



CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
520-770-3500
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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$$\frac{150 \times 20 \times 4}{15} = 9600 = 6$$

$$\frac{60 \times 12 \times 4}{15} = 192 \text{ tons}$$

$$\frac{2 \times 20 \times 10 \times 6}{15} = 120 \text{ tons}$$

$$\frac{3 \times 12 \text{ tons} \text{ - Slimes}}$$

$$V = R^2 \pi H$$

$$\frac{3^2 \times 3.1416 \times 15}{3} = 3534 = 196 \text{ tons}$$

$$500 \text{ tons} = 14\% - 100\% = 500 \text{ tons}$$
$$2,570 \text{ tons}$$

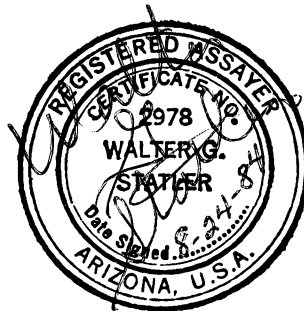
$$\frac{714,000 \text{ lbs}}{2860 \text{ lbs}} = 2,100 \text{ yds. Paved}$$

$$3500 \times 27 = 94,500 \text{ cu ft.}$$

Feldene
(PIROXICAM) 20 mg capsules

IRON KING ASSAY OFFICE ASSAY CERTIFICATE

BOX 247 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329



ASSAY
MADE
FOR

Richard E. Mieritz
2940 N. Casa Tomas
Phoenix, Az. 85016

Aug. 24, 1984

REF. NO.	DESCRIPTION	oz/ton Au	oz/ton Ag	MG'S Au	GMS	% Pb	% Zn	% Cu
8-21-1	# 2964	Tr	0.18					
-2	65	0.002	0.02					
-3	66	0.098	Nil	0.675	2.080			
-4	67	0.034	Nil	2.54	13.731			
-5	68	0.108	0.21	40.64	6.425			
-6	69	Tr	0.08					
-7	70	Tr	0.08					
-8	71	0.002	0.12					

} sample weight

CHARGES

124.00

ASSAYER

REPLY TO:

2940 N. CASA TOMAS
PHOENIX, ARIZONA 85016
TELEPHONE (602) 277-6053

Richard E. Mieritz

MINING CONSULTANT

ARIZONA REGISTERED
MINING ENGINEER AND GEOLOGIST

GEOLOGY
EXPLORATION
EVALUATION
FEASIBILITY
OPERATION

August 27, 1984

Mr. J. E. Scally
5809 East Thomas Road
Scottsdale, AZ, 85251

On August 16th, you verbally requested and authorized the writer to conduct a limited "check sampling" program on the Little Pan gold placer property, Sec. 29, T. 8 N., R. 1 E., Maricopa County, Arizona, a property in which an interest is shared by your principal.

In July 1984, Del Tierra Engineering Co., Scottsdale, Arizona, completed a program consisting of sampling the crude ore (placer material) bank, slime pits, sand pile and black sands, the latter three being products of the simple milling operation set up by Cliff Freeman, present property owner.

On August 18, 1984, the writer visited the property of concern, met Mr. Freeman, and explained the reason for his presence. The writer took "bank run" samples, samples of the slime pits, of the "sand pile" and the final product (processed) black sands.

SAMPLING PROCEDURE, CRUDE BANK MATERIAL:

The writer's method of sampling a "placer material" - (slimes, clay, sand, rock fragments and boulders) is a bit more involved than sampling hard rock veins. A "bulk" sample is required. Herewith a description of how the writer obtained and prepared the "bank run" samples:

- (1) The writer used a wood "box" which has a capacity of 2.7 cubic feet - 1/10 of a cubic yard.
- (2) A representative area of the "bank" was selected and a "channel" cut of the bank made from near the floor, upwards for 6 or 7 feet in length, 1½ feet wide in one case and 2 feet wide in the other. The channel was 3 to 4 inches deep - taking everything, including boulders and putting same into the "sample box." The "box" was heaped, filling all corners and permitting the "heap" its normal angle of repose. Heaping is necessary to compensate for the volume expansion from "in place" compaction to removed expansion of the material.
- (3) Three inch rocks to 6 - 8 inch boulders are removed, the surfaces cleaned by hand rubbing, piled and weighed.
- (4) The balance of the material is screened through a ¼ inch screen, the plus material hand dry cleaned as well as possible, and weighed - (also observed for "large nuggets").
- (5) The -¼ material is screened using a 16 mesh (window) screen.

The plus material is hand dry cleaned and weighed - (also observed for +16 mesh nuggets).

- (6) The -16 mesh material is weighed and bagged.

The above is all completed in the field at the sample site.

In Phoenix:

- (7) The -16 mesh material is washed to rid the "sands" of clay and slimes. The sands are dried and weighed. A sample of the slimes was dried.
- (8) The assayer (Walt Statler - Iron King Assay Office, Humboldt, Arizona) pans the -16 mesh material to reduce the volume to an "impure" black sand (concentrate) which is weighed and then subjected to an amalgamation process to collect the "free gold", which is then recovered and weighed. The remaining concentrate is then assayed by fire to determine the gold content not recovered by amalgamation.

By calculations, the gold content per cubic yard gravel is determined.

OTHER SAMPLES:

Other samples taken include slime pit samples, sand pile sample and a sample of the "black sand" concentrate (processed) - meaning, if the writer is correct - that the "goodies" - free gold - were removed by panning and "hand picking or collecting" the nuggets.

The writer took a sample from each of the two slime pits from the bottom(?) of a "sample" hole in each pit. These were "post hole digger" holes from which Del Tierra Engineering took their samples.

The "sand pile" sample was also taken with a post hole digger at a site "selected" near the base of the "sand pile" by Mr. Freeman - which was approved by the writer - because now, or recently in the past, the minus $\frac{1}{4}$ " material (including slimes and black sand) discharged from the SGS Gold Screw, is stacked on the "sand pile".

A grab sample from five 5 gallon buckets containing various volumes of "processed black sand" was taken. The above four samples were dried, split to a reasonable size using a Jones type splitter and fire assayed for gold and silver.

BANK RUN SAMPLE DATA:

The bank run samples taken by and the procedure used by the writer have provided useful data which is necessary for various calculations included in this report.

Each of the two samples taken had a volume of 2.7 cubic feet - 1/10 of a cubic yard, thus, a factor of 10 should be used to convert the recorded data to that of a cubic yard volume.

The data obtained on the two samples is:

	<u>Sample I -#2967</u>	<u>Sample II -#2968</u>
Weight of + 3" material	154 pounds	120 pounds
% of + 3" material	47.5%	34.5%
Weight of -3", + ¼" material	71 " "	151 " "
% of -3", + ¼" material	21.9%	43.4%
Weight of -¼", +16 mesh mat.	42 " "	40 " "
% of -¼", +16 mesh mat.	13.0%	11.5%
Weight of - 16 mesh material	57 " "	37 " "
% of - 16 mesh material	<u>17.6%</u>	<u>10.6%</u>
	<u>324 pounds</u>	<u>348 pounds</u>
	100.0%	100.0%
Weight of clean sand	30 pounds	14 pounds
% of clean sand	52.6%	37.8%
Weight of slimes	27 pounds	23 pounds
% of slimes	<u>47.4%</u>	<u>62.2%</u>
	<u>57 pounds</u>	<u>37 pounds</u>
	100.0%	100.0%

Clean sands includes "heavies", magnetite, etc.

Weight of black sands (ob- [Mr. Statler decided to use the full sam-
tained by Assayer-panning) ple as received.]

By calculation, a cubic yard of the bank run material should weight approximately 3360 pounds or about 1.68 tons. The material these samples represent indicate there is much more "dirt and clay" than in a normal, nature washed river or creek gravel. This suggests that milling or treatment problems could exist.

The above data will be used in succeeding calculations.

SAMPLE DESCRIPTIONS:

Sample #2967, Slope bank channel cut (2 feet wide, 7 feet long and 3" deep) of crude gravel from east bank of mine trench, 50 feet south of north end near Del Tierra Sample 03-2 and consisted of dirt, clay, fragments and boulders of diorite, granite, basalt, dacite, schist and rhyolite ranging in size from micron to boulders of 6 to 8 inches.

Sample #2968, Similar to 2967 (1½ feet wide, 6 feet long and 4" deep), approximately 80 feet south of sample #2967 near Del Tierra Sample 03-4 containing the same type material, probably more clay and dirt.

Sample #2964, Slime material from bottom of Del Tierra sample hole S-2-2 (northern most), from a depth of 3½ feet. Micron size material.

Sample #2965, Slime material from bottom (?) of Del Tierra sample hole S-1. Micron size material. Wet.

Sample #2966, Grab (scooped) sample from each of 5 buckets of "black sand" (processed by Freeman) [magnetics and heavies] as the concentrate is also known as.

Sample #2969, Post hole digger sample--one foot--at base of "sand pile" (discharge tails) from SGS Gold Screw. Material contains some $\frac{1}{4}$ " rock fragments, slimes and some black sand. The latter visible at the discharge of the Gold Screw.

Sample #2970, Sample of the slimes washed from the -16 mesh material of bank run sample #2968.

Sample #2971, Sample of the slimes washed from the -16 mesh material of bank run sample #2967.

SAMPLE RESULTS and CALCULATIONS:

The gold and silver values of the various samples as determined by Walt Statler, Iron King Assay Office, are shown in the included Comparison Schedule of Sample Results which also lists Del Tierra's samples and results by Arizona Testing Laboratories and Iron King Assay Office.

Samples 2964, 65, 69, 70 and 71 have gold and silver values reported in ounces per ton of material.

Sample 2966--"Black sands", (concentrate, the processed product of the "milling operation") contains FREE gold and gold "tied or married" to sand and/or magnetite or other "heavies". The amalgamation process recovers what free gold is available--and the "tied or married" gold remaining in the sample now "de-freed" is fire assayed for the "tied or married" values.

Samples 2967 and 2968 are reported in the same manner as sample 2966.

To determine the amount of "FREE gold" per ton of concentrate-black sands or for a cubic yard basis of crude material, the following calculations must be made using the proper factors.

Factors used in the following calculations are:

- (1) 10 - converting sample data to a cubic yard.
- (2) 453.6 grams equals one pound (Avoir).
- (3) 1000 milligrams equals one gram.
- (4) 31.103 grams equals one Troy ounce.
- (5) 2000 pounds equals one ton.
- (6) Gold price set at \$350.00 per ounce.

Sample 2967--Bank Run

<u>Sample</u>			<u>Factor</u>		<u>Cubic Yard</u>
Total Weight	324 lbs.	X	10	=	3,240.- lbs.
Clean Sand weight	30.271	X	10	=	302.7 lbs
FREE gold recovered	2.54mg	X	10	=	25.4 mg.
Milligrams to grams	2.54mg	÷	1000	=	0.0254 grams.
Grams to Troy ounce	0.0254	÷	31.103	=	0.0082 ounces.
Gold price \$350.-		X	0.0082	=	\$ 2.87/cuyd.

COMPARISON SCHEDULE OF SAMPLE RESULTS

Little pan Placer

Del Tierra Eng.					R. E. Mieritz				
Sample #	A. T. L.		IRON KING		Sample Number	IRON KING			
	Atomic Absorbtion		Fire Assay			Fire Assay		Amalgamation	
Bank Run	Gold	Silver	Gold	Silver	Gold	Silver	Gold	Silver	
03	Lt 0.002	Lt 0.02	Tr.	0.10					
03-1	Lt 0.003	Lt 0.02	0.002	0.22					
03-2	Lt 0.002	Lt 0.02	Tr.	0.02					
					2967	0.034	Nil	2.54mg. from 13,731 grams sand (30.271 lbs.)	
					2971	0.002	0.12	Slimes from #2967.	
03-3	Lt 0.002	Lt 0.02	Tr.	0.08					
					2968	0.108	0.21	40.64mg. from 6,425 grams sand (14.164 lbs.)	
					2970	Tr.	0.08	Slimes from #2968.	
03-4	Lt 0.002	Lt 0.02	Tr.	0.02					
03-5	Lt 0.002	Lt 0.02	Tr.	0.04					
0 -1	Lt 0.002	Lt 0.02	0.008	0.07					
01-2	Lt 0.002	Lt 0.02	0.002	0.24					
0 -2	Lt 0.002	Lt 0.02	0.012	0.17					
<u>Sand Pile</u>									
B. P. 1	0.028	Lt 0.02	0.024	0.18	2969	Tr.	0.08		
<u>Slime Pits</u>									
S-2-2	0.005	Lt 0.02	Tr.	0.02	2964	Tr.	0.18		
S - 1	0.015	0.02	0.002	0.08	2965	0.002	0.02		
S - 2	0.002	Lt 0.02	Tr.	0.06					
S - 3	Lt 0.002	Lt 0.02	0.004	0.06					
<u>Black Sands</u>									
Black Sand	0.550	0.04	0.546	Tr.	2966	0.098	Nil	0.675mg. from 2080 grams conc. (4.586 lbs.)	

NOTE:

Lt. means Less than.
mg. means milligrams.

Sample 2967--Bank Run

<u>Sample</u>		<u>Factor</u>	<u>Cubic Yard</u>
Total Weight	348 lbs.	X 10	3,480.- lbs.
Clean Sand weight	14.164 lbs.	X 10	141.64 lbs
FREE gold weight	40.64mg	X 10	406.4 mg.
Milligrams to grams	40.64mg	÷ 1000	0.4064 grams
Grams to Troy ounce	0.4064	÷ 31.103	0.01306 ounces
Gold price \$350.-		X 0.01306	\$ 4.57/cuyd.

Indicated average value--\$ 3.72 per cubic yard FREE gold.

The "tied up or married" gold-silver contents would require 6.61 cubic yards for sample #2967 and 14.29 cubic yards for sample #2968 to recover a ton of sands which respectively have a gold assay of 0.034 oz/ton and 0.108 oz/ton, or \$11.90 /ton of sands and \$37.80 /ton of sands. A completely different treatment mill would be required to recover these values.

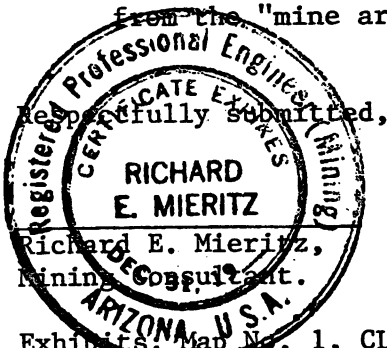
Sample 2966--Black Sands

<u>Sample</u>		<u>Factor</u>	<u>Per Ton</u>
Total Weight	4.586 lbs.	X 436.11	= 2000.- lbs.
FREE gold content	0.675mg.	X 436.11	= 294.37mg.
Milligrams to grams		÷ 1000	= 0.29437grams
Grams to Troy ounce	0.29437gm	÷ 31.103	= 0.00946 ounces
Gold price \$350.-		X 0.00946	= \$ 3.31/ton con.
Tied up gold	0.098oz	X \$350.-	= \$34.30

OPINION:

Based on the writer's limited sampling completed, the writer's sample taking and preparation procedures and the assaying techniques utilized by Iron King Assay Office at the request of the writer, the writer opines that:

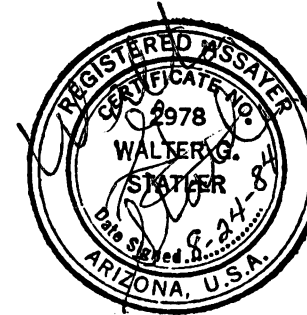
- (1) - The bank (mined) material sampled contains FREE gold values, but such values could vary from sample to sample, location to location,
- (2) - The present "milling operation" has recovered some gold values in as much as the "tails" from the operation are quite low in gold values,
- (3) - There are probably 300 tons of "slimes" in the two pits,
- (4) - There could be 200 tons of "sand" in the "tail pile",
- (5) - Probably 350 pounds of "black sands" remain in the five buckets, and
- (6) - That approximately 2,100 cubic yards of material have been removed from the "mine area".



Exhibits: Map No. 1, CLAIM MAP - Little Pan Claims
Map No. 2, LITTLE PAN PLACER - Surface workings & Mill Flow Scheme.

**IRON KING ASSAY OFFICE
ASSAY CERTIFICATE**

BOX 247 - PHONE 632-7410
HUMBOLDT, ARIZONA 86329



ASSAY
MADE
FOR

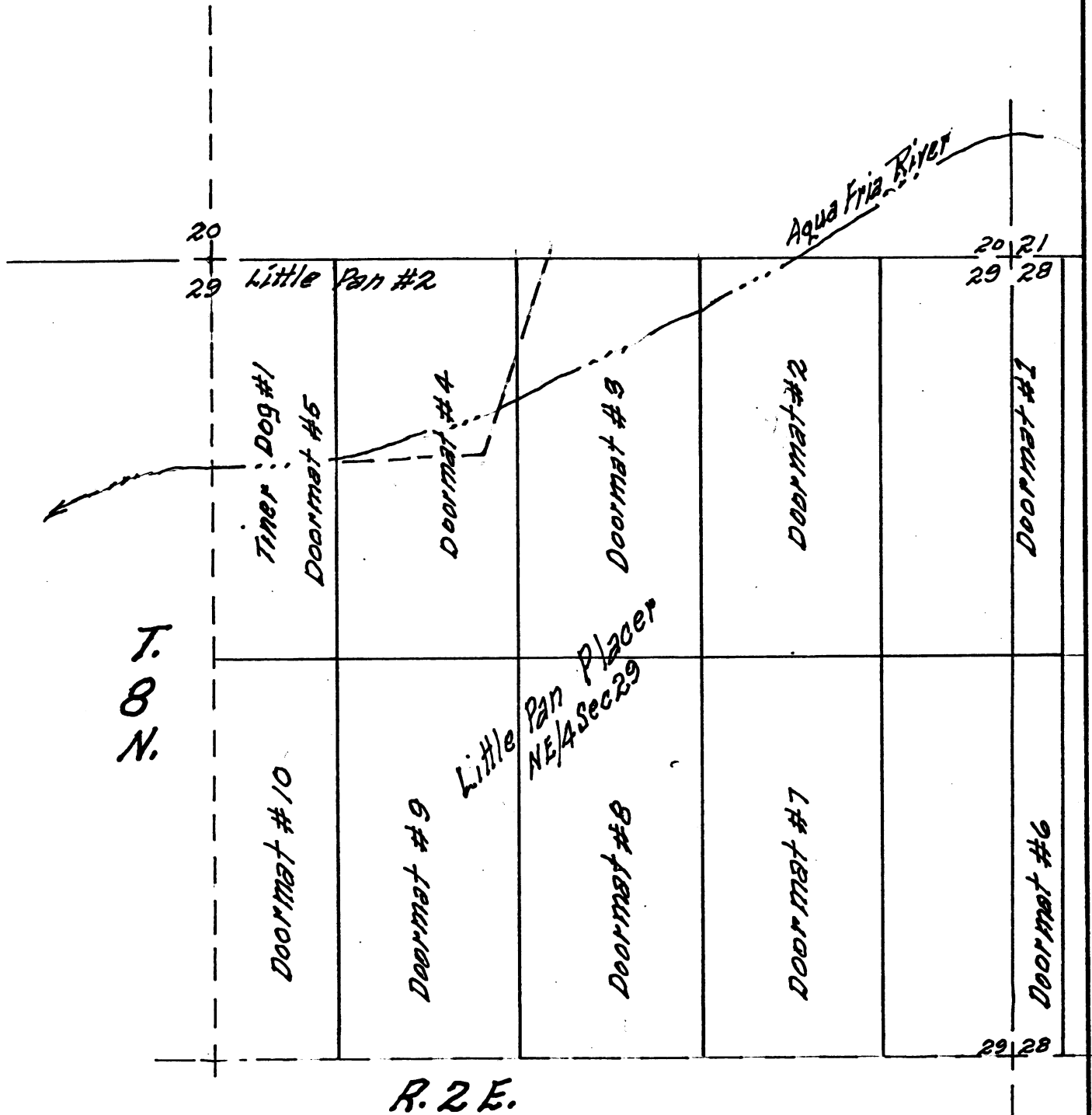
Richard E. Mieritz
2940 N. Casa Tomas
Phoenix, Az. 85016

Aug. 24, 1984

REF. NO.	DESCRIPTION	oz/ton Au	oz/ton Ag	MB ^s Au	% Fe GMS	% Pb	% Zn	% Cu
8-21-1	# 2964	Tr	0.18					
-2	65	0.002	0.02					
-3	66	0.098	Nil	0.675	2,080	} sample weight		
-4	67	0.034	Nil	2.54	13,731			
-5	68	0.108	0.21	40.64	6,425			
-6	69	Tr	0.08					
-7	70	Tr	0.08					
-8	71	0.002	0.12					

CHARGES \$ 124.00

ASSAYER _____



**LITTLE PAN PLACER
CLAIMS**

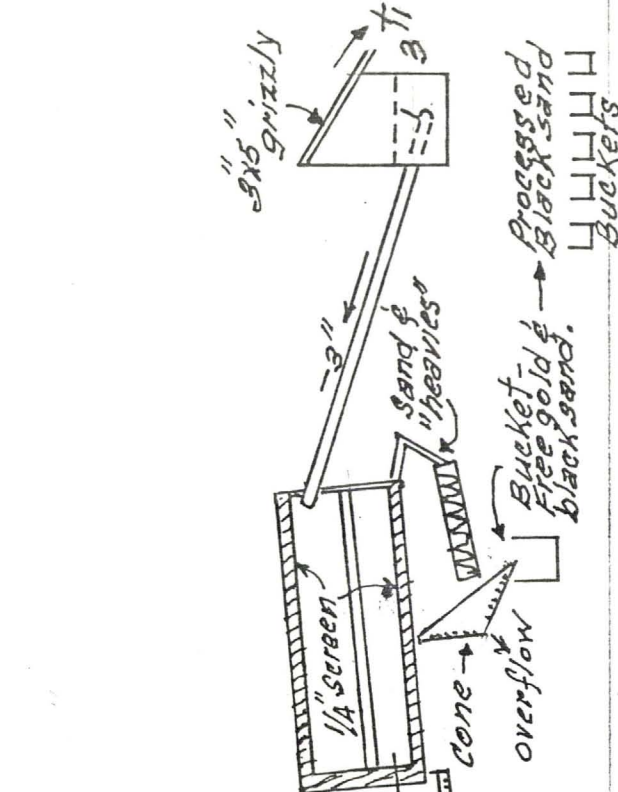
Maricopa Co., Ariz.

Scale: 1" = 500 Ft.

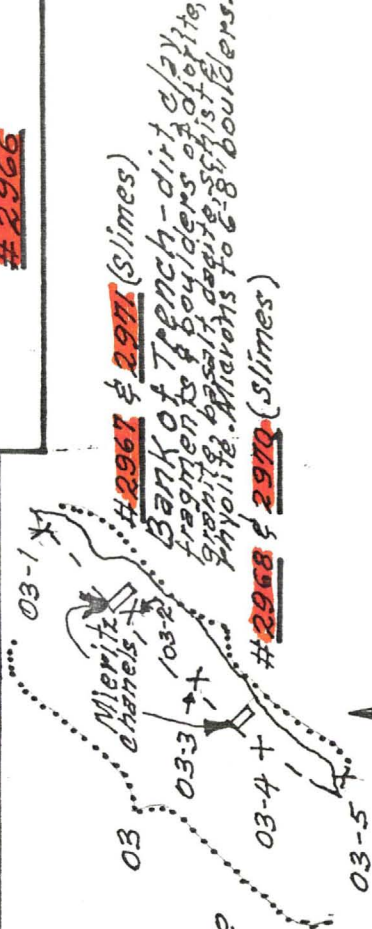
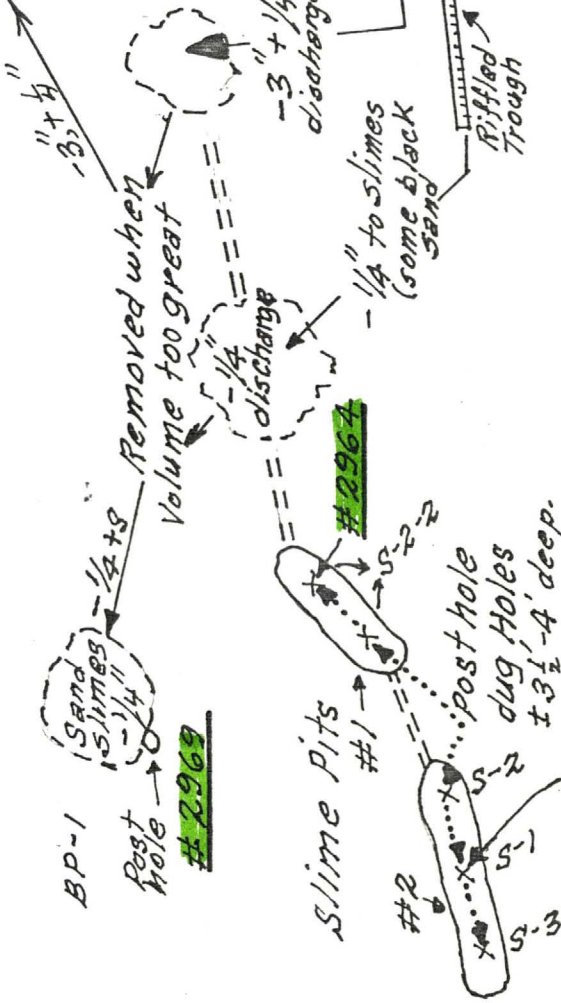
Aug. 1984

RE Mieritz

MAP No. 1



Milling Operation



Placer Material
Alluvial fanglomerate

NOTE

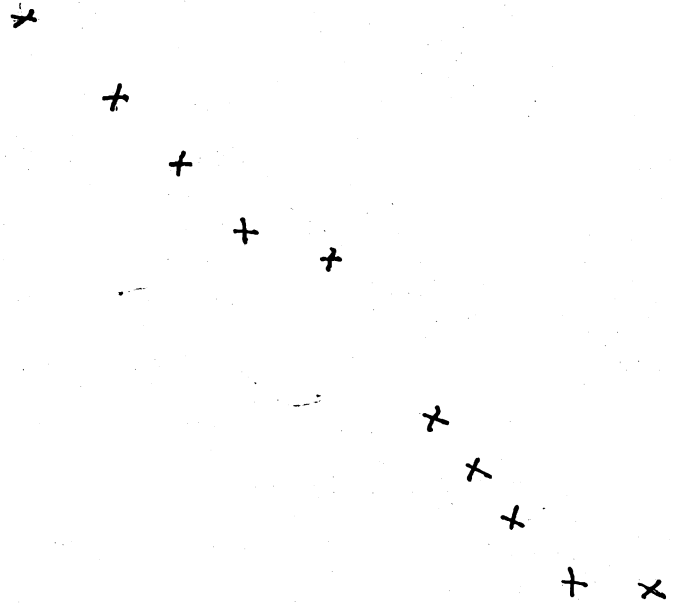
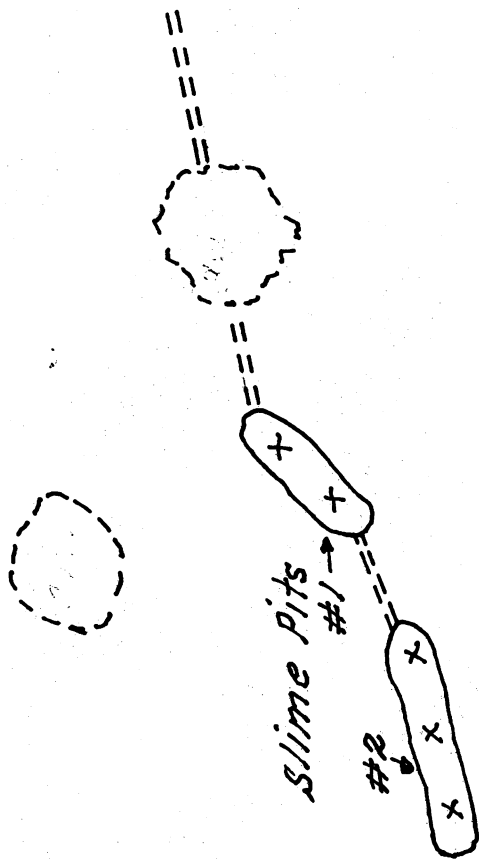
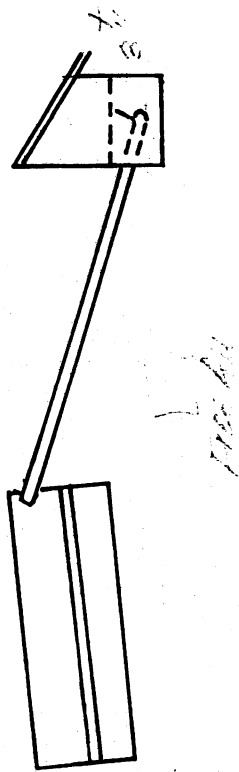
This map in part traced from sketch by Del. Tierra Engineering in their report of August 1, 1984. Additions and revisions by R.E. Mieritz August 27, 1984.

Mieritz samples 2964 thru 2971.

01-2+
0-2 x



LITTLE PAN PLACER
Sec. 29, T8N, R2E.
Maricopa Co., ARIZ.
No Scale
Aug, 1984
R.E. Mieritz
MAP No. 2



L-632-7410 Scatter

#	Au	Ag	
2964	.72	.18	Slime
2965	.002	.02	Slime
2969	.72	.08	Sand P.
2970	.72	.08	Slime #2
2971	.002	.12	Slime #1

	(Fine Hg.)	Fine (Residue)	wt of res		
	Au	Ag	Au	Ag	
2967					4.586 lbs
2966	0.675 Mg		0.098	Nil	2,080. 80.271 gms
2967	2.54 Mg		1.034	Nil	13,721 14.164 gms
2968	40.62 mg		.108	.21	6,425

1000 mg = 1 gram
 At = 29.166 gram

gms to Troy oz? 31.1035

(100)
 $28.35 \times 16 = 453.6 \text{ grams/lb}$

$21.103 \text{ grams} = \text{tiny ounce}$

~~$1000 \overline{) 2.54} \text{ grams}$~~

$21.103 \overline{) .02540000}$ $\$550.$

35000

.0092

70000

$28 \overline{) 25080000}$
 $28 \overline{) 2870000}$

.0149

.002

.700

.46400

21.103

46
~

$$16 \times 822857 = \underline{13.166} \text{ ounces?}$$

$$1 \text{ Tray} = 480 \text{ grams}$$

$$1 \text{ Ad. Oz} = 437.5 \text{ grams}$$

$$16 \times 911458 = 14.58$$

$$\underline{452500} = 28.95 \text{ gms/ounce}$$

16

$$28.41 \times 822857 = 23.38 \text{ gms/tray ounce}$$

$$28.41 \div 822857 = \underline{34.53} \text{ gm/tray ounce}$$

$$\underline{34.53} \times 13.166 = 454.6$$

34.5 grams to a tray ounce?

14. - to 100g pd.

Sample Result Comparison Schedule
Little Box Flavour

Sample #
 Batch #

ATK
 Amis Absorb

Sample #
 Fire Absorb

Sample #
 Fire Absorb

Amalgamation

ATK

D3
 D3-1
 D3-2

17R002 17R002
 " 0.002 " 0.02
 " 0.002 " 0.02

ATK 0.10
 " 0.002 0.22
 " 0.02

29617 - 0.034 Nil
 29618 - 0.002 0.12

2.59mg.

13.73gms
 6.22gms

D3-3

" 0.002 " 0.02

" 0.08

29618 - 0.108 0.21
 2970 - Nil 0.08

40.6mg

6.42gms (14.64gms)

D3-4

" 0.002 " 0.02

" 0.02

29618 - 0.108 0.21

40.6mg

6.42gms (14.64gms)

D3-5

" 0.002 " 0.02

" 0.04

29618 - 0.108 0.21

40.6mg

6.42gms (14.64gms)

D1-2

17R002 17R002

0.002 0.07

29618 - 0.108 0.21

40.6mg

6.42gms (14.64gms)

Small #1
 B.B.1

0.028 - 17R002

0.024 0.18

2969 - Nil 0.08

Shine Patch
 S-3-2
 S-1
 S-2
 S-3

0.005 17R002
 0.015 0.02
 0.002 17R002
 17R002 " 0.02

Nil 0.02
 0.002 0.08
 Nil 0.06
 0.004 0.06

2964 - Nil 0.18
 2965 - 0.002 0.2

Blank Standard

0.550 0.04
 0.550

0.546 Nil

2966 0.098 Nil

6.73mg

20.80gms (4.586 lbs)

25 } #1 2' x 7 = 14 x 25% 3.5 cu ft.
 40 }
 70 } +3" marl 154 47.5% Boulders to ex 8"
 49 }
 71 - (3 + 1/4) 71 21.9% clay. Rhy
 Basalt

30 lbs Sand 52.6%
 27 lbs clay 47.4%

20 - +16 mesh - 1/4" 42 13%
 22
 23 - 16 mesh
 23
 11

57 $\frac{17.6}{100.0}$ (324)

sa 72 92%
 sb 27 28%

#2 1 1/2' x 6' = 9' x 4' (33) 2.00 cu ft.
 +3" - 120# 120 34.5%

-3" + 1/4" - 46#
 34#
 39 151 43.4%
 30

avg 23600 lbs/cu yd
 1.68 tons/yd.
 15 cu ft/ton

-1/4 + 16 mesh
 29 40 11.5%
 11

-16 mesh 20
 17
 37 10.6% 348
 200.0

14 lbs Sand 37.8%
 23 lbs clay 62.2%

54 18.75
 166 = 11.5%
 672

sa 54 = 70.1%
 sb 23 29.9%
 77

20 7.44
 271 672

Sands
180 length
x 12 high

360
180

2160
x 20 wide

43200
27

= 1,600 cu yds. x 1.68 = 2,688 tons

1/4 mesh - sands.

$V = \frac{h}{3} T R^2$ (15)² x 3.1416 = $\frac{704.86}{3} = 235.62$ x 15 = 3534.3

500
29.4 tons
~~122 tons~~
18 cu ft

Slimes

10 x 50 x 8 ~~2,400~~ 1,500
8 x 15 x 8

960
1,460 = ~~104 tons~~ 136.7 tons

~~100~~ = 37.8 %
~~164~~ = 62.1 %

Sand 100 = 42.4 % 196 = 59 %
Slimes 136 = 27.6 % 184 = 41 %
236 332

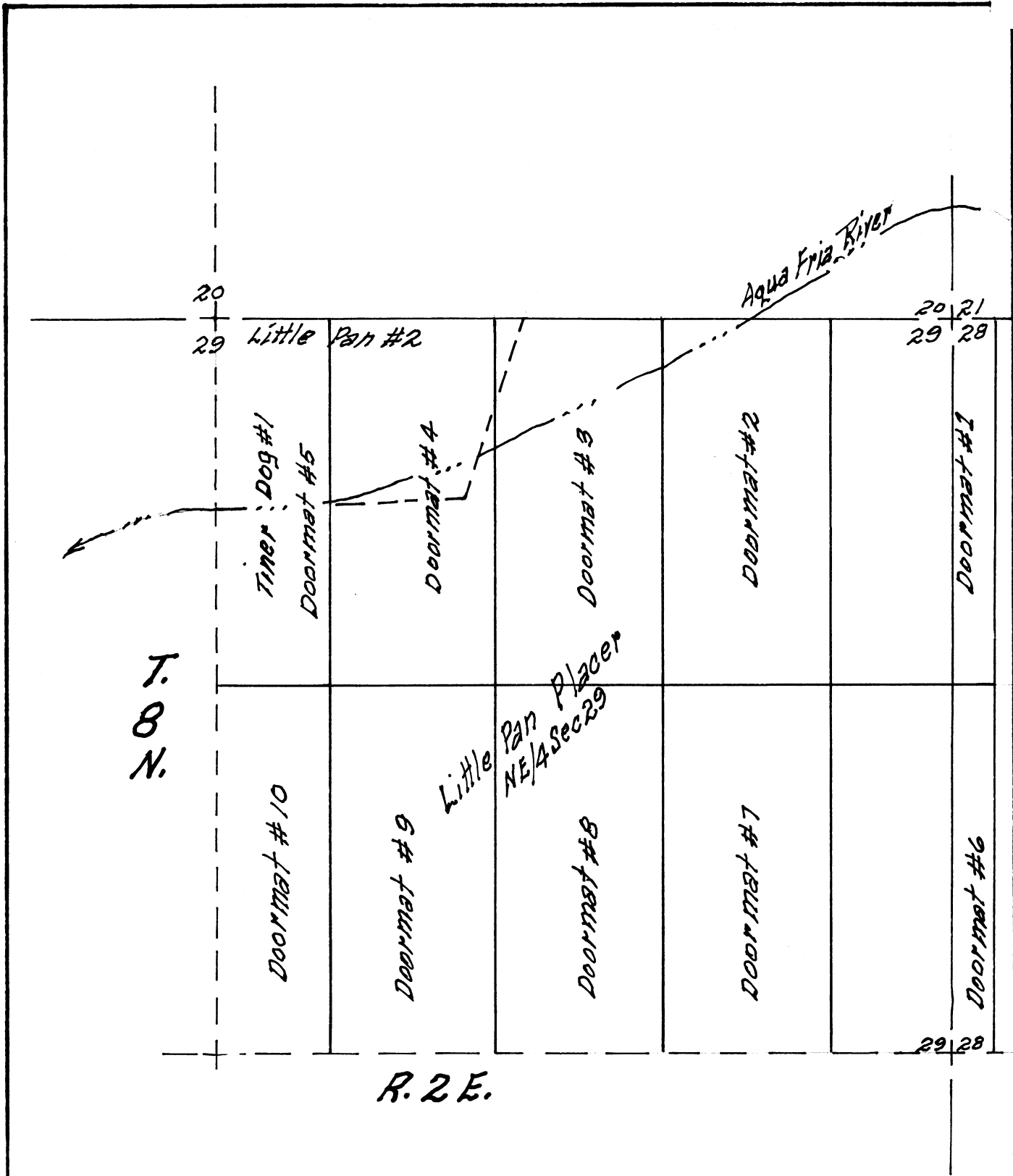
Comparison Schedule
 Sample Matrix Results
 Littleton, Colorado
 Maricopa County, Arizona

Sample No	Colgate	Sally	Shirley	Stall
A.T.L.	A.T.L.	A.T.L.	A.T.L.	A.T.L.
Black Sand #2964 (Free Mag)	0.55	0.546	0.04	Tr

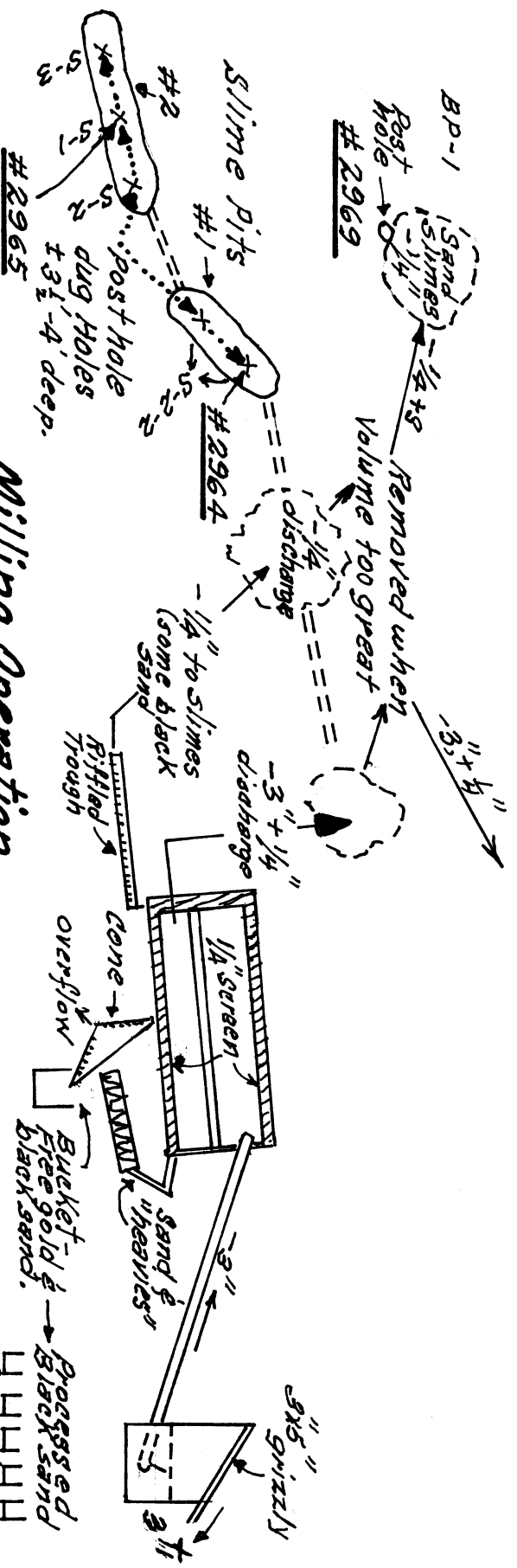
Slimes	Colgate	Sally	Shirley	Stall
S-1 #2965	0.005	0.002	LT 0.02	0.08
S-2	0.002	Tr	LT 0.02	0.06
S-3	LT 0.002	0.004	LT 0.02	0.06
SCI (comp)	0.005		LT 0.02	
S2-2 #2964	0.005		LT 0.02	

Band Pile	Colgate	Sally	Shirley	Stall
B.P-1 #2969	0.028	0.024	LT 0.02	0.18
Bank Run				
03-1	0.003	0.002	LT 0.02	0.22
03-2 #2967 (Free Mag)	0.002	Tr	LT 0.02	0.02
03-3 #2968 (Free Mag)	LT 0.002	Tr	LT 0.02	0.08
03-4	LT 0.002	Tr	LT 0.02	0.02
03-5	LT 0.002	Tr	LT 0.02	0.04
03	LT 0.002	Tr	LT 0.02	0.10

2970 (Slimes of 2968)
 2971 (Slimes of 2967)

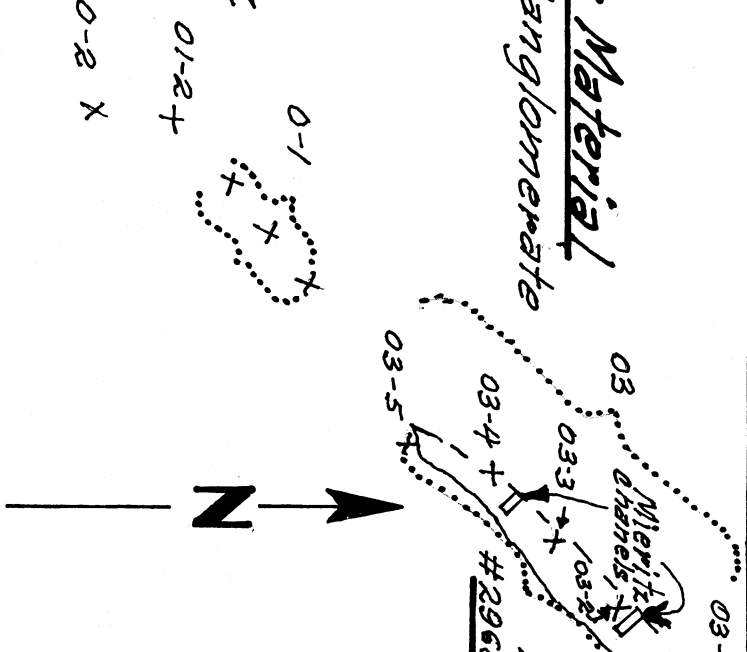


LITTLE PAN PLACER CLAIMS
 Maricopa Co., Ariz.
 Scale: 1" = 500 Ft.
 Aug. 1984 RE. Mieritz
MAP No. 1



Milling Operation

Placer Material
Alluvial fanglomerate



#2967 & 2971 (slimes)
Bank of Trench-dirt & slimes
fragments & boulders of the
gravelly deposit of the
Meritz. Relations to 2964 boulders.

NOTE

This map in part traced from sketch by Del. Terra Engineering in the Report of August 1, 1984. Additions and revisions by R.E. Meritz August 27, 1984.

Meritz samples 2964 thru 2971.

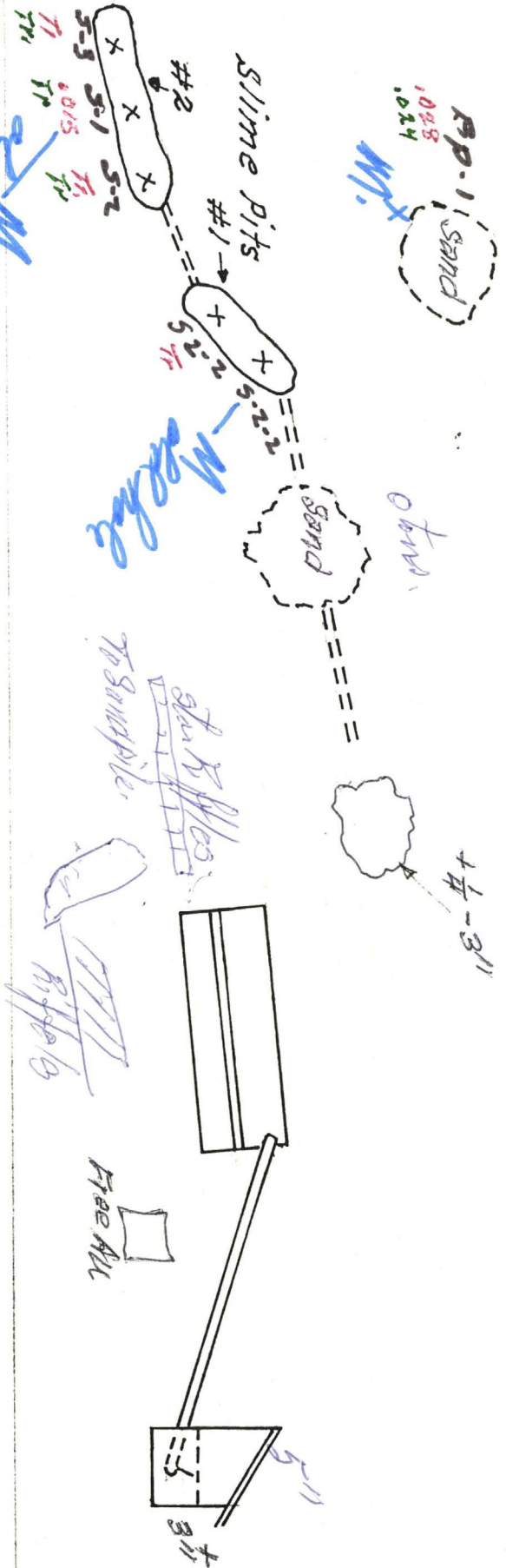
LITTLE PAN PLACER
Sec. 29 T8N, R2E.
Maricopa Co., Ariz.
No Scale
R.E. Meritz
Aug. 1984
MAP No. 2

B. Sand,
1.55
1.546

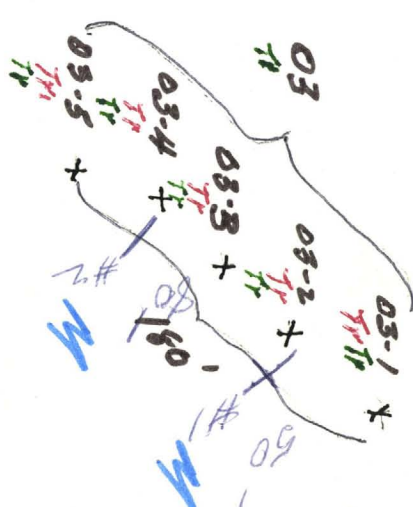
RP-1 sand
1.088
1.024
W.

Obv.

1/4-3"



0-1
+
1.009
0-1-2 +
+
0-2 X
.01



(6)

determined by Walt Statter, San King Assay Office, are shown in the included sample schedule which lists De Terra's samples and results, and the comparable "Meritz" samples and obtained results.

As the opinion of the writer, based on the sample taken, that a cubic yard of "bank run material" could contain ~~of gold and of silver, along with~~ ^{oz gold and oz silver as an} admixture of the "leaves".

Samples 2964, 65, 69, 70 and 71 are gold and silver contents in ounces/ton.

Sample 2966 - "black sands" (concentrate, the ~~processed~~ processed product of the "milling operation") contains free gold and gold "tied or married" to sand and/or magnetite or other "leaves". The amalgamation process recovers what free gold is available - and the "tied or married" gold is ~~still~~ remaining in the ~~sample~~ sample now "de-fined" is fire assayed for the "tied or married" values.

Samples 2967 and 2968 are reported in the same manner as sample 2966.

To determine the amount of "free gold" portion of concentrate - black sands or free cubic yard basis of crude material - the following calculations must be made using the following factors:

Sample Description
Sample 2967 ^{bank} Channel cut of crude gravel from east bank of mine trench 50 feet south of north end ~~of~~ near Del Tierra sample 03-2 and consisted of dirt, clay, fragments and boulders of diorite, granite, basalt, dacite, schist and sphyerite ranging in size from ^{micro}microns to boulders of 6 to 8 inches.

Sample 2968 Similar to 2967 (1 1/2 feet wide, 6 feet long and 4 deep) approximately 80 feet south of sample 2967 near Del Tierra sample 03-4 containing the same type material.

Sample 2964 - Same material from bottom of Del Tierra ^{sample} hole 5-2-23 ^{sample} from a depth of 3 1/2 feet. Micro size material.

Sample 2965 - Same material from bottom of Del Tierra sample hole 5-1. Micro size material. Wet.

Sample 2966 Sub (scooped) sample of from each of 5 buckets of "black sands" (successed by Freeman) [magnetics - heavy] as the concentrate is also known as.

Sample 2969 - Post-hole digger sample - one foot at base of "sand pile" (discharge tails) from 369 - Gold screw. Material contains some ~~and~~ 1/4" rock fragments, slimes and ~~the~~ black sand. The latter visible at the discharge of the gold screw.

Sample 2970 - Sample of the slimes washed from the -16 mesh material of bank run sample # 2968.

Sample 2971 Sample of the slimes washed from the -16 mesh material of bank run sample # 2967.

Sample Results.

The gold and silver values of the various samples as

Att: had

(1)

J. E. Sully
5509 E. Thomas Rd.
Scottsdale Arizona 85257

On August 16th you verbally requested and authorized the writer to conduct a limited "check sampling" program on the Little Bear gold placer property, Sec. 24, T. 5 N. R. 1 E, Maricopa County, Arizona, a property in which an interest is shared by your principal.

On July 27, 1984, Del Terra Engineering Co. Scottsdale, Arizona, completed a ~~sample~~ program (consisting of sampling the crude ore (placer material) banks, slime pits, sand pile, and black sands, the latter three being products of the simple milling operation set up by Cliff Freeman, present property owner).

On August 18, the writer visited the property of concern, met Mr. Freeman, explained the reason for his presence. The writer took ~~the~~ "bank run" samples, samples of the slime pits, ~~and~~ of the "sand pile" and the final product (ground) black sands.

Sampling Procedure: Crude Placer Material

The writer's method of sampling a "placer material" - (slimes, clay, sand, rock fragments and boulders) is a bit more involved than sampling hard rock veins. A "bulk" sample is required. Here is a description of how the writer obtained and prepared the "bank run" sample.

- (1). The writer used a wood "box" which has a capacity of 2.7 cubic feet - 1/10 th of a cubic yard.
- (2). A representative area of the "bank" was selected and a "channel" cut of the bank ^{made} from near the floor, upwards for 6 or 7 feet in length, ~~to~~ 1 1/2 feet wide in one case

(2)

and a foot wide in the other. The channel was 3 to 4 inches deep - taking everything, including boulders and putting same into the "sample box". The "box" was heaped, filling all corners and permitting the "heap" its normal angle of repose. Taping is necessary to compensate for the volume expansion from "in place" compaction to removed expansion of the material.

- (3) ~~Anything~~ ~~over~~ ~~two~~ ~~inch~~ ~~rocks~~ ~~to~~ ~~6~~ ~~8~~ ~~inch~~ ~~boulders~~ are removed, the surfaces cleaned by hand rubbing, piled and weighed.
- (4) The balance of the material is screened through a $\frac{1}{4}$ inch screen, the plus material ^{hand} cleaned as best as possible, and weighed (also observed for "large nuggets").
- (5) The $-\frac{1}{4}$ material is screened using a $\frac{1}{16}$ mesh (window) screen. The plus material is hand, dry cleaned, and weighed. (also observed for $+\frac{1}{16}$ mesh nuggets)
- (6) The $-\frac{1}{16}$ mesh material is weighed and bagged.

The above is all completed in the field at the sample site.

- (7) In Phoenix the $-\frac{1}{16}$ mesh material is washed to rid the "sands" of clay and slimes. The sands are dried and weighed. ^{a sample of the dried sands is dried}
- (8) The assayer (Carl Stettin, Iron King Assay Office, Humphreys, Arizona), pans the $-\frac{1}{16}$ mesh material to reduce the ^(weight) volume to an "impure" black sand concentrate which is then subjected to an amalgamation process to collect the "free gold", which is then recovered and weighed. The ^{remaining} concentrate is then assayed by fire to determine the gold content.

(3)

not recovered by amalgamation.

By calculations, the gold content per cubic yard gravel is determined.

Other samples

Other samples taken include slime pit samples, sand pile sample and a sample of the "black sand" concentrate (processed) - meaning, if the writer is correct - that the "geodies" - free gold - ~~was~~ removed by panning and "hand picking or collecting" the nuggets.

The writer took a sample from each of the two slime pits from the "bottom" (i.e. ~~the~~ "sample" hole) in each pit. These were "post hole digger" holes from which Del Pierre Eng. took their samples.

~~The~~ The "sand pile" sample was also taken with a post hole digger at a ~~site~~ site "located" by ~~the~~ ~~writer~~ near the base of the "sand pile" by Mr. Truman - which was approved by the writer - because now, or recently in the past, the minus $\frac{1}{4}$ " material (including slimes and black sand) discharged from the 565 Gold River, is ~~now~~ stacked on the "sand pile".

A grab sample from five 5-gal ~~containers~~ buckets containing various volumes of "processed black sand" was taken. The above four (4) samples were dried, split to a reasonable size using a Jones type splitter and fine assayed for gold and silver.

Bank Run Sample Data:

The bank run samples taken by ~~the writer~~ and the procedure used by the writer has provided useful data ~~to~~ which is necessary for various calculations included in this report.

~~The following~~
Each of the two samples taken had a volume of 2.7 cubic feet 1/10th of a cubic yard, thus a factor of 10 should be used to convert the recorded data to that of a cubic foot volume. The data on the two samples ~~are~~ is:

	Sample I - 1967	Sample II - 1968
wt of +3" material ^g	154 154 ¹⁶⁵	120
	47.5%	34.5
wt of -3, +1/4" ^g	71	151
	21.9%	43.4
wt of -1/4, +16 mesh ^g	42	40
	13.0%	11.5
wt of -16 mesh (sands) ^g	57	37
	17.6%	10.6
wt of clean sand ^g	374	348
	100.0%	100.0
wt of slimes ^g	30	14
	52.4%	37.8
wt of black sand ^g	27	23
	47.7%	67.2
	57	37
	100.0	100.0

-26 mesh

By calculation, a cubic yard of the bank run material should weigh ^{an average of} 3360 pounds or approximately 1.68 tons. ~~The samples~~ The material these samples represent indicate there is much more "dirt and clay" than in a normal, washed river or creek gravel which suggests milling or treatment problems.

The above data will be used in succeeding calculations.

Sample 2966 Black Sands.

Sample
~~material~~ 4586 lbs. 436.11
Free gold content 0.675 mg 436.11
.000675 grams 436.11
31.103 grams of pyrite
at \$350. / ounce
"Pick up" gold - 0.01937 oz per ton

Car Ton
2000 lbs
294.37 mg.
0.29437 grams.
.00946 ounces Troy.
\$3.31 / ton conc.
\$34.30 / ton conc.

Opinion

Based on the writer's limited sampling completed, the writer sample taking and preparation procedures and the assumed techniques utilized by Denver assay office, ~~the writer believes that:~~

- (1) the bank material sampled contains free gold values, but such values could vary from sample to sample, location to location.
- (2) the present "milling operation" has recovered some gold values in, as much as the "tail" from the operation are quite low in ^{gold} values.
- (3) there are probably 20 tons of slime in the troughs,
- (4) there could be 20 tons of "sand" in the "tail" pile, ~~and~~
- (5) probably 250 lbs of "black sands" remain in the five buckets, and
- (6) that approximately 2,000 cubic yards of material have been removed from the mine area.

Cliff Freeman -

Joe Seally.

Little Pan - aqua-fine

Bob Judd - Mic. Eng.

#1 - 7080 A/Ten.

away 5.7m/Black - Sub Pijmer - 478-4653
10 - 160 ac. claims.

5200 - F. came back - off - 85018.

840 - 3610 - in morning.

M - F - 7

5809 - F. Howard.

Scotto 85251

944 - 5974