbitt or Mr. John Babbitt of Flagstaff are contacted for the arrangement of any plans that may be made for the conversion of the hole into a water well.

Good water was obtained in the Barron-Steele well, drilled a quarter of a mile northeast, at their 1335-1385' level and the same condition probably prevails in the Babbitt #1 well. Consequently the Babbitt well will probably have to be plugged at some point in the neighborhood of 1400'. The exact depth will depend in some measure on the casing record, which I do not have at hand, and on the arrangement that your company will make with the Messers Babbitt of Flagstaff.

Plugging will have to be witnessed by personnel approved by Mr. Williams and we would appreciate sufficient notice to allow someone to reach the well from Phoenix in time to witness the setting of the plug.

Notice of intention to abandon the well should be submitted in triplicate on Form O&G #1. Following abandonment, a detailed account of the manner of abandonment and a report of all work done, including drilling log, casing record, records of any tests, etc., will be submitted on O&G Form #2 in duplicate. All necessary forms are enclosed.

Word to this effect was left at Cameron, Arizona, for Mr. Harry Failing, pusher on the well for Dunlap and Graham. I had hoped to go over the details of abandonment personally with Mr. Glenn M. Earl or Mr. Failing but was unable to contact either in the vicinity of the well.

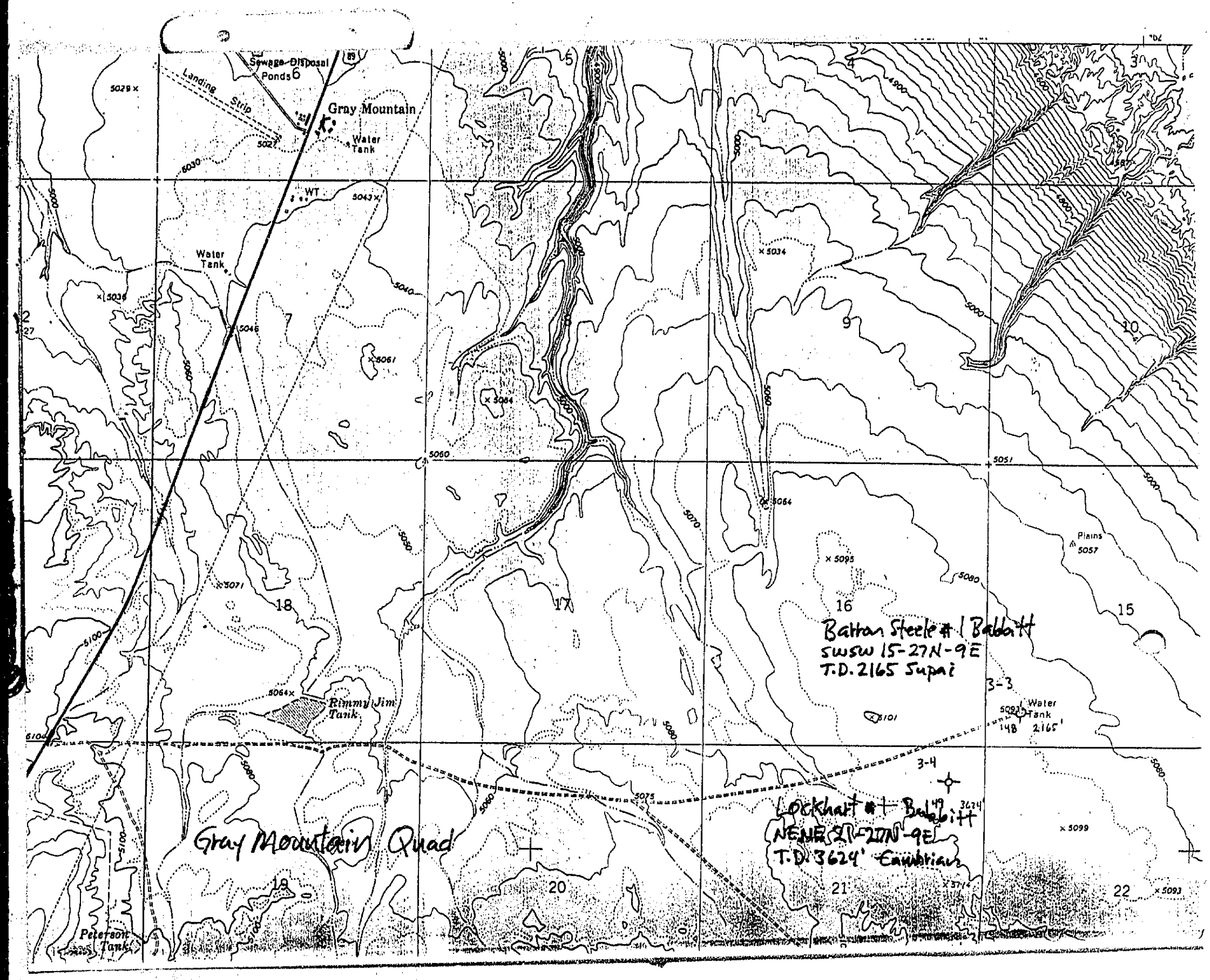
Your cooperation in this matter will be greatly appreciated.

With best wishes,

Very truly yours,

L. A. Heindl
Geologist

cc Mr. Harry Failing


Sewage Disposal Ponds
Landing Strip
Gray Mountain
Water Tank
WT
Water Tank
Plains
5057
Rimmy Jim Tank
Peterson Tank
Gray Mountain Quad
Batton Steele #1 Babbitt
SWSW 15-27N-9E
T.D. 2165 Supai
Water Tank
Lockhart #1 Babbitt
NENE 21-27N-9E
T.D. 3624' Cambrian