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PRINTED: 04/29/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: OATMAN ONE PLACER

ALTERNATE NAMES:

BURRYS MINE
CAT CLAW PLACER

MOHAVE COUNTY MILS NUMBER: 743

LOCATION: TOWNSHIP 19 N RANGE 21 W SECTION 12 QUARTER SE
LATITUDE: N 35DEG 02MIN 43SEC LONGITUDE: W 114DEG 27MIN 40SEC
TOPO MAP NAME: OATMAN - 7.5 MIN

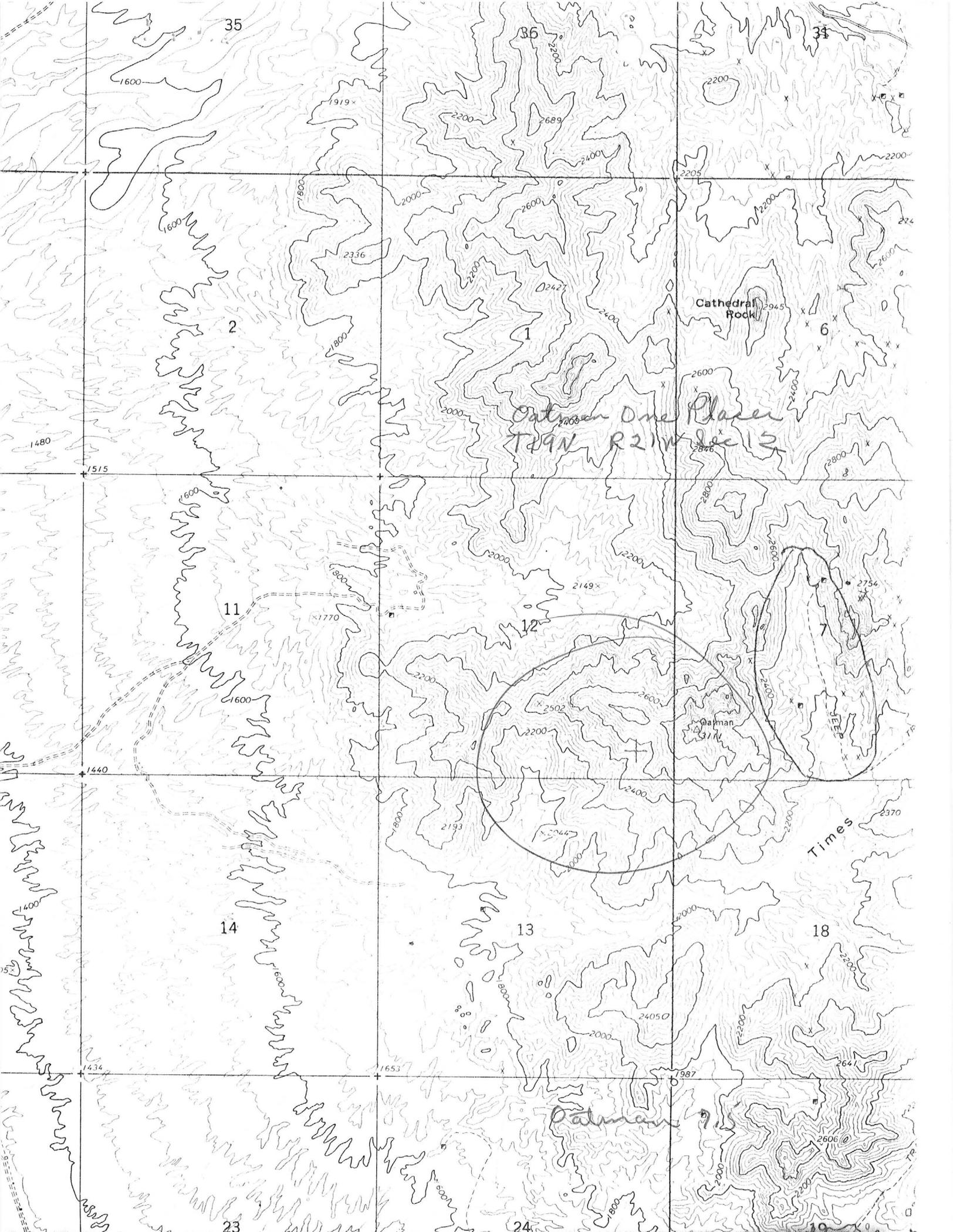
CURRENT STATUS: EXP PROSPECT

COMMODITY:

GOLD PLACER

BIBLIOGRAPHY:

ADMMR OATMAN ONE PLACER FILE
USGS BULL 1355, P. 27-29
ABGMT BULL 168, P. 33
ABGMT BULL 131, P. 88-90



35

36

34

1600

1919

2689

2200

2200

1600

1800

2000

2600

2205

2200

2200

2

1

Cathedral Rock 2945

6

1480

1515

Palman One Place
T19N R21W Sec 12

1600

1800

2000

2200

2800

2800

11

12

7

1440

1440

1600

1770

2200

2149

2200

2800

2754

14

13

18

1434

1434

1800

2193

2200

2400

2600

Times

2370

23

24

19

1434

1434

1800

2405

2000

2200

2400

2200

2200

Palman

987

264

264

2600

2600

**UPDATE AND HIGHLIGHTS
Of
BAYOU MINING PROJECT**

Oatman Mining District, Mohave County, Arizona

by

Michael J. Skopos

Professional Geologist

AIME, GAC, AIPG, GSN

December 12, 2008

Update and Highlights

The author confirms reviewing the past geological and engineering reports of the Oatman Mining District and Bayou Mining Project Reports and completing these reports dated 1983 and 1998. Since the previous reports were written, significant technological advancements have been made, especially in the field of metallurgical recovery of precious metals and local regional and global plate tectonics. In addition, the price of gold in 1998 was in the \$300.00 per ounce range and currently has doubled and is in the \$700.00 per ounce range.

I believe the Bayou Property; located in the Oatman Mining District, Mohave County, Arizona has exceptional precious metal potential based on the following reasons:

- The Oatman Mining District, has had over 2,300,000 ounces of gold and 900,000 ounces of silver production.
- The Oatman District hosts the only major volcanic epithermal bonanza gold ore deposits In Arizona.
- The Bayou Placer Mining Claim Block, includes Sections 1, 2, 4, 7, 10, 11, 12, 13, 14 and 18, located Township 19 North, Range 20 and 21 West, Mohave County, Arizona. The Mining Claim Block contains 10 square miles.
- Some of the coarsest gold which was recovered by bulk testing back in 1982, was in Areas 1 and Area 2, located in the Section 12. Please see attached map showing Key Areas containing placer gold.
- Approximately 500,000 yards were calculated with an average grade of 0.066 ounces of gold per yard, 33,000 ounces of gold. These two Areas 1 and Area 2 are both located in the Northwest Section of 12.
- The 33,000 ounces of gold, at a gold price of \$700.00 per ounce, would have a gross value of \$23,000,000.00.
- This value appears conservative and doesn't include any additional values in precious metals, with no premium for the, jewelry gold and the rare collector's nuggets.
- In the addition ~~to~~ Area 1 and Area 2 located in the northwest portion of Section 12, other Placer areas containing gold values include:

Alma	Located Northeast Section 12 and Southeast Section 1.
Add on	Located in West at portions of Section 12.
Fluorite	Located in Northeast Section of 12.
Amphitheater	Located in Northeast portion of Section 12.

Bucks Pit Located in East Portion of Section 12.
Apache Pit Located in Northeastern of Section 14.
Easy and Lost Wagon Located in the Northwestern portions of section 4.

- It was observed that the previous exploratory work mainly targeted the Placer precious metal deposition and was only tested to a shallow depth, additional potential for Placer gold deposition exists at depth.
- The author is not aware of any other mining that has taken place on the Bayou Claims since the 1998 report.
- Metallurgical Advances I have witnessed some significant metallurgical technological advances, in the precious metal recovery processes, some of these may enhance the precious metal recoveries of the Bayou Project of many fold.
- An example the Paul M. Jones, solvent leach recovery method returned 31 ounces of gold per ton, with additional precious metal values. This leach recovery system warrants further field testing.
- Another metallurgist, A. C. Johnson, returned 9 ounces gold per ton from the Bayou Project. Other recovery method may also be tested.
- Plate Tectonic Advances Plate Tectonics and block rotation can be used as a template for geologic accuracy in exploration, development and production of mining properties.
- Plate tectonics can influence exploration and impact mine geology, by improving grade control, increasing reserves, mine design and improve diamond drilling core and metal recovery.
- The writer noted that tectonics was mentioned in the previous reports and lode gold deposition could enhance the richness and gold potential on the Bayou Project. (gold quartz stockwork, or quartz vein)

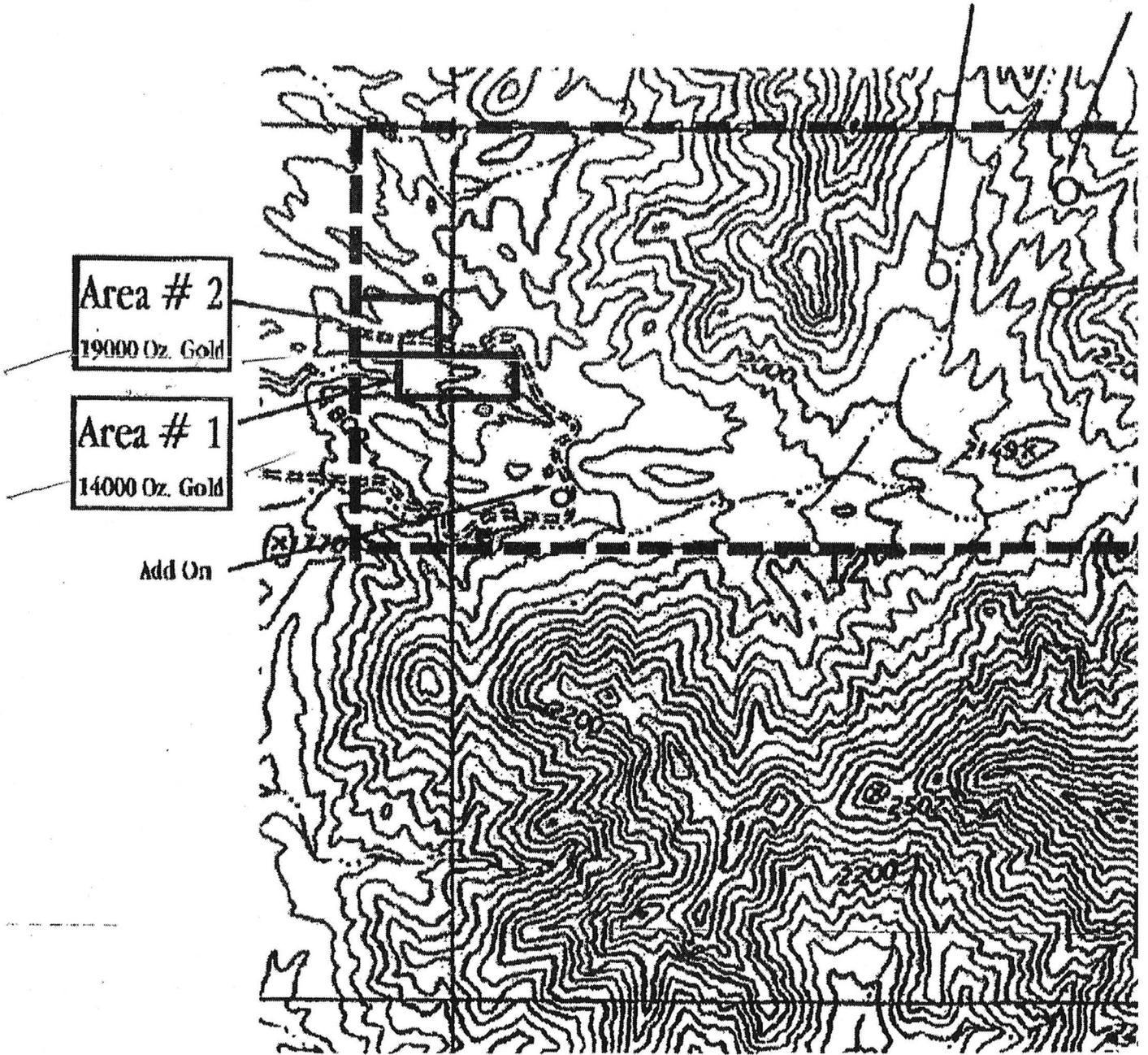


Mike J. Skopos
Professional Geologist
AIPG, GAC, AIME, GSN

Bayou Mining - Section 11/12 - Reserves

Amphitheater

Alm



Date Printed: 10/29/93

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

Information from: **Steve Nolte and Larry Toppenberg**

Company: Desert Wide Properties
Address: 3330 N. Dobson Road # 8
City, State ZIP: Chandler, Arizona 85224
Phone: 602-838-6631

MINE: Oatman One Placer

ADMMR Mine File: Oatman One Placer file
County: Mohave
AzMILS Number: 743

SUMMARY

Steve Nolte and Larry Toppenberg, brokers with Desert Wide Properties, 3330 N. Dobson Road #8, Chandler, Arizona 85224, phone 602-838-6631, represent a client interested in investing in a mine. They have been approached by Steve Tima, Tima Oil and Minerals of Chandler, to invest in his placer gold property in the Chemehuevis District of Mohave County which may be either the Quail Placer or the Oatman One Placer.

Mr. Tima claims that the placer will yield a \$20,000 per ton concentrate in gold and silver by using a Dukes' Bowl and concentrating the placer gravels 20 to 1. The recovery is reportedly only successful, and the precious metals are only fire assayable if concentrates are pretreated by a proprietary roasting method.

Ken A. Phillips, Chief Engineer Date: October 28, 1993

MINE INSPECTORS START UP SHEET 1/14/86: Mine Name - Oatman One, Oatman Mining and Exploration Inc., Salvadore Franzella, Chief Officer, 3814 Veterans Blvd, #300, Metairie, LA 70002, (504) 887-1703. 7 miles south traffic light at Rivera, Az is Rodeo Rd. Go east about 7 miles to a ramp on left. Take ramp and follow dirt road 3 miles northward to site.

MG WR 3/7/86: Provided general information concerning permits for a cyanide-leach operation to Mr. Leonard Larkin of Oatman One Ltd. This company has a gold property in Mohave Co, between Bullhead City and Oatman, Az.

MG WR 1/30/86: There is still some activity on the Oatman One Placer property (Mohave County). Reportedly, Dr. Alvin Johnson is "in charge" and samples are being analysed at JB Laboratory in the Phoenix area.

KAP WR 11/14/86: Arthur Doyle of the FBI, Phoenix office, 279-5511, called to make an appointment to discuss platinum in Arizona. He later came in and explained that the FBI was investigating the Oatman One Ltd project which reports to have high platinum values. The history of platinum and related scams in Arizona was discussed. Additionally, he was provided with the Department circular on platinum and copies of the platinum group chapter in Mineal Facts and Problems.

KAP WR 5/15/87: An attorney, Mark Seyler, 3600 Place Saint Charles, 201 St. Charles Ave., New Orleans, LA 70170, phone (504) 582-1500 called for information on placer mining history in Mohave County. He is representing a group of clients who are/were investors in Oatman One Limited (file), Mohave County. He feels he has a case because they can prove salted samples and other forms of intentional deception.

NJN WR 10/23/87: Talked with Dr. John Wade of Manderville, Louisiana regarding the Oatman One Placer (file) Mohave County. Dr. Wade had previously supplied us with reports by Hazen Research and the Colorado School of Mines Research Institute on the property. He reported that he had initiated a \$3 million lawsuit against Oatman One Ltd. partnership. He would still be interested in obtaining information on Vincent Orland and Alfred Leon Packer.

October 13, 1982

NP-829010

Mr. Vincent P. Orlando
 Vice President Projects Coordinator
 Interstate Minerals Corporation
 P.O. Box 52005
 Lafayette, Louisiana 70505

Dear Mr. Orlando:

An evaluation of various gold-bearing samples has been completed by the Colorado School of Mines Research Institute. Your verbal authorization and advance payment initiated this investigation on September 7, 1982. The initial scope of work was altered as work progressed, and additional authorization occurred on September 21, 1982 and September 30, 1982.

The objective of the evaluation was to determine the recoverable free gold content and concentration characteristics of two relatively large (i.e., ~2,500 lb) bulk placer samples. An additional objective was to evaluate and characterize five smaller samples to determine their gold content and the presence of additional mineral values. The scope of work included various scrubbing, sizing, gravity concentration, and amalgamation tests along with product analyses by fire assay and x-ray fluorescence.

Throughout the course of this investigation, the presence and consultation of Mr. H. F. Buchholtz and yourself was appreciated.

SUMMARY

Various samples were evaluated to determine their gold content. Following is a summary of the results.

Sample	Au Content oz/ton
Sample 1	0.004
Sample 2	0.003
HA1	0.011
HA2	0.018
H Sec 14	0.022 ¹
Guess Again Mine (Vein)	0.010 ²
Guess Again Mine (Width)	<0.001 ²

¹ Amalgam residue, not pure gold.
² Free gold only.

DISCUSSION

The investigation is presented here in two sections; the first section presents the investigation of two relatively large bulk placer samples, whereas the second section presents the evaluation of five smaller samples.

INVESTIGATION OF TWO BULK PLACER SAMPLES

Two samples comprising the contents of brown and white sample bags were delivered to the Research Institute on September 9, 1982. The brown bags were called Sample 1, while the white bags were called Sample 2. Each of these samples was evaluated in an identical manner according to the following procedure.

The samples bags were weighed and the contents shoveled into a 4 ft long by 2 ft diam scrubber/trommel system fitted with water sprays. The trommel rejected +2 in. material and a -2 in. +3/8 in. fraction. The -3/8 in. product was screened, on a 10-mesh SWECO screen with water sprays, and the -3/8 in. +10 mesh fraction was saved for further processing. The -10 mesh product was pumped to a half-size Deister shaking table fitted with a slime deck. Shaking table processing resulted in a concentrate and tailing product. The entire table concentrate was amalgamated, and both the amalgam concentrate residue and the amalgam tailing were fire assayed. The table tailing was sampled and amalgamated, and both the amalgam concentrate residue and the amalgam tailing were fire assayed. Finally, the -3/8 in. +10 mesh product was processed through a rocker box, and the heavy mineral product was hand panned to recover coarse gold. A complete equipment gold cleanup was done before processing the first sample, between the first and second sample, and at the conclusion of the second sample.

Results of the bulk sample processing are presented in Tables 1 and 2.

TABLE 1

Results of Processing Sample 1¹
(total sample weight 3,378 lb)

Product	Weight %	Analyses				Distribution Au %
		Au oz/ton	Au mg	Ag oz/ton	Ag mg	
Feed (computed)	100.0	0.004	187.38	<0.01	29.0	100.0
+2-in. Reject ²	0.2	--	0.0	--	0.0	--
-2-in. +3/8-in. Reject ²	24.2	--	0.0	--	0.0	--
+3/8 in. +10M	32.1	--	0.0	--	0.0	--
Shaking Table Tailing	43.3	--	--	--	--	--
Amalgam Residue	--	--	0.0	--	0.0	--
Amalgam Tailing	--	0.001	22.7	Nil	0.0	12.1
Shaking Table Concentrate	0.2	--	--	--	--	--
Amalgam Residue	--	--	163.0	--	29.0	87.0
Amalgam Tailing	--	0.016	1.68	Nil	0.0	0.9

¹ Sample 1 was contained in brown bags.

² These products were assumed to contain no gold or silver values.

TABLE 2

Results of Processing Sample 2¹
(total sample weight 2,817 lb)

Product	Weight %	Analyses				Distribution Au %
		Au oz/ton	Au mg	Ag oz/ton	Ag mg	
Feed (computed)	100.0	0.003	128.84	<0.01	14.1	100.0
+2-in. Reject ²	1.0	--	0.0	--	0.0	--
-2-in. +3/8-in. Reject ²	33.0	--	0.0	--	0.0	--
-3/8 in. +10M	33.5	--	1.21	--	--	0.9
Shaking Table Tailing	32.3	--	--	--	--	--
Amalgam Residue	--	--	5.19	--	0.1	4.0
Amalgam Tailing	--	0.001	14.2	Nil	0.0	11.0
Shaking Table Concentrate	0.2	--	--	--	--	--
Amalgam Residue	--	--	105.0	--	14.0	81.6
Amalgam Tailing	--	0.037	3.24	Nil	0.0	2.5

¹ Sample 2 was contained in white bags.

² These products were assumed to contain no gold or silver values.

As presented in Tables 1 and 2, neither sample contained significant amounts of gold or silver. Sample 1 contained the most gold at 0.004 oz/ton, and 87.0% of the gold was recoverable by gravity/amalgamation techniques.

INVESTIGATION OF SEVERAL SMALL SAMPLES

Several smaller samples were evaluated by CSMRI. The results are presented here.

Samples MA1 and M2

Samples MA1 and M2 were processed in an identical manner. The sponsor indicated that these materials were the product of 1,000-lb samples processed elsewhere to result in a gravity "concentrate" and "tailing" sluice concentrate. CSMRI received two sample pails from MA1 (labeled concentrate and tailing) and two sample pails from M2 (labeled concentrate and tailing).

Each of the four pails was amalgamated separately to result in an amalgam residue and an amalgam tailing. The two amalgam concentrate residues from each sample were combined and fire assayed; however, it should be noted that more than 99% of the combined amalgam residue material in both samples was from the "concentrate" pail. The amalgam tailings were ground to about 80% passing 150 mesh and reamalgamated; again, the amalgam concentrate residues were fire assayed. The final amalgam tailings were sampled and fire assayed. Results of the evaluation are presented in Table 3.

TABLE 3

Results of Evaluation of Samples MA1 and M2

Product	Sample MA1				Sample M2			
	Au oz/ton	Au mg	Ag oz/ton	Ag mg	Au oz/ton	Au mg	Ag oz/ton	Ag mg
Feed ¹	0.011	165.803	<0.01	46	0.018	271.722	<0.01	27
1st Amalgamation Con- centrate	--	165	--	46	--	271	--	27
2nd (Reground) Amalga- mation Concentrate	--	0.803	--	<0.1	--	0.103	--	<0.1
2nd (Reground) Amalga- mation Tailing	<0.001 ²	--	Nil		0.003	0.619	Nil	--

¹ According to sponsor, the total feed weight processed was 1,000 lb.

² Considered as 0.0 for calculation purposes.

Sample M-Sec 14

This total sample was weighed (74.5 lb) and processed through a Knelson Hydrostatic concentrator (gravity concentration device). The concentrate was amalgamated, and the amalgam concentrate residue was weighed. The amalgam residue weighed 25.6 mg, which computes to 0.022 oz/ton. The amalgam residue does contain a certain amount of silver and other gold diluents.

Samples from Guess Again Mine

Two samples were received by CSMRI and were identified by the sponsor as being from the Guess Again Mine in Boulder County, Colorado. The samples were crushed to -14 mesh and amalgamated, and the amalgam concentrate residues were fire assayed. The amalgam tailing material was submitted for x-ray fluorescence scanning analysis (see Attachments 1 and 2). Results of the amalgamation analyses are presented here.

Sample	Free Gold Content oz/ton
Vein Material	0.010
Mining Width	<0.001

This report completes the currently authorized work on this project. Unless otherwise instructed by you, all remaining sample materials will be discarded after 30 days from the date of this report.

COLORADO SCHOOL OF MINES RESEARCH INSTITUTE

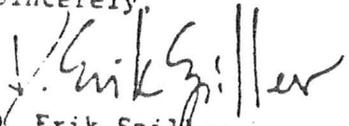
Mr. Vincent P. Orlando

Page 5

October 13, 1982

We appreciate having had the opportunity to conduct these studies for you and look forward to working with you again in the future.

Sincerely,


D. Erik Spiller
Senior Project Engineer
Process Division

Approved:


Earl L. Rau
Division Manager
Process Division

/nkr
encls.

cc: Mr. H. F. Buchholz

~~XXXX~~ QUALITATIVE
~~XXXX~~ SEMI-QUANTITATIVE
 _____ QUANTITATIVE

ANALYTICAL REPORT

Job Number 30255
 Page 1 of 2 Pages
 Date 22 Sep 1982

TO: Colorado School of Mines Research Institute
 P.O. 1176 N20910 R. Corbett

SAMPLE: CSMRI #3 Vein Mat'l, Amal Tails

Copper	<u>130</u>	Iron	<u>16000</u>	Lanthanum	_____
Silver	_____	Cobalt	_____	Cerium	_____
Gold	_____	Nickel	_____	Praseodymium	_____
Zinc	<u>54</u>	Cesium	_____	Neodymium	_____
Cadmium	_____	Rubidium	<u>270</u>	Samarium	_____
Mercury	_____	Barium	<u>330</u>	Europium	_____
Gallium	_____	Strontium	<u>59</u>	Gadolinium	_____
Indium	_____	Titanium	<u>1200</u>	Terbium	_____
Thallium	_____	Zirconium	<u>250</u>	Dysprosium	_____
Germanium	_____	Hafnium	_____	Holmium	_____
Tin	_____	Thorium	_____	Erbium	_____
Lead	<u>100</u>	Vanadium	_____	Thulium	_____
Arsenic	_____	Columbium	_____	Ytterbium	_____
Antimony	_____	Tantalum	_____	Lutetium	_____
Bismuth	_____	Chromium	_____	Yttrium	_____
Selenium	_____	Molybdenum	_____	_____	_____
Tellurium	_____	Tungsten	_____	_____	_____
Bromine	_____	Uranium	_____	_____	_____
Iodine	_____	Manganese	<u>530</u>	_____	_____

The values above are estimated elemental concentrations in:
 _____ per cent ~~XXXX~~ parts per million _____ grams per liter

No check was made for elements with atomic numbers less than 22.

By *Merlyn L. Salmon*

NOTE: A PORTION OF THE REPORTED SAMPLES WILL BE RETAINED ON FILE FOR A PERIOD OF TWO YEARS FROM THE ABOVE DATE. THE REMAINING PORTION WILL BE DESTROYED OR DISPOSED OF THIRTY DAYS PENDING RECEIPT OF WRITTEN INSTRUCTIONS FOR DISPOSAL FROM THE CLIENT.

IMPORTANT MESSAGE

For *COPIES BAKFI = RED FLAG*

From *TRANSMIT (SM) 1) OK*

GAZMAR LTD Putawa (A)

Telephone *()*

- Telephoned
- Wants to see you
- Returned your call
- Was here to see you
- Please call
- Will call again
- URGENT**

*Please see page 6+7
of the document dated
OCT. 25 1982 - The lower
VALUES OF COLORADO SCHOOL OF
MINES & HAZEN RESEARCH ARE EXPLAIN*

Time-Date *By THESE GUYS.* Taken By *John*

~~XXXX~~ QUALITATIVE
~~XXXX~~ SEMI-QUANTITATIVE
_____ QUANTITATIVE

ANALYTICAL REPORT

Job Number 30255
Page 2 of 2 Pages
Date 22 Sep 1982

TO: Colorado School of Mines Research Institute

SAMPLE: CSMRI #4 Entire Amal Tails

Copper	99	Iron	12000	Lanthanum	_____
Silver	_____	Cobalt	_____	Cerium	_____
Gold	_____	Nickel	15	Praseodymium	_____
Zinc	81	Cesium	_____	Neodymium	_____
Cadmium	_____	Rubidium	240	Samarium	_____
Mercury	_____	Barium	980	Europium	_____
Gallium	_____	Strontium	510	Gadolinium	_____
Indium	_____	Titanium	800	Terbium	_____
Thallium	_____	Zirconium	83	Dysprosium	_____
Germanium	_____	Hafnium	_____	Holmium	_____
Tin	_____	Thorium	_____	Erbium	_____
Lead	_____	Vanadium	_____	Thulium	_____
Arsenic	_____	Columbium	_____	Ytterbium	_____
Antimony	_____	Tantalum	_____	Lutetium	_____
Bismuth	_____	Chromium	_____	Yttrium	77
Selenium	_____	Molybdenum	19	_____	_____
Tellurium	_____	Tungsten	_____	_____	_____
Bromine	_____	Uranium	_____	_____	_____
Iodine	_____	Manganese	270	_____	_____

The values above are estimated elemental concentrations in:

_____ per cent ~~XXXX~~ parts per million _____ grams per liter

No check was made for elements with atomic numbers less than 22.

By Merlyn L. Salmon



Hazen Research, Inc.
4601 Indiana St • Golden, Colo 80403
Tel (303) 279-4501 • Telex 45-860

October 22, 1982

Mr. Al Leonpacker
President
Interstate Minerals Corporation
P.O. Box 52005
Lafayette, LA 70505

Re: HRI Project 5566
Gold, silver, and platinum assays of placer products

Dear Mr. Leonpacker:

In early October Mr. Vincent Orlando and Mr. H. F. Buchholtz delivered four placer products to Hazen Research, Inc. These samples were identified as follows:

- Sample 1, H-1 Concentrate
- Sample 2, H-1 Middling
- Sample 3, H-2 Concentrate
- Sample 4, H-2 Middling

These samples were treated according to the procedure outlined in Mr. John Holland's October 4, 1982, proposal to you. Specifically, the concentrate and middling from the same sample were combined for further processing which consisted of:

1. Drying and weighing.
2. Leaching the material with dilute (0.05%) HNO_3 to dissolve caliche.
3. Filtering and washing leach residues.
4. Wet screening the leach residues at 10-mesh.
5. Drying the screen products.
6. Tabling the minus 10-mesh material to obtain concentrate, middling, tailing, and slime products.
7. Assaying the entire table concentrate for gold, silver, and platinum.

The purpose of this procedure was to concentrate the precious metals into a sample that could be assayed in its entirety to avoid the sampling errors that can occur if coarse gold is present. One plus 14-mesh flake, and numerous smaller flakes were observed during tabling. The product weights and assays are summarized in Table 1.

Mr. Al Leonpacker
October 22, 1982
Page 2

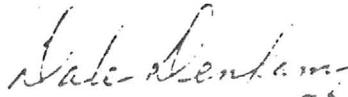
Only the table concentrates were assayed. Precious metal Dore' beads were obtained using standard fire assay procedures. These beads contain the gold, silver, and platinum originally present in the concentrates. They weighed 91.14 and 271.62 mg, respectively. The beads were dissolved in aqua regia and assayed for gold, silver, and platinum by atomic absorption. H-1 contained 64.5 mg of gold and 29.2 mg of silver while H-2 contained 202 mg of gold and 71.4 mg of silver. No platinum was detected in either sample. Sufficient gold and silver were found to account for the original Dore' bead weights.

If the assumption is made that the products that were not assayed do not contain gold, silver, or platinum, then the calculated assays for the as-received material are as follows:

	Calc oz/ton Au	Calc oz/ton Ag	Calc oz/ton Pt
H-1	0.21	0.10	<0.005
H-2	0.67	0.24	<0.005

Sincerely,

HAZEN RESEARCH, INC.



Dale Denham
Metallurgist

DD:mb
Attachment

Table 1

Summary of Results for H-1 and H-2

	Wt %	Au		Ag		Pt	
		mg	oz/ton	mg	oz/ton	mg	oz/ton
H-1							
Feed to leach (calc)	8.966	100.00		(0.2)		(0.10)	
Leach residue (calc)	(4,368)	(48.71)		(0.43)		(0.20)	
Table conc	203.5	2.27	64.5	9.25	29.2	4.19	<0.05 <0.005
Table mid	453.5	5.06					
Table tail	1,242	13.85					
Table slimes	327	3.65					
Subtotal (calc)	(2,226)	(24.83)		(0.85)		(0.38)	
+10 mesh	2,142	23.88					
H-2							
Feed to leach (calc)	8,853.0	100.00		(0.67)		(0.24)	
Leach residue (calc)	(5,707)	(64.46)		(1.03)		(0.37)	
Table conc	235	2.65	202.0	25.1	71.4	8.87	<0.05 <0.005
Table mid	402	4.54					
Table tail	2,157	24.36					
Table slimes	219	2.47					
Subtotal (calc)	(3,013)	(34.02)		(1.96)		(0.69)	
+10 mesh	2,694	30.44					

NOTE: The assays in parentheses are calculated values based on the assumption that no gold or silver is contained in any of the products that were not assayed.

R. BLACKLER
1150 58TH STREET
SACRAMENTO, CALIF. 95819

10-12-82

H.F. Buchholtz
807 Penn. Ave.
Denver, Colo. 90203

Dear Sir;

Your four samples submitted to me
for analysis has been determined as
follows;

EA--Cons
AU ---- .02 oz P.T.
AG ---- T.
PT-GR - .004

BA-- Tails
AU ---- .01 oz P.T.
AG ---- .08 oz P.T.
PT-GR - T.

E2-- Cons
AU ---- .05 oz P.T.
AG ---- .07 oz P.T.
PT-GR - .02 oz P.T.

B2 -- Tails
AU ---- .02 oz P.T.
AG ---- .03 oz P.T.
PT-GR - T.

For this report I have used the Electro-
lytic Ionization chamber for this technical
determinations and percentages are
approximate..

Thanking you
Sincerely,
R. Blackler

R. Blackler

R. BLACKLER
115D 58TH STREET
SACRAMENTO, CALIF. 95819

10-15-82

V. Orlando
H.F. Buchholtz

Dear Sirs;

I re-run your concentrates & Tails by screening to a 90-100 mesh, then using the Electrolytic Ionization process for a more thorough recovery.

I found that this finer screening had increased the values that I overlooked before..

This more detailed report is as follows.

EA Cons

AU ---- .03 oz P.T.
AG ---- .18 oz P.T.
PT-GR - .04 oz P.T.

EA Tails

AU ---- .02 oz P.T.
AG ---- .12 oz P.T.
PT-GR - .01 oz P.T.

B2 Cons

AU ---- .06 oz P.T.
AG ---- .16 oz P.T.
PT-GR - .02 oz P.T.

B2 Tails

AU ---- .03 oz P.T.
AG ---- .12 oz P.T.
PT-GR - .01 oz P.T..

Thanking you
Sincerely,
R. Blackler



FISHER & ASSOCIATES

October 6, 1982

Post Office Box 123
Gridley, California 95948
Phone: (916) 846-5251

202 Obermeyer Avenue
Gridley, California 95948
Phone: (916) 846-5863

Advanced Construction Corporation
P. O. Box 485
5528 Hiway 50 East
Carson City, Nevada 89701

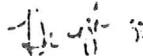
Gentlemen:

Regarding your sample marked "FIG 70 76.5 RJCE SACK", we recovered 43 milligrams of gold.

Your sample weighed 70g, which is 1/28.57 of a ton. 28.57 times 43 milligrams is 1.228 grams. At \$390 per ounce gold, the value of a ton would be \$15.48.

We tabled the sample, and found that the gold is in very, very fine particle sizes. I believe the product COULD be jigged, but, I would caution you to use EXTREME care in operating the jig, and, by no means, overfeed it. Perhaps cut the feed as much as 40%.

Very truly yours



Hugh J. Fisher

EJF/gk

METALS ENGINEERING



CONSULTANTS
ASSAYERS

METALS
EXTRACTION

CORPORATION

P. O. Box 707

Phillipsburg, MT 59355

405-659-3206

11 October 1952

Interstate Minerals Corporation
P.O. Box 52005
Lafayette, Louisiana
70505

Attn: H. F. Buchholtz

Sir:

Preliminary assays of the material that Mr. Orlando of your organization had delivered to our Phillipsburg plant are completed. The samples consisted of six bags of unconsolidated material identified as 12H, 12M, 12H Calechi, 12M Calechi, 14H and 14M.

Our tests indicate that the major values lie in the finer material, rather than the rocks. Upon crushing the samples labeled 12H Calechi and 12M Calechi to -8 mesh, it was found that the calechi portion powdered to -25 mesh. Findings are as follow. Values based on \$425.00 gold and \$9.00 silver.

Sample No.	Ounce Per Yard		Value		Ounce Per Ton		Value	
	Au	Ag	Au	Ag	Au	Ag	Au	Ag
12H Calechi	.12	.88	\$51.00	\$ 7.92	.09	.65	\$36.25	\$ 5.85
12M Calechi	.05	.66	12.75	5.94	.02	.49	8.50	4.41
12H	.04	1.50	17.00	13.50	.03	1.11	12.75	9.99
12M	.08	1.32	34.00	11.88	.06	.93	25.50	8.82
14H	.07	.96	29.75	8.64	.05	.71	21.25	6.39
14M	.12	2.12	51.00	19.08	.09	1.57	38.25	14.13

As requested, findings are reported in ounces per cubic yard and ounces per ton. Upon completion of further evaluation of your ore a complete report will be forwarded.

Sincerely,

Leonard E. Larkin

OATMAN
PLACER (A)
K 1/10

September 18, 1987

Mr. Nyal Neimuth
Mines and Mineral Resources Department
Mineral Building Fairgrounds
Phoenix, Arizona 85007

Dear Mr. Neimuth,

Enclosed please find the geological reports taken from the prospectus for Oatman One, Ltd.

Just to refresh your memory, we spoke on the telephone about two weeks ago, at which time I explained to you the situation with the Oatman project. You, at the time, were very helpful in supplying me with names and agencies to contact for further information. Since that conversation, I have spoken with the Arizona Corporations Commission, the Bureau of Land Management and the S.E.C. in Atlanta.

I have sent you all of the geologists' reports that appeared in the prospectus for our project. You seemed very knowledgeable about mining ventures, successful and otherwise, in the San Francisco district, and I believe that you will be able to give me what I need--an educated opinion of what these reports are claiming.

I sincerely appreciate your time, as I know that you are aware of the losses that can occur due to faith placed in these documents.

After speaking with the Corporations Commission, I have learned from their attorney that there are many techniques currently used to present properties in a much better light than they actually exist. This fact was confirmed by the Bureau of Land Management, and now I'm concerned that our reports may have been falsified or may have been the result of inaccurate sampling.

Again, I appreciate any help that you can offer, any facts that you could give me, and any opinions that you have based on what you know about the mining field. Thank you, and please don't hesitate to call if you have any questions about the enclosed materials.

Sincerely,

John Wade

John Wade D.V.M.
2480 N. Causeway
Mandeville, LA. 70448
(504) 626-7522

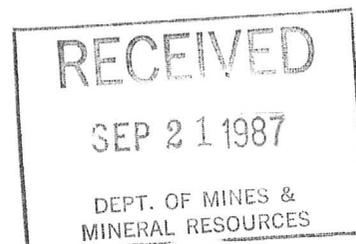


EXHIBIT D
GEOLOGICAL REPORTS
OF
OATMAN ONE, LTD.
A LOUISIANA LIMITED PARTNERSHIP

MICHAEL J. SKOPOS, B. SC.

**CONSULTING GEOLOGIST
G.A.C., C.I.M.M., A.I.M.E.**

5901 Moss Creek Circle
Fair Oaks, Ca., 95628

GEOLOGICAL REPORT

of

**Bubby's Mine
Catclaw Placer Claims #1-7**

Mohave County, Arizona

April 17, 1982

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GEOLOGICAL REPORT
Mohave County, Arizona

April 17, 1982

Introduction

At the request of Vincent P. Orlando, the writer was retained to examine and sample the Catclaw Placer Claims #1-7, Mohave County, Arizona. The writer examined, sampled and processed the placer material during the period April 5 through 8th, 1982. The writer wishes to thank Ray Corner, Christ Christenson, Vincent P. Orlando and Jim Pappas for their assistance during the Geological evaluation.

Property

The property consists of 7 placer claims, Catclaw #1-7, each placer claims containing 160 acres, for a total acreage of 1120. Please see Claim Map, showing all the claims. The Catclaw Claims #1-7 are located in Sections 1, 11, 12 and 14, Township 19 N. and Range 21 W., Mohave County, Arizona and in the San Francisco Mining District. The placer claims are owned by Ray Corner, Box 5, Oatman, Arizona. The claims are in good standing with the Mohave County, recording office and are recorded in the Bureau of Land Management Office.

Location

The Catclaw Claims are located seven miles due east of the Colorado River, by the Southern most corner of Nevada, adjoining California and Arizona. The property is located 10 miles west of the town of Oatman, Arizona, via a fair gravel road. The small town of Oatman, has a population of 125. The second access is from Bullhead, Arizona, a much larger town with a population of 45,000, is located 15 miles northwest of the property. The claims can be reached via a good gravel road.

The property lies on the west flank of the Black Mountains at an elevation of 1,500 to 2,500 feet. During the rainy season the run off from the sides of the mountains are carried westward to

to the Colorado River, which borders the three states Arizona, California and Nevada.

Climate

The area has an excellent dry climate, with no snow, which can be worked year around. The annual rainfall averages from 7 to 9 inches. In April, when the property was examined, the gulches were dry. The only run off occurs during the rainy season.

Water

Other than the run off during the rainy season, there is only one water well, shown on Sketch Map Area 3 & 4. This well produces approximately 1,000 gallons per day. Additional water will be necessary and a deeper well will have to be drilled, in order that ample water will be available. Vegetation consists principally of small desert shrubs and abundant Yucca or Joshua trees.

History

In the 1800's gold placers were the main source for gold mined in Arizona until after the Civil War period; their yield continued to be considerable until about 1885, but thereafter it was of very minor importance except during periods of depression in the base-metal markets. Placers have accounted for approximately \$11,240,000.00 of the total gold production in Arizona, at the old prices. After 1885 siliceous lode deposits led the output with the immediate Oatman district of Arizona accounting for over 36 million dollars production, at an average gold price of \$20.00 per oz. A total of 1,800,400 ounces of gold were produced. The surrounding area of the placer claims, has had many gold producers.

Geology

The Black Mountains lie to the east of the Catclaw Claims and are ruggedly dissected, gently eastward-dipping block of Tertiary

volcanic rocks which rest upon a basement of pre-Cambrian gneiss and granite.

The Oatman district is in a belt of rugged foothills at the western base of the mountains, mainly between altitudes of 1,500 and 3,200 feet. Eastward, the range rises with deeply dissected, steplike cliffs to a maximum elevation of about 5,000 feet above sea level or 4,500 feet above the Colorado River. The gulches which are dry except during rainy seasons carry the run off from this side of the mountains westward to the Colorado River.

The principal formations, consist of a few patches of gneiss and granite on the west, overlain by a thick series of trachytes, andesite, latite, tuffs, rhyolite, and basalt. Intrusive into parts of this series are monzonite, granitic and rhyolitic porphyrys.

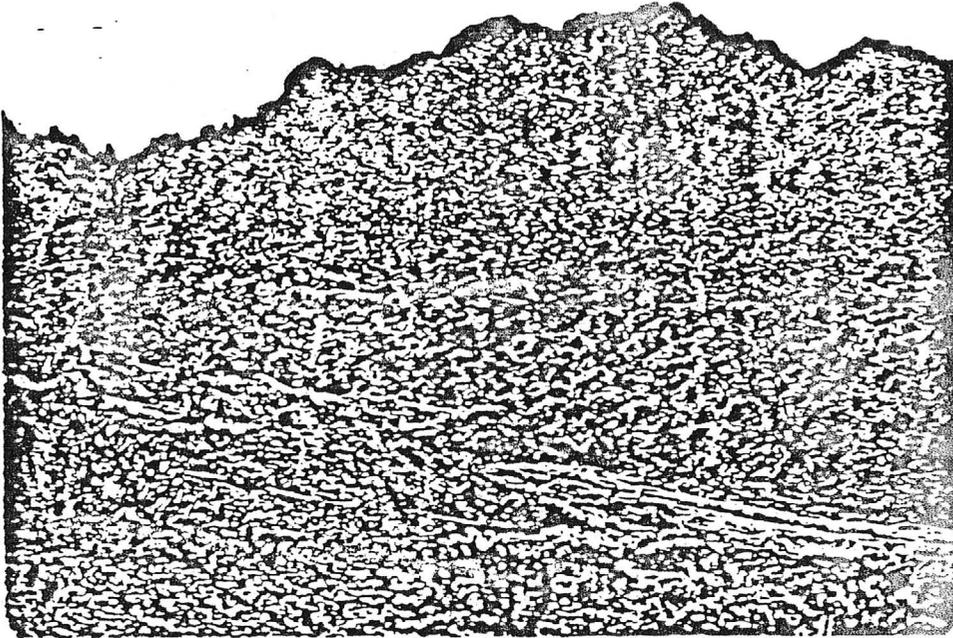
The most important ore-bearing formation is the Oatman Andesite which has been termed the "green chloritic andesite." These formations are cut by numerous faults of prevailing northwestward strike and steep northeastward dip. The veins occur within fissures along which faulting has taken place, as a rule before, during and after the period of vein formation. The veins in the Oatman area have averaged from a few stringers up to 50 feet in width.

The main rock type noted on the property, consists of a volcanic rhyolite, which is well fractured and should not present any problems when the bedrock is ripped. The rhyolite is fractured in areas and brecciated with some cementing.

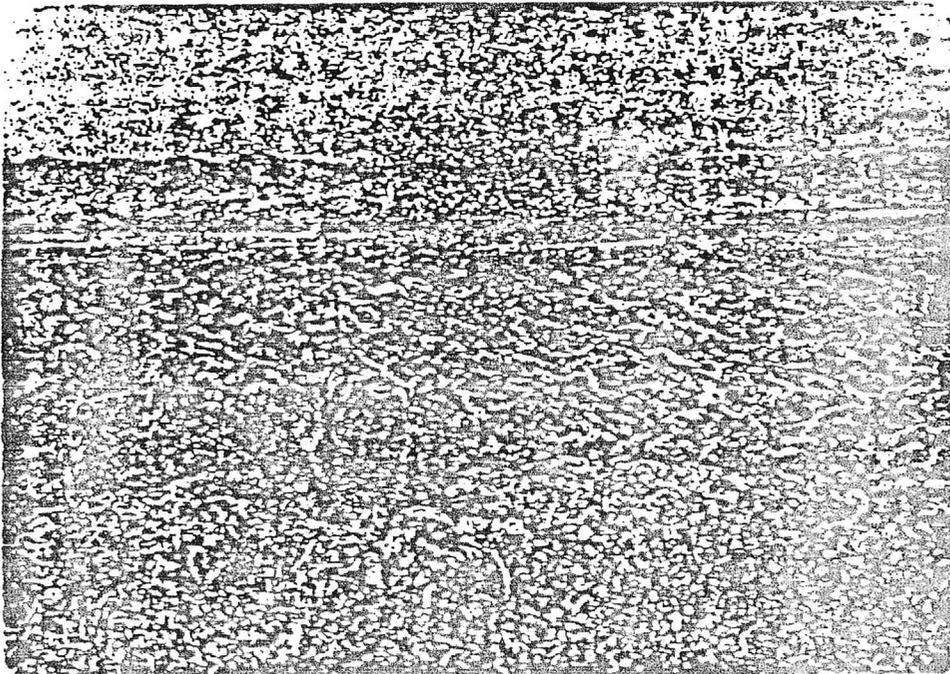
There are two shafts located on the Catclaw Claims. One is on a quartz vein which carries gold and the second shaft is down 75 feet but in the thick gravel Area #4, shown on the Sketch Map showing Areas 3 & 4.

The alluvium, on the Catclaw Claims, is made up predominantly of basin-fill deposits of gravel, sand and silts, locally cemented by caliche a calcium carbonate. The gold bearing gravels occur principally in arroyos and gulches, between the elevations of 1,500 feet to 2,500 feet. Heaviest gravel deposition appears to be located in the ravines, forming long -slender gravel deposits averaging 100 to

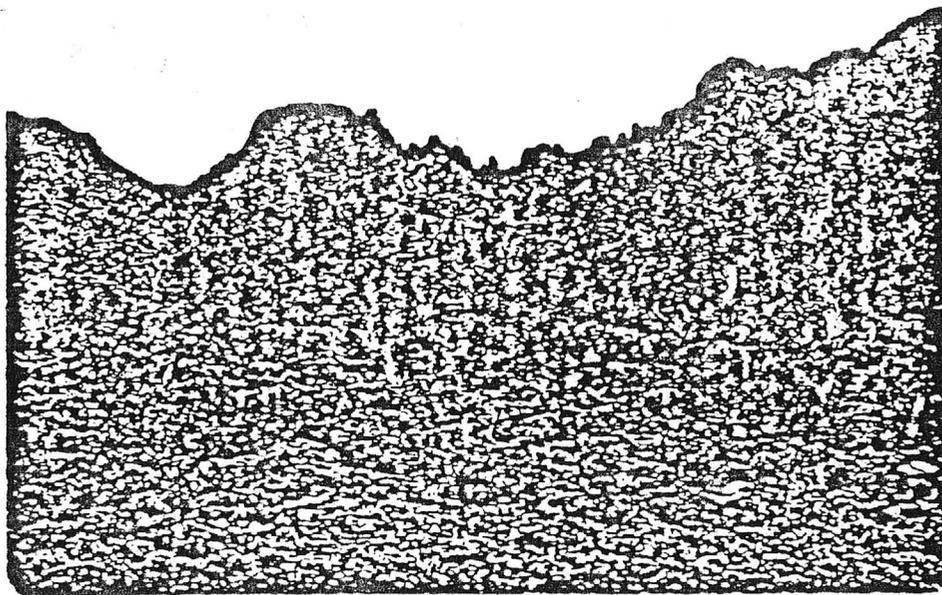
300 feet in width. Please see photographs, showing Areas #1,2,3 & 4.



Gold bearing gravels, Area #1 & part of #3



Backhoe trenches, Area #2



Thick gravels in Area #4

The gravels average from a few feet in thickness to over 75 feet and rest upon caliche-cemented gravels. Gold, being heavier than most materials tends to settle and sink to bedrock. Depressions in the bedrock generally hold rich pockets of gold, while bedrock that is soft, fissured and shattered, acts as a good riffle and may hold good gold values. Crevices and potholes usually yield good gold values and may extend for several feet in depth. Very noticeable, is the lack of large boulders in the gravels. The largest pieces encountered while running the bulk sample test, 5 to 6 inches in diameter.

Detailed Sampling Program

A Ford backhoe, with a $\frac{1}{2}$ yard bucket was used to cut 45 trenches. Please see photograph showing Ford Backhoe used to cut the trenches in the gravel. These trenches varied from 3 to 20 feet in depth. Several of these trenches didn't reach bottom at 20 feet. The trenches were cut systematically to determine precious metal values, continuity, trends and volume available for production.

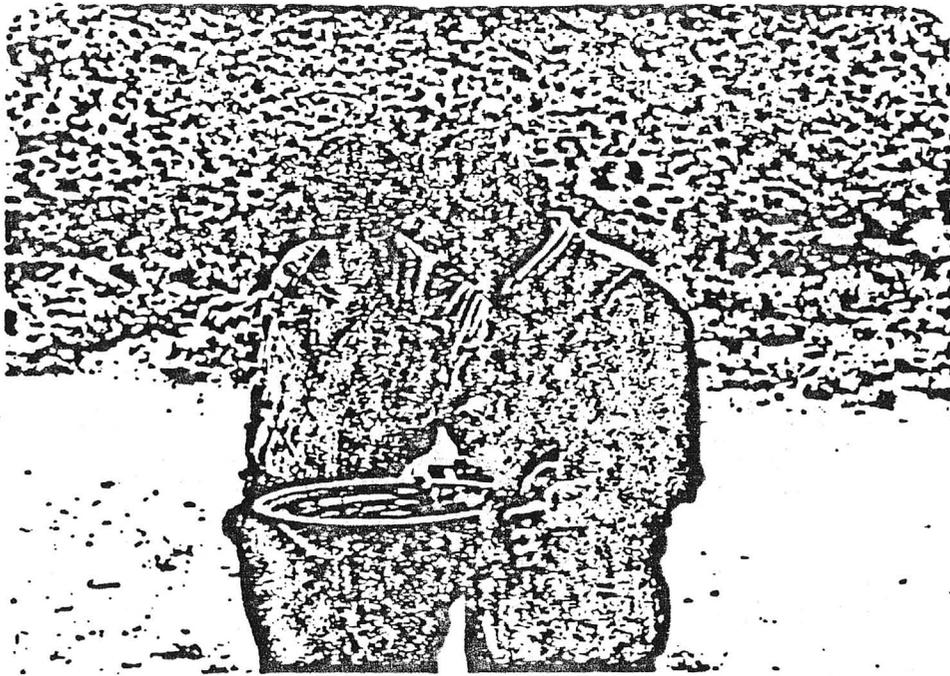


Ford Backhoe, with $\frac{1}{4}$ yard bucket

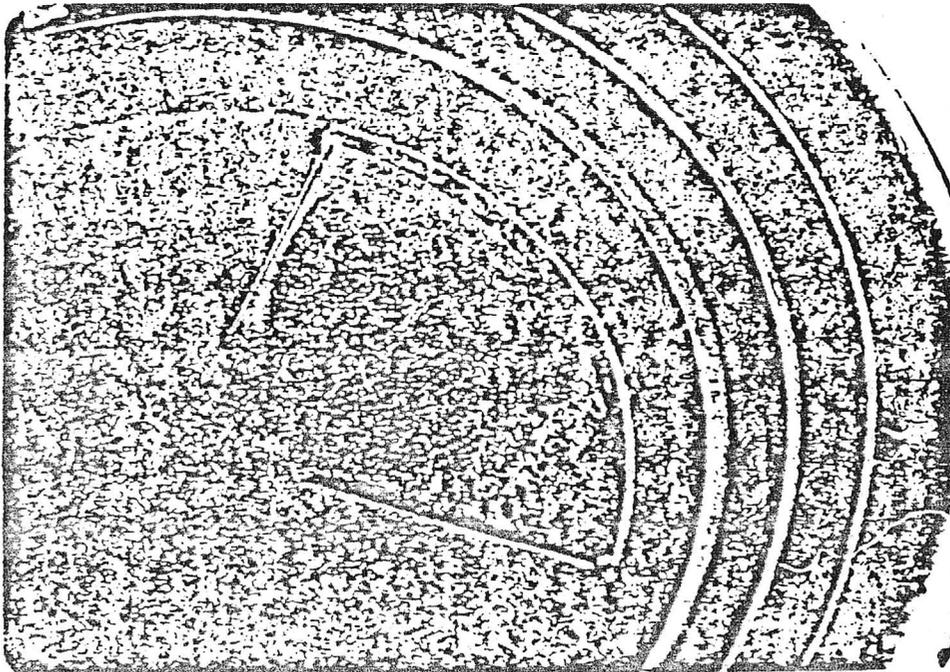
Please see Sketch Maps showing trenches in red in Areas #1,2,3 and 4.

Eighteen test samples were taken at the property from the different trenches using both the gold pan method and the small oil drum trommel built by Ray Corner. Only one sample didn't show visible gold, but black heavy sands were recovered in every test. Please see photographs showing gold pan method and gold recovered in the blue gold pan, and the trommel built by Ray Corner. Six 100 pound tests were run through the small trommel and every test showed good gold. These crude tests proved that most of the gold can be easily extracted.

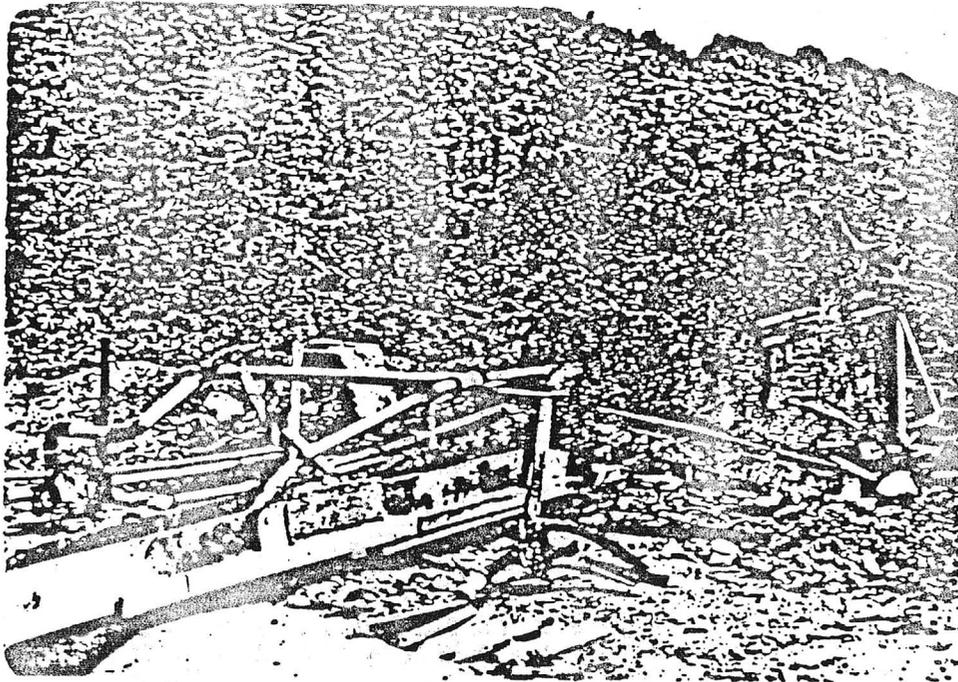
In addition bulk sampling was completed in four separate areas. Forty 100 pound sacks were filled and tagged from the different trenches cut and hauled to Steve Dukes Mfg. Co. in Reno, Nevada for processing. The "Knudsen Bowl Centrifugal Concentrator" was used. This method is excellent for recovering fine gold and heavy metals. Please see photograph of sampling plant. Approximately 100 pounds of concentrate was recovered from the 4,000 pounds of material processed. The writer used the gold pan, on the concentrate, to check on the gold recovery and all four samples showed good gold.



Christ Christenson and the writer panning gold.



Visible gold recovered with gold pan.



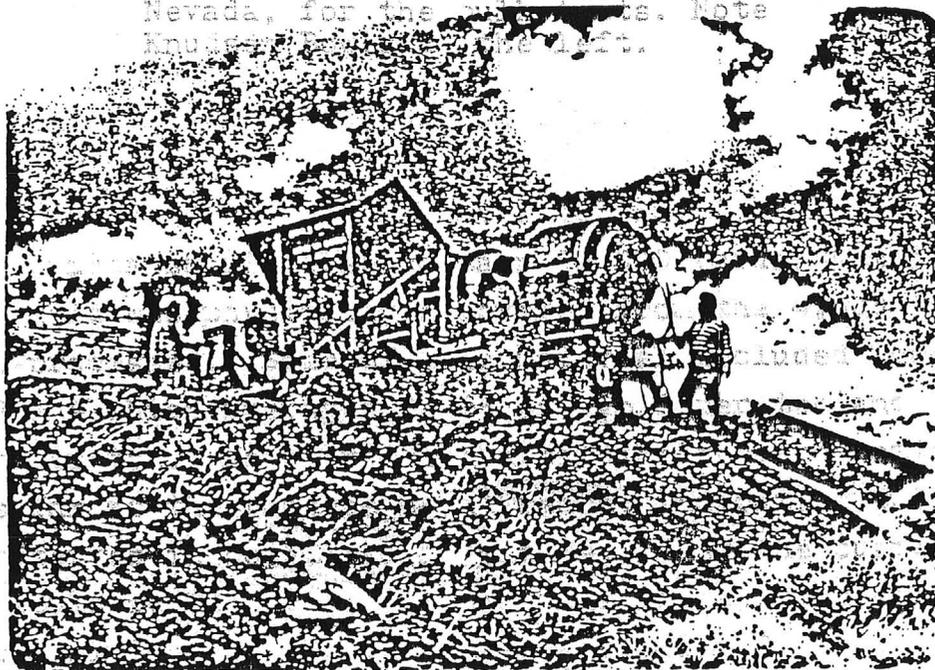
Small oil drum trommel, built by Ray Corner, used to recover gold at the property.

All the samples of concentrate were tagged, plus tailings and delivered to R. Blackler, in Sacramento for analysis. The results are attached. Samples 5-C, 9-A, 9-B and 9-C, 10-A and 10-B, 11-A and 11-B and tailings represent the bulk sampling program, while 2-C, 3-C, 4-C, 6-C, 7-C and 8-A represent the gold pan method. The writer asked Mr. Blackler to crush the 100 lbs. to 80 mesh prior to analysis. Considerable additional gold was recovered, that was not seen by the writer in Reno and at the property. This proved that some of the gold was tied up in the quartz and in the caliche. An impact type of crushing will probably be needed to recover the additional gold values. It should be pointed out that Mr. R. Blackler commented on the easy concentration of the gold. This is extremely important, that most of the gold has weight to it, in the form of nuggets and not the fine powder gold. This form of nugget gold showed up under the microscope.

Ore Reserves

The bulk sample test from Area #1, returned the highest assays of 0.385 oz. gold per ton and 0.68 oz. platinum per ton. 50,000

Concentrating Plant used in Reno, Nevada, for the bulk tests. Note Knudsen Bowls to the left.



Concentrating Plant used in Reno, Nevada, for the bulk tests. Note Knudsen Bowls to the left.

yards of gravel is available in this block. Please see Sketch Map showing the area and trenches cut. The bulk sample test from Area #2 returned 0.285 oz. gold per ton and 0.645 oz. platinum per ton. This area should also contain 50,000 yards. A third of an ounce of gold was physically recovered from the 4,000 lbs. of material processed. Some of this material included lower grade Areas #3 & #4 which averaged 0.065 oz. gold per ton and 0.065 oz. platinum per ton. However, both areas didn't reach bottom at twenty feet, as far as the backhoe could reach, indicating substantial gravel reserves in both Area #3 and #4. Just the current values in gold would be \$23.60 per ton in this gravel. In Area 1 and 2, there is a minimum of 100,000 yards averaging 0.37 oz. gold per ton. With gold at \$363.00 per ounce and a 75% recovery, the gross value is \$10,500,000.00. Additional values in the platinum group were recovered, averaging 0.62 oz. per ton. Even though a button of platinum was recovered, it is felt additional testing will be necessary to determine the platinum group of precious metals present. Minor values in silver will also be recovered. Another button of rare earth metals was also recovered of cesium, bismuth, and gallium. Other elements present: chromite, titanium, columbite, copper and rare earths of lanthanum, neodymium and zirconium.

Conclusion

Based on the following:

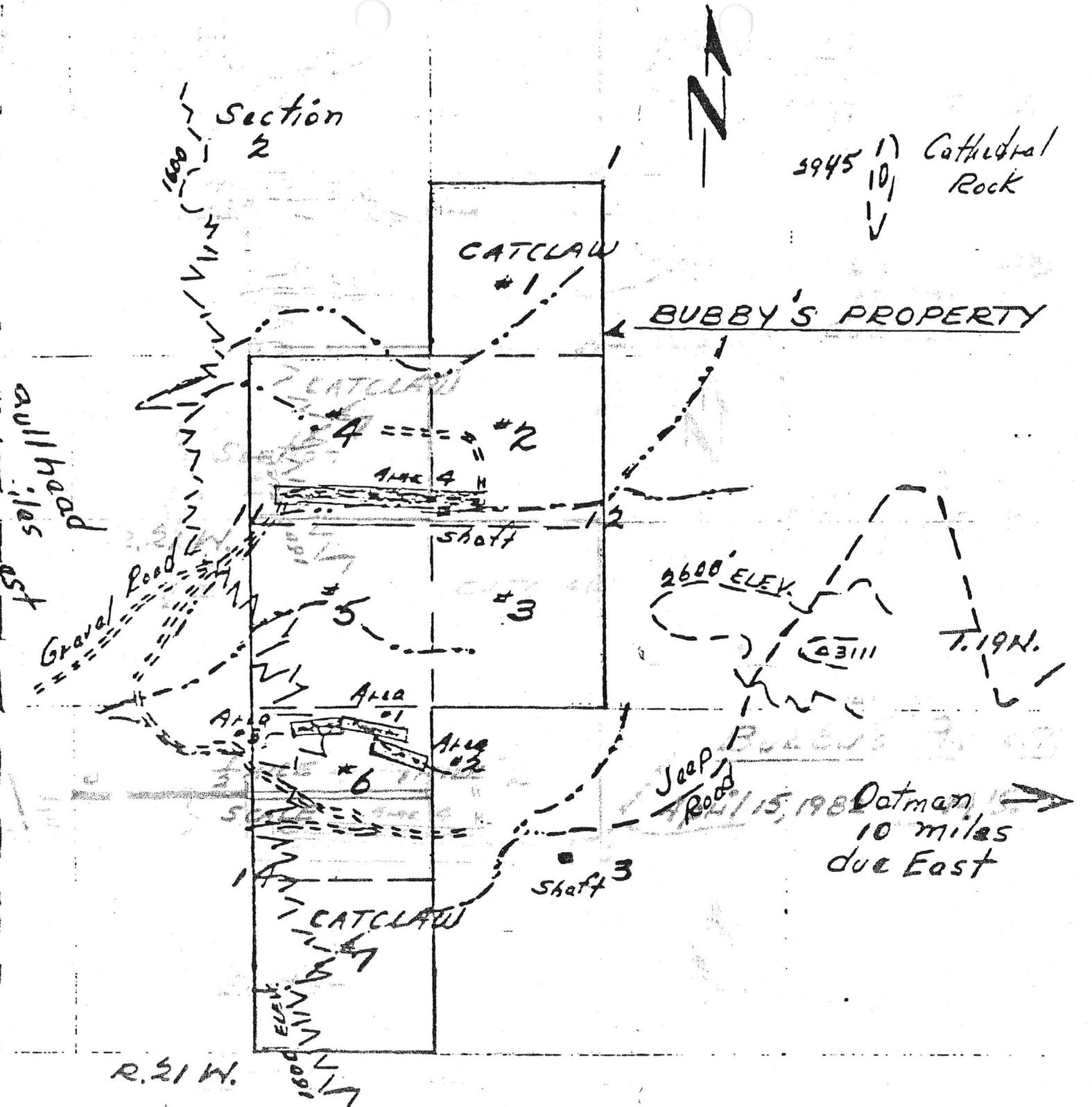
1. Excellent gold and platinum recoveries.
2. Outlined minimum reserves of 100,000 yards, with a gross value of gold only, of \$10,500,000.00.
3. Substantial additional potential reserves in Areas #3 & 4. Will need to be drilled.
4. Only 60 acres of the total 1120 acres explored.
5. Production of over 36 million dollars at an average price of \$20.00 per oz. in the surrounding Oatman district.
6. Excellent fine and coarse gold and heavy metal recoveries, using the Knudsen Bowl Concentrating Method.
7. Two lode gold showings on the property and two shafts.
8. Location of the placer claims, on the foothills of the Black Mountains, draining pattern of the Oatman District gold lode deposits.

The writer recommends the Bubby Mine be placed into production. A profitable mining and milling operation can be attained, for under a million dollars, depending on the capacity of the plant and percentage of recovery for both the gold and platinum.

Respectfully submitted



Michael J. Skopos
Geologist



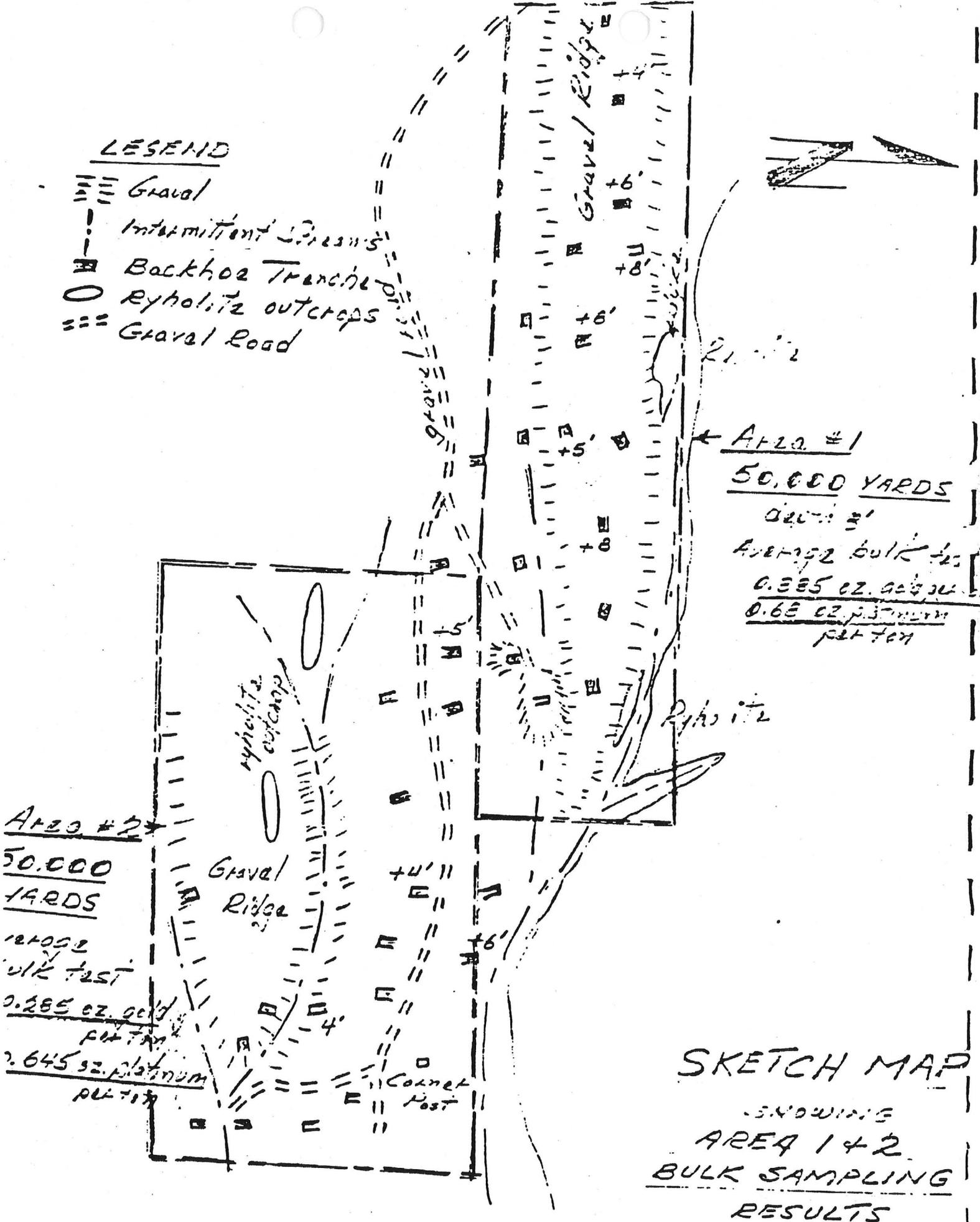
CLAIM MAP
 showing
Bubby's Property

April 15, 1982 M.S.



LEGEND

- ≡≡≡ Gravel
- · - · - Intermittent Streams
- ▣ Backhoe Trenches
- Rhyolite outcrops
- ≡≡≡ Gravel Road



Area #1
50,000 YARDS
 depth 3'
 Average bulk test
 0.385 oz. gold per ton
 0.68 oz. platinum per ton

Area #2
50,000 YARDS
 depth 3'
 Average bulk test
 0.285 oz. gold per ton
 0.645 oz. platinum per ton

SKETCH MAP
 SHOWING
 AREA 1 & 2
 BULK SAMPLING
 RESULTS

1" = 100'

-14- 75' deep

Gravel

will need to be drilled
Abundant
Gravel

Rhyolite

Area #3

Visual Estimate

+20' 0.03 oz. gold's
per ton
0.06 oz. platinum
per ton

Abundant

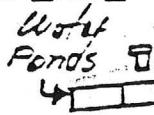


1000 gallons per day

Rhyolite

Area #4

0.155 oz. gold's per ton
Rays 0.053 oz. platinum per ton
from gravel +20'



Abundant
Gravel

will need to be drilled

-14-

75' deep

Gravel

1000 gallons per day

Water
Well 150'
deep

15'

Area #3

Visual Estimate

0.03 oz. gold's
per ton

Gravel

SKETCH MAP

SHOWING

AREA 3 + 4

1" = 100' APRIL 13.

References

Geology and Ore Deposits of the Oatman and Katherine Districts, Arizona, Arizona Bureau of Mines, Bulletin No. 131 by Carl Lausen, 1931.

Arizona Gold Placers and Placering, Arizona Bureau of Mines, Bulletin No. 132, 1932. and Bulletin No. 135.

Arizona Lode Gold Mines and Gold Mining, Arizona Bureau of Mines. Bulletin No. 137.

U.S. Geological Survey, Bulletin #397, 625 and 743.

Geology and Mineral Deposits of Clark County, Nevada, Nevada Bureau of Mines and Geology, 1979, Bulletin 62.

R. BLACKLER
1150 58TH STREET
SACRAMENTO, CALIF. 95819
#3468

4-15-82

M. Skopos
V. Orlando
5901 Moss Creek Circle
Fair Oaks, Calif. 95628

Your Placer samples submitted to me for analysis & recovery of the precious metals, including Gold, Silver & the Platinum group elements only.

This report is based in ounces Per Ton taken from your mine run material.

An over-all average of Gold recovery is approx. .37 oz Per Ton with the Platinum group at .62 oz including Silver at about .20 oz.

The following percentage have been determined.

# 11-A	# 11-B
AU ---- .14 oz F.T.	AU -- .17 oz F.T.
AG ---- .08 oz F.T.	AG -- .03 oz F.T.
PT ---- .36 oz F.T.	PT -- .52 oz F.T.
# 10-A	# 10 B
AU -- .26 oz F.T.	AU -- .32 oz F.T.
AG -- .08 oz F.T.	AG -- .03 oz F.T.
PT -- .62 oz F.T.	PT -- .67 oz F.T.
# 9-A	# 9 -B
AU - .28 oz F.T.	AU - .35 oz F.T.
AG - .05 oz F.T.	AG - .18 oz F.T.
PT - .60 oz F.T.	PT - .66 oz F.T.

# 9-C	
AU -- .42 oz F.T.	
AG -- .23 oz F.T.	PT -- .72 oz F.T.

QUALITATIVE AND QUANTITATIVE ANALYSIS

R. BLACKLER
1150 58TH STREET
SACRAMENTO, CALIF. 95819
CON'T

# 8-A	# 8-B	# 7-C
AU -- .18 oz F.T.	AU -- T.	AU - .05 oz F.T.
AG --- .07 oz F.T.	AG - T.	AG - T.
PT -- .38 oz F.T.	PT - T.	PT - T.

# 6-C	# 5-C
AU -- .07 oz F.T.	AU -- T.
AG -- T.	AG -- T.
PT -- T.	PT -- .08 oz F.T.

# 4-C	# 3-C
AU -- .02 oz F.T.	AU -- T.
AG -- T.	AG -- T.
PT -- .05 oz F.T.	PT -- T.

# 2-C	Tailings
AU -- .03 oz F.T.	AU -- T.
AG -- T.	AG -- T.
PT -- .05 oz F.T.	PT -- T.

As other elements exist such as Chromite, Titanium, Columbite, & Copper with added values in the Rare Earths as Cerium, Lanthanum, Neodymium, & Zirconium, these elements are possible for marketing as a by-product from the precious metals recovery.

Sincerely;
R. Blackler

R. Blackler

Resume

Michael J. Skopos
Consulting Geologist

Education

Kent State University, B.Sc. Degree in Geology, graduated in Spring 1957.

Service

Marine Corps, Aug. 1952 - Aug. 1954, Corporal in the Intelligence Section, 2nd Marine Division. Security cleared to handle classified maps, aerial photographs and typist.

Foreign Languages

Speak, read and write Greek and some Spanish.

Personal

Age 49, excellent health, U.S. Citizen. Married with two children, boy 19 and girl 11 years of age, residing at 5901 Moss Creek Circle, Fair Oaks, Ca. 95628. Phone 916 966 1803.

Professional Associations

Geological Association of Canada, American Institute of Mining Engineers, and Canadian Institute of Mining and Metallurgy, also California Mining Association.

Resume

Michael J. Skopos
Consulting Geologist

Summary -

My past twenty five years of mining experience has been with the emphases on the exploration and production of precious and base metals in North America.

Consulting Mining Geologist

March 1972 to the present. Currently in the initial research, acquisition and exploration stages of the following properties:

Sierra Buttes, Buttes Saddle and Phoenix, Sierra City, Ca. these are all old lode gold deposits, to date approximately \$100,000.00 has been expended.

Big Comstock Mine and Dumps, Virginia City, Nevada and Mesquite Lake, Ca., near Las Vegas. Feasibility stage on these gold-platinum group placer deposits.

Instrumental in placing the following mines into production, right from the initial research and acquisition stages through the sampling, drilling, planning, mine evaluation, cost estimates, construction and mine development:

Paragon Placer Mine, Foresthill, Ca., managed and placed this placer deposit into production at 150 to 200 yards per day, at a cost of \$500,000.00.

American Bar Quartz Mining Co., American River, Foresthill, Ca., Cost \$100,000.00. Introduced new concept for recovering placer gold in the U.S., averaging 1,500 yards per day. Over a 1,000 oz. gold were recovered, also re-evaluated gold lode deposit adjoining the placer.

Silver Arrow, Ross River, N.W.T. Sampled and placed into production, a massive stratabound silver, lead and zinc deposit. Had interest and general manager, sold out early 1979.

El Dorado Placer Mine, Foresthill, Ca., Managed and placed a 100 yard per day into production, this was the bulk test. This placer mine is operating today at a much larger rate. A gold-silver placer operation. Currently in the initial research, acquisition and exploration stages of the following properties:

Sierra Buttes, Buttes Saddle and Phoenix, Sierra City, Ca.

Quick Tung, Stillwater Range, near Fallon, Nevada. Sampled, drilled and placed into production this gold deposit.

Flat Top Uranium-Vanadium Mine, Temple Mt., Utah. Sampled, drilled and placed into production this small uranium-vanadium mine.

Jolu Gold Silver Mine, Mallard Lake, Sask., Canada. Help financed, explored, drilled, sampled, constructed and developed this 75 ton per day mine and mill complex. Cost to set up \$800,000.00.

Vernal Coal Mine, Vernal, Utah. Brought this coal mine into production and was involved in all phases of exploration, mining and marketing.

Emery Uranium, Emery County, Utah near Ferron, Castledate, Utah. Spearheaded staking, exploration, ground and aerial uranium program covering 6,000 claims, including 15 old uranium mines.

Gilson Uranium, Temple Mt., Utah, Supervised the uranium exploration and title search of 96,000 acres. Sampled, explored and evaluated numerous base metal, precious metals, tungsten, uranium and coal properties in Western U.S. and Canada.

Rio Algom-Rio Tinto Sept. 1966 to March 1973

Lornex Mining Corp. Sept. 1969 to March 1973

Chief Geologist, largest base metal open pit operation in Canada. The mine was placed into production at 50,000 tons per day and worked on the computer studies for the expansion to 80,000 tons per day. Was responsible for discovering multi-million tons of base metal ore, placing this mine into the better than a billion ton category.

Anglo Rouyn Mine Sept. 1966 to Sept 1969

Chief Geologist, 1,000 ton per day open pit and underground mine, gold-silver, producer. Found a new ore body along strike.

Discovery Gold Mines, N.W.T., Dec. 1964 to Sept. 1966

Chief Geologist, 250 ton per day gold-silver producer. Involved in all aspects of exploration and mining.

Cochenour Willans Gold Mine, Marcus and Willmar Gold Mines

Geologist, exploration, development, grade control and ore reserves. Jan. 1963 to Dec. 1964. 225 ton per day gold

producer.

McKenzie Red Lake Gold Mine -Oct. 1959 to June 1963.

Chief Geologist. 250 ton per day gold-silver producer.

Simard Knight & Assoc. Geologist on a geophysical and exploration program on a copper-gold producer. Wa Wa, Ontario, Canada.

Mogul Mining, Toronto, Ontario, April 1959 - July 1959

Geologist, geophysical and exploration program in Rankin Inlet area, Hudson Bay, N.W.T.

Tib Exploration, Newboro, Ontario, Resident Engineer, outlined 34 million ton of iron and titanium.

New Mylamaque Exploration, Newboro, Ontario, Assistant Engineer. Bulk sampling program and drilling, outlining 50 million tons of iron and titanium.

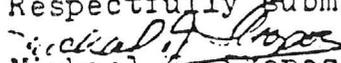
New Spring Coulee Oil and Minerals, Cedar Lake, Manitoba, Sept. 1958 - Jan. 1958. Chief Geologist, outlined 12 million pounds of amber reserves.

Ontario Department of Mines, Toronto, Ontario, July 1957 - Sept. 1957. Geologist, examined and mapped sand and gravel deposits.

Professional References:

<u>Egil Lornstzen</u>	Founder and Chairman of Lornex Corp. Phone - 604 669 4025, Vancouver, B.C.
<u>Charlie Reno</u>	Vice President and General Manager Lornex Mining Corp. Now with Parson of California
<u>Dr. R. Evans</u>	Chief Geologist Dennison Mines, Toronto, Ontario Phone -416 278 8694
<u>Dave Hutton</u>	Manager - Selco Phone - 416 247 3088
<u>J.E.J. Fahlgren</u>	President, Cochenour Willans Gold Mine 152 Cochenour Crescut Cochenour, Ontario, POV, 1L0

Respectfully submitted


Michael E. Skopos

Yatman Placer
MB

MICHAEL J. SKOPOS, B. SC.

**CONSULTING GEOLOGIST
G.A.C., C.I.M.M., A.I.M.E.**

5901 Moss Creek Circle
Fair Oaks, Ca., 95628

(Handwritten scribble)

REVISED GEOLOGICAL REPORT
of

Bubby's Mine

Placer Sections #1, 10, 12, 13 & 14

Mohave County, Arizona

July 22, 1982

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REVISED GEOLOGICAL REPORT
Mohave County, Arizona

July 22, 1982

Introduction

At the request of Vincent P. Orlando, the writer was retained, during the period April 5 through April 17th, 1982 to examine, sample and complete a processing study of the placer deposits located on Catclaw Placer Claims #1-7 located in Sections 1, 11, 12 and 14, Township 19 N. and Range 21 W., Mohave County, Arizona and in the San Francisco Mining District.

This study was completed and then followed up by a legal and an independent claim survey by George DeWitt. The survey revealed that the southwestern portion of the placer deposits outlined by the writer is located in Section 11 adjoining Section 12 belonged to Santa Fe Mining Co. When this was realized the writer was retained by Vincent P. Orlando a second time to reexamine the area including the Santa Fe Mining Sections 3, 9, 11, 15, 21 and 23, to determine the feasibility of placing the placer gold bearing gravels into production. This examination follows and was completed during the period July 17th, through July 22nd, 1982. The writer wishes to thank Ray Corner, Christ. Christenson, George DeWitt, Vincent P. Orlando and Jim Pappas for their assistance during the Geological evaluation.

Property

The property presently consists of 5 Unpatented Placer Sections #1, 10, 12, 13 and 14, Township 19N. and Range 21 W., Mohave County, Arizona and in the San Francisco Mining District. This acreage has been leased and staked by Vincent P. Orlando. Please see Section Ownership Map.

Location

The Sections are located approximately six miles due east of the Colorado River, in the Southern most corner of Nevada, adjoining California and Arizona. The property is located 10 miles west of the town of Catman, Arizona, via a fair gravel road. The small town of Catman, Arizona, has a population of 125. The second access is from Bullhead, Arizona, a much larger town

with a population of 45,000, is located 15 miles northwest of the property. The claims can be reached via a good gravel road.

The property lies on the west flank of the Black Mountains at an elevation of 1,500 to 2,500 feet. During the rainy season the run off from the sides of the mountains are carried westward to the Colorado River, which borders the three states Arizona, California and Nevada.

Climate

The area has an excellent dry climate, with no snow, which can be worked year around. The annual rainfall averages from 7 to 9 inches. In April, when the property was examined, the gulches were dry. The only run off occurs during the rainy season.

Water

Other than the run off during the rainy season, there are two wells. shown on location map. The well located in Section 12 produces approximately 1,000 gallons per day, while the water well in Section 10 has a casing with an inside diameter of 8 inches. A rock was dropped into the well, taking 10 seconds to hit the water. Considerable water appears to be available from this well, however the gallons available must be checked. Vegetation consists principally of small desert shrubs and abundant Yucca or Joshua trees.

History

In the 1800's, gold placers were the main source for gold mined in Arizona until after the Civil War period their yield continued to be considerable until about 1885, but thereafter it was of very minor importance except during periods of depression in the base-metal markets. Placers have accounted for approximately \$11,240,000.00 of the total gold production in Arizona, at the old prices. After 1885 siliceous lode deposits led the output with the immediate Oatman district of Arizona accounting for over 36 million dollars production, at an average gold price of \$20.00 per oz. A total of 1,800,400 ounces of gold were produced. The surrounding area of the placer claims has had many gold producers.

Geology

The Black Mountains lie to the east of the placer claims and are ruggedly dissected, gently eastward-dipping block of Tertiary

Volcanic rocks which rest upon a basement of Precambrian gneiss and granite.

The Oatman district is in a belt of rugged foothills at the western base of the mountains, mainly between altitudes of 1,500 and 3,200 feet. Eastward, the range rises with deeply dissected, steplike cliffs to a maximum elevation of about 5,000 feet above sea level or 4,500 feet above the Colorado River. The gulches which are dry except during rainy seasons carry the run off from this side of the mountains westward to the Colorado River.

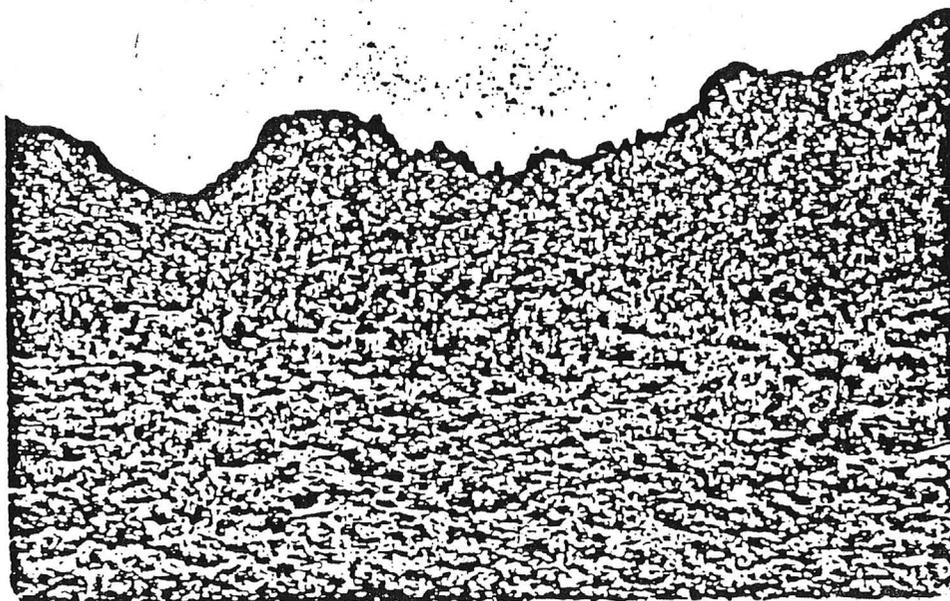
The principal formations, consist of a few patches of gneiss and granite on the west, overlain by a thick series of trachytes, andesite, latite, tuffs, rhyolite and basalt. Intrusive into parts of this series are monzonite, granitic and rhyolitic porphyrys.

The most important ore-bearing formation is the Oatman Andesite which has been termed the "green chloritic andesite." These formations are cut by numerous faults of prevailingly northwestward strike and steep northeastward dip. The veins occur within fissures along which faulting has taken place, as a rule before, during and after the period of vein formation. The veins in the Oatman area have averaged from a few stringers up to 50 feet in width.

The main rock type noted on the property, consists of a volcanic rhyolite, which is well fractured and should not present any problems when the bedrock is ripped. The rhyolite is fractured in areas and brecciated with some cementing.

There are two shafts located on Sections #12 & #13. One is on a quartz vein which carries gold and the second shaft is down 75 feet but in the thick gravel in the Area #4, in section #12.

The alluvium is made up predominantly of basin-fill deposits of gravel, sand and silts, locally cemented by caliche a calcium carbonate. The gold bearing gravels occur principally in arroyos and gulches, between the elevations of 1,500 feet to 2,500 feet. Heaviest gravel deposition appears to be located in the ravines, forming long-slender gravel deposits averaging 100 to 300 feet in width. Please see photographs, showing Areas #1, 2, 3 and 4.

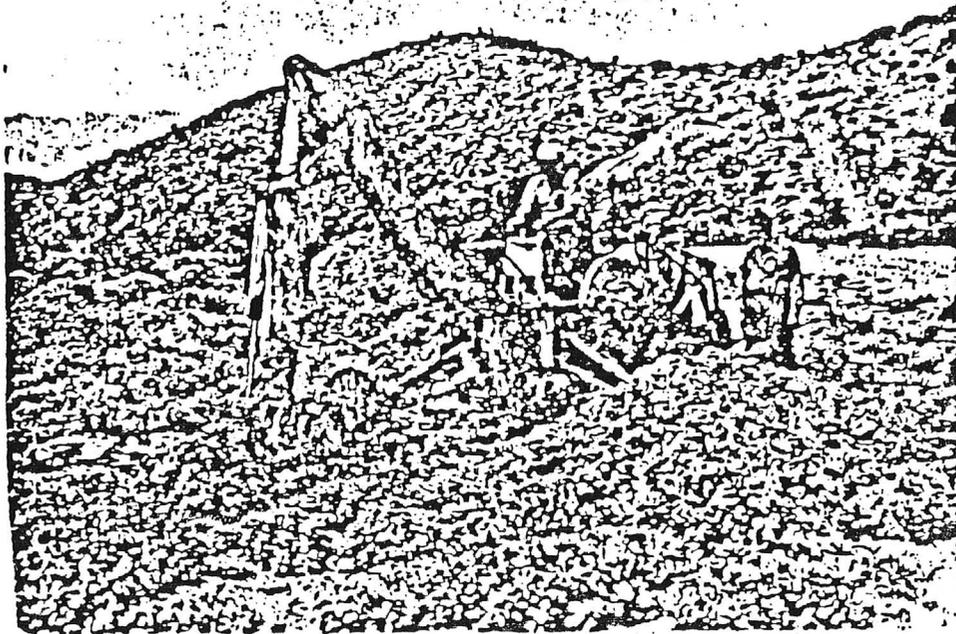


Thick gravels in Area #4, Section 12

The gravels average from a few feet in thickness to over 75 feet and rest upon caliche-cemented gravels. Gold, being heavier than most materials tends to settle and sink to bedrock. Depressions in the bedrock generally hold rich pockets of gold, while bedrock that is soft, fissured and shattered, acts as a good riffle and may hold good gold values. Crevices and potholes usually yield good gold values and may extend for several feet in depth. Very noticeable, is the lack of large boulders in the gravels. The largest pieces encountered while running the bulk sample test, 5 to 6 inches in diameter.

Detailed Sampling Program (Completed April 5 through 17th, 1982)

A Ford backhoe, with a $\frac{1}{2}$ yard bucket was used to cut 45 trenches. Please see photograph showing Ford Backhoe used to cut the trenches in the gravel. These trenches varied from 3 to 20 feet in depth. Several of these trenches didn't reach bottom at 20 feet. The trenches were cut systematically to determine precious metal values, continuity, trends and volume available for production.

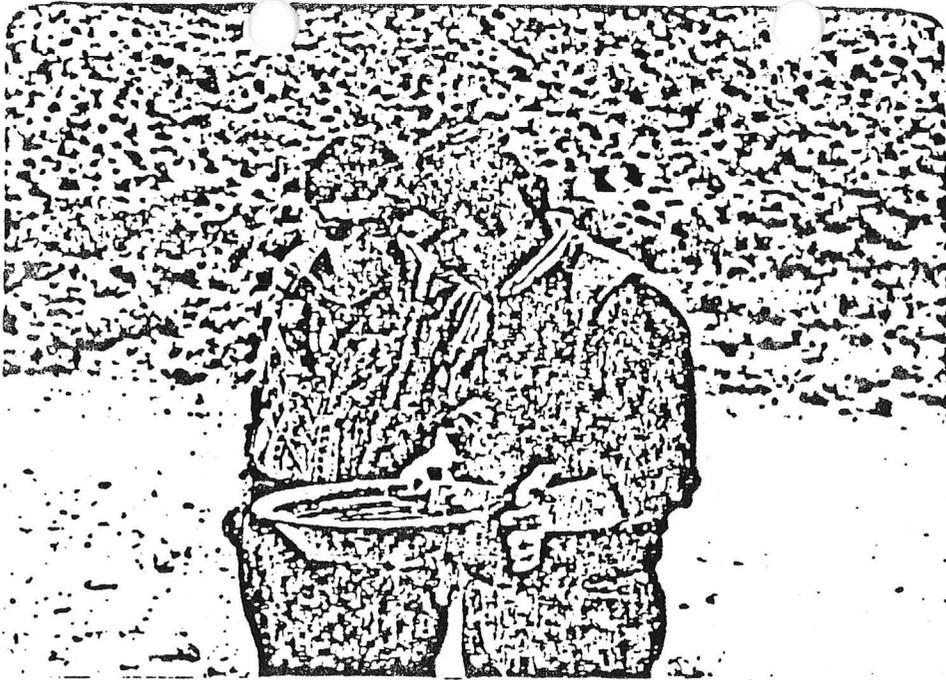


Ford Backhoe, with $\frac{1}{4}$ yard bucket

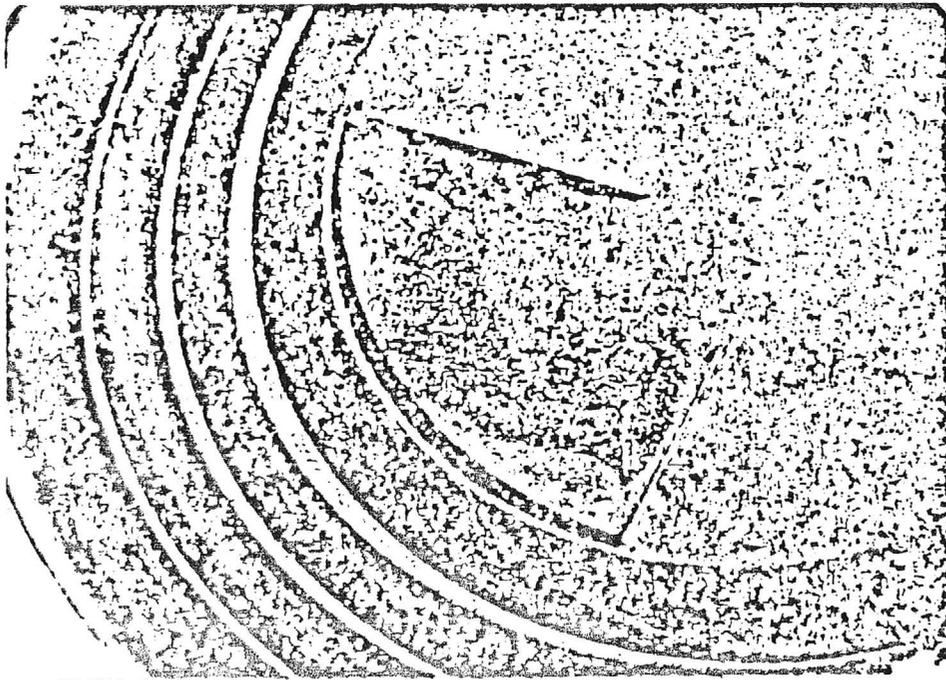
Please see Sketch Maps showing trenches in red in Areas #1, 2, 3 and 4.

Eighteen test samples were taken at the property from the oil drum trommel built by Ray Corner. Only one sample didn't show visible gold, but black heavy sands were recovered in every test. Please see photographs showing gold pan method and gold recovered in the blue gold pan and the trommel built by Ray Corner. Six 100 pound tests were run through the small trommel and every test showed good gold. These crude tests proved that most of the gold can be easily extracted.

In addition bulk sampling was completed in four separate areas. Forty 100 pound sacks were filled and tagged from the different trenches cut and hauled to Steve Dukes Mfg. Co. in Reno, Nevada for processing. The "Knudsen Bowl Centrifugal Concentrator" was used. This method is excellent for recovering fine gold and heavy metals. Please see photograph of sampling plant. Approximately 100 pounds of concentrate was recovered from the 4,000 pounds of material processed. The writer used the gold pan, on the concentrate, to check on the gold recovery and all four samples showed good gold.



Christ Christenson and the writer panning gold.



Visible gold recovered with gold pan

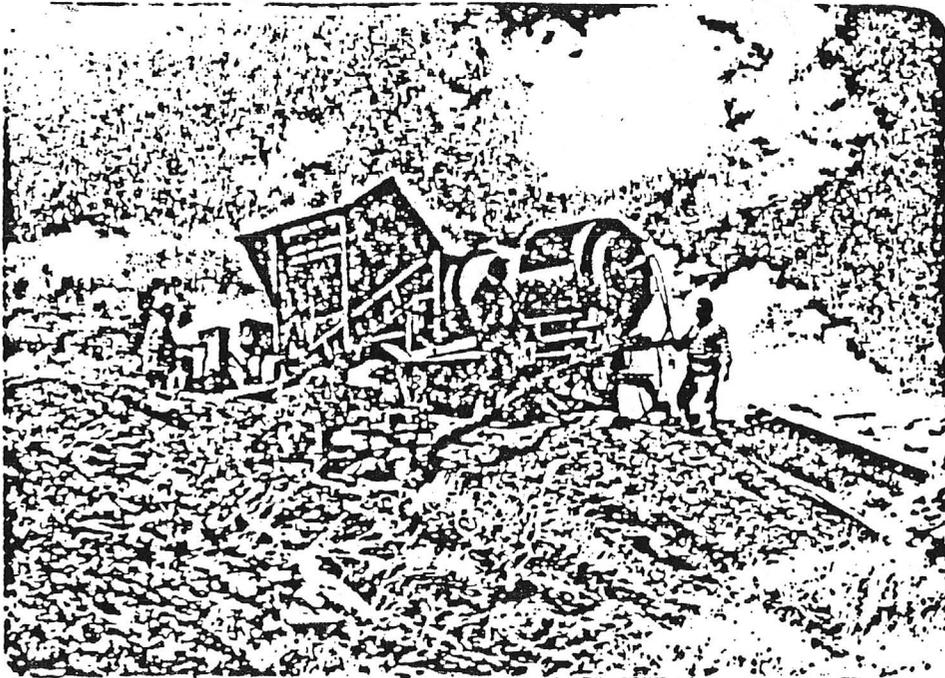


Small oil drum trommel, built by Ray Corner, used to recover gold at the property.

All the samples of concentrate were tagged, plus tailings and delivered to R. Blackler, in Sacramento for analysis. The results are attached. Samples 5-C, 9-A, 9-B and 9-C, 10-A and 10-B, 11-A and 11-B and tailings represent the bulk sampling program, while 2-C, 3-C, 4-C, 6-C, 7-C and 8-A represent the gold pan method. The writer asked Mr. Blackler to crush the 100 lbs. to 80 mesh prior to analysis. Considerable additional gold was recovered, that was not seen by the writer in Reno and at the property. This proved that some of the gold was tied up in the quartz and in the caliche. An impact type of crushing will probably be needed to recover the additional gold values. It should be pointed out that Mr. R. Blackler commented on the easy concentration of the gold. This is extremely important, that most of the gold has weight to it, in the form of nuggets and not fine powder gold. This form of nugget gold showed up under the microscope.

Cre Reserves

The bulk samples test from Area #1, returned the highest assays of 0.385 oz. gold per ton and 0.68 oz. platinum per ton. 50,000



Concentrating Plant used in Reno, Nevada, for the bulk tests. Note Knudsen Bowls to the left.

yards of gravel is available in this block. Please see Sketch Map showing the area and trenches cut. The bulk sample test from Area #2 returned 0.285 oz. gold per ton and 0.645 oz. platinum per ton. This area should also contain 50,000 yards. A third of an ounce of gold was physically recovered from the 4,000 lbs. of material processed. Some of this material included lower grade Areas #3 & #4 which averaged 0.065 oz. gold per ton and 0.065 oz. platinum per ton. However, both areas didn't reach bottom at twenty feet, as far as the backhoe could reach, indicating substantial gravel reserves in both Area #3 and #4, located in Section 12. Just the current values in gold would be \$23.60 per ton in this gravel. In Area #1 and 2, there is a minimum of 100,000 yards averaging 0.37 oz. gold per ton. With gold at \$363.00 per ounce and a 75% recovery, the gross value is \$10,500,000.00 Additional values in the platinum group were recovered, averaging 0.62 oz. per ton. However, even though a button of platinum was recovered, further testing will be necessary to determine the complex platinum group of precious metals present, and recoveries. Minor values in silver will also be recovered. Another button of rare earth metals was also recovered of cesium, bismuth and gallium. Other elements present: chromite, titanium, columbite, copper and rare earths of lanthanum, neodymium and zirconium.

Sampling Santa Fe Mining Co. Sections (period July 17 through July 19th, 1982)

During the period July 17 to July 19th, the writer reexamined Areas #1 & 2 where the 100,000 yards was blocked out in April 1982. Please see Sketch Map showing Area #1 & 2 Bulk Sampling Results. It appears that out of this block approximately 19,000 oz. of gold would be located in Section #11 of the Santa Fe Section and 14,000 oz. would be located in Section 12 of the V.P. Orlando Section. In addition to the above area located in Section #11, five other Santa Fe Sections were sampled. These include two channel samples taken from Section 3, two from Section 9, two from Section 15, two from Section 21 and two from Section 23. These assay results range from 0.04 oz. gold per ton to 0.10 oz. gold per ton with low silver and platinum values. Please see Section Ownership and Assay Map. The 10 assays #1-10 averaged 0.067 oz. gold per ton with a value of \$24.22 per ton with gold at \$363.00 per oz. Mr. Blackler commented that the gold recovered in these sections was finer than the gold in Area #1 & 2 in Sections #11 & 12, indicating that the deeper gold near bedrock may be coarser and probably increase in value per ton.

Conclusion

Based on the following;

1. Excellent gold and platinum recoveries.
2. Outlined minimum reserves of 100,000 yards, with a gross value of gold only, of \$10,500,000.00.
3. Substantial additional potential reserves in Areas #3 & 4, Section 12 and Santa Fe Sections will need to be explored and drilled.
4. Production of over 36 million dollars at an average price of \$20.00 per oz. in the surrounding Oatman district
5. Excellent fine and coarse gold and heavy metal recoveries, using the Knudsen Bowl Concentrating Method.
6. A lode gold showing on the property and two shafts.
7. Location of the placer claims, on the foothills of the Black Mountains, draining pattern of the Oatman District gold lode deposits.

Recommendations

The writer recommends that an agreement be reached with Santa Fe Mining Co. re production of their portion of outlined reserves on Section #11 and acquired reserves on Section #12 shown as Area #1 and 2. Additional exploration work should be completed on the remaining Santa Fe Sections #3, 9, 15, 21 & 23 and acquired Sections #1, 10, 13 & 14 at depth. The writer recommends the above work be completed in view of the large rock outcrops limiting the mineable gravel available in portions of the Sections. It appears also that some of the richer coarser gold bearing gravels may be at depth.

Respectfully submitted



Michael J. Skopos
Geologist

References

Geology and Ore Deposits of the Oatman and Katherine Districts, Arizona, Arizona Bureau of Mines, Bulletin No. 131 by Carl Lausen, 1931.

Arizona Gold Placers and Placering, Arizona Bureau of Mines, Bulletin No. 132, 1932. and Bulletin No. 135.

Arizona Lode Gold Mines and Gold Mining, Arizona Bureau of Mines. Bulletin No. 137.

U.S. Geological Survey, Bulletin #397, 625 and 743.

Geology and Mineral Deposits of Clark County, Nevada, Nevada Bureau of Mines and Geology, 1979, Bulletin 62.

LEGEND

- ≡≡≡ Gravel
- - - Intermittent Streams
- ⊔ Backhoe Trenches
- Ryholite outcrops
- ≡≡≡ Gravel Road

SECTION 12

V.P. ORLANDO

SECTION 11

ANTA FE

Area #2

20,000 YARDS

Average bulk test

0.385 oz. gold per ton

0.68 oz. platinum per ton

Cornet Post

Gravel Ridge

RIVERVIEW #1

Ryholite

Area #1

50,000 YARDS

depth 8'

Average bulk test

0.385 oz. gold per ton

0.68 oz. platinum per ton

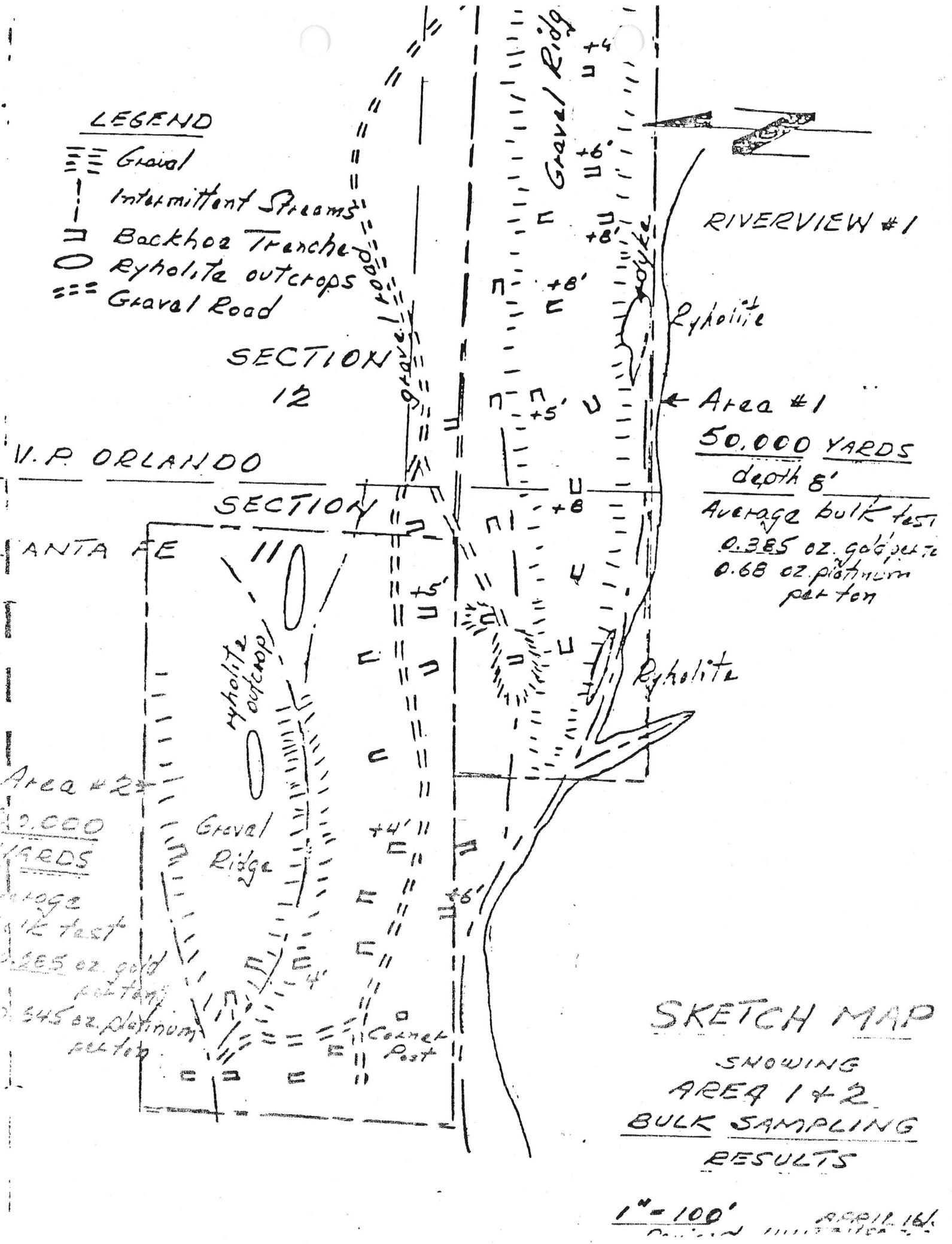
Ryholite

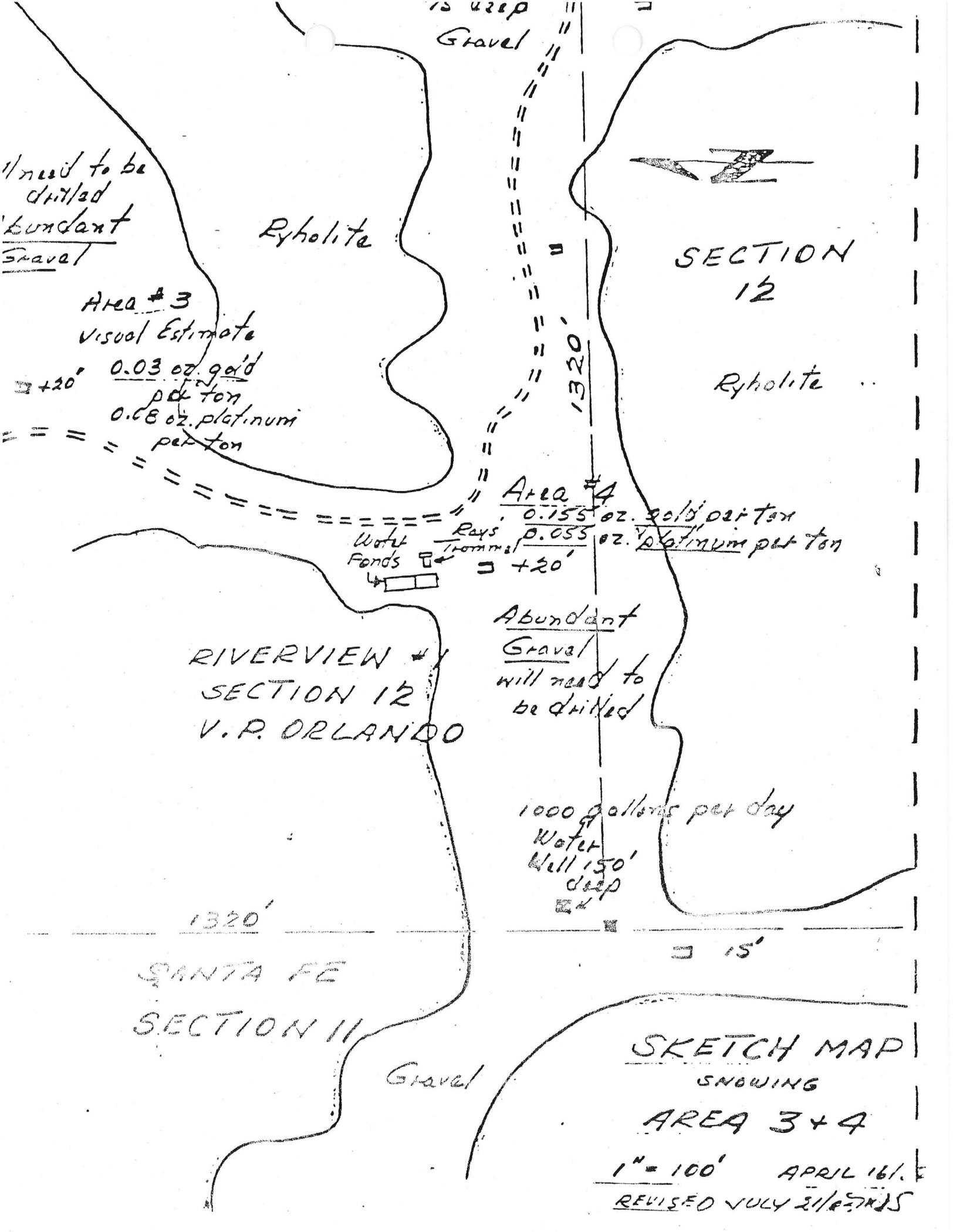
SKETCH MAP

SHOWING
AREA 1 + 2
BULK SAMPLING
RESULTS

1" = 100'

APRIL 1961





is deep
Gravel

if need to be drilled
abundant
Gravel

Rhyolite



SECTION
12

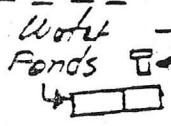
Rhyolite

Area #3
Visual Estimate

+20' 0.03 oz. gold
per ton
0.68 oz. platinum
per ton

Area #4

0.155 oz. gold per ton
0.053 oz. platinum per ton



Abundant
Gravel
will need to
be drilled

RIVERVIEW #1
SECTION 12
V.P. ORLANDO

1000 gallons per day
Water
Well 150'
deep

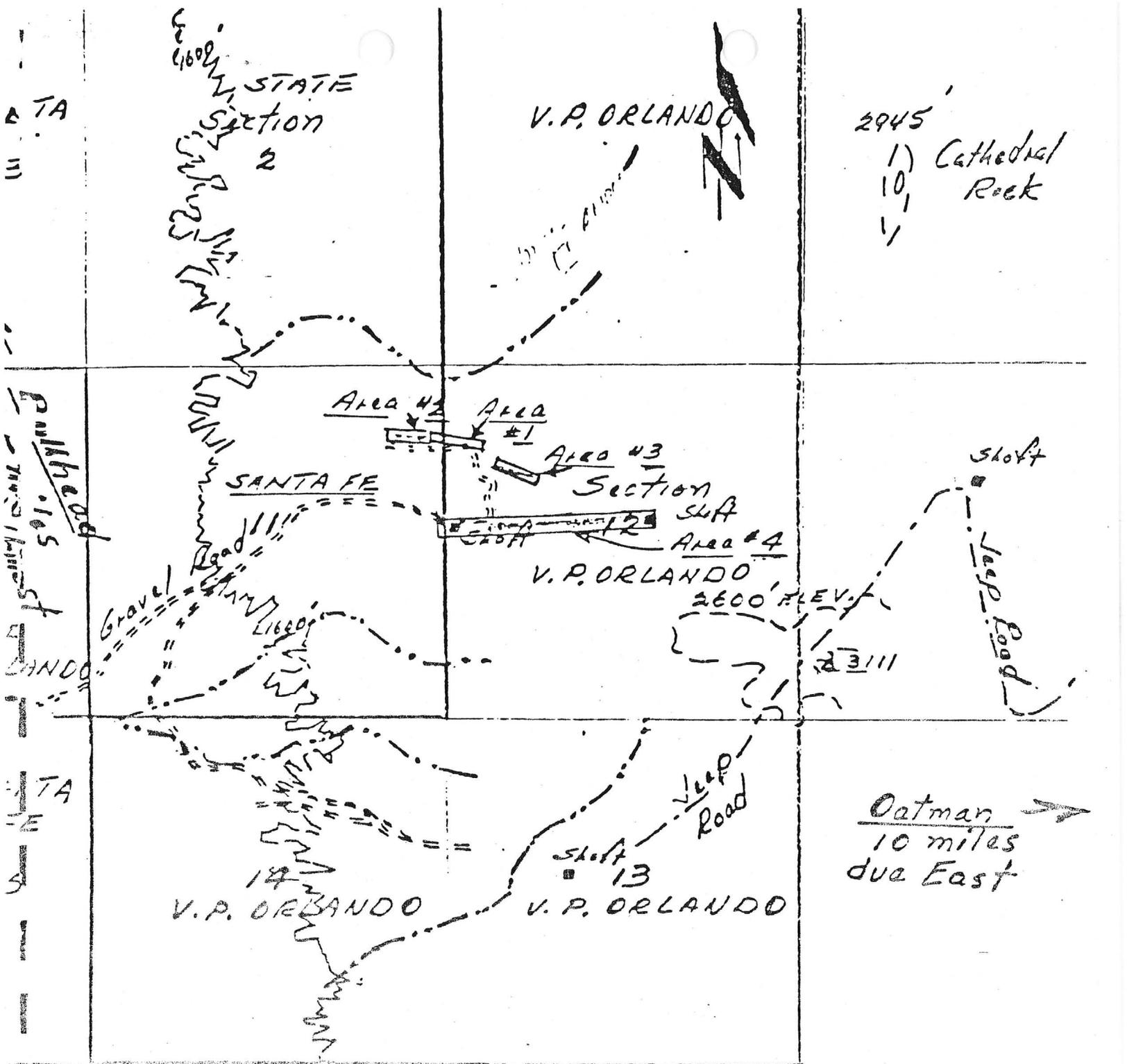
1320'

SANTA FE
SECTION 11

Gravel

SKETCH MAP
SNOWING
AREA 3+4

1" = 100' APRIL 16/61
REVISED JULY 21/67 MJS



2945
1) Cathedral
Rock

Oatman
10 miles
due East

CLAIM MAP
showing
AREAS 1, 2, 3 & 4
JULY 21, 1982

R. 21 W. T. 19 N.





Average of
10 assays
24.22 gr. to
Average
gold per ton
0.067 oz.
with minor sil
& platinum

SECTION
OWNER V.

ASSAY MA
SNOOING
SANTA FE
ASSAYS
#1-10

Scale 1" = 100'
July 21, 1882
249

V.P. ORLANDO 1	STATE 2	SANTA FE 3	4
RIVERVIEW #1 V.P. ORLANDO 12 Water Well	SANTA FE 11	V.P. ORLANDO 10 Water Well 8' North of SECTION	SANTA FE 9
V.P. ORLANDO 13	V.P. ORLANDO 14	SANTA FE 15	16
24	SANTA FE 23	22 T.19N.	SANTA FE 21

R. BLACKLER
1150 58TH STREET
SACRAMENTO, CALIF. 95819

#3468

4-15-82

M. Skopos
V. Orlando
5901 Moss Creek Circle
Fair Oaks, Calif. 95628

Your Placer samples submitted to me for analysis & recovery of the precious metals, including Gold, Silver & the Platinum group elements only. This report is based in ounces Per Ton taken from your mine run material. An over-all average of Gold recovery is approx. 37 oz Per Ton with the Platinum group at .62 oz including Silver at about .20 oz. The following percentage have been determined.

# 11-A	AU ---- .14 oz P.T.	# 11-B	AU -- .17 oz P.T.
	AG ---- .08 oz P.T.		AG -- .05 oz P.T.
	PT ---- .36 oz P.T.		PT -- .52 oz P.T.
# 10-A	AU -- .26 oz P.T.	# 10 B	AU -- .32 oz P.T.
	AG -- .08 oz P.T.		AG -- .05 oz P.T.
	PT -- .62 oz P.T.		PT -- .67 oz P.T.
# 9-A	AU - .28 oz P.T.	# 9 -B	AU - .35 oz P.T.
	AG - .05 oz P.T.		AG - .18 oz P.T.
	PT - .60 oz P.T.		PT - .66 oz P.T.

# 9-C	AG -- .42 oz P.T.		
	PT -- .23 oz P.T.	PT -- .72 oz	P.T.

R. BLACKLER
1150 58TH STREET
SACRAMENTO, CALIF. 95819

CON'T

# 8-A	AU -- .18 oz P.T.	# 8-B	AU -- T.	# 7-C	AU - .05 oz P
	AG --- .07 oz P.T.		AG - T.		AG - T.
	PT -- .38 oz P.T.		PT - T.		PT - T.
# 6-C	AU -- .07 oz P.T.	# 5-C	AU -- T.		
	AG -- T.		AG -- T.		
	PT -- T.		PT -- .08 oz P."		
# 4-C	AU -- .02 oz P.T.	# 3-C	AU -- T.		
	AG -- T.		AG -- T.		
	PT -- .05 oz P.T.		PT -- T.		
# 2-C	AU -- .03 oz P.T.	Tailings	AU -- T.		
	AG -- T.		AG -- T.		
	PT -- .05 oz P.T.		PT -- T.		

As other elements exist such as Chromite Titanium, Columbite, & Copper with added values in the Rare Earths as Cesium, Lanthanium, Neodymium, & Zirconium, these elements are possible for marketing as a by-product from the precious metals recovery

Sincerely;
R. Blackler

R. Blackler

R. BLACKLER
1150 58TH STREET
SACRAMENTO, CALIF. 95819

R. BLACKLER
1150 58TH STREET
SACRAMENTO, CALIF. 95819

7-22-82

M. Skopos
5901 Moss Cr. Cir.
Fair Oaks, Calif. 95628

Oatman, Ariz.
Santa Fe Mining Dist.

Dear Sir;

Your ten ore samples submitted to me for analysis & recovery of the precious metals has been determined as follows;

#1 Sec. 3
AU ---- .06 oz P.T.
AG ---- .12 oz P.T.
PT ---- T.

#2 Sec. 3
AU ---- .05 oz P.T.
AG ---- .16 oz P.T.
PT ---- T.

#3 Sec. 9
AU ---- .04 oz P.T.
AG ---- .03 oz P.T.
PT ---- T.

#4 Sec. 9
AU ---- .05 oz P.T.
AG ---- .03 oz P.T.
PT ---- T.

#5 Sec. 15
AU ---- .08 oz P.T.
AG ---- .14 oz P.T.
PT ---- .02 oz P.T.

#6 Sec. 15
AU ---- .07 oz P.T.
AG ---- .04 oz P.T.
PT ---- .02 oz P.T.

#7 Sec. 23
AU ---- .06 oz P.T.
AG ---- .02 oz P.T.
PT ---- .01 oz P.T.

#8 Sec. 23
AU ---- .07 oz P.T.
AG ---- .04 oz P.T.
PT ---- .01 oz P.T.

#9 Sec. 21
AU ---- .09 oz P.T.
AG ---- .02 oz P.T.
PT ---- .02 oz P.T.

#10 Sec. 21
AU ---- .10 oz P.T.
AG ---- .04 oz P.T.
PT ---- .02 oz P.T.

As many other metals of lesser values exist in the samples listed, a report of these elements will be given upon your request.

Thanking you
Sincerely,
R. Blackler

R. Blackler

Wattman Blaney

Mr. Alfred Leonpacker

October 25, 1982

President

Interstate Minerals Corporation

P.O. Box 52005

Lafayette, LA 70505

Dear Mr. Leonpacker:

As requested, Mr. Vincent Orlando, Mr. James Papas and I made a study of the company's holdings, namely the NW/4 section 12 and the NE/4 section 14 T 19 N, R 21 W of the Arizona coordinate system.

Various samples were submitted for testing by a total of five agencies. The results are: Section 12 contains approximately 1,600,000 tons of material which averages approximately 0.031 ounces of gold, which at a price of \$425 an ounce has the value of \$13.19 per ton.

Section 14 contains approximately 3,000,000 tons of material which averages approximately 0.0462 ounces per ton of gold, for a value at current prices of \$19.62 per ton. These values indicate that the area owned by the company is extremely valuable as a placer.

The material is inter-fingered with bands of caliche which carry valuable metal and must be broken down to a size of 100 mesh to insure the liberation of the entrapped gold.

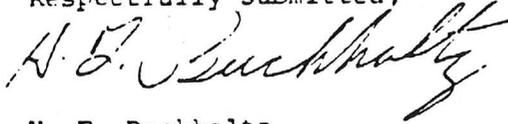
The stream beds do not carry values near the surface but appear to start carrying values at a depth of ten feet, and the values appear to increase as the bed rock is approached.

The areas owned by the company but which have not been tested appear to be physically and geologically the same, so the conclusion could be drawn that they parallel the tested areas in recoverable values and that the method of production could be similar. This does not mean that they do not need to be tested and explored.

Further testing is necessary to determine the best method of liberating the gold from the calcic, clays, etc.

It appears that the production choice is between the Richer cone and heap leaching methods, but further tests are required to see which of them or if a combination of concentration methods is most applicable.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "H. F. Buchholtz".

H. F. Buchholtz
Chief Engineer

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Metals Engineering	

LOCATION:

The Interstate Minerals Corporation's mining claims are located in the state of Arizona on the western slope of the Black Mountains near the Colorado River. All of the sections claimed are located in T 19 N, R 21 W of the Arizona coordinate systems. The sections claimed from the BLM are sections 1, 4, 12, 13, 14, 22, 24, and from the state of Arizona section 16.

ACCESS:

The property is reached by traveling south on Arizona route 95 for a distance of 13.8 miles from the junction of Arizona 95 and 68, or 10.4 miles from Fullhead City, thence 6 miles east on a dirt road until a power line road is reached. On this road travel 2.5 miles northward until another dirt road is reached. Travel 2.2 miles along this dirt road until you reach the center of section 12. This area has been used as the focal point for the investigations. From here the other areas under claim can be reached either by dirt roads or by cross-country jeep travel.

CLIMATE AND TOPOGRAPHY:

The claims are in the Oatman Mining district and are located on the western slope of the Black Mountains. Many of the gold veins of the Oatman district are located in these mountains; particularly the Gold Road vein, the Midnight vein, and several others. The western drainage from these mountains is the source of the alluvial gold.

The majority of the property is on the alluvial fan or outwash plain of these mountains. The area closed to the mountains has igneous rocks protruding from the alluvial fan. The fan itself has been dissected by numerous dry gulches which drain the area westward in the direction of the Colorado River. The Times gulch is the major drainage system and dominates the southern portion of the claims. Although it is normally dry, it evidently on occasion carries

a large volume of water.

The climate is extremely arid with little rain, which does occur in late summer or early fall. The summer temperatures are extremely hot but the following yearly temperatures are warm but not uncomfortable.

It is estimated that the annual rainfall is between 7 and 9 inches. There is no snow to impede operations. However, some rainstorms are so severe that they may halt operations for a day.

WATER:

It is not feasible to count on any water except that which can be developed by wells. It is not practical to impound any runoff water, as evaporation would negate any long-range storage facilities. However, all possible reuse of water must be planned for. At present there are two wells in the claimed area. One is located in section 12 and is reported to produce approximately 1,000 gallons per day. In section 10 there is a well with 8-inch casing. It is stated that this well is 1,100 feet deep and reported to have considerable flow; however, no data is available and pump tests will have to be performed on the well to determine its yield. Local knowledgeable sources claim that well water is available throughout the area.

HISTORY:

Gold was first discovered in the Oatman area in about 1864 and some small mining was done. It was not until 1902 that any real production took place. Mining then progressed and slackened until the early 1930's, when most of the mines were closed. There has been some leasing in the area. The main veins were the Gold Road, Tom Reed, Pasadena, Mallery, American, Esperanza, Crown Point, Midnight, Hardy, among others. It is highly probable that more will be found by using modern techniques.

In spite of the mining history of the district, little investigation has been made as to the potential of placer mining in the drainage areas of the district.

GEOLOGY:

The rocks of the Oatman district comprise a closely related series of Tertiary volcanic flows, with associated tuffs and some subordinate beds of conglomerate or breccia, sandstone, shale and limestone. The volcanic flows rests as a whole on Precambrian crystalline rocks chiefly granitic, and have been invaded and displaced in part by masses of porphyry that are closely related in composition to some of the flows and probably came from the same molten magma. They also are cut by numerous dikes and small irregular intrusive bodies of rhyolite and quartz. The main ore-bearing formation is the Oatman Andersite called the "green chloritic andersite;" the veins occur within fissures caused by pre-mineralization faulting. There has also been post-mineral faulting. The last of the igneous rocks was a thin flow of olivine basalt.

Following the eruption of this basalt the region was faulted and tilted. This was followed by a long period of erosion lasting to the present time. The result is the presence of alluvial fans which are dissected with dry stream beds, gravel capped ridges. These ridges contain well bedded fluvial deposits interbedded with bands of caliche.

OCCURENCE OF GOLD:

Gold is to be found within the whole alluvial area, as the present veins undoubtedly were eroded at the same time as the surrounding rocks.

A sand and gravel operation at Bullhead City, 6 to 7 miles from the parent mountains, is recovering placer gold at present in its operations and is doing so very profitably.

There are two distinct areas within the alluvial fan. One is close to the parent igneous rocks and therefore the parent veins. The other is at a distance from these sources.

The area close to the sources has igneous rocks protruding through the alluvial fans and are bisected by dry stream beds which apparently are quite deep and are filled with alluvium. Test holes were dug in these stream beds with a backhoe. The material in the holes was panned at intervals from top to bottom. The top material carried no values; however, at 12 feet, the limit of the backhoe's capability, there was the beginning of measurable values. One can only assume that the values had migrated to depth through the porous alluvium which made up the stream beds.

These stream beds are flanked by igneous rocks which obviously carry no placer values. However, they may carry small stringers with minor values. In section 12 there is a vein, on which a shaft has been sunk. This vein carries values.

The areas not having exposed igneous rock outcrops contain well bedded fluvial deposits interbedded with calechi. These fluvial deposits have been dissected by dry stream beds probably of large depth and filled with alluvium. In testing it was found that these dry stream beds also did not have appreciable values near the surface, but at moderate depth values started to show.

The ridges between the stream beds are a different story. The calechi and minor clays held the gold particles in what appears to be a more or less stationary position, for there are values not only at depth but also at the surface. In panning the test holes dug by the backhoe, no discernible difference was observed in the value content with depth.

The actual gold varies in size from very flat pieces about 1 millimeter round to extremely fine flour gold. It has been reported that some wire gold

has been found but I have not seen it. There is an unusual amount of black sands in the deposits, and in tabling some of the material there sometimes occurred a thin strip of zircon.

SAMPLING:

From September 14 until September 20, 1982, Mr. Orlando, Mr. Corner and myself were at the Bullhead deposit where we collected six separate groups of samples from the NW/4 section 12 and the NE/4 section 14. These samples were to be submitted to Mr. Blackler of Sacramento, California, Colorado School of Mines Research Institute, and Hazen Research Company for their independent evaluation.

Upon completion of our sampling program on September 20, we went to Reno, Nevada to have the samples concentrated. This was accomplished by Mr. Duke Fleckenstein, who ran the samples individually through his trommell and then through two Knudsen Bowls. The tailings from the Knudsen Bowls was passed over a sluice box to form midlings.

As the individual samples were rather small in comparison to a production run (each took from six to eight minutes to run), it was impossible to verify the calibration of the Knudsen Bowls. (Their efficiency is dependent on revolutions per minute and the particle size distribution of the material being processed.)

Six individual concentrates were obtained as well as six midlings. Two of the concentrate samples and two midlings were delivered to Mr. Blackler. Those from section 12 were labeled BA cons and BA tails; those from section 14 were labeled B2 cons and B2 tails. Leaving Mr. Blackler, we returned to Bullhead City to obtain more samples. These were to be tested as raw ore. They were to be tested by two other independent testers--one being the Advanced Construction Corporation of Carson City, Nevada. They sent their samples to Fisher & Associates, a consulting firm that does all their testing

for them. The Advanced Construction Company manufactures a jig that is reported to be an excellent jig for placer deposits. The other company is Metal Engineering Corporation of Philipsburg, Montana. They do their own testing and are reported to be experts in the leaching of precious metals.

It was felt that by knowing the capability of the respective methods of treatment and the efficiency of each, we could further evaluate the best equipment for production. We also felt that they could give a true industrial opinion as to the value of the material submitted.

Four of the remaining samples were delivered to the Colorado School of Mines Research Institute. Two of these were the concentrate and the midlings from section 12. They were combined and labeled MA1. The other two were the concentrate and midlings from section 14. They were also combined and labeled MA2.

The remaining four samples were delivered to Hazen Research Inc., and were labeled H-1 concentrate and H-1 midlings. These were from section 12 and were combined and relabeled H-1. The other samples were labeled H-2 concentrate and H-2 midlings. These were all from section 14 and were combined and relabeled H-2.

THE INVESTIGATORS:

Colorado School of Mines Research Institute (CSMRI)

CSMRI amalgamated the samples and fire assayed the residue as well as the tails. They found section 12 to be barely commercial at 0.011 ounces per ton but found section 14 to be commercial at 0.018 ounces per ton. This was at such variance with the results of the other investigators, with the exception of Hazen Research, that Mr. Erik Spiller felt uneasy and took a sample of the raw ore from section 14 and concentrated it by hand feeding about 70 pounds through a Knelson Hydrostatic Concentrator to see if it were possible that the values were lost in the concentration by the Knudsen Bowl of Reno. No

attempt was made to determine, by crushing or digesting the calichi, if the gold was unobtainable by virtue of its being tied up in the calichi. The results of his investigation showed 0.022 ounces per ton of precious metal, an increase of 22%. From the appearance it was by far mostly \pm 85% gold.

The result of Mr. Spiller's diligence indicated that much of the values were lost in the Knudsen Bowl.

Hazen Research

The results from Hazen were the most discouraging of all the tests. They came up with the concentrate and midlings of section 12 to be 0.21 ounces per ton. Since this concentrate was the result of a 50 to 1 concentration, it indicated that the gold in the raw ore was apparently only 0.0042 ounces per ton. In section 14 the concentrate contained 0.67 ounces per ton which would be 0.0134 ounces per ton in the raw ore.

Hazen concentrated the concentrate using a laboratory shaking table. They did dissolve the calichi with dilute nitric acid.

The tabling produced a concentrate, midling, tailing and slime product.

Departing from normal procedure the Hazen laboratory assayed only table concentrate. Since a metallurgical balance was not possible without assaying all products, the total amount of precious metal in the initial concentrate is not possible to determine.

It is probably safe to assume that the Hazen tabling was performed relatively well and that here again the values were lost in Reno by the Knudsen Bowl. But as has been stated there could have been large values in the midlings or tails all tied up in the clays or undissolved calichi.

Hazen reported a substance that they could not identify. As one of the investigators reported platinum in their sample, Hazen decided to test for platinum. Instead of parting the assay bead in nitric acid to dissolve any silver present, they attempted to dissolve it in aqua-regia (a mixture of

hydrochloric and nitric acids) which will dissolve silver, gold and the platinum metals, and then use atomic absorption to determine the precious metal substances and their values. However, a portion of the bead did not dissolve and could not be identified.

Mr. R. Blackler

Mr. Blackler basically used electrolytic deposition as a method of determining the values present. It appears to be a valid method of assaying; however, it will show the amount of precious metal present but not the amount of precious metal that can be extracted profitably, as the tests by the other investigators have indicated. However, this does not explain the large discrepancy between Blacker and Hazen or the CSMRI, since all three were supplied concentrates from the sample areas. Mr. Blackler reported gold in section 12 as 0.05 ounces per ton, and 0.30 ounces of silver. In section 14 he reported 0.09 ounces per ton in gold, and 0.28 ounces of silver.

It was stated earlier in this report that each sample of 1,000 pounds was run separately through the Knudsen Bowl and that the runs were of such short duration (\pm 8 minutes) that little adjustments were possible. However, Mr. Fleckenstein, the operator of the Bowl, appeared to be doing some adjusting. The only plausible explanation is that Blackler's samples were the last ones run and he may have finally gotten the Bowl into proper adjustment.

Blackler also reported twice on the samples submitted to him. One was on the 12th of October, when he reported section 12 to contain 0.03 ounces per ton of gold and 0.08 ounces of silver. In section 14 he reported gold to be 0.07 ounces and silver 0.10. He then further ground the material down to 90-100 mesh and reported from section 12 a total of 0.05 ounces per ton of gold and 0.30 ounces of silver. From section 14 he reported a total of 0.09 ounces per ton of gold and 0.28 ounces of silver.

In section 12 this is an increase of 67% of gold and in section 14 an increase of 28%. This is a strong indication that there are values which are tied up in calochi, clays or other materials, and that some form of liberation of these golds must be considered, such as a log washer or even an impact mill.

Mr. Blackler also reported platinum present in a rather substantial amount. No other investigator has found any platinum. However, Hazen did report a metal that they could not identify, even as platinum. It could be that this material, having some of the characteristics of platinum, could have been called platinum by Mr. Blackler.

Fisher & Associates

This firm does the testing for the company which manufactures the jig, in which we were interested. The sample submitted to the jig manufacturer, Advanced Construction Corporation, was raw ore from section 14. It was jigged and Fisher & Associates recovered 0.0397 ounces of gold per ton of ore at a value of \$425 per ounce of gold. This yields \$16.87. Jigs in general are known for their inability to capture very fine gold so some of the gold in the sample must have been lost. However, in spite of this apparent loss, the jig recovered more than sufficient gold to show that the project is valuable. Even Fisher & Associates cautioned about the operation of a jig with our fine gold.

Metals Engineering

This firm specializes in precious metal recovery by leaching. They have one of the few successful heap leaching operations now in operation. Their testing has caused us to consider the possibility of leaching the material of these placers.

Six samples of the ore were delivered to Metals Engineering labeled 12 H, 12 M, 12 H Calechi, 12 M Calechi, 14 H, and 14 M. They were so labeled as it was our intention to deliver the M-labeled samples to CSMRI and the H-labeled

ones to Hazen. The 12 and 14 indicate the sections these samples were taken from. The Calechi samples were samples of the typical calechi so common in the deposit. The H & M samples were identical.

Metals Engineering leached the 12 H, 14 H and 12 M calechi samples without crushing them. The results were 12 H 0.03 ounces per ton gold. At current prices this is valued at \$12.75 per ton. 14 H 0.05 ounces per ton for a value of \$21.25 and 12 M Calechi 0.02 ounces per ton for a value of \$8.50.

They then crushed the remaining samples 12 M, 12 H Calechi and 14 M. After crushing them to -35 mesh they then leached each sample, obtaining the following results: 12 M yielded 0.05 ounces per ton, an increase of 100% over 12 H, for a total value of \$25.50 per ton. 14 M for a value of 0.09 ounces per ton, again of 80% over 14 H, for a total value of \$48.25 per ton. The 12 H Calechi showed a value of 0.09, an increase of 350% over 12 M Calechi, for a total value of \$38.25 per ton.

Further testing by the Metals Engineering company determined that the gold values in the calechi were tied up in the calechi itself and not in the enclosed rocks which made up a large portion of the total calechi. In testing the gold content of the calechi and the testing of the ore in both the raw state and a ground state, they proved, as did Mr. Blacker, that there are indeed valuable metals tied up in the calechi and that some type of liberation of that gold is necessary.

SUMMARY OF INFORMATION GATHERED BY TEST RESULTS:

In examining the results of the various tests that have been performed on the material from the Bullhead deposits, it seems very clear that the following conclusions are important:

1. The discrepancy between the various testing agencies was due to
 - A. The concentration process using the Knudsen Bowl was too short in

time duration to adequately adjust the Bowls, causing the loss of much of the value.

B. Adequate testing of the materials is not possible without proper reduction of the clay and calechi materials to minus 100 mesh so as to liberate the numerous gold particles held by these materials.

2. The deposits tested definitely contain sufficient gold to make a placer operation feasible in the areas sampled and tested.
3. The location and make up (both physical and geological) of the remaining untested areas is such that they would parallel the tested areas in value as well as in physical characteristics.
4. Due to the high values tied up in the clays and in particular the calechi, some type of breakup equipment must be installed. I believe that a heavy-duty log washer will do the job very nicely.
5. Large portions of the mined material will be able to be eliminated from the actual concentration process by the installation of the proper screening system between the proposed log washer and the rest of the concentration system.
6. It might be desirable to install a Hammer mill at the end of the screen to further disintegrate the calechi particles to liberate all the gold from incrustation by the calechi at minus 100 mesh.
7. The actual concentration will be performed by either a Richer cone or an ACC Jig, depending on further production tests to be performed before the actual purchase of equipment.
8. Serious consideration must be given to the possibility of heap leaching the material. The advantage of heap leaching, if done properly, is that it has a better chance of recovering the very fine flour gold that will be lost in both the Richer cone or the jig. The difference in the recovery

of the jig results and the recovery by leaching performed by Mr. Larkin is undoubtedly due to the flour gold lost by the jig. Another plus for heap leaching is the extreme low operating cost as well as a relatively low capital cost for equipment. However, one must remember heap leaching is generally not over 75% efficient. This must be balanced against the efficiency of the jig or Richer cone.

TONNAGE CALCULATIONS:

In making tonnage calculations it is necessary to make certain assumptions, which are:

1. One ton of the material to be mined occupies 18 cubic feet.
2. The mining pit sides will have a 1 to 1 slope.
3. No tonnage will be assigned to a depth lower than the base contour of the area. In section 12 it will be 1,800 feet. In section 14 it will be 1,560 feet.

On the enclosed maps the proposed mining areas, which have been sampled, are shown as the shaded areas. The cross sections were taken at 300 feet intervals with the exception of the end sections.

NW/4 Section 12

		Cross sectional area	
		Feet Sq.	
Cross section 1		0	
Cross section 1A (sec 1 + 40 ft.)		23,400	
Cross section 2 (sec 1A + 260 ft.)		24,300	
Cross section 3 (sec 2 + 300 ft.)		22,500	
Cross section 4 (sec 3 + 300 ft.)		18,900	
Cross section 5 (sec 4 + 300 ft.)		21,600	
Cross section 6 (sec 5 + 300 ft.)		4,500	

		TONS	CUBIC YARDS
Cross section 1-1A			
<u>0 + 23400</u>	X 40	26,000	17,300
2			
18			
Cross section 1A-2			
<u>23400 + 24300</u>			
2	X 260	344,500	229,600
18			
Cross section 2-3			
<u>24300 + 22500</u>			
2	X 300	390,000	260,000
18			
Cross section 3-4			
<u>22500 + 18900</u>			
2	X 300	345,000	230,000
18			
Cross section 4-5			
<u>18900 + 21600</u>			
2	X 300	337,500	225,000
18			

	TONS	CUBIC YARDS
Cross section 6		
$\frac{21600 + 500}{2}$		
18 X 300	217,500	145,000
TOTAL	1,660,500	1,106,000
USE	1,600,000	1,070,000

NE/4. sec. 14

	TONS	CUBIC YARDS
Cross section 1		0
Cross section 1A (sec 1 + .40ft)		21,600
Cross section 2 (sec 1A + 260ft)		31,500
Cross section 3 (sec 2 + 300ft)		39,600
Cross section 4 (sec 3 + 300ft)		32,400
Cross section 5 (sec 4 + 300ft)		21,600
Cross section 6 (sec 5 + 300ft)		35,100
Cross section 7 (sec 6 + 300ft)		21,600
Cross section 7A (sec 7 + 120ft)		
Cross section 1-1A		
$\frac{0 + 21600}{2}$		
18 X 40	24,000	16,000
Cross section 1A-2		
$\frac{21600 + 31500}{2}$		
18 X 260	383,500	255,600
Cross section 2-3		
$\frac{31500 + 39600}{2}$		
18 X 300	592,500	395,000
Cross section 3-4		
$\frac{39600 + 32400}{2}$		
18 X 300	600,000	400,000
Cross section 4-5		
$\frac{32400 + 21600}{2}$		
18 X 300	450,000	300,000
Cross section 5-6		
$\frac{21600 + 35100}{2}$		
18 X 300	472,500	315,000
Cross section 6-7		
$\frac{31500 + 21600}{2}$		
18 X 300	472,500	315,000
Cross section 7-7A		
$\frac{21600 + 0}{2}$		
18 X 120	72,000	48,000
TOTAL	3,068,000	2,008,600
USE	3,000,000	2,000,000

CONCLUSIONS:

From the information above, it seems that a series of conclusions can be drawn. They are:

1. Section 12 appears to contain approximately 1,600,000 tons of material that averages approximately 0.031 ounces of gold per ton, which at a price of \$425 per ounce has the value of \$13.19 per ton. Section 14 contains about 3,000,000 tons of material, which averages approximately 0.0462 ounces of gold per ton. At the value of \$425 per ounce, it has the value of \$19.62 per ton.
2. The material is interfingered with bands of calcite which carry valuable metals and must be broken down to a size of minus 100 mesh to insure liberation of the entrapped gold.
3. The stream beds do not carry values near the surface but appear to start carrying values at a depth of 10 feet and the values appear to increase as bed rock is approached.
4. The areas owned by the company but which have not been tested appear to be both physically and geologically the same. The conclusion could be drawn that they parallel the tested areas in recoverable values and that the method of production could be similar. This does not mean that they do not need to be tested and explored.
5. It appears that the production choice is between the Richer cone and heap leaching methods but further tests are required to see which of them, or, if a combination of concentration methods is most applicable.

SUMMARY OF RESULTS

Testing agency	Section	Gold oz./tn	Valu @425	Silver oz/tn	Value @9/oz	Total value
Hazen Research	12	0.0042	1.78	0.0020	0.02	1.80
CSMRI	12	0.011	4.76			4.76
R. Blackley	12	0.05	21.25	0.30	2.70	23.95
Metals Engineering	12	0.03	12.75	1.11	9.99	22.74
	12	0.06	25.50	0.98	8.82	34.32
AVERAGE	12	0.031	13.19	0.478	4.31	17.50
Hazen Research	14	0.0134	5.70	0.0048	0.04	5.74
CSMRI	14	0.018	7.65			7.65
	14	0.022	9.35			9.35
R. Blackler	14	0.09	38.25	0.28	2.52	40.77
Metals Engineering	14	0.05	21.25	0.71	6.39	27.64
	14	0.09	38.25	1.57	14.13	53.38
Fisher & Assoc.	14	0.0397	16.87			16.87
AVERAGE		0.0462	19.62	0.142	1.28	20.90
Metals Engineering	calechi	0.09	38.25	0.65	5.85	44.10
	calechi	0.02	8.50	0.119	4.41	12.91
AVERAGE		0.055	23.37	0.57	5.13	28.50
R. Blackler	12	0.03	12.75	0.08	0.72	13.47
Not crushed	14	0.07	29.75	0.10	0.90	30.65

L I N C O L N

W A S H I N G T O N

C L A R K

NEVADA

Las Vegas

GRAND CANYON

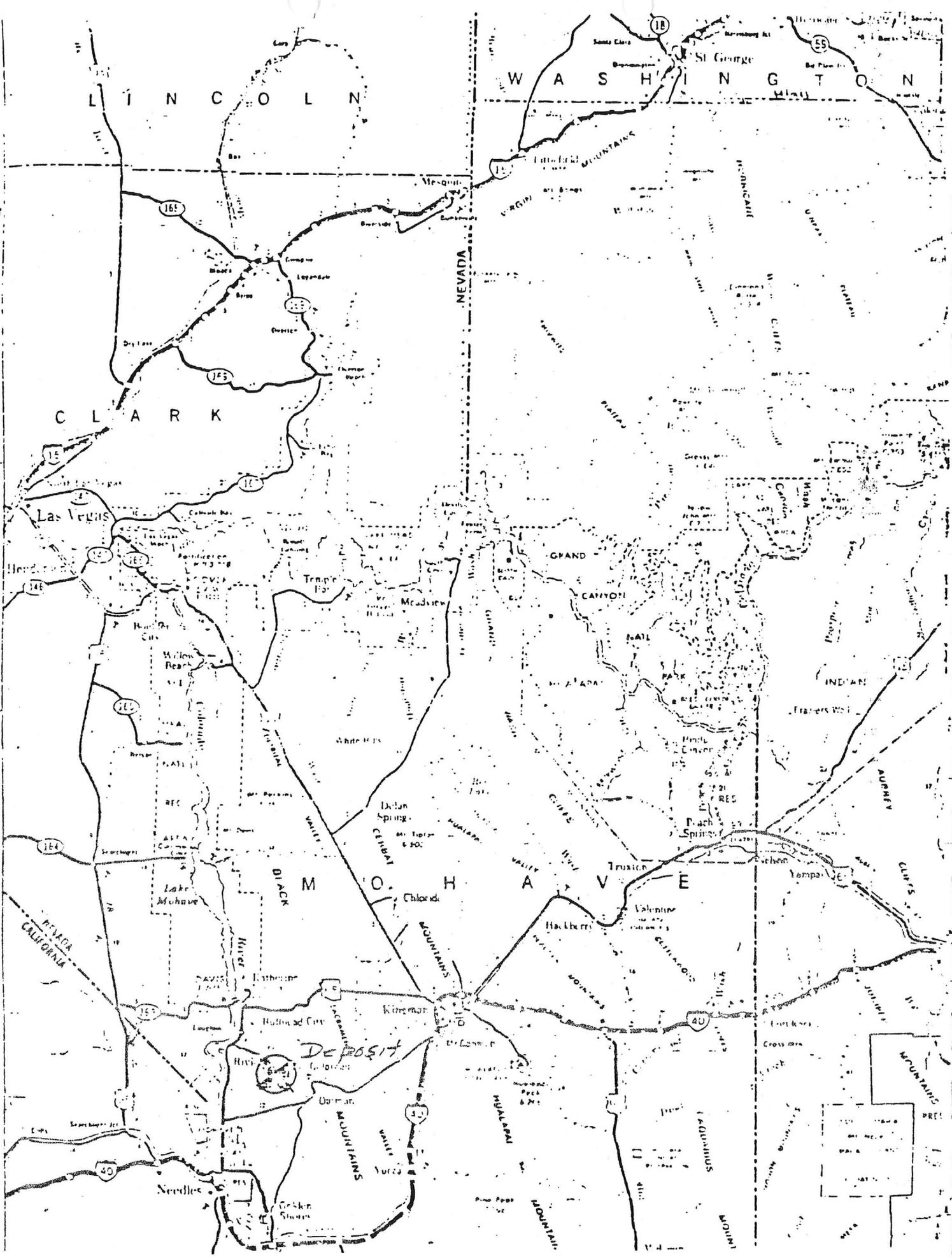
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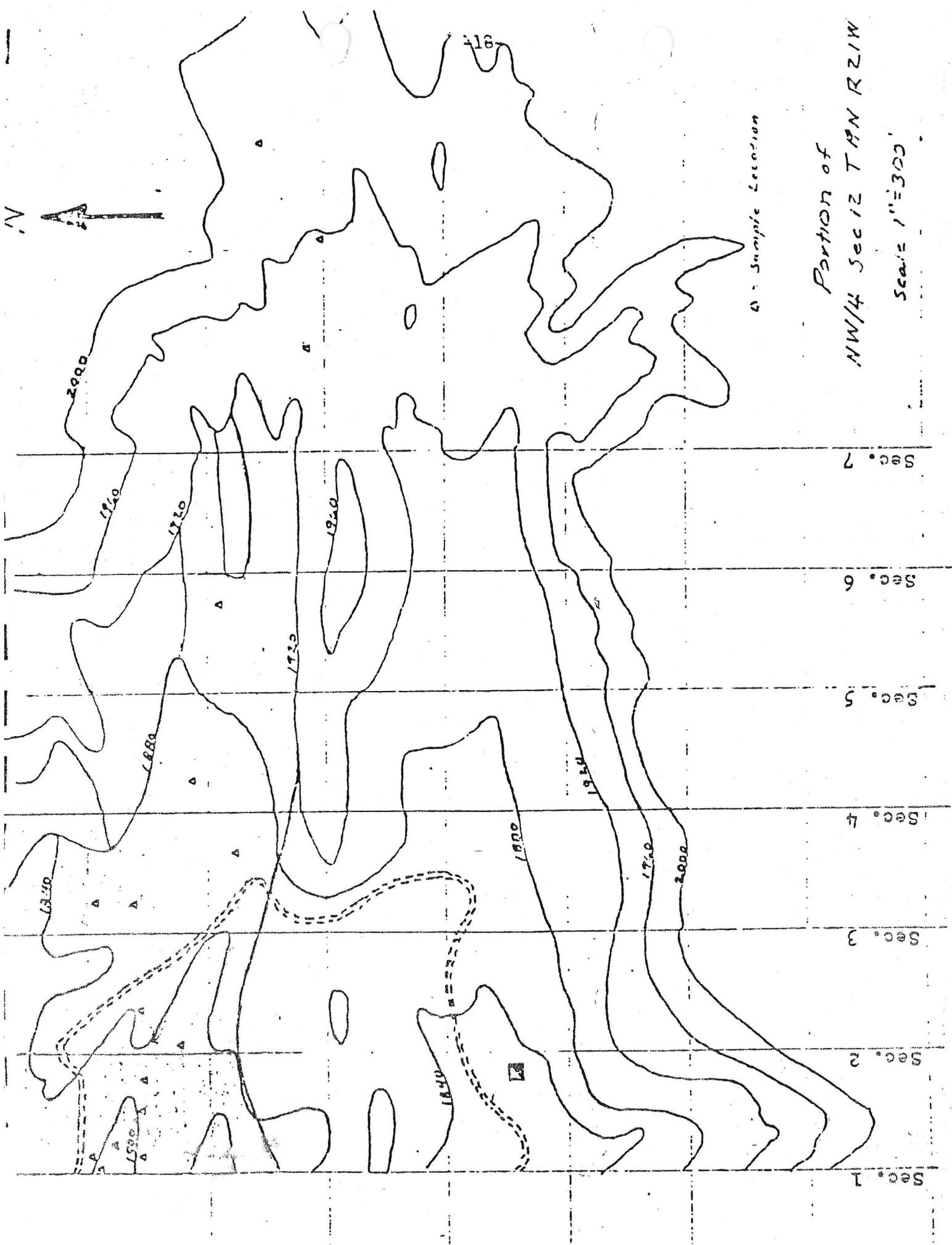
NEVADA CALIFORNIA

DEPOSIT

MOUNTAINS

MOUNTAINS



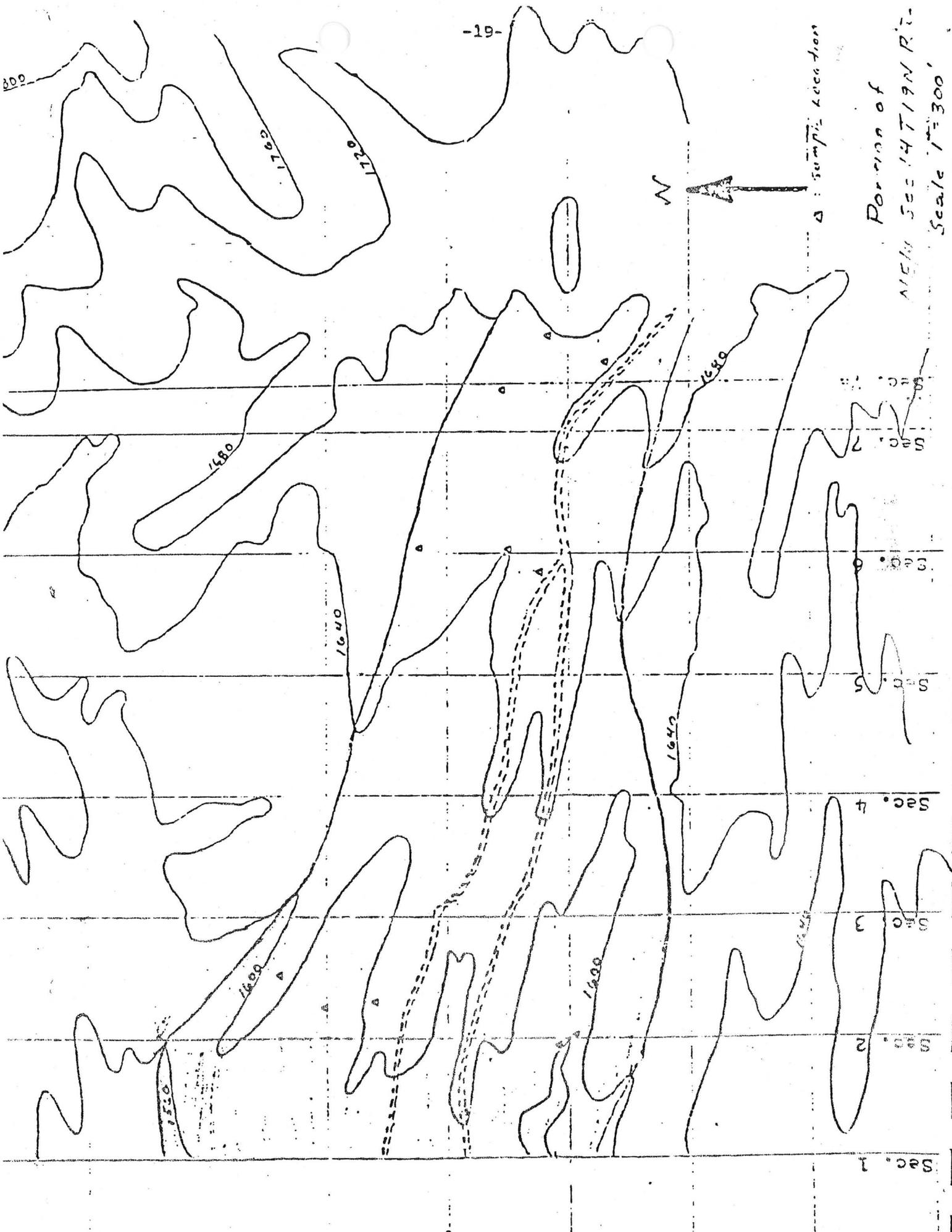


△ - Sample Location

Portion of

NW/4 Sec 12 T 4 N R 21 W

Scale 1" = 300'



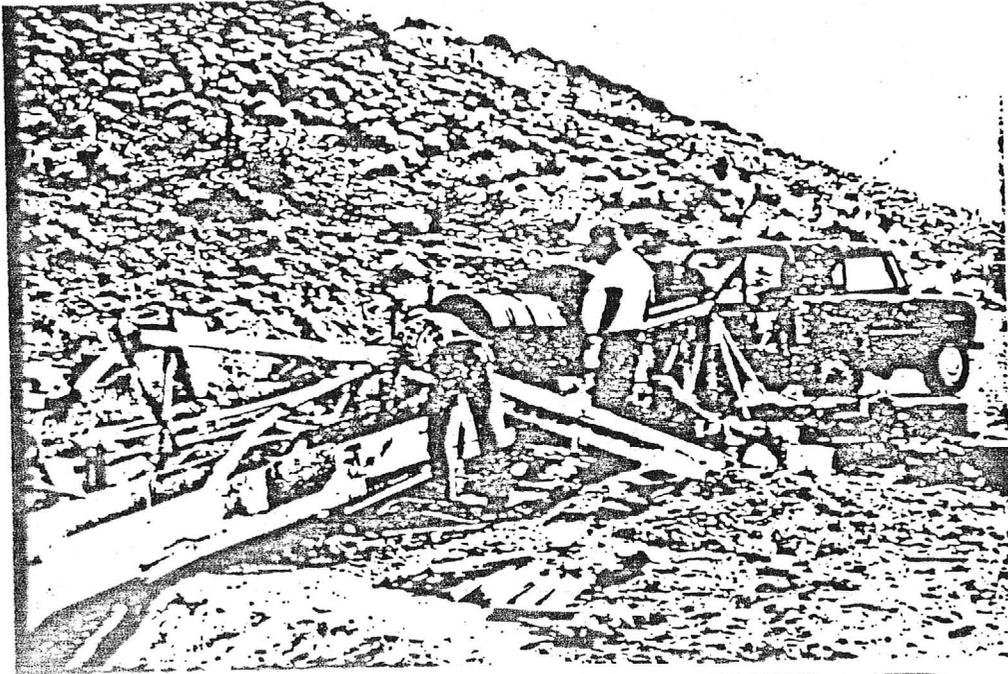
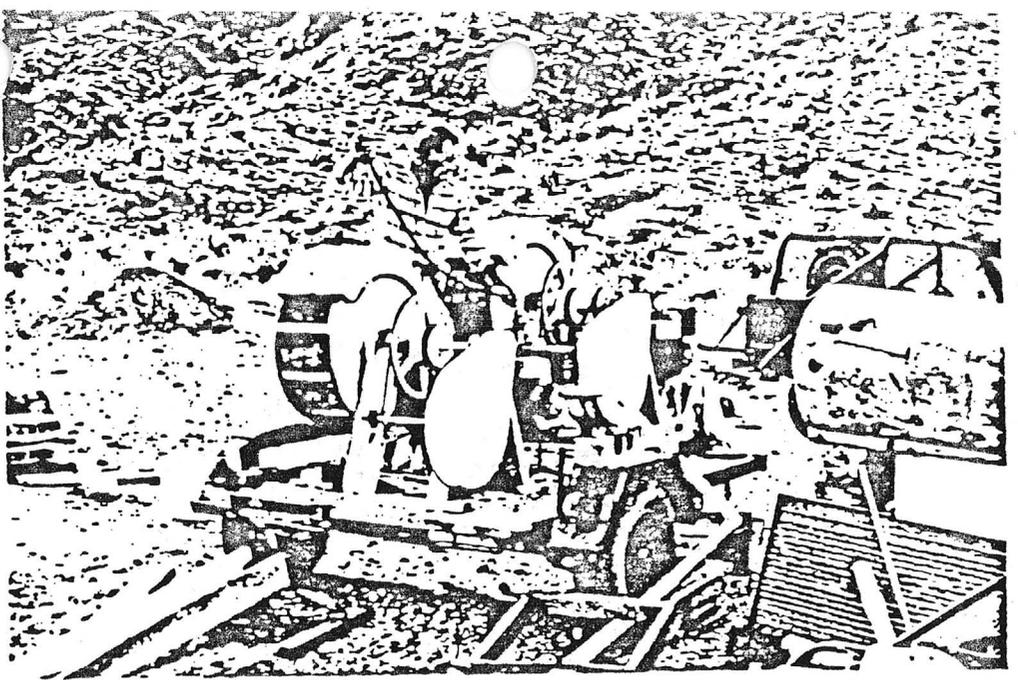
Part of
 NE 1/4 Sec 14 T19N R12E
 Scale 1" = 300'

△ : sample location



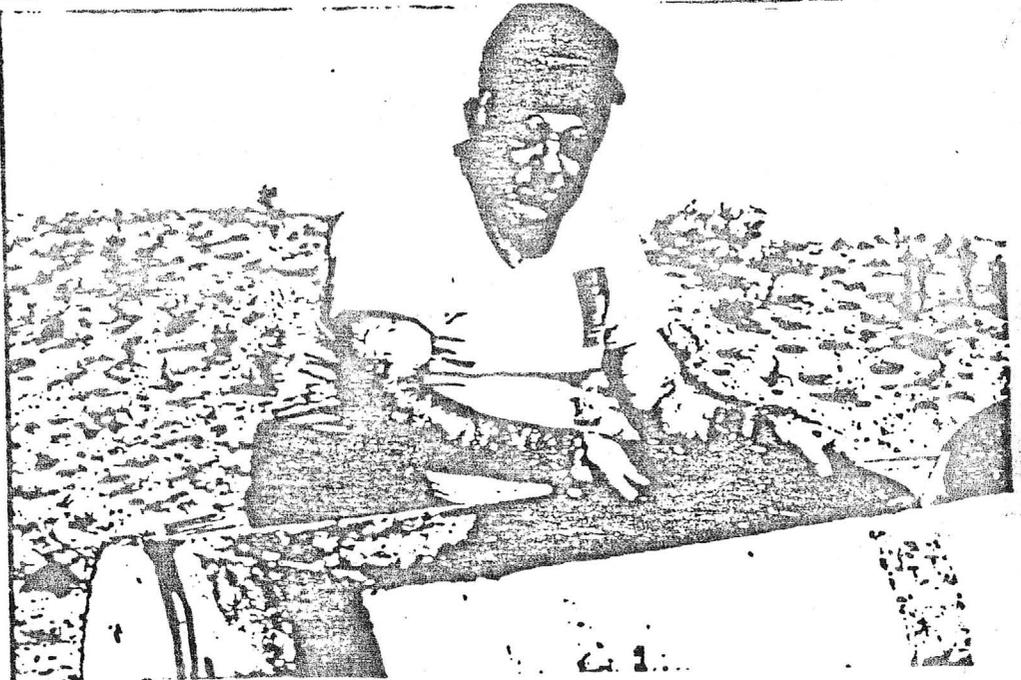
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 Sec. 8
 Sec. 7
 Sec. 6
 Sec. 5
 Sec. 4
 Sec. 3
 Sec. 2
 Sec. 1

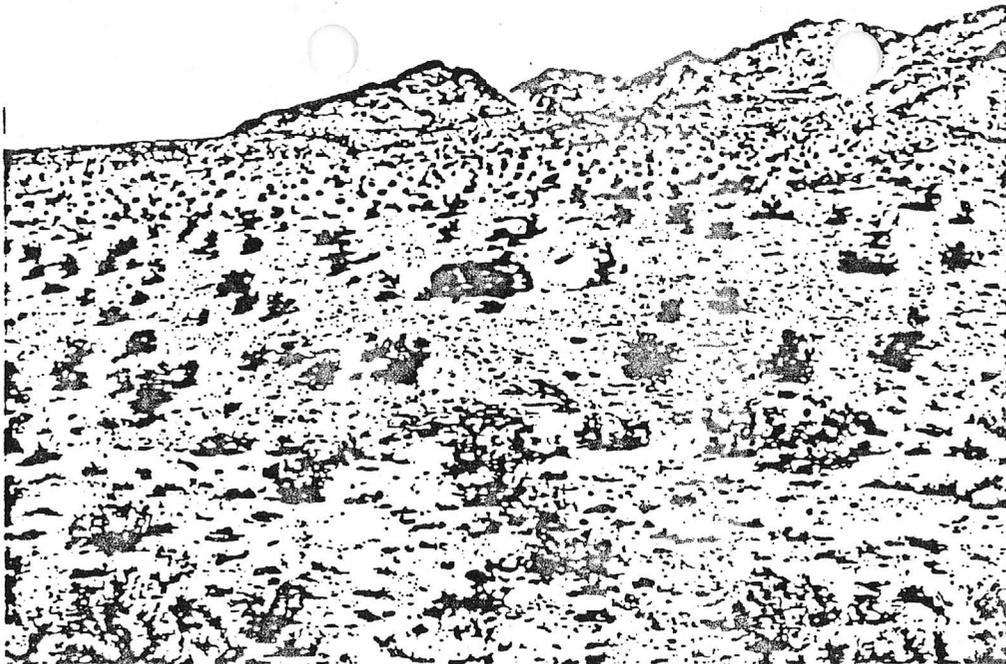
Mr. Corner, with
cully machine used
to grind calechi



Author at Mr.
Corner's trommel

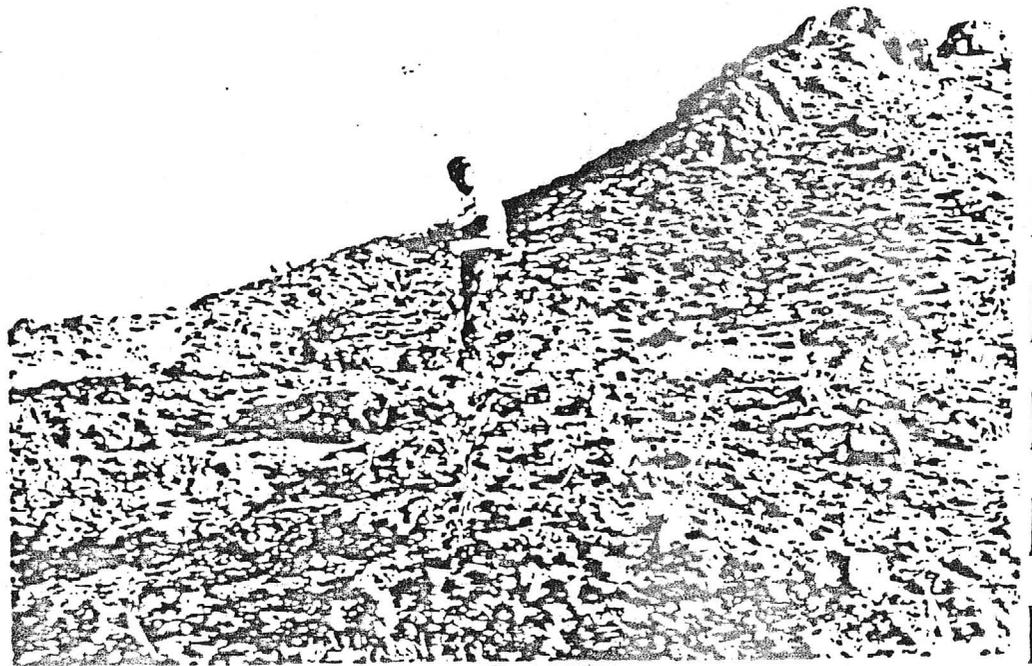
Author panning



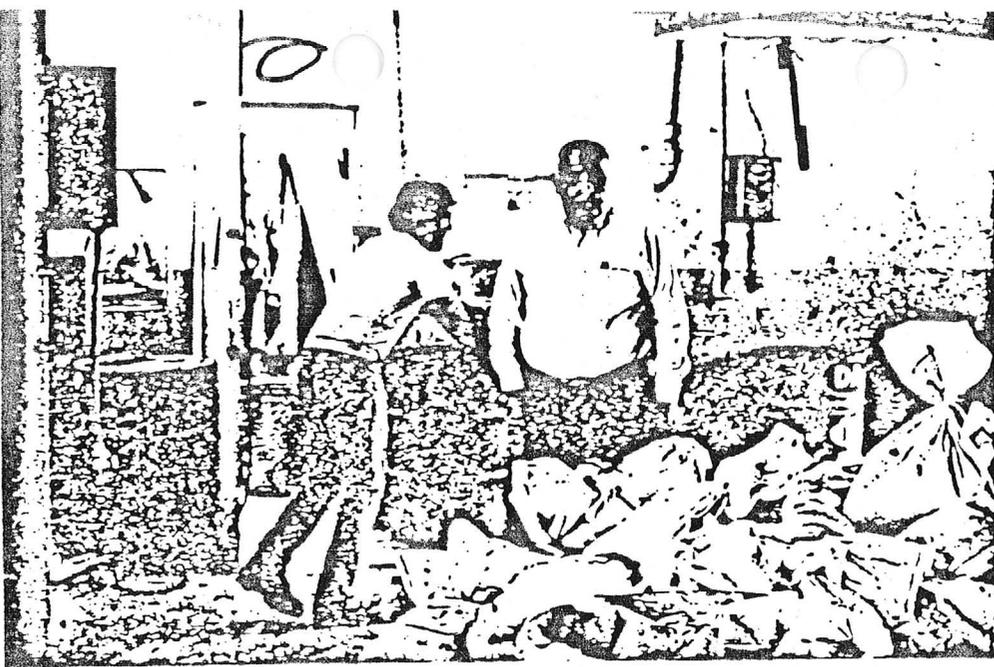


Mr. Pappas
Mr. Corner &
Author Sampling

Author on
Calechi bank

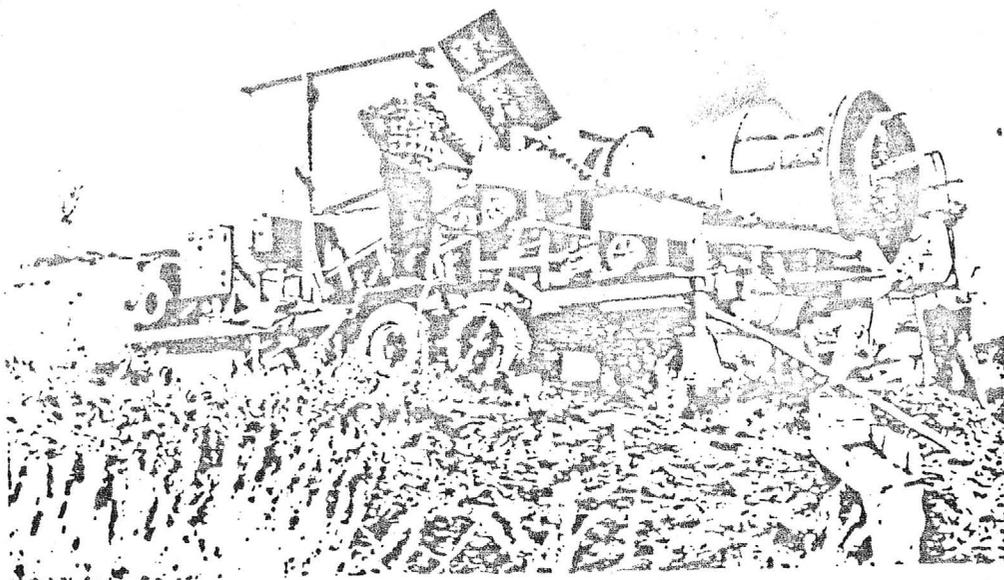
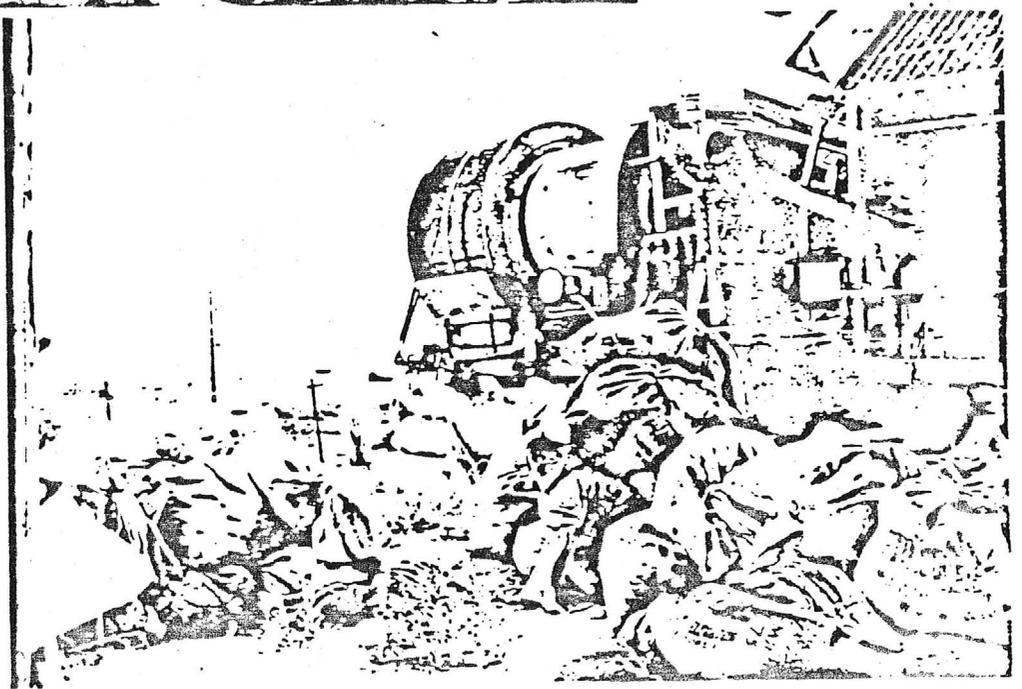


Mr. Orlando,
Mr. Corner,
backhoe operator
& Author with
backhoe



Author with
samples at
Colorado School
of Mines Research
Institute

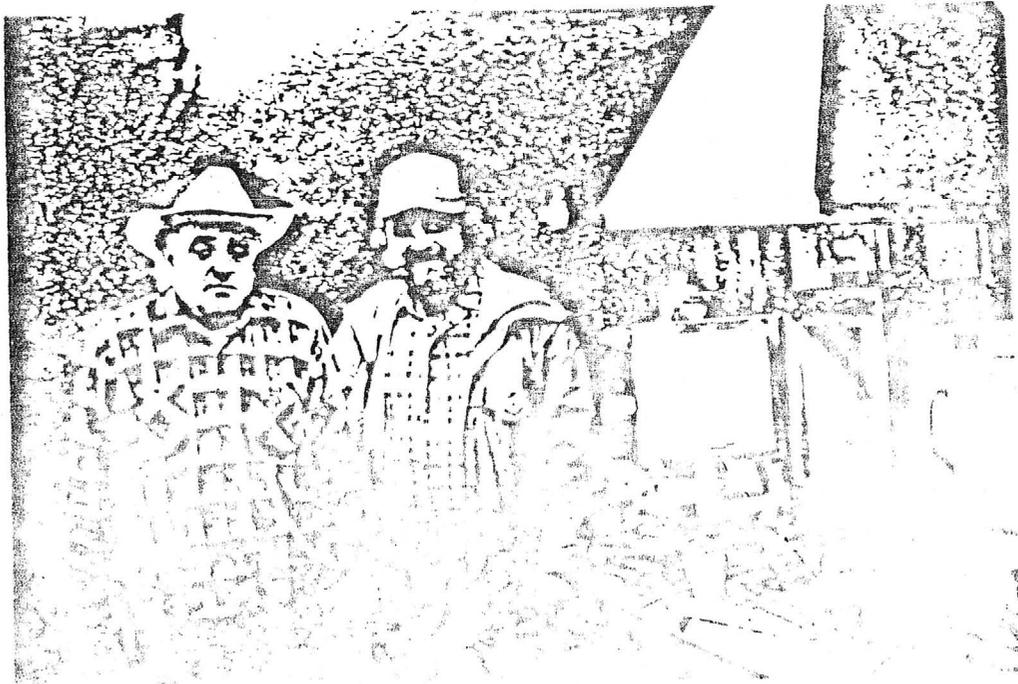
Samples waiting
to be run through
Knudsen Bowl



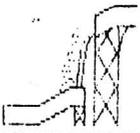
Author with Mr.
Fleckenstein and
his trommel and
Knudsen Bowl



Mr. Erik Spiller, project director
at Colorado School of Mines Research
Institute



Mr. Barker of Metals Trade Assn. (left)
with other



LENARD E. LARKIN

Oatman One placer
Mohave Co

K 1105

RECEIVED

DEC 15 1986

DEPT. OF MINES &
MINERAL RESOURCES

ARIZONA DEPT. OF MINES & MINERAL RESOURCES
STATE OFFICE BUILDING
416 W. CONGRESS, ROOM 161
TUCSON, ARIZONA 85701

10 Dec 86

Dear Dave:

~~Handwritten scribble~~
Sorry I didn't get this to you before. I thought I'd better get off my duff and get it out to you.

Anything interesting happening in your area? There is not much activity here. Oatman One personnel are still in the area but with no results that I am aware of.

I received some assays from the investors that they had received from Oatman One. They appear within the parameters of what I had found, i.e., .006 opt. They were reported in

Handwritten vertical note on the right margin: "Larkin 11/15/86"



ppm. Apparently they have a + a chemical
and electrolytic process set up on the property.

I understand that a Alvin C. Johnson Jr. PhD
from Tempe is in charge of it. They
had the assays done by J.B. Lake of Phoenix
and a Ronald McCarty? They appeared
to be proper for the material and concentration
of the samples. The big problem I had with
it is the way the Outman One worded the
letter to the investors and some statements
made by Dr. Johnson, as for him. If
you know anything about him please
drop me a line.

You and your family have a
good Christmas Season.

Don Jordan Reg Ass
Ex PD Member

Sincerely,

James F. Parker

OATMAN ONE

Hopkins Rept

The Oatman One Placer Mining Project
San Francisco Mining District
Mohave County, Arizona

Paul M. Hopkins, P.E.

11 June, 1986

ARIZONA DEPT. OF MINES & MINERAL RESOURCES
STATE OFFICE BUILDING
BIG W. CONGRESS, ROOM 161
TUCSON, ARIZONA 85701

T19N
R21W
S 12-13

INTRODUCTION: The investigation is to determine the gold mining potential for certain placer deposits found on Sections 12 and 13, Township 19 North, Range 21 West, Gila Principle Meridian, Mohave County, Arizona.

Three alternatives were to be delineated as follows:

1. Such immediate potential as might be delineated for exploitation at this time or the near future.
2. Delineate a potential that may be delineated and developed by further field work.
3. Recommend the ceasing of any major interest and funding for the placer potential for the project area and such additional sections as may be contiguous or extensions of the indicated deposits found on the above specified sections.

An alternative to the above three courses of action was found when examining the project area. There appears to be a potential for the outlining and possible development of a lode or hard-rock gold mine such as may be found in adjoining districts, eg at Oatman and vicinity.

Additional areas such as the sections to the north, west and south of these two sections have been correlated to the objective area with recommendations made for their consideration at this or a future time.

PROPERTY DESCRIPTION: The property consists of placer mining
AND TITLE : claims on the public domain administered
 by the United States Department of Interior
Bureau of Land Management. The several claims are "held" by the owners or
their agents complying with the federal and state requirements of "annual
labor" performed within the limits of the several claims for exploration,
development and exploitation as justified by results obtained from the
field work. Title search, verification of location and compliance with
the several requirements of law has been made and assurance given that all
is in proper order at this time.

The general description is that the claims cover all the appropriate
areas of Sections 12 and 13, Township 19 North, Range 21 West, Gila
Meridian, Mohave County, Arizona. The claim limits are to cover all
apparent areas of interest for alluvial gold deposits in the two specified
sections. Additional claims are located on adjoining or other nearby sections
by various parties for the same potential. Title is not vested in the
operating company to these nearby areas.

The title to operate upon the several claims in Sections 12 and 13 is
held by Oatman One Ltd., P. O. Box 9050, Fort Mohave, Arizona and P. O. Box
52005, Lafayette, Louisiana. The company management consist in part of the
following officers and or employees: Alfred Leonpacker as President;
Vincent Orlando as Vice President and Superintendent of all programs
related to the project; and H.F. Buchholtz as the Project Manager and
Chief Engineer.



GEOGRAPHY, ACCESS : The property is located on the west side
 CLIMATE AND LOCAL : of a group of small mountains including
 SERVICES : Cathedral Rock on the northeast and
 other unnamed mountains of 2,500 to 3,100 feet elevation to the east or
 within the sections of interest. The alluvial deposits of interest are
 from 1,800 feet elevation to 2,200 feet elevation in Section 12 and from
 1,500 feet elevation to 2,000 feet elevation in Section 13.

The principle areas for investigation are: (1) the various branches
 and or parallel drainages near the east-west centerline of Section 12. The
 local term, as used for identification, is "Gold Gulch"; (2) The drainage
 of "Times Gulch" as identified on maps and found near the east-west center-
 line of Section 13.

The property is accessible by an improved road beginning near mile
 post 26 on State Highway 95 thence easterly to the project area. A company
 maintained single track road has been in place for many years to the many
 parts of the project area and to the company installations near the west
 quarter corner of Section 12. These truck trails and extensions are
 constructed and maintained as needed to meet the requirements for access and
 service to this time.

E/
 Hwy 95

Water is limited on the property. All major requirements have been met
 by the small spring and by hauling water from the valley sources to the west.
 Sanitation is not provided at the company field operations installations.
 Electrical power requirements are supplied by (1) a diesel electric unit for
 the shop and laboratory. A small gasoline powered unit is used to supply the
 domestic requirements of the resident watchman and his family.

All services and supplies of common demand may be found in the local area. Mining equipment, special items and services may be found in Las Vegas, Nevada, Phoenix, Arizona or more distant sources.

The climate is arid and warm to very hot at different seasons of the year. The rainfall is less than ten (10) inches per year. The vegetation is that common to the Sonora desert, cactus, and the similar vegetation requiring a minimum of water. The temperatures range from near freezing during the winter months to highs in excess of 110 degrees fahrenheit during the summer months. The minimum maximum temperature is exceeded by many degrees when working in the sun. These temperatures are not conducive to field work from late May until mid-September.



BIBLIOGRAPHY OF : The major government publications are listed
 GOVERNMENT AND : below. Schrader, Description of the area as
 PRIVATE REPORTS : part of U.S.G.S. Bulletin 397, 1909

Ransome, Geology of the Oatman Gold District, Arizona, U.S.G.S. Bull. 743, 1923
 Staff: Placer deposits of Arizona, U.S.G.S. Bull.

U.S.G.S. Topographic maps as required.

Wells, Placer Examination, Principles and Practices, U.S. Bur. Land Managment Tech.
 Bull. 4, 1968.

Gardner and Johnson, Placer Mining in the Western United States. U.S. Bur.
 Mines. I.C. 6786, 6787 and 6788.

"Lode Gold Mines and Mining," Arizona Bur. Mines Bull. 137

"Gold Placers and Placering," Ariz. Bur. Mines. Bull. 132 and 135.

"Placer Mining in California," Calif. Bur. Mines. Bull. 135, 1946.

Lawson, Geology and Ore Deposits of the Oatman and Kathering Mining Districts,
 Arizona, Arizona Bur. Mines. Bull. 131, 1931.

Peele, Mining Engineers Handbook, John Wiley and Sons, 3rd Ed., 1945.

Private reports are those prepared by various individuals or companies
 on the project and area. These reports are listed below.

Skopas: Geologic Report on Burrys Mine, Catclaw Placer Mining Claims
 1 to 7, Mohave County, Arizona, 17 April 1982.

Skopas: Revised Geologic Report on Burrys Mine, Placer Sections
 No. 1, 10, 12, 13, and 14. Mohave County, Arizona, 22 July, 1982.

Skopas: Report on Catclaw Placer Claim No. 7, Mohave County, Arizona,
 6 August, 1982.

Buchholtz: Report on Interstate Mineral Holdings, Mohave County, Arizona, with inclosures: 25 October, 1982.

T.D. McNulty, Hazen Research: Letter report on Characterization/
Evaluation of the Oatman Plant, 7 May, 1986. *Hazen*

Hopkins, Placer Gold Deposits and Their Potential, The Oatman Mining District, Mohave County, Arizona, 26 March, 1980, and subsequent correspondence with Fischer Watts Mining Company.

Ridell and Associates: Preliminary Evaluation of the Placer Deposits in the Times Gulch area, San Francisco Mining District, Mohave County, Arizona, 25 May, 1983.

Rabb, Letter report on Metallurgy of Submitted Samples, 24 March, 1986 with additions on May, 1986.

Metal Engineer Corp., Assay report dated 11 October, 1982, Phillipsburg Montana, signed by Leonard Larkin.

Larkin, Leach recovery feasibility study in 1985. Co. files.

The cooperation of Mr. Perry Durning of Fischer Watts Mining Company Kingman and Oatman, Arizona was most helpful. The company files were made available without any restrictions as to their use.

It shall be noted that the Oatman One Ltd. ^{files} in their known entirety has been studied and correlated for this report. Those files are made a part of and considered to be appendices to this report.



GEOLOGY: The area has been studied and described in brief and in detail by different writers. The following Discussion is to form the basis for some interpretations and the potential for the project area.

The geologic record begins with two pre-cambrian granites of apparently wide spread occurrence. Intermixed with these two granites is a complex of various types of gneisses and schists, much sheared and altered. This group can be identified as to the very early age.

A second group of various types is of indeterminant age, definitely younger than the above group yet not identified as to geologic time. The second group is also mostly granite with various types of gneisses and schists forming a detrital deposit resting on the earlier complex. The detrital material is cemented by a mud, apparently formed by the decomposition of the above described rock types. This group of cemented rock can only be dated as being older than the known "Tertiary volcanics and other igneous rocks."

The Tertiary rocks are composed of a series of volcanic flows, agglomerates and tuffs. The composition varies from acidic rhyolite to basic basalts. The texture is variable, usually with some degree of prophyritic character of small phenocrysts. The second group of Tertiary igneous rocks are porphyry units varying in composition from granitic to dioritic. Volcanic plugs of rhyolitic composition are known in the district.

BT

The deposits of interest for placer material appear as Quaternary in age and composed of the many rock types listed above. All material in these deposits has been moved from outcrop to the present location by water, and or gravity. The deposits are shallow in the valleys. The long pediment slopes from the foot of the present mountains to the Colorado River is formed from this detrital material. The pediment is essentially continuous along the valley with shallow arroyos or dry stream beds cut into this generally continuous slope. These arroyos vary from nearly zero to possibly 50 feet in depth locally. The detrital material found on the long slopes as well as in the arroyos is somewhat rounded. The classification is that the material is generally sub-angular.

Rounded material is found in limited outcrops. These deposits appear to have been deposited by stream flow with appreciable volume, size of channel and velocity of varying rates as shown by the bedding exposed in cuts and trenches on the property. Continuity is inferred but not proven between the scattered occurrences as shown in some of the deeper arroyos. These beds are usually cemented by caliche, a calcium carbonate.

The structural geology is common to the Basin and Range province of the southwestern United States. High angle faults and tilting of the fault blocks appear to account for the major variation in elevations. The faults are both normal and reverse. Subsequent erosion has emphasized the boundaries of the block unit. The major faults have a nearly north-south strike. Cross faults have varying strikes of predominantly east-west trends.

The mineralization of the faults formed veins of economic interest for past mining operations in the area. This mineralization is related to the intrusive and extrusive vulcanism of the Tertiary period. The area of Sections 12 and 13 appears to have been the location of several of these vein-forming activities of the faults. The exploration by prospectors or other interested groups appears to have been minimal.



The character of the gold as recovered in the past exploration and limited production efforts indicates that the local structures are a very probable source for the gold recovered in the placer deposits of this area. The deposition of the gold is further indicated as being of different times as well as from different sources.

The rounding found in some specimens examined indicates transportation over a minimal distance of a few miles after liberation from the accompanying country rock.

Gold of crystalline and flat nature with very sharp edges show no evidence of wear by movement as part of a stream flow. Two or more source veins or areas are indicated by the color of the individual grains. The color is indicative of the purity or "fineness". An estimate is made that this transportation of the rough gold can be measured from source to point of recovery in hundreds of yards or possibly one mile as the upper limit.

Near the west side center point or quarter corner of Section 12, gold is recovered of the rounded nature. The rock in the alluvial deposit containing this gold is also rounded such as may be found in a stream after considerable travel for that rock piece from its source or origin. Stream flow direction appears to be from northeast to southwest.

PREVIOUS EXPLORATION: Unknown prospectors were in the area about 1863 or
AND OPERATIONS : before when the discoveries near Oatman were made.
The district began as a lode gold producer at that time. Very little placer
gold is known to have been produced.

Geologic and mining reports have been prepared based upon field
examinations of varying degrees of field work intensity. The early report
by Hopkins in 1980 indicated a potential but did not define any quantities
of economic interest--only that limited sums should be spent to explore the
area further. The exploration by the company for which the above report was made
did not show sufficient values to warrant the further expenditures.

In 1981 or 1982, the present company and or individuals in the company
was approached to explore for and exploit the indicated placer deposits
along and near the arroyo named "Gold Gulch" for reference by the company.
The testing for and evaluation of results obtained has been an ongoing effort
by the company since that time. The work and results obtained have been the
subject of reports as listed in the bibliography.

Hopkins used samples from the near surface of approximately one-third
cubic foot or about 35 pounds per sample for the reconnaissance work of that
time. The material was washed using an Denver Equipment Co. "Gold Saver"
unit. The location of the samples is shown on the map accompanying that
report. No economic evaluation as to contained values per unit volume for
a specific area such as to classify any area as "indicated", "probable",
or "proven" as to grade was made.



Values for volumes were thus only to be indicative for areas to extend the program. The client, Fischer Watts Mining Co. followed this program by extending the work in detail and by following the accepted practices of the placer mining segment of the mining industry. The work did not show sufficient values in any specific area to justify further efforts.

The present operating company initiated efforts, either directly or by its agents, on the property beginning in 1982. The field work began with the sample program of Mr. Skopas of Fair Oaks, California. The work entailed the digging and thence sampling of pits from 3 to 20 feet in depth. The details of the sample procedure is not given. At the least, a measured volume of material was taken from each location and thence processed in the various steps as detailed in his report. After the reduction to a concentrate, all concentrate material was processed using an electrolytic Ionization recovery unit by a Mr. Blackler of Sacramento, California. D/mr

Descriptions of the procedure to determine the values gives an immediate basis for non-acceptance. The first is that the concentrate is ground to a fine powder to liberate the metals for assay. The second is the chemical limitations imposed by the procedure does not give any finite proof that the metal as reported is in fact gold and gold only. It shall be further noted that the reported values of silver and platinum have not been verified by any accepted procedure for the assaying for silver or the platinum group metals or individual members thereof.

The projections of values and the application to obtaining measured volumes of material with contained values are thus improper. This projection was made by Mr. Buchholtz in October, 1982.



The location of the several sample points on the map accompanying the projection immediately discloses several points for non-acceptance. The first item is that the sections as outlined and drawn on the map do not have any continuity of sample data on or near each line to give an indication of the values to be found. The second point is the acceptance of values obtained by a non accepted or unproven method for determining values used by the placer mining industry. The third point is the vertical depth projection of values to be expected in the stream beds as well as those parts of the "Gold Gulch" area between the arroyos. The fourth point is the projection of values as found on limited areas to others by the geologic inference that similar deposits will contain equal values. The fifth point is the grinding of the caliche bound material to liberate gold. The grinding is an immediate step into "milling" with the costs and equipment requirements for that work requiring major capital investment and is not a part of any placer mining operation. The panning of material without weight of gold recovered for the unit panned is questioned when the statement is made as to specific areas and or depths tested by pits contain "measureable values" without so tabulating the results for the record. The testing of values in the caliche as recoverable by placer mining methods was not demonstrated nor tested in a flow sheet using only placer mining methods.

The sampling by the company from 14 to 20 September 1982 is from widely located points of the same character as the work of Mr. Skopas. The material was processed in the several methods as described in the Buchholtz report. In all the work directed for the benefit of the company the mixing of milling procedures and the placer recovery methods is most apparent. The exceptions appear to be the Colorado School of Mines Research Institute and Hazel Research results. As these results were low, the merits and validity of results have been questioned by company management.

Hazen

RA

The CSMRI results are probably the most indicative of the sample material submitted for evaluation to the several commercial organizations.

In conclusion, the values as quoted from the work of Skopas and Buchholtz using the Knudsen bowl thence various assay methods for values contained has little merit for application to the placer deposits as found in the area. Subsequent work and projections based upon this work is to be limited to the acceptance that gold is found on the property at specific locations and only by specific techniques that are not applicable to the mining of placer deposits nor the indication of the values to be recovered by that mining effort.

The company management has used the results of the various laboratories and or investigations to guide the efforts for: (1) the testing the values contained, (2) the recovery requirements and techniques used and (3) the basis for an on-going program to develop a method of recovering values as quoted in the reports of 1982. The tabulation of the test runs and the amount of gold recovered in total and per unit volume of cubic yards and unit weight of tons is contained in the following tabulation. It shall be noted that no run has even approached the values as predicted based upon the earlier work by assay houses and or equipment houses processing material for contained values.

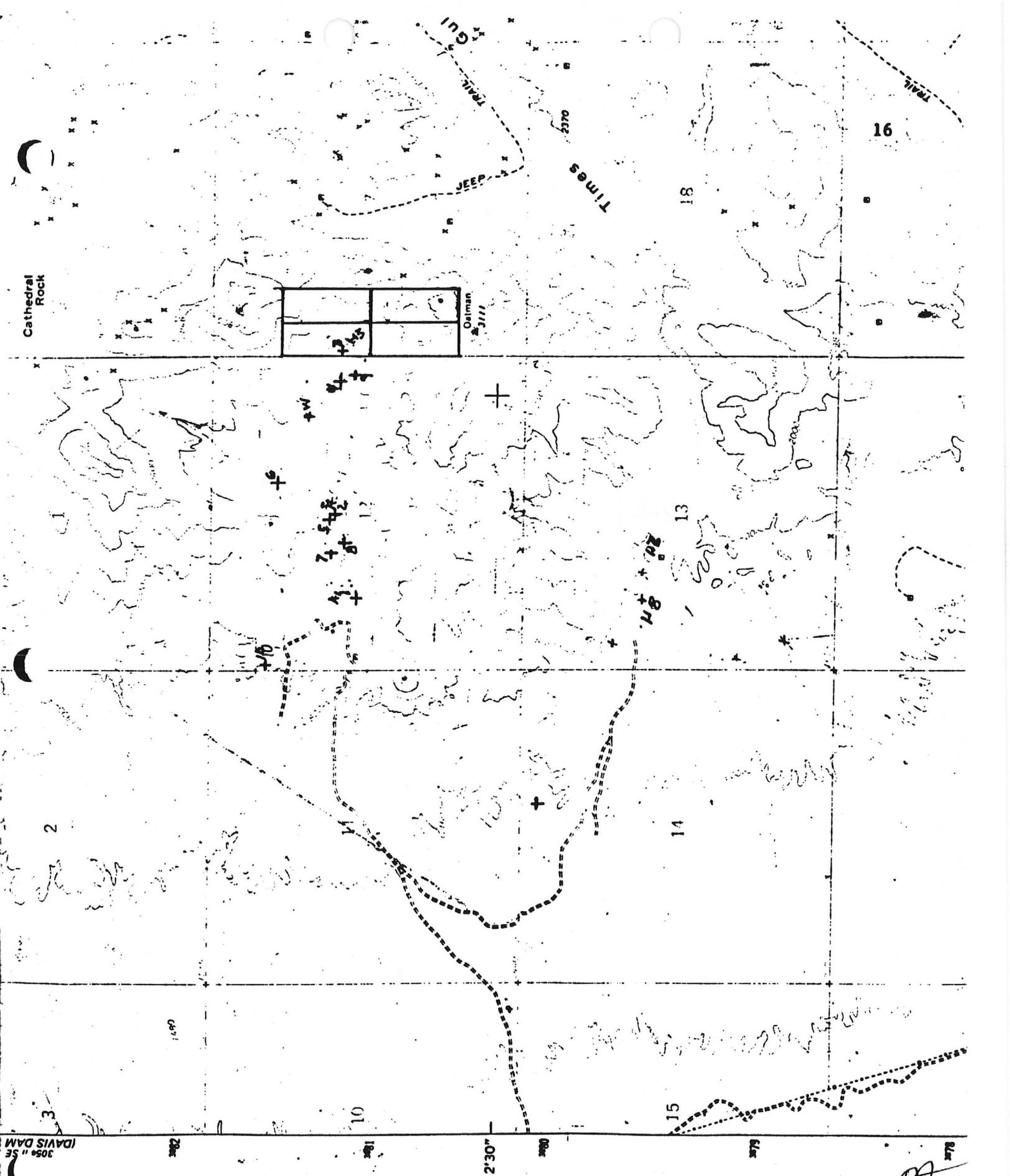


Test Run No.	Tons	Quantity		Grams	Ounces (Troy)	Gram		Troy Ounces	
		Yards ³				Gm/CP	Gm/Ton	TO/CY	TO/Ton
1.	495	330		44.06	1.417	0.1335	0.0890	0.0043	0.0029
2.	588	392		48.79	1.569	0.1245	0.0830	0.0040	0.0027
3.	402	268		112.14	3.606	0.4184	0.2790	0.0135	0.0090
4.	239	159		17.85	0.638	0.1248	0.0831	0.0040	0.0027
				<u>2.00 est.</u>					
				19.85					
		Totals				Average			
	1,724.0	1,149.0		224.84	7.230	0.1957	0.1304	0.0063	0.0042

Value @ \$350 T/O

700 Fine = \$245 Troy Ounce

\$1.54 CY \$1.03 Per Ton



Sample locations 1986 -

305° 11' SE
DAVIS DAM

Cathedral
Rock

Oilman
3111

JEEP
TRAIL

GULI
TRAIL

Times

16

18

13

14

15

10

2

2'30"

1800

1600

1400

1200

[Signature]

FIELD PROGRAM OF: During a visit to the project area while en route to a MAY-JUNE, 1986 : project in Sinaloa, Mexico, the question of sampling procedures, recovery of values, assay procedures; and contained values per unit weight (ton) and per unit volume (cubic yard) was discussed. On the return to the United States, the writer returned to the project area, arriving about 25 May, 1986. The work for this professional engagement was to evaluate the previous work and problems, the establishment of recognized procedures for further evaluation and finally make recommendations as to the merits of the project.

Equipment and supplies imposed limits to the program. In view of the early results, the expenditures for correcting the deficiencies became a mote question and in view of the probable results, these costs could not be justified. Nine samples were "cut" from the sides of pits in the manner demonstrated to the field personnel. The sample material was washed using the company "Gold Miser" as manufactured by Humphrey's Corporation of Denver, Colorado. Each foot of the vertical cut from bottom to top was processed as individual units. The separate units showed the vertical distribution as found in the deposits. The locations were in the arroyo bottoms, along the sides of arroyos and apparent areas of potential. The locations were acceptable as indicative to form the basis for recommendations for further work upon the project area.

The results are tabulated in the following table.

Sample No.	Vol. Cont.	Mg Aw	Mg Acly	Mg/Ag	9/64	\$/Tux	09/2044	03/0	09/2044	09/2044
H1	4.75	0.86	4.08	3.26	3.84	2.57	0.00016	0.00010	0.00007	0.00003
H2	8.00	0.84	2.835	1.89	2.23	1.49	0.00009	0.00006	0.00026	0.00017
H3	9.5	4.56	12.96	8.64	10.21	6.81	0.00033	0.00022	0.00023	0.00015
H4	9.0	2.96	8.88	5.92	7.00	4.66	0.00029	0.00019	0.00003	0.00002
H5	13.5	0.06	0.02	0.08	0.09	0.06	0.00004	0.00002	0.00003	0.00002
H6	9.0	1.10	3.3	2.2	2.60	1.74	0.0001	0.00007	0.00009	0.00006
H7	6.0	0.37	1.665	1.1	1.31	0.87	0.00008	0.00003	0.00004	0.00003
H8	3.5	0.24	1.85	1.23	1.46	0.97	0.00006	0.00004	0.00005	0.00003
H9	3.5	0.40	3.09	2.06	2.43	1.62	0.00009	0.00006	0.00007	0.00005
H10	-	-	-	-	-	-	-	-	-	-
H11	-	-	-	-	-	-	-	-	-	-
H12-1	2.0	1.78	159.03	106.02	125.28	83.52	0.00511	0.00341	0.00403	0.00269
5A1	5.0	1.2	10.26	6.84	8.08	5.30	0.00033	0.00022	0.00026	0.00017
5A2	5.0	0.8	4.32	2.88	3.40	2.27	0.00013	0.00009	0.00011	0.00007
12	5.0	0.35	1.89	1.26	1.49	0.99	0.00006	0.00004	0.00005	0.00003
#12B2	1.5	0.68	-	-	-	-	-	-	-	-

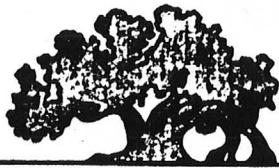
⊗ 700 fine

⊗ 700 h

$$1 \text{ mg Ave } 700 \text{ fine } @ 350/03 = 0.7878 \text{ g}$$

31103.5 mg/09704

Sect 12 1 to 7 of #12 Justus
14 8-9



COVINGTON
Holiday Inn

Viol Identification

6 Dr. Conc w/ Au.

Part of B.C. run on 5 Jun 86

1 Dr. Au as picked from above

1/2 Dr Au from slice above run

1 Dr. vial #1

1.3 gm Au as "picked"

1 Dr. vial #2

1.2 gm Au Amel. recovery

1 Dr. vial #1

Drill taken Pit sample the Yacoubi Rio
Mace

1 Dr. vial #2

1 Dr. vial #3

3 gm Au + Load Gold for free Milling gold Co

± 0.5 gm Au - Placer Gold - Colorado - Various Sources

It shall be noted that the recovered values do not approach the values quoted from other sources. The test samples do not approach the grade of the material as processed thru the wash unit on the project at this time.

The correlation of values recovered by the bulk runs and that found at various locations indicates that testing was based upon the small area and yardages immediately adjacent to the dry screening plant. The original continuity of the deposit in the arroyo at that location has been destroyed by the manner of attempted bulk sample testing or "limited production operations" of a day or more.

The dilution of values by the material from surface down several feet having little or no value will reduce the grade in the relationship of the several feet intervals and the contained values per vertical foot for the unit volume. It has been demonstrated that the shallow dirt of less than one (1) foot thickness can and does often contain high values that may be of interest to an individual or group capable of mining very small volumes sometimes known as a "sniping" mining operation on a mineral deposit.

Two items were planned for a final check upon the distribution of values, laterally across a channel of flow as indicated by the subsurface bedding and size of material in the individual beds.

The drainage line checked by the sample H-3 with a short tractor dozer pit was opened for the full width of the apparent channel in location. This channel is about 200 feet maximum width and is generally due easterly from the screening plant and the "recovered gold operations" of past efforts as tabulated previously. About 50 feet easterly from the center of this trench is the location of a shaft reported as 32 feet from collar to bedrock. The bedrock channel was not found. The bedrock is below the reasonable digging operation of the tractor-dozzer unit and backhoe.



Time and conditions of the gravels so exposed permitting, the company crew will sample this by a "grab sample" of several cubic feet to be washed to determine if there is any enrichment at depths below the digging depths of the backhoe when only digging from the surface. If possible these samples will be on about 50 feet intervals in the cross channel direction. The results of this work will be reported verbally on 10 June, 1986 to the writer. These results are tabulated and part of table on Page 18.



PLACER SAMPLE VERSUS: Placer values are determined by the amount of
LODE SAMPLE VALUES : metal or mineral recovered per unit volume. The
sample material is obtained in a manner appropriate to the field conditions
of the project: These techniques include drive pipe drilling, special
drilling techniques of very limited application, pits, shafts and occasional
exposed banks. The unit sample is that material from a definite vertical
interval as a component of the total vertical exposed or drilled section
to be evaluated. Channel samples from top to bottom of a pit or shaft are
usually one-half or one cubic foot per foot of depth. Drill holes using
the accepted drive pipe technique will be the volume for that interval
as a component of the total depth of the drill hole. The usual drive is
one foot with variances to meet the local conditions. The engineer changes
this interval only after a definite knowledge of the deposit that justifies
the change.

Channel samples are measured in two ways. The first is the material
as cut from the bank in convenient volume containers. The second is to
measure the physical dimensions of the cut as made in the bank for each
interval. Each measurement is made a part of the record.

The amount of gold in each interval is usually noted by the color
count of the small pieces and the measured weight of pieces of larger than
10 milligrams found. The total metal for the sample unit such as the drill
hole or a channel cut in the side of a pit is proportioned to the several
intervals using this "count" to make the distribution. A very finite procedure
for the recovery of placer gold from a concentrate is detailed on pages 92 and
93, Tech Bull. 4, U.S. Bureau of Land Management as listed in the bibliography.
The misleading information from fire assays and other unproven assay procedures
for placer deposits is discussed on page 91 of that same bulletin. For the reader,
the appropriate pages are copies as an enclosure with this report.



5. UNPROVEN PROCESSES

Many special placer machines or secret recovery processes have been "invented" or proposed. Some claim the ability to extract microscopic or colloidal gold from materials that show little or no value when tested by fire assay or by the normal methods of testing placer material. Others are intended to recover the varying amounts of fine gold admittedly lost in large-scale placer operations. These devices or schemes seem to have an unflinching attraction for miners as well as for the general public.

But despite the many "improved" placer machines and the new gold-saving methods that have been offered, the simple Hungarian-type riffle has held its place in the placer industry while most of its rivals have been discarded. A notable exception is the placer-type jig which has supplemented the riffled tables (sluices) in some dredging operations and has replaced them in others.

It can be said generally that the success of a placer operation will hinge on the throughput, a high throughput being the key to low costs. In other words, the greater the throughput the lower the unit cost. Experience has shown that to achieve the optimum working rate some recovery must be sacrificed, or put simply, it is cheaper to lose a certain amount of gold than to save it.

To date no one has demonstrated a placer recovery system that can economically replace today's methods and equipment. Operating economies made possible by the large capacity and the simplicity of conventional riffles and placer jigs more than offset the dollar value of the gold they may lose. On this basis, they yield the greatest operating profit.

Even where a new or improved recovery method may be shown to possess some potential, if it is not yet at the stage where it can be presented as a proven method or technique, the mineral examiner has little choice but to rely on standard analytical and recovery methods when making his evaluation.

REFERENCES CITED (PART VI)

- Clifton, H. Edward, Hubert, Arthur, and Phillips, R. Lawrence, Marine Sediment Sample Preparation for Analysis For Low Concentrations of Fine Detrital Gold: U.S. Geol. Survey Circular 545, 1967. 11 pp.



The report occurrence of gold in the caliche bound material is questioned on the basis of a very preliminary test. About 50 pounds of the caliche material from Section 14 was placed in two small cement mixers. Water was added and the mixers tumbled the material for about one hour. The resulting fine material, after being washed and scrubbed from the rock, was panned. The gold was amalgamated in the usual manner and a fire assay made upon the remaining concentrate. The resulting gold from this test was less than 0.005 milligrams in both cases. These tests are indicative but not positive that gold is not "in the caliche".

Very careful analysis must be made prior to any commitment of monies to this type of recovery procedure. The specific question to be answered is which of two controls determines the gold in the caliche. The first possibility is the codeposition. The second possibility is the mechanical concentration in the caliche as a "bedrock" limiting downward migration.

The values in this caliche must be sufficient to pay for the grinding to liberate the gold from the caliche binding, preferably without grinding the other rock pieces in the bedded material. This major expense will definitely increase cost.

The several research groups and or individuals that have done work on various segments of the recovery of values from the material have all conveniently omitted any study of the costs of such treatment. No preliminary estimate of time and costs and installation requirements for processing projected unit volumes or tonnages have been made. The use of untested recovery units and techniques is also discussed in Tech. Bull. 4 on page 103 as follows. (See Page 22)

The caution is that unproven techniques are most likely unreliable and possibly most unrealistic in the claims made.



LODE MINING : Specimen samples of mineralized vein material have been
POTENTIAL : found on the property. Assay values are reported as high
as about one third of an ounce gold per ton. The areas of apparent lode
deposits are up slope from the valley deposits. In several locations, the
veins appear to cross the valley or parallel the alluvial material. The
vein potential for economic deposits has not been explored. A limited funded
program to explore this potential appears to be justified. No work is
suggested prior to mid-September as the field conditions are not cost
effective during the summer months.

SUMMARY: Many parts of the following summary have been stated before.
The repetition is for emphasis.

The original reconnaissance by Hopkins of the district in 1980 indicated values were to be found in local areas of interest. These values were not economic but sufficient to justify further investigation. The company personnel of Fischer Watts Mining Co. made that further field work. The field results were; sufficient indicated values and yardages were not to be found to justify their further efforts.

The reports of value contained in the "placer deposits", particularly in areas near the west center corner of Section 12 in the vicinity of Gold Gulch, have been "repeated" to many parties at different times.

The discussion of the several procedures for the determination of placer values and areas of such deposits has been made in preceeding pages. The procedures for the determination of values shows only two parties of credibility, i.e., the Colorado School of Mines Research Institute and Hazen Research. The material presented for analysis is suspect as not representative of any major volume or weight--cubic yards or tons.

In general, the basis of all the work since 1982 is based upon the assays and procedures of that time. The company has further discounted the results by the several test runs made over the past year or so.

Accordingly, the classified quantities and reserves of previous work can not be accepted. The volumes are not present in a form such as known placer mining methods will recover the values; i.e., free washing without major treatment by grinding etc., using strictly gravity methods with or without water to obtain a product with a very high concentration of gold such as can be recovered by amalgamation or appropriate metallurgical methods.

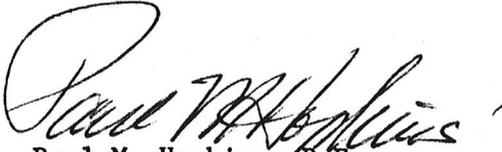


CONCLUSIONS AND: The adverse results obtained using placer examination
RECOMMENDATIONS: methods and technical limitations has not demonstrated
any major "placer" potential for the project area. The apparent potential is for
a small group of individuals as lessees or owners working as a group to mine
limited high grade volumes as found. These volumes are expected to be limited
to less than 100,000 (one hundred thousand cubic yards) in any location. A
large deposit for this type of operation would be ten thousand (10,000) cubic
yards.

The lode gold mining potential has not been determined. A limited
budget program, starting when weather conditions are more favorable for
time efficient field work, may be implemented for Sections 12 and 13,
and possible adjoining mountain terrain on the north, east and south of
the alluvial deposits.

The results of the field programs of reasonable approach has made any
program for exploration for "placer deposits" of the adjoining sections
to the west, south and north of questionable merit at this time.

Respectfully,


Paul M. Hopkins, P.E.