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James Doyle Sell Mining Collection

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JHCourtright

AMERI[redacted] SMELTING AND RE[redacted]NG CO.

EL PASO ORE TESTING AND ASSAY LABORATO[redacted]

J. H. C.

ASSAY CERTIFICATE

JUN 9 - 1969

DATE June 9 1969

MARKED TUCSON OFFICE / HAWLEY AND HAWLEY SAMPLES

SEZelenkov 5/5/69

LOT NO. UNIT	SMELTER	GOLD OZ	SILVER OZ	Cu %	Pb %	Zn %	Cd %	Fe %	Mn %	%	S %	SiO_2 %	CaO Total %	CaO Avail. %	%
	PR-1	Nil	.05												
	PR-2	Nil	.05												
	PR-3	Nil	Tr												
	PR-4	Nil	.05												
	PR-5	Nil	.07												
	PR-6	Nil	Tr												
	PR-7	Nil	Tr												
	PR-8	Nil	Tr												
	PR-9	Nil	Tr												
	PR-10	Nil	Tr												
	PR-11	Nil	.05												
	PR-12	Nil	Tr												
	PR-13	Nil	.05												
	PR-14	Nil	.05												
	PR-15	Nil	Tr												
	PR-16	Nil	Tr												
	PR-17	Nil	Tr												
	PR-18	Nil	Tr												
	PR-19	Nil	Tr												
	PR-20	Nil	Tr												
	PR-21	Nil	Tr												
	PR-22	Nil	.05												
	PR-23	Nil	Tr												
	PR-24	Nil	Tr												
	PR-25	Nil	Tr												
	PR-26	Nil	Tr												
	PR-27	Nil	Tr												
	PR-28	Nil	Tr												

Painted Rocks
chg gen expl

JHCourtright
SEZelenkov
VKudryk
GWBossard
File

HILL PRINTING CO.—EL PASO

BY ______________________ A. Jiménez S. CHIEF CHEMIST

3226 East 46th Street

Phone 624-0049

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE May 17, 1969

SAMPLE MARKED	GOLD OZ./TON	SILVER OZ./TON	PER CENT COPPER	PERCENT LEAD	PERCENT ZINC	PERCENT MOLYBDENUM	PERCENT IRON	Percent WO_3
Composite PR-1 ---PR-28	Trace	0.11						.057

J. H. C.
MAY 19 1969

File: Painted Rock Prospect

K.V.D.S.
MAY 19 1969

CHARGES $ 9.25

REGISTERED ASSAYER
CERTIFICATE NO. 6852
PETE S. FLORES
Date Signed 5-19-69
Tucson, Arizona, U. S. A.

ASSAYER-CHEMIST

Painted Rock Arts

J.H.C.

MAY 19 1969

COMPOSITE ASSAYS FOR WO_3

PAINTED ROCK PROSPECT

HAWLEY & HAWLEY
ASSAYERS AND CHEMISTS, INC.
1700 W. GRANT RD. • BOX 5934 • 622-4836
TUCSON, ARIZONA 85703

BRANCHES
DOUGLAS, ARIZONA
HAYDEN, ARIZONA
EL PASO, TEXAS
AMARILLO, TEXAS

IDENTIFICATION	GOLD OZS	SILVER OZS	LEAD %	COPPER %	ZINC %	MO. %	IRON %	WO_3 %
Composite: PR-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 and PR-28								< 0.01

REGISTERED ASSAYER
CERTIFICATE NO.
6701
Date Signed
Arizona U.S.A.

American Smelting & Refining Company
P. O. Box 5795
Tucson, Arizona 85703
Attn: S. E. Zelenkov

REMARKS:
Composite pulp delivered to American Analytical Lab. 13 May

ANALYSIS CERT. BY

PREPARATION $
ANALYSIS $

AMERICAN SMELTING & REFINING COMPANY | DATE SPL. RECEIVED 5/5/69 | DATE COMPL | TUC 342954-A | $ - - - -

S.E.Z.
5/12/69
Painted Rock

HAWLEY & HAWLEY

ASSAYERS AND CHEMISTS, INC.

1700 WEST GRANT ROAD - TELEPHONE 622-4836 - POST OFFICE BOX 5934

TUCSON, ARIZONA 85703

Registered Assayers

J.H.C.

MAY 13 1969

THE SOUTHWEST'S LEADING ASSAYERS AND REPRESENTATIVES

Branch Representatives at Buyer's Plants:
Phelps Dodge Corp., Douglas, Arizona; ASARCO, El Paso, Amarillo, Texas and Hayden, Arizona

K.V.B.S.
MAY 13 1969

IDENTIFICATION	Gold ozs.	Silver ozs.	Lead %	Copper %	Zinc %	Mo. %	WO_3		
PR1	None	None							
PR2	None	None							
PR3	None	None							
PR4	None	None							
PR5	None	None							
PR6	None	0.03							
PR7	None	None							
PR8	None	0.05							
PR9	None	0.04							
PR10	None	None							
PR11	None	None							
PR12	None	None							
PR13	None	None		GROUP "A"					
PR14	None	None							
PR15	None	None							
PR16	None	None							
PR17	None	None							
PR18	None	None							
PR19	None	None							
PR20	None	None							
PR21	None	0.05							
PR27	None	None							
PR28	None	None							
Composite PR21 thru PR28							** TO FOLLOW		

CC: American Smelting & Refining Company
ADD: Box 5795, Tucson, Arizona 85703
CITY: Attn: Mr. S. E. Zelenkov
ADD: pulps: Mr. T. D. Henderson
CITY: P. O. Box 895, El Paso, Texas 79999

REMARKS:
Page 1
Au - Ag single
WO_3 verified

Analysis Cert. By

Preparation $
Analysis $

ACC: AMERICAN SMELTING & REFINING CO

Date Spl. Received 5/5/69

Date Compl. 5/12/69

TUC 342954

$

HAWLEY & HAWLEY

ASSAYERS AND CHEMISTS, INC.

1700 WEST GRANT ROAD - TELEPHONE 622-4836 - POST OFFICE BOX 5934

TUCSON, ARIZONA 85703

Registered Assayers

THE SOUTHWEST'S LEADING ASSAYERS AND REPRESENTATIVES

Branch Representatives at Buyer's Plants:
Phelps Dodge Corp., Douglas, Arizona; ASARCO, El Paso, Amarillo, Texas and Hayden, Arizona

K.V.D.S.

MAY 13 19

IDENTIFICATION	Gold ozs.	Silver ozs.	Lead %	Copper %	Zinc %	Mo. %		
Postage for mailing pulps to El Paso								1.05
23 samples crushed, split, & pulverized @ 0.85								19.55
28 samples composited @ 0.20								5.60
23 single Au & Ag @ 4.00 - .25% discount								91.77
1 verified WO_3								8.50
								$126.47

CC: American Smelting & Refining Company
ADD: Box 5795
CITY: Tucson, Arizona 85703
ADD:- Attn: Mr. S. E. Zelenkov
CITY:

REMARKS:

Page 2

Analysis Cert. By

Postage	1.05
Compositing	5.60
Preparation $	19.55
Analysis $	100.27

ACC: AMERICAN SMELTING & REFINING CO

Date Spl. Received 5/5/69

Date Compl. 5/12/69

TUC 34295A

$ 126.47

S.E.Z. 5/13/69 Painted Rock

HAWLEY & HAWLEY
ASSAYERS AND CHEMISTS, INC.
1700 W. GRANT RD. • BOX 5934 • 622-4836
TUCSON, ARIZONA 85703

BRANCHES: DOUGLAS, ARIZONA; HAYDEN, ARIZONA; EL PASO, TEXAS; AMARILLO, TEXAS

IDENTIFICATION	GOLD OZS	SILVER OZS	LEAD %	COPPER %	ZINC %	MO. %	IRON %		
PR22	None	0.05	} GROUP "B"						
PR23	None	None							
2 samples crushed, split & pulverized @ 0.85									1.70
2 single Au & Ag @ 4.00									8.00

K.V.S. MAY 13 1969

REGISTERED ASSAYER CERTIFICATE NO. 6734 H. E. RICHARD

American Smelting & Refining Company
Box 5795
Tucson, Arizona 85703
Attn: Mr. S. E. Zelenkov

REMARKS: Singles

ANALYSIS CERT. BY H. E. Richard

PREPARATION $ 1.70
ANALYSIS $ 8.00

AMERICAN SMELTING & REFINING COMPANY | DATE SPL. RECEIVED 5/12/69 | DATE COMPL. 5/5/69 | Tuc 342955 | $ 9.70

S.E.Z. 5/13/69 Painted Rock

HAWLEY & HAWLEY
ASSAYERS AND CHEMISTS, INC.
1700 W. GRANT RD. • BOX 5934 • 622-4836
TUCSON, ARIZONA 85703

BRANCHES: DOUGLAS, ARIZONA; HAYDEN, ARIZONA; EL PASO, TEXAS; AMARILLO, TEXAS

IDENTIFICATION	GOLD OZS	SILVER OZS	LEAD %	COPPER %	ZINC %	MO. %	IRON %		
PR24	None	0.02	} GROUP "C"						
PR25	None	0.03							
PR26	None	None							
3 samples crushed, split & pulverized @ 0.85									2.55
3 single Au & Ag @ 4.00									12.00

K.V.S. MAY 13 1969

REGISTERED ASSAYER CERTIFICATE NO. 6734 H. E. RICHARD

American Smelting & Refining Company
Box 5795
Tucson, Arizona 85703
Attn: Mr. S. E. Zelenkov

REMARKS: Singles

ANALYSIS CERT. BY H. E. Richard

PREPARATION $ 2.55
ANALYSIS $ 12.00

AMERICAN SMELTING & REFINING COMPANY | DATE SPL. RECEIVED 5/5/69 | DATE COMPL. 5/12/69 | TUC 342956 | $ 14.55

~~Painted Rock~~

~~Silver Bell~~

Paint R.

5-9-69

	Au	Ag
1	nil	nil
2	nil	nil
3	"	"
4	"	"
5	"	"
6	"	0.03
7	"	nil
8	nil	0.05
9	"	0.04
10	"	"
6		
20	"	"
21	nil	0.05
27	"	nil
28	"	"
22	"	0.05
23	"	"
24	"	0.02
25	"	.03
26	"	nil

J. H. C.

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona MAY 6 1969

May 5, 1969

TO: J.H. Courtright

FROM: S.E. Zelenkov

Painted Rock Prospect

Claims

Seventy eight claim notices were surveyed in during the period of April 21 to April 25. Since no U.S.G.S. control points were found, the highest point on the outcrop was used as a starting point. This point is about 450 feet east of the west notice line.

A considerable number of cattle were in the area at the time the claim notices were put in, and is expected thatthey will destroy a great number of the notices.

Three claims (Dixie 1, 2, 3) occupy the entire major outcrop. The claims were filed February 20, 1969, by Mr. Robert A Wonder and Mr. Thomas H. Farley. They can be reached in Gila Bend, Arizona, "General delivery". These claims appeared to be valid. The attached map (Fig. 1) shows the approximated position of the Dixie claims with respect to our claims.

Outcrop Sampling

The three outcrops that Mr. J.E. Kinnison recommended for sampling were divided into three groups to simplify note taking procedures (see Fig. 2). Group A was sampled on a 200 foot grid and groups B and C were sampled on a 100 foot grid. Twenty three five-pound samples were taken from group A (PR-1 to PR-21, PR-27, PR-28) two from group B (PR-22, PR-23), and three from group C (PR-24 to PR-26). Each sample was taken on a 2' by 2' square and cut normal to the strike of the formation.

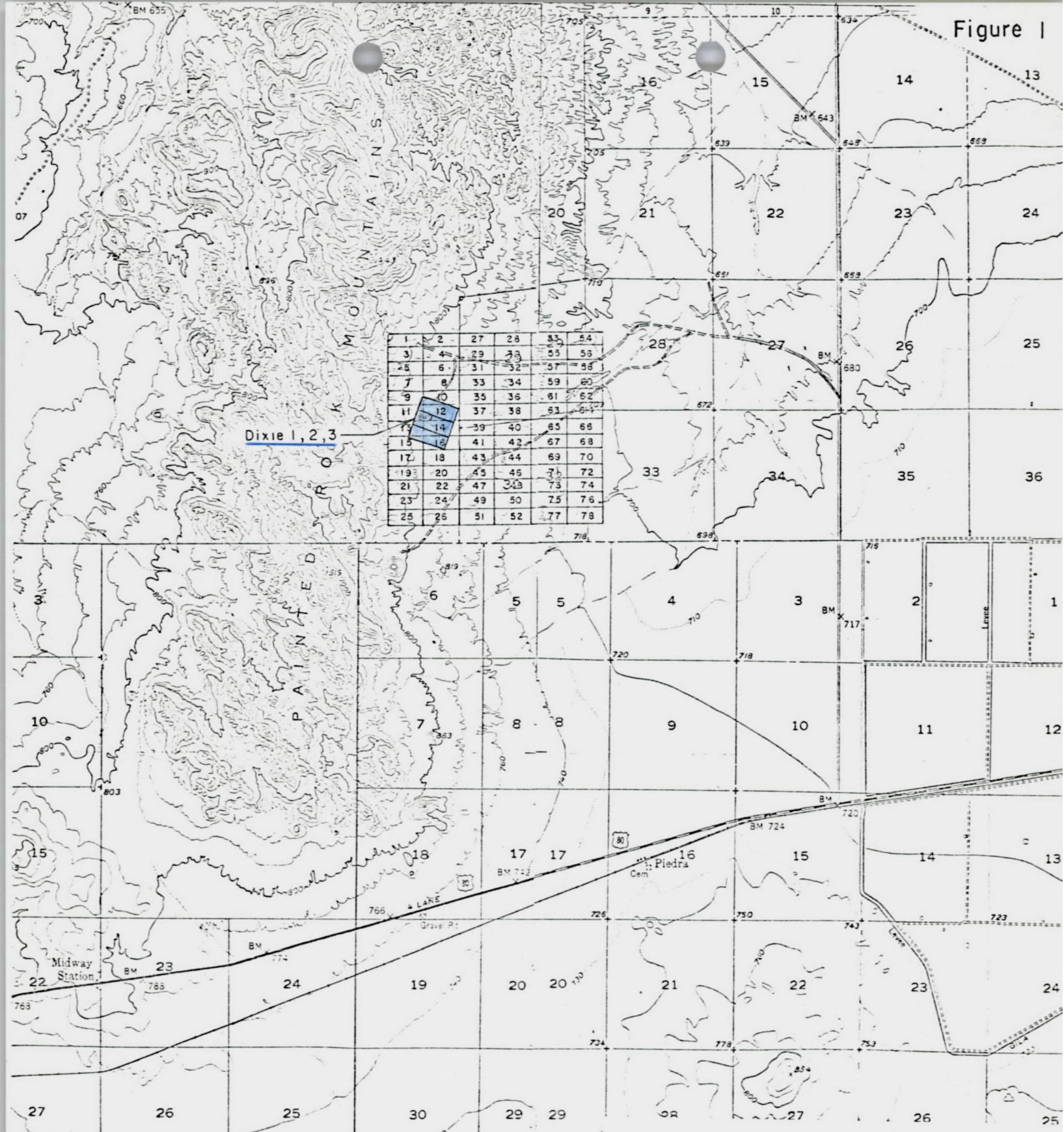
The samples were delivered to Hawley & Hawley May 2, 1969 to be assayed for gold and silver. Hawley and Hawley has been instructed to forward the pulps to El Paso for check assays. Hawley & Hawley is going to run a composite for tungsten (WO_3).

S. E. Zelenkov

SEZ:lzb
Encl.

S.E. Zelenkov

Figure 1



PR CLAIMS

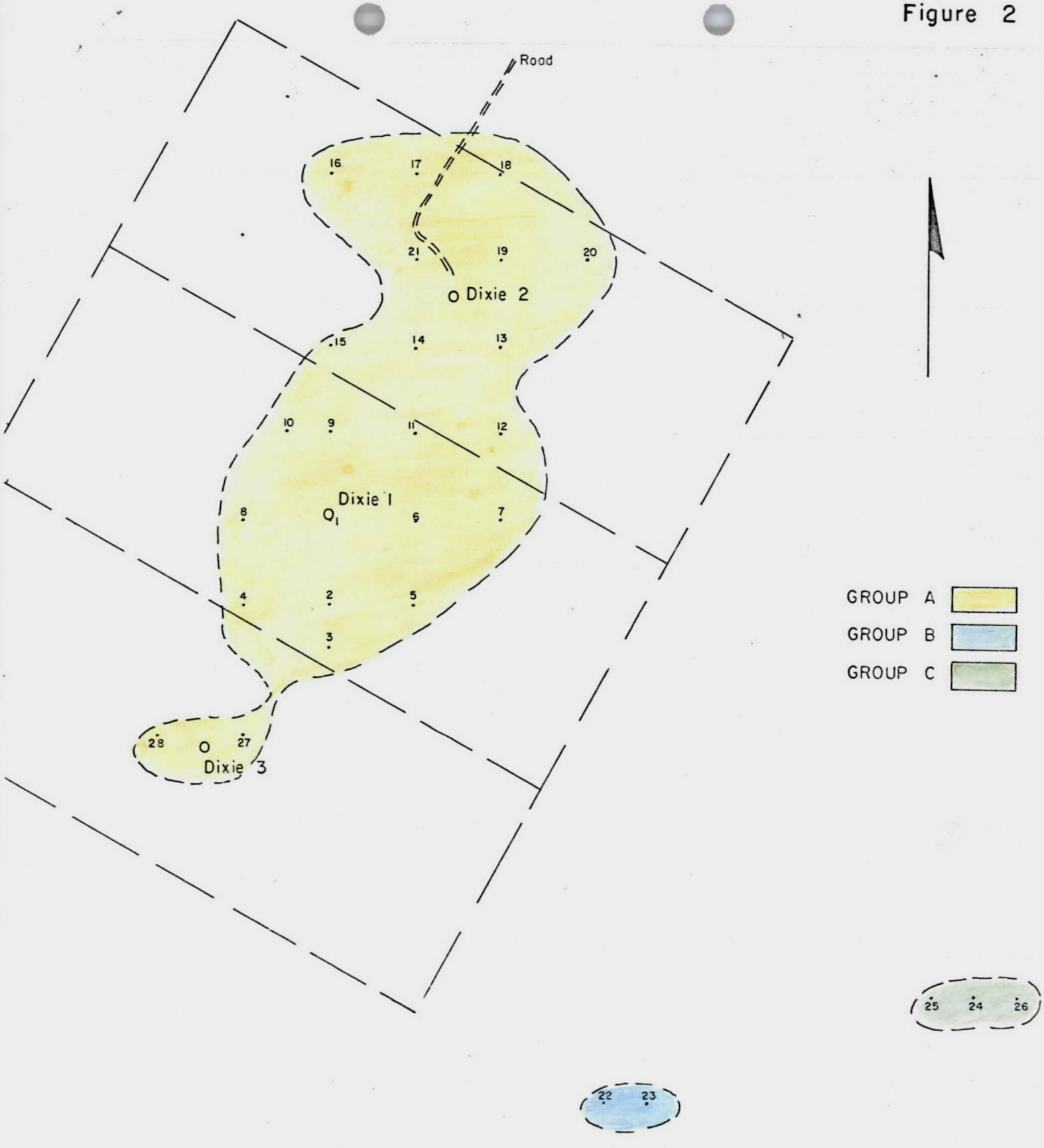
PAINTED ROCK PROSPECT

WEBB DISTRICT

Maricopa County, Arizona

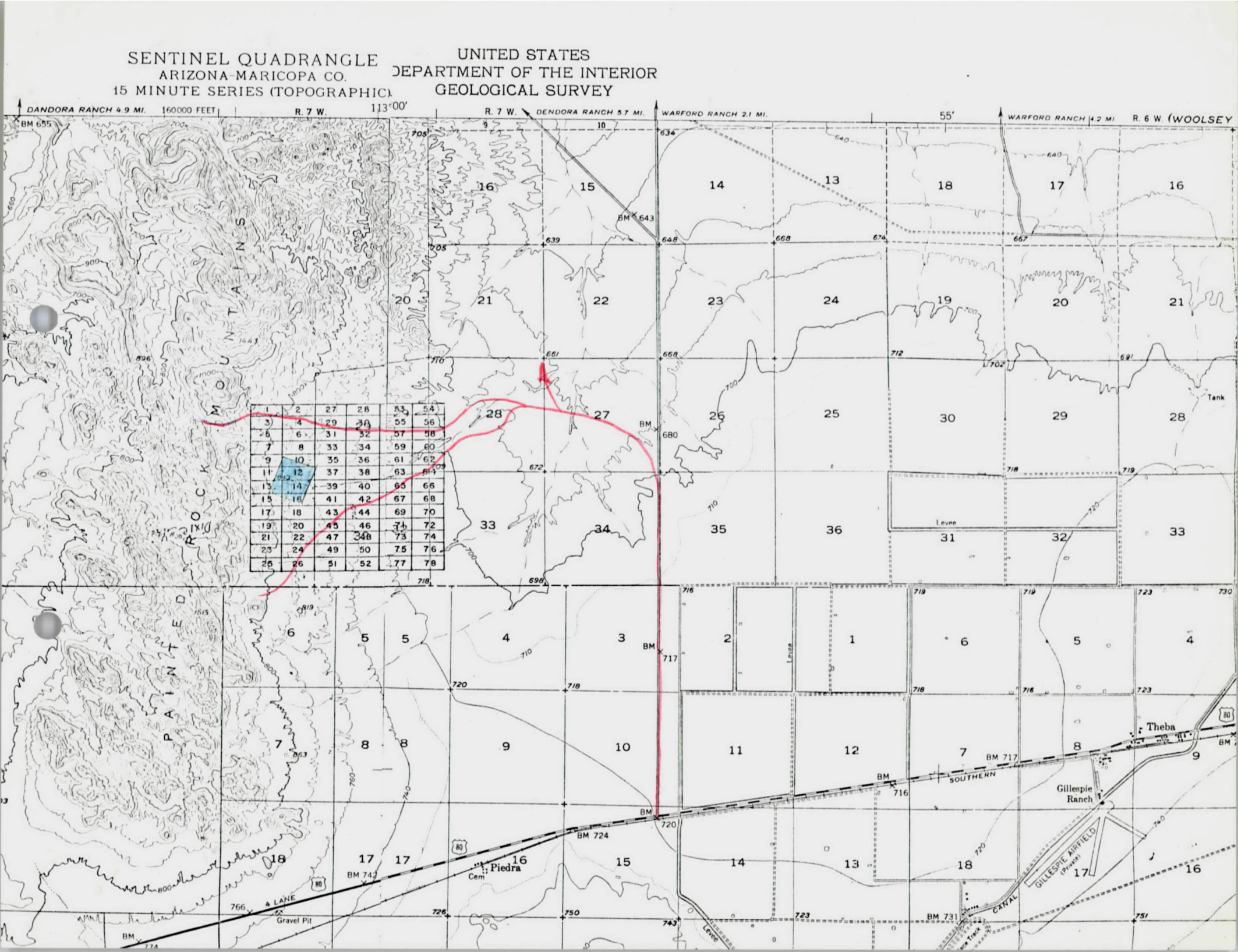
Scale 1" = 1 mi

Figure 2



PAINTED ROCK PROSPECT
OUTCROP SAMPLE GRID
Maricopa County, Arizona

Scale 1" = 300'


SENTINEL QUADRANGLE
ARIZONA-MARICOPA CO.
15 MINUTE SERIES (TOPOGRAPHIC)
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
DANDORA RANCH 4.9 MI.
160000 FEET
R. 7 W.
113°00'
R. 7 W.
DENDORA RANCH 5.7 MI.
WARFORD RANCH 2.1 MI.
55'
WARFORD RANCH 4.2 MI.
R. 6 W. (WOOLSEY
BM 655
BM 643
BM 680
BM 717
BM 724
BM 743
BM 731
BM 716
Tank
Levee
Theba
Gillespie Ranch
SOUTHERN
GILLESPIE AIRFIELD (Private)
CANAL
Piedra
Cem
4 LANE
Gravel Pit
80

3226 East 46th Street

Phone 624-0049

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY American Smelting & Refining Company

DATE May 1, 1969

SAMPLE MARKED	GOLD OZ./TON	SILVER OZ./TON	PER CENT COPPER	PERCENT LEAD	PERCENT ZINC	PERCENT MOLYBDENUM	PERCENT IRON	Percent WO_3
Dixie # 1	.001	0.16						.088

REGISTERED ASSAYER CERTIFICATE NO. 6852 PETE S. FLORES

5/1/69

CHARGES $ 9.75

ASSAYER - CHEMIST

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

April 22, 1969

FILE MEMORANDUM

S.E. Zelenkov phoned yesterday, the 21st of April, to advise that one or more claims were found on the Painted Rock Prospect outcrop.

These, the Dixie Claims, were staked February 20 by Robert A. Wonder and Thomas H. Farley, of Gila Bend, general delivery, Document Book 7492, page 28.

I advised Sergei to attempt to determine the pattern of the claim or claims and proceed to stake around them.

Sergei Zelenkov is staying at the Western Motel, room 28, Gila Bend.

J. H. Courtright
J.H. Courtright

JHC:lzb

cc: WESaegart
SIBowditch
JEKinnison
SEZelenkov

Proposed Federal Claim Area
Painted Rock Prospect
Maricopa County, Ariz

To S.H.C
From J.E.K.

April 14, 1969

The attached geog copy shows the area I propose for initial claims on the subject prospect. As shown, an area 7800 ft north by 6000 ft west will protect the immediate area around the prospect, amounting to 52 claims.

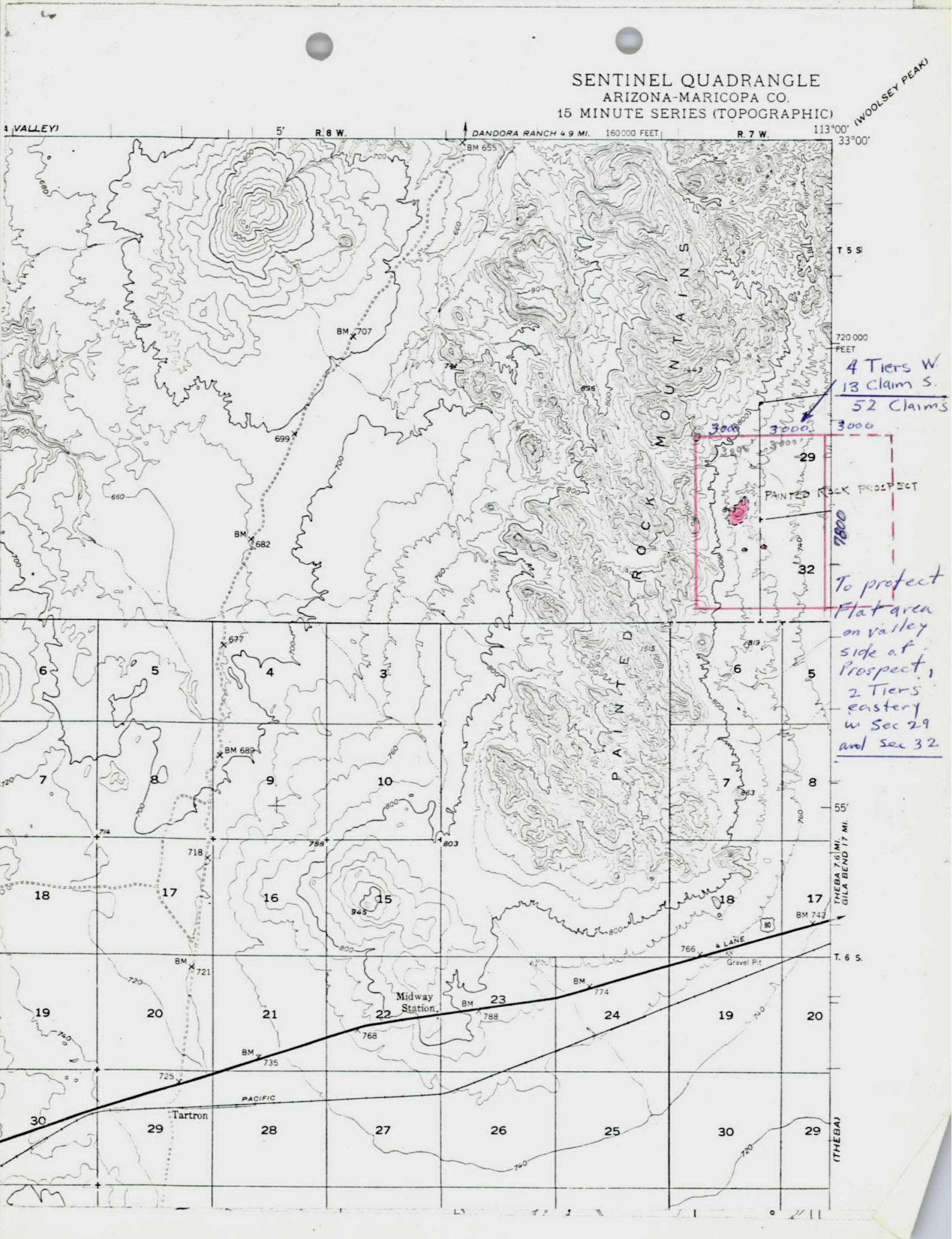
Two more tiers are suggested in the flat alluvial area adjoining to the east, amounting to 26 claims.

The total claims then, would be 78.

John E. Kinnison

John E. Kinnison

cc S.I. Bowditch


SENTINEL QUADRANGLE
ARIZONA-MARICOPA CO.
15 MINUTE SERIES (TOPOGRAPHIC)
(WOOLSEY PEAK)
(VALLEY)
5'
R. 8 W.
DANDORA RANCH 4.9 MI.
160000 FEET
R. 7 W.
113°00'
33°00'
BM 655
BM 707
699
682
677
BM 689
718
714
788
803
945
BM 721
725
Midway Station
768
BM 735
PACIFIC
Tartron
PAINTED ROCK MOUNTAINS
443
696
515
813
363
T 5 S
720 000 FEET
PAINTED ROCK PROSPECT
3000
7800
29
32
4 Tiers W
13 Claim S.
52 Claims
To protect
flat area
on valley
side of
Prospect,
2 Tiers
eastery
in Sec 29
and Sec 32
55'
THEBA 7.6 MI.
GILA BEND 17 MI.
BM 742
80
LANE
766
Gravel Pit
BM 774
BM 788
T. 6 S.
(THEBA)
1
2
3
4
5
6
7
8
9
10
15
16
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30

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

April 11, 1969

TO: J.H. Courtright

FROM: J. E. Kinnison

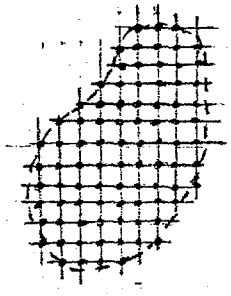
Painted Rock Prospect
Silver-Gold, Tungsten
Maricopa County, Arizona

In regard to our recent discussion concerning sampling of the subject prospect, I illustrate on the attached sketch a proposed grid which will yield an estimated 85 samples. The Northern larger outcrop will be sampled on a 100' grid, while the two southerly and smaller outcrops are proposed for a 50' grid to obtain sufficient samples from them.

Weight of all samples should be about 10 pounds. The actual number of samples will be dependent on the number of rock outcrops which occur at grid points.

John E. Kinnison

JEK:lab



± 86 SAMPLES
100' GRID

N

SEC 29
SEC 32

± 19 Samples
50' GRID

± 11 SAMPLES
50' GRID

TOTAL : 116 theoretical samples

less est 25% not possible
due to talus cover. (30 samples)

ADJUSTED TOTAL : ± 85 SAMPLES

PROPOSED SAMPLE GRID
PAINTED ROCK PROSPECT
MARICOPA Co. ARIZONA
1" = 1000'

J. H. C.

APR 30 1969

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

April 11, 1969

TO: J.H. Courtright

FROM: J. E. Kinnison

Painted Rock Prospect
Silver-Gold, Tungsten
Maricopa County, Arizona

In regard to our recent discussion concerning sampling of the subject prospect, I illustrate on the attached sketch a proposed grid which will yield an estimated 85 samples. The Northern larger outcrop will be sampled on a 100' grid, while the two southerly and smaller outcrops are proposed for a 50' grid to obtain sufficient samples from them.

Weight of all samples should be about 10 pounds. The actual number of samples will be dependent on the number of rock outcrops which occur at grid points.

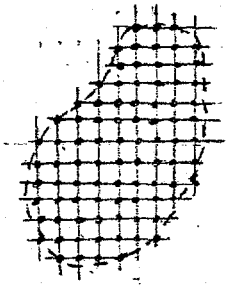
John E. Kinnison

JEK:lab

N

± 86 SAMPLES
100' GRID

Use 200' grid



SEC 29
SEC 32

± 19 Samples
50' GRID

Use 100' grid

± 11 SAMPLES
50' GRID

Take 5 samples

TOTAL : 116 theoretical samples

less est 25% not possible
due to talus cover. (30 samples)

ADJUSTED TOTAL : ± 85 SAMPLES

PROPOSED SAMPLE GRID
PAINTED ROCK PROSPECT
MARICOPA Co. ARIZONA
1" = 1000'

Copied for S.I.B. 4/14/69

[redacted] I. B.
MAR 19 1969

J. H. C.
MAR 19 1969

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

March 19, 1969

MR. ~~[redacted]~~ ~~[redacted]~~
READ AND RETURN KA
PREPARE ANSWERS ____ HANDLE ____
FILE ____ INITIALS ____

TO: J.H. Courtright

FROM: J.E. Kinnison

Painted Rock Prospect
Silver - Gold, Tungsten
Maricopa County, Arizona

SUMMARY AND RECOMENDATIONS

The subject prospect is a low ridge of silicified shale and rhyolite, in the Arizona desert region 18 miles west of Gila Bend (Att. A & B). I first noticed the red outcrop in the morning sun, while traveling west on the Yuma highway. Returning late the same day, I located the color zone on the ground, determined it was mineralized, and brought a hand specimen from which tiny flecks of native gold and horn silver were identified.

Reconnaissance sampling (May 1967 and June 1968) has shown that although exceedingly low values of gold, silver and tungsten are pervasely present, they nowhere reach commercial values in the outcrop, nor do these samples indicate a lead in any specific direction toward alluvial cover. Since the mineralized zone is limited by alluvium, there may be inferred a possibility that the outcrops lie to one side of similar silicified rock with better gold/silver or tungsten values. There is no way to evaluate the odds of such a possibility--but certainly the present evidence suggests a "long-shot" category. I believe, however, that this chance should be considered and herein I estimate the amount and cost of drilling necessary to accomplish initial prospecting under alluvial cover. Pre-requisite to a decision to drill would be 1) a property study, and 2) a thorough surface sampling to better show mineralization trends. Neither of these steps has yet been taken.

If my estimate of probable shallow bedrock depth is correct, the holes could be drilled feasibly through alluvium with a medium rotary drill and mud circulation, and continued in silicified rock with a down-the-hole hammer. A gravity survey would be helpful to confirm or deny my expectation of relatively thin alluvium.

Exposures of alluvial gravels as seen in the banks of washes show it to be "powdery" with hard boulders, much like the Gila terrace gravel at Posten Butte. Thus, the rotary-mud holes might require casing before continuing with air drilling.

To determine the lateral extent and character of mineralization in all directions from the outcrops would require, initially, five drill holes (Att. C). If 300 feet of alluvium is inferred, and if 100 feet of hammer drilling in bedrock is planned, the initial drilling estimate would be 1500 feet of rotary rock-bit and 500 feet of hammer drilling, for a total cost of $29,500. Details are given in Att. D.

I recommend that the property status be determined, and that surface sampling and appropriate cross-checks on assays be handled as soon as convenient. This additional field work will take 3 to 5 days of two men are used.

John E. Kinnison

JEK:lzb
Encl.

cc:WESaegart, w/encl.

LIST OF ATTACHMENTS

A. Index Map

B. Access Map

C. Proposed initial drill holes

D. Drilling cost estimate

E. Mineralogic identification by John Guilbert-2 pages

F. Sketch map, outcrop and samples, 1967

G. Assays, Hawley and Hawley, composite sample

H. Spectographic analysis of composite

I. Hawley and Hawley, WO3 and Hg assays

J. Outcrop and sample location, 1968

K. Outcrop and sample location, 1968

L. Sample description, 1968

ACCESS AND LOCATION

The subject prospect is at the base of the southeast flank of the Painted Rock Mountains, 18 miles west of Gila Bend, in the Arizona desert region. It is about 3 miles north of Piedra (on U.S. highway 80), and is reached by the following route:

> Drive north from U.S. 80 on the paved road to Painted Rock Dam, 3.8 miles to a desert auto trail; drive then southwesterly on the auto trail about 2.2 miles to a point marked with yellow flagging; drive then overland following tire tracks north-northwesterly about 1 mile to a low red ridge.

The above route is the easiest, but four-wheel drive is still necessary. The arroyo banks between the Painted Rock Dam road and the prospect are cut four to six feet deep in soft, loose alluvium, and are difficult to cross. Attachment B diagrams the above route.

GENERAL GEOLOGY

The Painted Rock range is a narrow, northwesterly mountain range, made of Tertiary volcanics which dip easterly at a low angle. A pass in the central part of the range has carved into underlying Laramide (?) granite. Basalt of the Sentinel Plain laps onto the southwest flank. The subject prospect exists as a detached outlier on the southeast flank, and does not extend into the main part of the range.

PAINTED ROCK PROSPECT

Geology.- The mineralized outcrops protrude from a smooth, gravelly plain which slopes east to the main valley drainage. These outcrops (Att. B) are lower in elevation than the volcanics of the main part of the range, and thus may underlie them.

As seen on the larger ridge, the rocks are essentially a bedded sequence of shale and grit, perhaps with tuffaceous interbeds, inclined from 70° to vertical. Rhyolite porphyry has intruded these strata as sills. The entire sequence of sediments and rhyolite has been pervasively silicified, and much of the original texture is now obscured.

Mineralization.- Mineralization is manifested by pervasive silicification, by very small drusy rugs, by red hematite, and by occasional voids from leached pyrite. Considerable caliche appears on the slopes of the larger ridge, and might be reworked from limy beds in the sediments.

Silicification has formed a dense "flinty" quartzose rock. Red transported hematite occurs on thin fractures, and also diffused through the rock.

Fine grained native gold and bromyrite (horn silver)was identified from one hand specimen by John Guilbert--see his report appended (Att. E). The tungsten mineral is not known.

Assays.- Samples were taken in two stages.

The earlier group of 12 were hastily taken chip grab-samples, each individual sample taken from a relatively large area. Only the larger outcrop area was sampled at that time. Weight of each sample was about 2 pounds. The outcrop pattern, topography, sample description and assays are plotted on Attachment F. Assays as shown were fire assayed by Jacobs in Tucson. Silver varied from 0.1 to 0.4 Oz/ton and gold varied from trace to 0.005 Oz/ton. If irregular higher values are present, they were obscured by the large area represented in each sample.

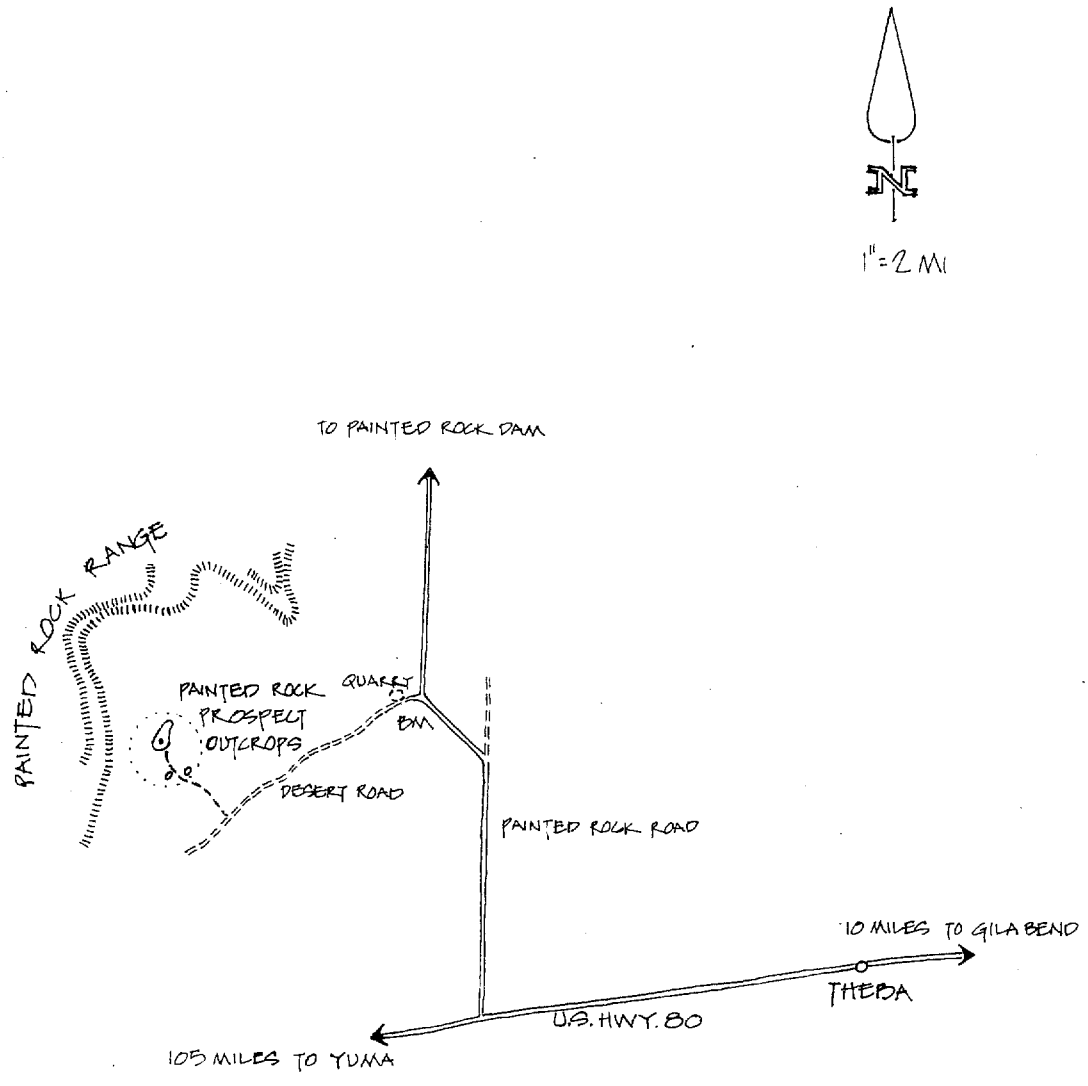
Subsequently, Hawley and Hawley prepared a composite from Jacobs' pulps for assay (Att. G) and spectographic analysis (Att. H). Following the spectographic analysis, which showed appreciable tungsten, the composite was assayed for that element, giving 0.085 % WO_3. This same composite showed neither gold nor silver*, contrary to Jacobs' results. The Arizona Bureau of Mines assayed* two original pulps, each showing 0.1 Oz/ton Ag--more than Hawley and Hawley and less than Jacobs. As a follow-up on tungsten, four individual pulps were assayed by Hawley and Hawley (Att. I) with a low of 0.037 % WO_3 and a high of 0.807 % WO_3. These tungsten assays are shown on Attachment I. A mercury assay was run on the composite and four pulps with negative results (Att. I).

At that time (1967) no conclusive answer regarding tungsten could be made. Accordingly, I collected 15 more samples in June, 1968, taking care that fractures were represented. The location and value of these samples are plotted on Attachments J and K. Sample descriptions are given in Attachment L. Assaying was done by Jacobs and silver was reported uniformly higher than in 1967, and tungsten was uniformly very low--the one 1967 high-grade WO_3 assay was not duplicated.

Sampling at this point is not satisfactory to aid in spotting low-grade mineral trends which might serve as a lead in prospecting for a better mineral zone beneath alluvium. The additional samples recommended would be numerous, to give a better statistical chance of spotting the range in grade, or progressive changes in a particular direction (if such a change is present). This would require three to five days if two men work.

John E. Kinnison

* Fire Assay:
Jacobs assays should be reliable--his principal source of error will be the correction for silver in the litharge. The check assaysby the Arizona Bureau of Mines were run with silver-free litharge. Hawley and Hawley assays are suspect.



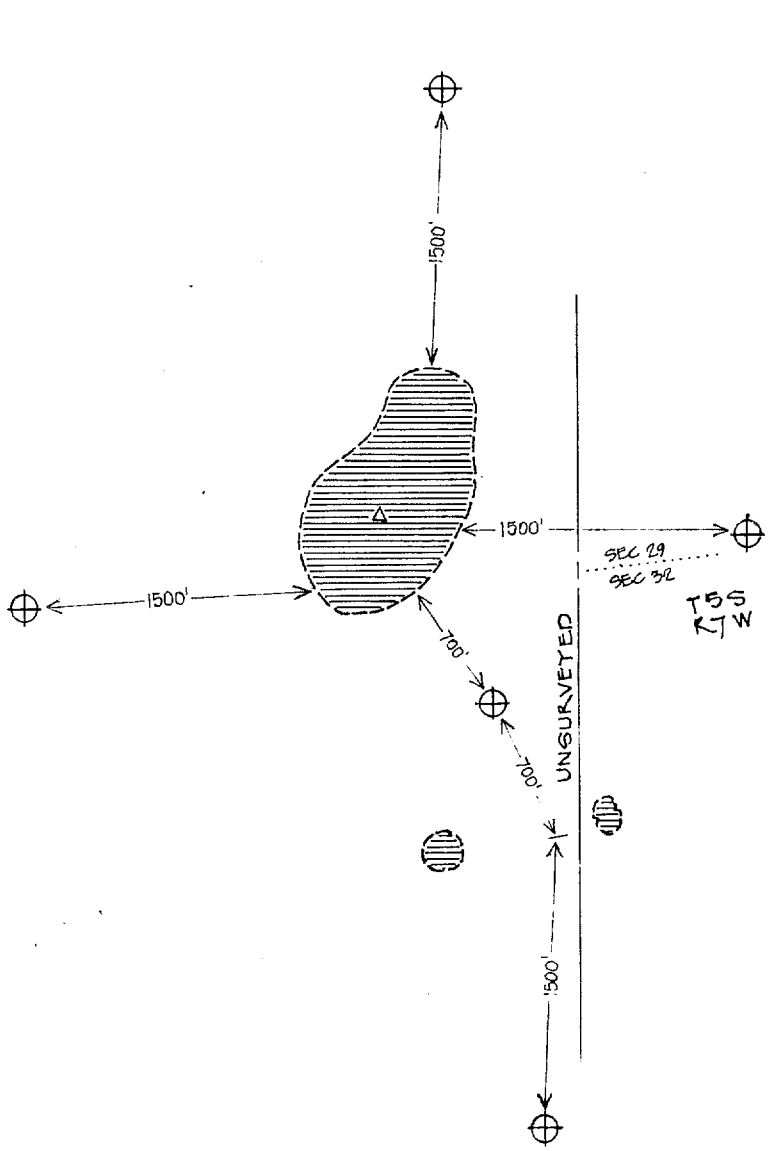
ACCESS MAP

PAINTED ROCK PROSPECT

JEK

0 .5 1 2
MILES

1968



MINERALIZED OUTCROP

PROPOSED SITE

Federal ground open to location within all but 2 circles except SW/4 Sec 32 which is State

PROPOSED INITIAL DRILL SITES

PAINTED ROCK PROSPECT

JEK 1" = 1000' '90B

PRELIMINARY DRILLING ESTIMATE
PAINTED ROCK PROSPECT

Mobilization, rotary drill and equipment			$ 700
Roads and drill sties (ground requires water and packing;	D-8 cat	$ 200	
	Water truck	2,000	
	Water	400	
	Grader	300	2,900
Rotary drilling 1500 ft. ($25/hr or equivalent to $8./ft)			12,500
Mud and supplies			500
Hammer drilling 500 ft @ $5.80/ft			2,900
Supervision and sampling			7,000
Assaying			1,000
		Total	$27,500
		Casing if needed	2,000
		Estimated maximum cost	$29,500

Cost: X-Ray and other lab-work Bromyrite 15.00
Report Gold 25.00
Total 10
50.00

ATTACHMENT E

May 12, 1967

J. E. K.

MAY 16 1967

Mr. John E. Kinnison
American Smelting and Refining Co.
P. O. Box 5795
Tucson, Arizona 85703

Re: J.M.G. No. 1324

Dear John:

Recently you submitted to me a specimen of hematite-stained metamorphosed shale contorted into a sharp hand-specimen fold with some small specks of mineral for identification. The specks were of two types: (1) bluish-green 'copper oxide' colored rounded patches, 3 in number and about 0.3 mm across, which almost resembled lichen spots, and (2) a cluster of perhaps twenty micrograins (0.05 mm?) of a bright, gold-colored mineral on quartz.

Mineral 1 is BROMYRITE, AgBr. One of the grains was removed, made into a spindle, and X-rayed. The pattern affords an unique identification which is completely in keeping with its physical and optical properties and environment.

Mineral 2 is GOLD(?). The query represents a 90% probability (or 10% uncertainty), but without certain proof. An X-ray needle was attempted, but the grains were so fine, so well attached to microcrystalline quartz, and so malleable (evidence in itself) that enough unknown could not be gathered for other than a blank X-ray pattern, even with a 10-hour exposure time. Gold was suspected especially in view of the bright, untarnished nature of the mineral in an otherwise thoroughly oxidized specimen (eliminating pyrite and chalcopyrite) so the following microchemical etch tests were run:

Mercury: ~~an~~ attempts at dissolving the mineral by forming amalgam were unsuccessful owing to the difficulty of contacting Hg globules with the microcrystals.

$AgNO_3$: should effect neither gold nor pyrite, but should dissolve chalcopyrite. No effect on unknown.

KCN: should dissolve gold, but effect neither pyrite nor chalcopyrite. Unknown grains were dissolved.

As final consideration, an association of native gold with bromyrite is a reasonable one.

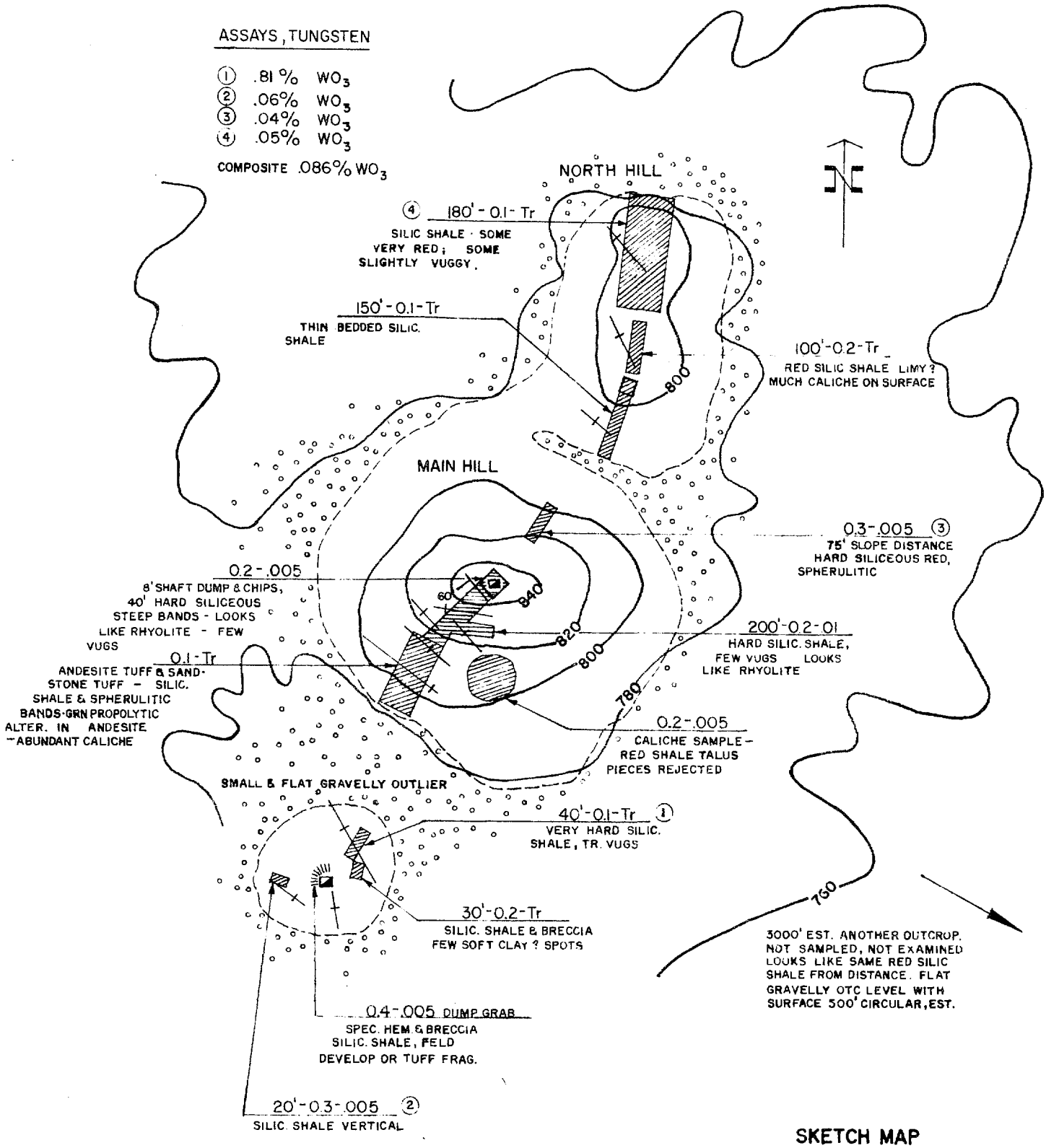
I trust that these identifications are satisfactory.

Sincerely yours,

John M Guilbert

John M. Guilbert

JMG:jc


ASSAYS, TUNGSTEN
① .81 % WO_3
② .06% WO_3
③ .04% WO_3
④ .05% WO_3
COMPOSITE .086% WO_3
NORTH HILL
④ 180'-0.1-Tr
SILIC SHALE · SOME VERY RED; SOME SLIGHTLY VUGGY.
150'-0.1-Tr
THIN BEDDED SILIC. SHALE
100'-0.2-Tr
RED SILIC SHALE LIMY? MUCH CALICHE ON SURFACE
800
MAIN HILL
0.3-.005 ③
75' SLOPE DISTANCE HARD SILICEOUS RED, SPHERULITIC
0.2-.005
8' SHAFT DUMP & CHIPS, 40' HARD SILICEOUS STEEP BANDS - LOOKS LIKE RHYOLITE - FEW VUGS
840
820
800
780
200'-0.2-01
HARD SILIC. SHALE, FEW VUGS LOOKS LIKE RHYOLITE
0.1-Tr
ANDESITE TUFF & SAND-STONE TUFF - SILIC. SHALE & SPHERULITIC BANDS-GRN PROPOLYTIC ALTER. IN ANDESITE -ABUNDANT CALICHE
0.2-.005
CALICHE SAMPLE - RED SHALE TALUS PIECES REJECTED
SMALL & FLAT GRAVELLY OUTLIER
40'-0.1-Tr ①
VERY HARD SILIC. SHALE, TR. VUGS
30'-0.2-Tr
SILIC. SHALE & BRECCIA FEW SOFT CLAY ? SPOTS
760
3000' EST. ANOTHER OUTCROP. NOT SAMPLED, NOT EXAMINED LOOKS LIKE SAME RED SILIC SHALE FROM DISTANCE. FLAT GRAVELLY OTC LEVEL WITH SURFACE 500' CIRCULAR, EST.
0.4-.005 DUMP GRAB
SPEC. HEM & BRECCIA SILIC. SHALE, FELD DEVELOP OR TUFF FRAG.
20'-0.3-.005 ②
SILIC. SHALE VERTICAL
LEGEND
oz. Ag oz. Au
0.2 - .005
AREA OF SURFACE CHIP SAMPLE
STRIKE OF BEDS
SKETCH MAP
PAINTED ROCK PROSPECT
SHOWING
SURFACE OUTCROP AND SAMPLE LOCATION
JEK
1967
1" = 250'
0 30 100 250

HAWLEY & HAWLEY
ASSAYERS AND CHEMISTS, INC.
1700 W. GRANT RD. • BOX 5934 • 622-4836
TUCSON, ARIZONA 85703

ATTACHMENT G

BRANCHES
DOUGLAS, ARIZONA
HAYDEN, ARIZONA
EL PASO, TEXAS
AMARILLO, TEXAS

IDENTIFICATION	GOLD OZS	SILVER OZS	LEAD %	COPPER %	ZINC %	W %	MoG. IRON %	U_3O_8 %
Composites of the following pulps:						SEP 28 1967		
Original - 1833 thru 1843	None	None						0.006
Duplicate- 1833 thru 1843	None	None						0.004

Painted Rock
John E. Kinnison
Maricopa County

CC: American Smelting & Refining Company
ADD: Attn: Mr. J. E. Kinnison J. E. K.
CITY: Box 5795
DD: Tucson, Arizona 85703 SEP 28 1967
CITY:

REMARKS:
Spectrograph to follow
Compositing

ANALYSIS CERT. BY Richard

PREPARATION $ 2.20
ANALYSIS $ 31.00

ACC: AMERICAN SMELTING & REFINING CO. - Tucson | DATE SPL. RECEIVED 9/18/67 | DATE COMPL 9/26/67 | TUC 336973 | $ 33.20

ATTACHMENT H

838-5939
870-3749

PACIFIC SPECTROCHEMICAL LABORATORY, INC.

CHEMICAL AND SPECTROGRAPHIC ANALYSIS

RESEARCH

2558 Overland Avenue

Los Angeles, California 90064

September 26, 1967

W. G. A.

SEP 29 1967

Report of semiquantitative spectrographic analysis of sample submitted by

Hawley & Hawley
P.O. Box 5934
Tucson, Arizona 85703

Composite - No's 1833 thru 1843

	336973
Silicon-	23. %
Aluminum-	13.
Potassium-	7.4
Iron-	0.17
Calcium-	2.1
Sodium-	3.9
Magnesium-	0.20
Titanium-	0.46
Manganese-	0.028
Barium-	0.12
Lead-	0.066
Tungsten-	0.17
Chromium-	0.037
Gallium-	0.0057
Vanadium-	0.0044
Copper-	0.016
Nickel-	0.0020
Zirconium-	0.042
Yttrium-	0.0095
Strontium-	0.018
Molybdenum-	trace
	less than 0.002
Boron-	trace
	less than 0.002
Tin-	trace
	less than 0.003

Antimony-	not detected-	less than 0.005
Arsenic-	"	" 0.05
Beryllium-	"	" 0.0003
Bismuth-	"	" 0.001
Cadmium-	"	" 0.006
Cesium-	"	" 0.20
Cobalt-	"	" 0.001
Columbium-	"	" 0.02
Germanium-	"	" 0.003
Gold-	"	" 0.001
Hafnium-	"	" 0.05
Indium-	"	" 0.007
Lithium-	"	" 0.02
Mercury-	"	" 0.09
Platinum-	"	" 0.002
Phosphorus	"	" 0.50
Rhenium-	"	" 0.005
Ruthenium-	"	" 0.01
Rubidium-	"	" 0.20
Silver-	"	" 0.0001
Tantalum-	"	" 0.05
Tellurium-	"	" 0.04
Thallium-	"	" 0.10
Zinc-	"	" 0.03
Rare earths-	mil	

Painted Rock
Maricopa County

Respectfully submitted,

PACIFIC SPECTROCHEMICAL LABORATORY, INC.

ATTACHMENT I

HAWLEY & HAWLEY

Registered Assayers

HAWLEY & HAWLEY

ASSAYERS AND CHEMISTS, INC.

1700 WEST GRANT ROAD - TELEPHONE 622-4836 - POST OFFICE BOX 5934

TUCSON, ARIZONA 85703

K.V.L.S.
OCT 20 1967

THE SOUTHWEST'S LEADING ASSAYERS AND REPRESENTATIVES

Branch Representatives at Buyer's Plants:
Phelps Dodge Corp., Douglas, Arizona; ASARCO, El Paso, Amarillo, Texas and Hayden, Arizona

IDENTIFICATION	Gold ozs.	Silver ozs.	Lead %	Copper %	Zinc %	Mo. %	WO_3 %	Hg %	
Composite: 1833-1843 orig.						Ave. .085%	0.078	None	
1833-1843 dup.							0.093	[illegible]	
1833							0.307	None	
1835							0.061	None	
1840							0.037	None	
1843							0.047	None	
	6 WO_3, verified @ $8.00								48.00
	6 Hg, verified @ $6.00								36.00
	11 composites @ $.20								2.20

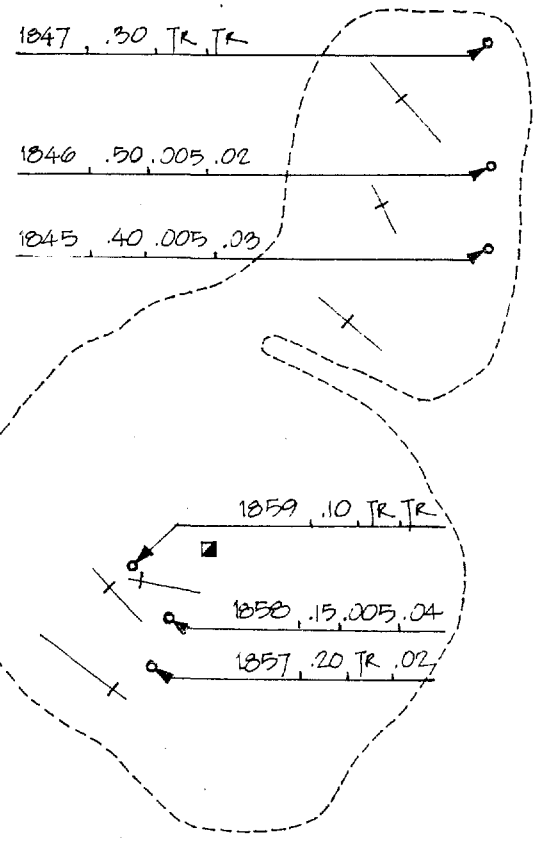
CC: American Smelting & Refining Co.
ADD: P. O. Box 5795
CITY: Tucson, Arizona 85703
ADD:
CITY:

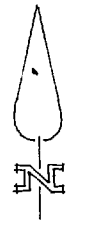
REMARKS:

Analysis Cert. By N. Creighton

Preparation $ 2.20
Analysis $ 84.00

ACC:	Date Spl. Received	Date Compl.		$
ASARCO - Tucson	10/16/67	10/19/67	TUC 337127	86.20





1000' TO OUTCROP 'B' SAMPLES 1848, 49, 50

800' TO OUTCROP 'A' SAMPLES 1851, 52, 53

NUMBER OZ Ag OZ Au $\%WO_3$ LOCATION

1853 .45 TR .02

STRIKE OF BEDS

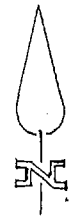
SURFACE OUTCROP AND SAMPLE LOCATION

PAINTED ROCK PROSPECT

JEK.

0 50 100 250
FEET

1968



1"=300'

1200' TO MAIN OUTCROP

OUTCROP 'B'
RISES 5' ABOVE GRAVEL PLAIN

1850 .30 .005 .02

1849 .10 TR .03

1848 .10 TR .02

OUTCROP 'A'
RISES 8' ABOVE GRAVEL PLAIN

JOINTS

700'

1851 .20 TR. .03

1858 .45 TR .02

1852 .35 .005 .02

NUMBER	oz Ag	oz Au	% WO_3	LOCATION
1858	.45	TR	.02	

SMALL OUTLYING OUTCROPS "A" & "B"
AND
SAMPLE LOCATION

PAINTED ROCK PROSPECT

JEK

0 50 100 300
FEET

1968

Description of samples
Painted Rock Prospect
Taken June, 1968--chip/grab

1845 Red massive sltst? Silic. Strgs qtz or opal. Fractured

1846 Spherulitic? Lim spots. Silica strgs and spots.

1847 Arkose and shale, silicified, with limonite spots.

1848 Outlier, Rhyolite or siltst. Silicified and limonitic. Bx text in places. St jts, bedding? N45°W.

1849 Outlier, as in 1848, Shale, silicified. St frac. NW, may be bedding. Bleached spots. Miner on frac.

1850 Outlier, as in 1848. Red siltst. Bleached areas - 50% Hem-lim plus silicif

1851 A second outlier W of 1848. Red silicified siltst? Hem diffused and on frac. Light green mineral on frac.

1852 Outlier, as in 1851. Dark red to black desert varnish on surface. Fresh breaks show dark red aphanitic - rhyolite. Frac N45°E, 70°NE.

1853 Outlier, as in 1851. Shale? silicif and bleached, St. frac. Hem and qtz on frac. (This appears better mineralized than 1851-2)

1854 Red silicif shale. Some Bx text. Hem coated frac.

1855 Silicif shale and Bx. Hem abundant.

1856 Dump grab. Hem. Bx and red shale. Specularite moderate.

1857 Silicif. shale w/drusy qtz and hem flooding and hem on frac.

1858 Massive ledge. Hem flooded shale? Vy siliceous. (Looks like rhy) Qtz druses and hem strgs.

1859 Rhyolite? St. silicif. Drusy rugs, specularite. Bleached along frac. Hem in bands and in some frac. Est 1% rugs.

V035

T-10.6
T

J. H. C.

JUN 19 1967

AMERICAN SMELTING AND REFINING COMPANY
Tucson Arizona

June 16, 1967

W.E.S.
JUL 21 1967

MR. WES
READ AND RETURN
PREPARE ANSWERS ___ HANDLE ___
FILE ..... INITIALS ___

TO: J. H. COURTRIGHT

FROM: JOHN E. KINNISON

AIR RECONNAISSANCE
SALOME TO PAINTED ROCK
MOUNTAINS, JUNE 4, 1967

On June 4, I made the subject flight and returned to Salome, using a Comanche 250, bottom wing plane. The pilot was John Hickey of Koenig Aviation, Casa Grande.

Left Salome 2:05 PM, returned 3:15 PM. Flying time one hour, ten minutes. Estimated one hour plane time round trip Casa Grande to Salome.

Weather: Bumpy at Salome and Harquahala plain; smoother over Painted Rock Mountains.

Visibility: Very good. High clouds, sun muted.

Geology

1. Southwest end of the Harquahala Mountains south of Salome appears to be made of banded schists (or sediments). Many small diggings and roads appear on the southwest slope. A rather extensive yellow-tan color zone, 1500' wide and one mile long -- estimated.

2. Flying southeast toward the Gila Bend Mountains over the Harquahala plain, I noted extensive development of pediments away from the principal mountains. The valley area is only locally incised by streams. Many red color zones appear on the pediments, and are probably alteration zones. They strike northwest. Some of this color may derive from weathered volcanics, however. The Eagletail Mountains on the west are gently dipping layered volcanics.

3. Flew south along the east side of the Painted Rock Mountains. Altitude reduced to 1000' above ground elevation. The red colored hill, which I recently sampled for silver (Painted Rock Prospect), is clearly visible. The steeply dipping beds of silicified shale could not be distinguished, and the rocks appear as a massive unit.

4. Flew over the gap in the center of the Painted Rock Mountains, where the county geologic map shows a laramide granite intrusive into the layered volcanics which form the main mountain range. The rock appears gray in contrast to the brown color of the volcanics. Its color and weathering characteristics suggest that it is a granitic rock. The contact is irregular and appears to be an intrusive contact. This irregularity could have been formed if the volcanics were deposited against an older granite ridge. The extent of granite (estimated) is about 3 by 2 miles, trending W-NW. No alteration seen.

5. Circled the south side of the range and flew north along the west side. An isolated group of diggings, with roads leading to the different workings, is in the volcanics of the Painted Rock Mountains. The roads appear to be in good condition. Location: 6 miles north of Gila Bend-Yuma highway.

6. North of No. 5 above, in a group of hills detached from the western escarpment of Painted Rock volcanic group, is an extensive group of diggings--Rawley Mine as shown on the Dendora Ranch 15' quad. Many roads lead to the different workings over an extent of 3/4 mile wide and maybe a little more than a mile in a northerly direction. The rock in this area is red and looks like the Painted Rock Prospect on the east side of the mountains. The topographic map shows more prospects continuing north, but I didn't see these. Most of the working are in the "red rock" and are lower in elevation than the layered volcanics of the main range. I saw one digging, with a road to it, clearly up in the volcanic sequence.

Conclusion

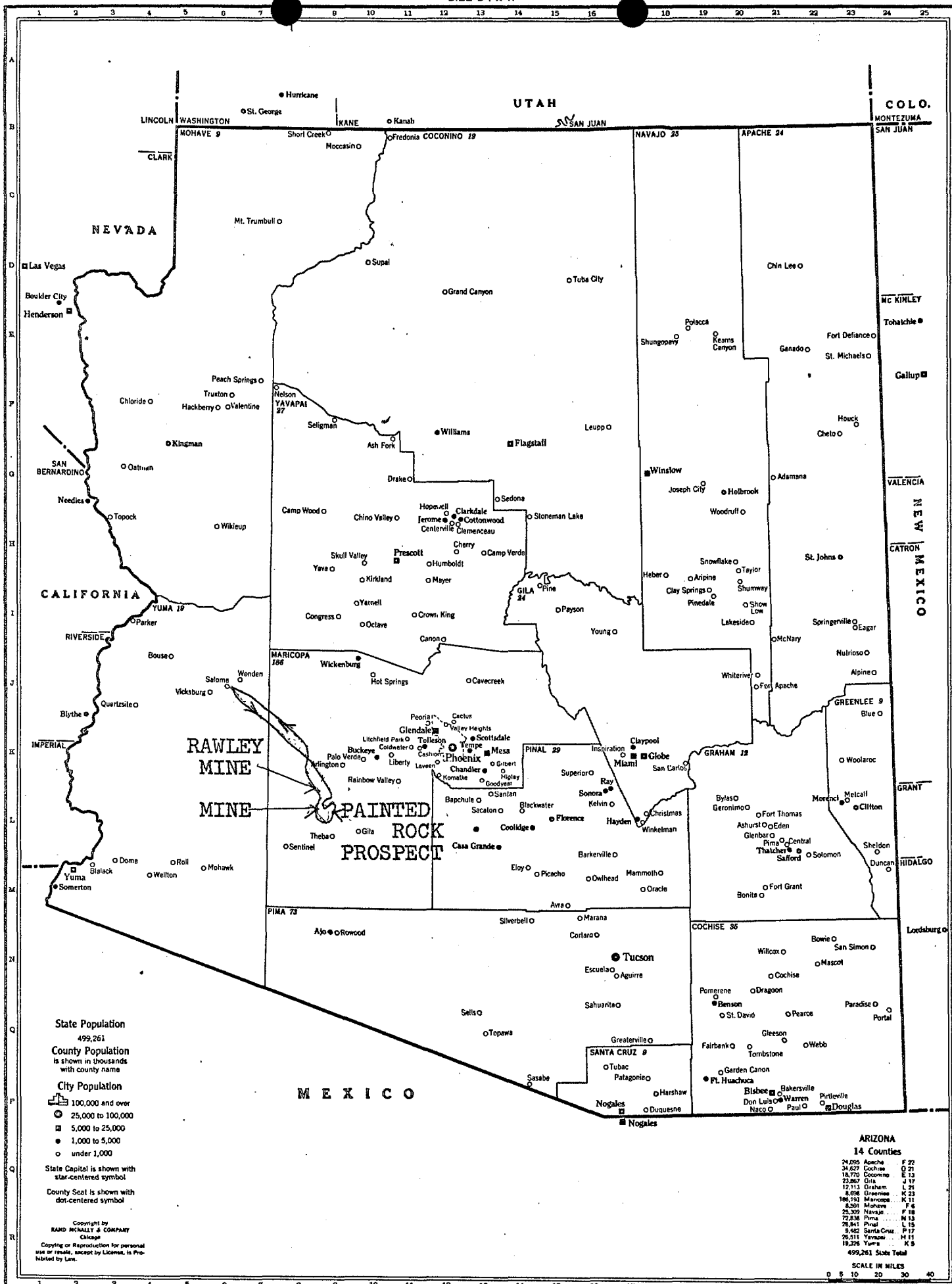
The Rawley Mine area is on a projection of the silicified beds of the Painted Rock Prospect, and should be field checked. The age of the volcanics versus the granite should be determined.

The above comments derive from notes made upon my return to Salome.

John E. Kinnison

JOHN E. KINNISON

JEK/mcg
Attachment



State Population
499,261

County Population
is shown in thousands with county name

City Population
- 100,000 and over
- 25,000 to 100,000
- 5,000 to 25,000
- 1,000 to 5,000
- under 1,000

State Capital is shown with star-centered symbol

County Seat is shown with dot-centered symbol

ARIZONA
14 Counties

24,095	Apache	F 22
34,627	Cochise	Q 21
18,770	Coconino	E 13
23,867	Gila	J 17
12,113	Graham	L 21
8,898	Greenlee	K 23
186,193	Maricopa	K 11
8,591	Mohave	F 6
25,309	Navajo	F 18
72,838	Pima	N 13
26,841	Pinal	L 15
9,482	Santa Cruz	P 17
26,511	Yavapai	H 11
19,226	Yuma	K 5
499,261	State Total	

SCALE IN MILES
0 5 10 20 30 40