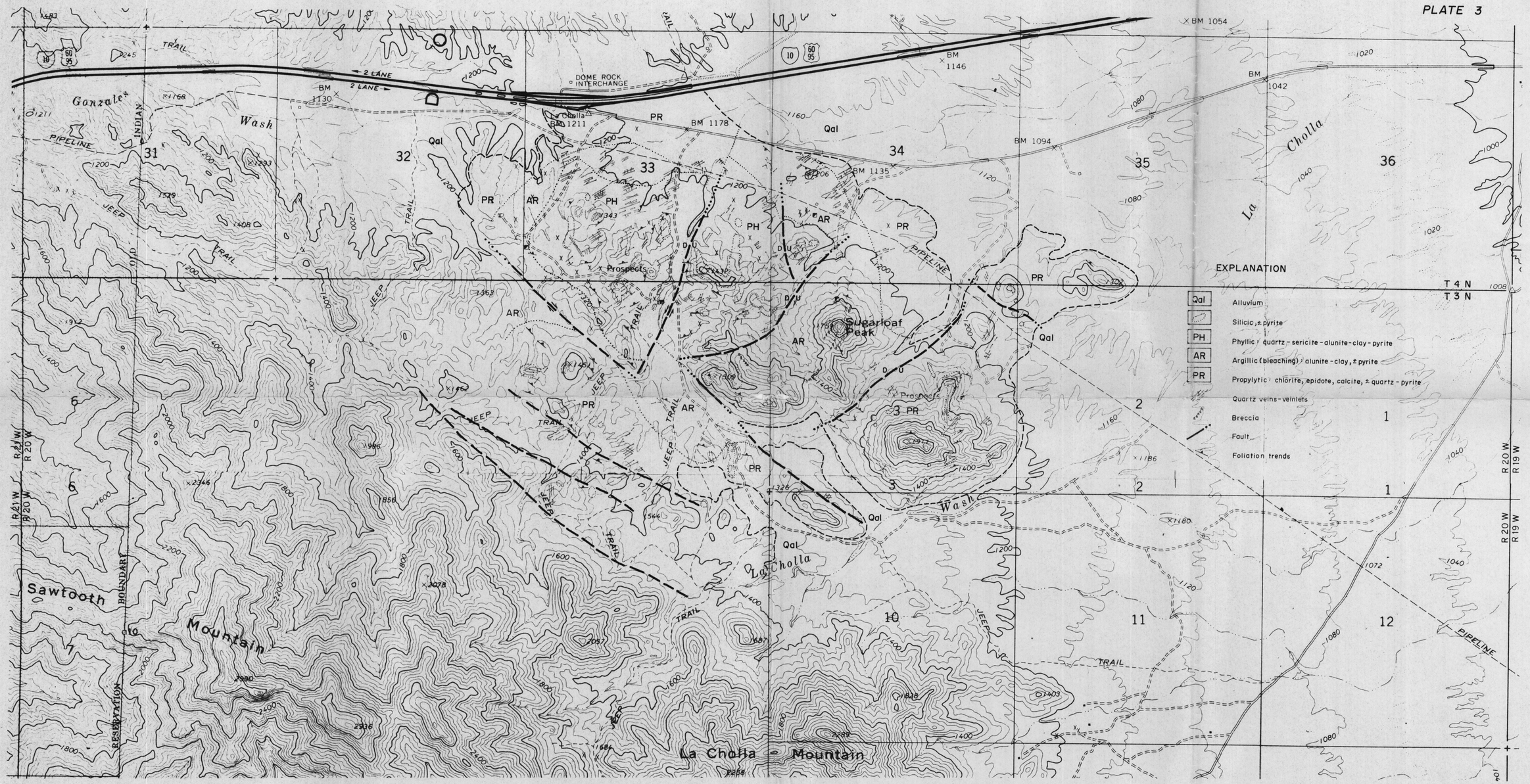
PLATE 3



ALTERATION - STRUCTURE MAP, SUGARLOAF PEAK PROJECT, QUARTZSITE, ARIZONA

1000 0 1000 2000 FEET

NED, 1983

A1201 - somewhat select grab of CuOx skarn. epid, garnet, hedenbergite skarn, hornfels - bed rep. is ≈ 5' thk. - don't know where interp. is - trace sulf. schist w dump

A1202 - somewhat select grab from very large dump. Deep shaft. Smp. FeOx - py. rich skarn stuff, local qtz. - no CuOx. Miner. must crop out on S side of ridge as is dip slope. Local py to 25%. - In tan wxy ls - marble

Series of thrust plates - trend E-W repeating int'vu. contacts

also looks like skarn mineralization.

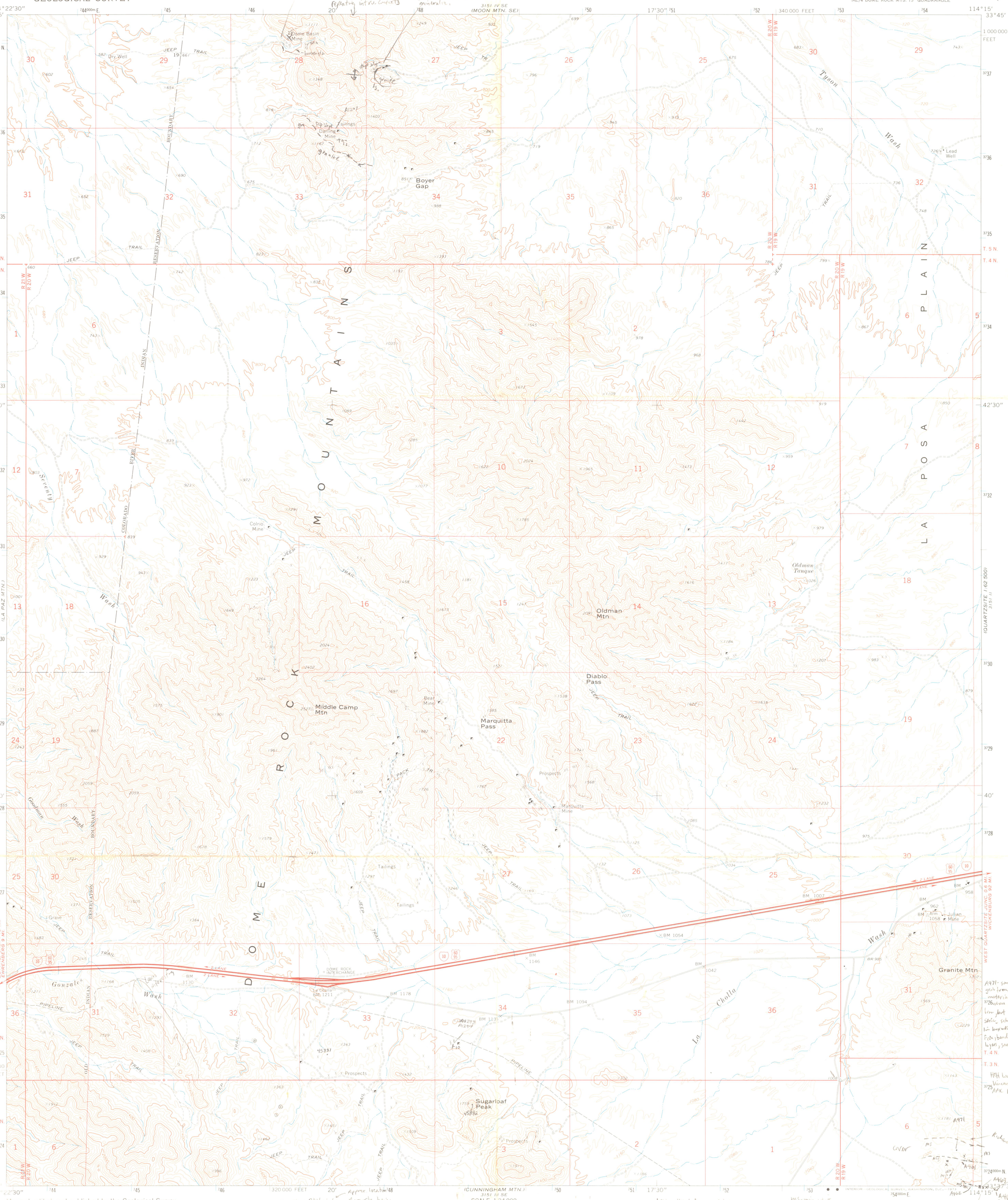
UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

MIDDLE CAMP MTN. QUADRANGLE

ARIZONA–YUMA CO.

7.5 MINUTE SERIES (TOPOGRAPHIC)

NE/4 DOME ROCK MTS. 15' QUADRANGLE



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1970. Field checked 1971

Projection and 10,000-foot grid ticks: Arizona coordinate system, west zone (transverse Mercator)

1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue. 1927 North American datum

Where omitted, land lines have not been established

A1293 - grab from small ore pile - rusty qtz from ≈ 2' thk vein, ~N-S dip ~10°E, followed by several shafts. include calcite in argillic-phyllic alt, meta chip?

A1294 - rep grab from 2 parallel E-W trend, bedding ~E-W flat - gossany, phyllic alt over metal sft?, local qtz veins, 1 trend in green-drab vesicular siliceous sinter? - trench, 40' long

Approx location of New RDH holes. Actively being drilled on 9/8/88

A471 - somewhat select grab from stockpile material - Don't know exact zone from but is local. Qtz. sericite schist w/ FeOx, lin boxwk, fractured w/ FeOx, banded w/ more silic layers, see gossan sulfs.

H&H Lode #2 Loc. Vincent Gatte AFX 196475

Richard Loc.

A461 - altered fg-mg. felsic dike? - abundant FeOx, ~2-3% py? only ≈ 2' wide, others in area, grab trends NW-SE

A462 - grab from small pit at FeOx - sericite schist unit - 5' thk, dip ~ 50N, str. E-W. - band is exposed ~ 30' of gray-blu mica schist. sample has some py → lim, locally silicified

A463 - rep grab from dumps of shaft - trench, sericite schist w/ local bands of dumortierite, kyanite where is also silicified. Zones of dum-sky or 1 to 50' thk, pass exposed. No FeOx, py seen in this area.

A464 - Similar to A463, but more purple sft, (dumor?) which is more massive. rep grab from shallow pits. No FeOx

ms - mica schist

dumor - kyan. pyrgl.

CONTOUR INTERVAL 40 FEET

DOTTED LINES REPRESENT 20-FOOT CONTOURS

DATUM IS MEAN SEA LEVEL

SCALE 1:24 000

ROAD CLASSIFICATION

Primary highway, hard surface — Light-duty road, hard or improved surface

Secondary highway, hard surface — Unimproved road

Interstate Route — U. S. Route — State Route

QUADRANGLE LOCATION

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242

A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

MIDDLE CAMP MTN., ARIZ.

NE/4 DOME ROCK MTS. 15' QUADRANGLE

N3337.5—W11415/7.5

1971

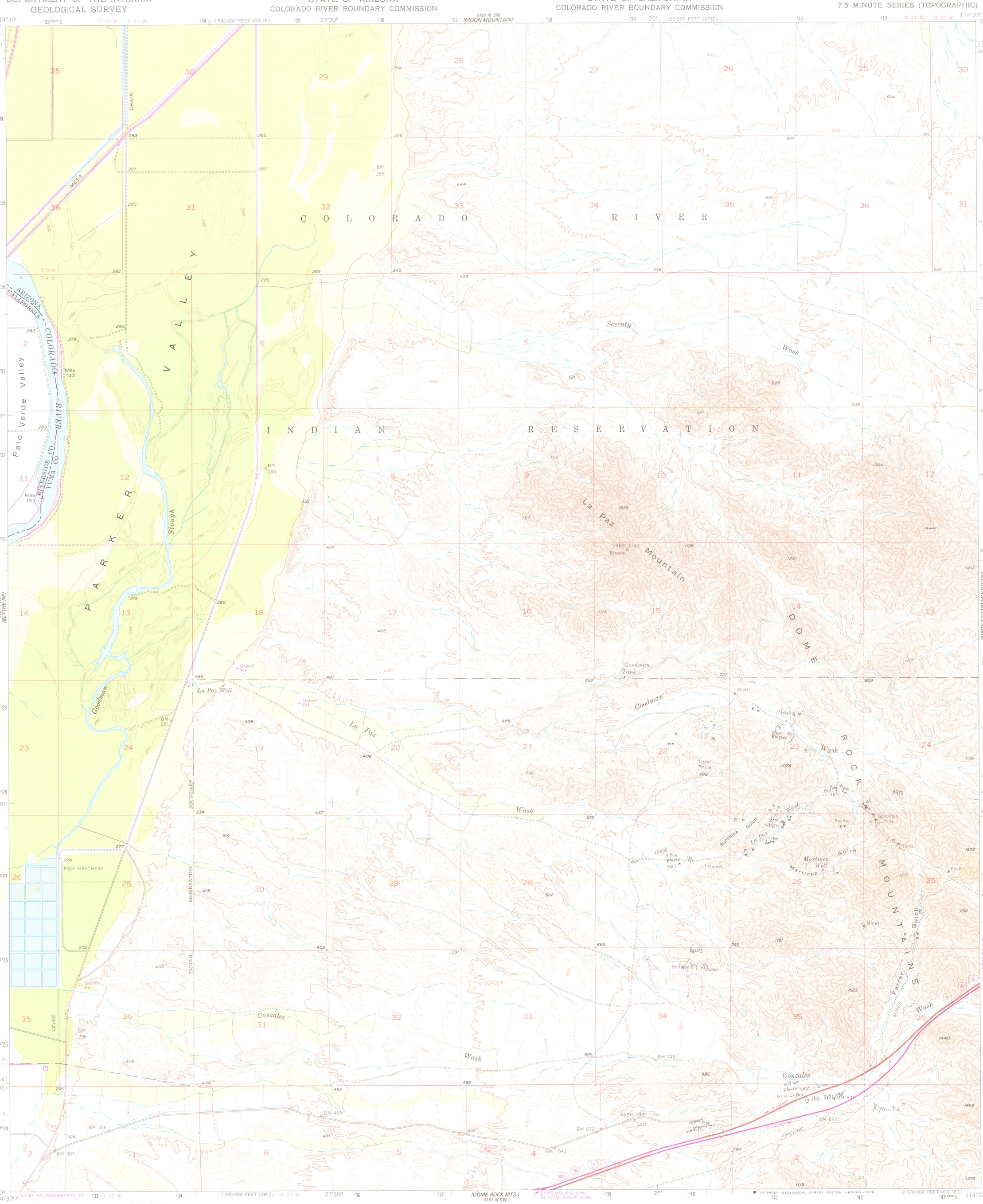
AMS 3151 III NE—SERIES V898

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF ARIZONA
COLORADO RIVER BOUNDARY COMMISSION

STATE OF CALIFORNIA
COLORADO RIVER BOUNDARY COMMISSION

LA PAZ MTN. QUADRANGLE
ARIZONA—CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)



5/19/85
Goodman Mine - in green-gray chl-qtz-ser schist. most twisted, folded, sheared. Conform to bed have erratic bunches of qtz and argill. alt. w/ FeOx. Also some felds. rich layers in schist. Fold noses have erratic bunches of qtz w/ FeOx, py in sphalerites in c.g. white qtz.
m.g. leuco. granite
show
mylonite
epidote c.g. granite
epidote granite becomes more sheared until it becomes the chl-qtz-ser. schist. Local folds but foliat generally N45W, ~30-45 SW. Contact w/ leuc. gran is sheared-gran. could be syn-tect. good mylonite here.
qtz veins & marg. alt. zone and all mining in schist, but qtz veins also in leuc gran. dip of qtz veins about that of schist and from 20-60 NE clear noted. qtz from 6"-6', very erratic.
A973 - chip just inside portal from main Goodman mine. 2' chip across white qtz. No marginal alt here.
active placer test - some gold in La Paz
active placer test - 5/24/85
quarry in Kyanite
active placer test
Dan-Angie Patch - Contract from Jesse Scott - Gold Belt 1, 2, 3, 4 - Patch loc. Gold City 1-40 and Jodi 1-43. Earliest for Patch is 4/20/83, latest is 4/15/85. Contract w/ Heber, Inc. dated April 1, 1985 - April Fool's Day! - Goodman Mine not patented. Claims formerly under option to Gold Resources Corp - seems must be conflict w/ Placer locations
A203 - select grab from various areas at Ky-and-qtz 'greisen'. areas w/ local py, FeOx and qtz vuggs sampled. These generally are more c.g. Rock generally a pale blue m.g granular rock w/ ~25% ky, 75% qtz., quite widespread. all in original leucocratic granite

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1953. Field check 1955

Polyconic projection. 1927 North American datum
10,000-foot grids based on Arizona coordinate system, west zone, and California coordinate system, zone 6

1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue

Revisions shown in purple compiled from aerial photographs taken 1970. This information not field checked

UTM GRID AND 1970 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
GN MN 1°25′ 25 MILS 14½° 258 MILS

SCALE 1:24 000
1 ½ 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION
ARIZONA

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Medium-duty — Unimproved dirt
U. S. Route — Interstate Route

LA PAZ MTN., ARIZ.—CALIF.
N3337.5—W11422.5/7.5

1955
PHOTOREVISED 1970
AMS 3151 III NW—SERIES V898

Table 2.

SUGARLOAF PEAK PROJECT — assay results from reverse circulation drilling

Hole: SWR-2
Bearing: 0°
Inclination: -70°
Completed: 11-15-84

Interval	Au (oz/t)	Interval	Au (oz/t)	Interval	Au (oz/t)
0- 5	no sample	150-155	.016	300-305	.013
5- 10	.014	155-160	.008	305-310	.023
10- 15	.033	160-165	.019	310-315	.033
15- 20	.009	165-170	.005	315-320	.052
20- 25	.016	170-175	.018	320-325	.008
25- 30	.006	175-180	.034	325-330	.008
30- 35	.002	180-185	.005	330-335	.007
35- 40	.013	185-190	.027	335-340	.005
40- 45	.022 (.023)**	190-195	.006	340-345	.014
45- 50	.018	195-200	.008	345-350	.018
50- 55	.021	200-205	.014 (.013)**	350-355	.006
55- 60	.011	205-210	.011	355-360	.005 (.007)*
60- 65	.008	210-215	.006	360-365	.004
65- 70	.007	215-220	.017	365-370	.010
70- 75	.009 (.011)**	220-225	.006	370-375	.006
75- 80	.003	225-230	.008	375-380	.006 (.006)**
80- 85	.031	230-235	.003	380-385	.022
85- 90	.005	235-240	.008 (.006)**	385-390	.003
90- 95	.034 (.033)*	240-245	.003	390-395	.001
95-100	.020	245-250	.004 (.006)*	395-400 TD	.003
100-105	.020	250-255	.005		
105-110	.009	255-260	.002		
110-115	.004	260-265	.006		
115-120	.005	265-270	.007		
120-125	.034	270-275	.009		
125-130	.014	275-280	.014		
130-135	.011	280-285	.010		
135-140	.015 (.02	285-290	.015		
140-145	.008	290-295	.011 (.015)**		
145-150	.058	295-300	.007		

(assay repeat) * Amselco Lab
** Monitor Lab

Intervals >.010 opt gold

NICOR MINERAL VENTURES

One of the NICOR basic energy companies

MEMORANDUM

To: Clancy Wendt

From: Gary Parkison

Date: April 1, 1986

Subject: Sugarloaf Peak Submittal - Norm Dausinger

INTRODUCTION

Norm Dausinger, agent for Westworld Oil and Gas, submitted the Sugarloaf Peak gold property to us for joint venture consideration in late February, 1986. The property consists of 84 SP claims and 48 Lizard Lip claims (total 132 claims) covering a contiguous 2640 acres on BLM ground (T4NR20W Secs 33, 34, 35; T3NR20W Secs 2, 3, 4). The area is located just south of I-10 about seven miles west of Quartzsite, La Paz County, Arizona. The topography is quite subdued with low hills except for conical-shaped Sugarloaf Peak.

Westworld originally located the SP claims in November, 1981 over an area previously evaluated for porphyry copper-moly potential. Following extensive surface sampling by Westworld and many other companies examining the property for joint venture participation Westworld drilled ten shallow (250') rotary holes in April, 1983 with interesting results. In 1984 AMSELCO entered into a joint venture on the property which was subsequently terminated in September, 1985 due to company wide cutbacks. AMSELCO drilled eighteen shallow to moderate depth holes with results comparable to Westworlds.

GEOLOGY

The Sugarloaf Peak property is underlain by extensively altered and weakly metamorphosed Mesozoic (Jurassic?) volcanic sandstones (graywackes), lithic tuffs and quartz porphyry intrusives and flows. The general lack of good exposures and the effects of superimposed metamorphic and alteration have hindered the generation of a useable geology map and no map of distribution of rock types is available. Foliation of the generally stratified rocks have shallow to moderate dips to the northwest, north and northeast. Large faults are inferred beneath alluvium whereas some exposed low-angle structures may also be faults of unknown displacement.

Petrographic descriptions of numerous rock samples by Sid Williams has led him to conclude that probable regional metamorphism was superimposed upon an earlier alteration episode, timing similar to that of the Carolina state belt. An alteration map prepared by AMSELCO shows a general increase in alteration intensity from west to east, towards Sugarloaf Peak. The alteration is assumed to have been generally independent of rock type and progresses from propylitic, through sericitic with or without quartz to argillic, including advanced argillic assemblages with alunite, and culminates in quartz-flooded silicified rock. The western half of the prospect area is underlain by the sericitically altered rock with argillically altered rock in the eastern part enclosing local areas of quartz flooded rock. The affects of later metamorphism are difficult to distinguish from the earlier alteration effects, but may have been of greenschist facies with attendent development of some schistosity and foliation.

GEOCHEMISTRY

A fairly comprehensive geochemical data base covers most of the prospect area as well as adjacent areas to the west. AMSELCO in particular took several hundred surface samples in a general E-W trending swath astride Sugarloaf Peak. Geochemical maps have been prepared for Au, Ag, As, Sb, Hg, Te, Tl, Bi, Cu, Pb, Zn and Mo. Au and Ag anomalies are coincident but do not generally relate to anomalies for any other elements. Where Au and Ag anomalies are present they often have associated, elevated As, Sb, Hg and Te values but within a more restricted area than the Au and Ag. Hence, anomalies for Au and Ag do themselves appear to be their own best "pathfinders". Other areas with coincident As, Sb, Hg and Te values but with no associated Au or Ag have been drilled and shown to be barren of Au and Ag at depth as well. For this discussion, anomalous values are Au, >.010 opt, Ag; >.06 opt; As, >30 ppm; Sb, >7 ppm; Hg, >.06 ppm and Te, >.10 ppm.

Anomalous Au and Ag values are commonly restricted to areas underlain by sericitically altered rocks, generally to the west and north of Sugarloaf Peak, and are generally absent in areas of argillic alteration and quartz-flooded rock, although these latter areas host significant enrichments in As, Sb, Hg and Te.

MINERALIZATION

Very little is known about the habit, mode of occurrence or origin of gold mineralization. Based on petrographic descriptions and associated gold values there does not appear to be a general coincidence between gold and any particular rock type.

Nor does there appear to be a positive correlation with pyrite (oxidized and unoxidized) content or silicification. All mineralized samples (>.01 opt gold) do have quartz veinlets, however, suggesting some epigenetic component to the mineralization.

Some gold mineralization appears to be restricted or localized by shallowly-dipping quartz veins with base-metal sulfides, whereas most mineralization may be related to irregular quartz veins. At least locally some gold does appear to be found in very porous, siliceous rocks resembling siliceous sinter material. Much more work obviously needs to be done to define the controls and origin of the mineralization and in particular to decipher the relationship between mineralization and alteration events and the effects of later(?) metamorphism.

A working model for gold mineralization based on little factual data may include:

1. Deposition in a shallow submarine environment of the siliceous volcanic flows and interbedded sediments with contemporaneous subvolcanic intrusions providing a heat source for generation of subaerial and submarine hot springs with related deposition of siliceous sinter.

2. Alteration associated with the hot springs produced the present alteration pattern and is genetically related to gold-silver mineralization. Quartz-flooded zones could represent throats or vents of hot springs with spatially related trace element anomalies.

3. The fairly long lived alteration-mineralization hydrothermal event produced cross-cutting quartz veins and veinlets and redistributed some of the earlier deposited gold.

4. Cessation of the hydrothermal system was followed by regional greenschist facies metamorphism which could have also acted to remobilize gold and other elements to some degree.

5. Weathering and supergene effects have oxidized pyrite, and produced both allophane and alunite veinlets.

DRILLING RESULTS

Drilling results are tabulated in Table 1. Drilling has been fairly widespread and many holes have intersected interesting thicknesses and grades of mineralization, typically aggregating 75-150' of .015-.020 opt gold with .2-.4 opt silver. The

mineralized zones are often scattered throughout the hole, however, and no consistent mineralized zone or trend has been defined. An assay log of one of the better holes, SWR-2, is presented as Table 2. Drill holes and associated aggregate grades and thicknesses are shown in Figure 1.

As shown on Figure 1 the most intensely drilled area is west of Sugarloaf Peak with 15 of the total 28 holes drilled in an area about 1200' N-S by 2500' E-S. This area also closely follows the area of consistently high gold values in surface sampling by AMSELCO.

METALLURGY AND ASSAYING

Preliminary metallurgical studies have been performed on composite drill hole cuttings by Dawson Labs and Heinen-Lindstrom. Bottle roll leach tests conducted on both oxide and sulfide zone material at sizes from 1/4 inch to -200 mesh gave gold recoveries from 68 to 72% in 48 hours with fairly low cyanide and lime consumption.

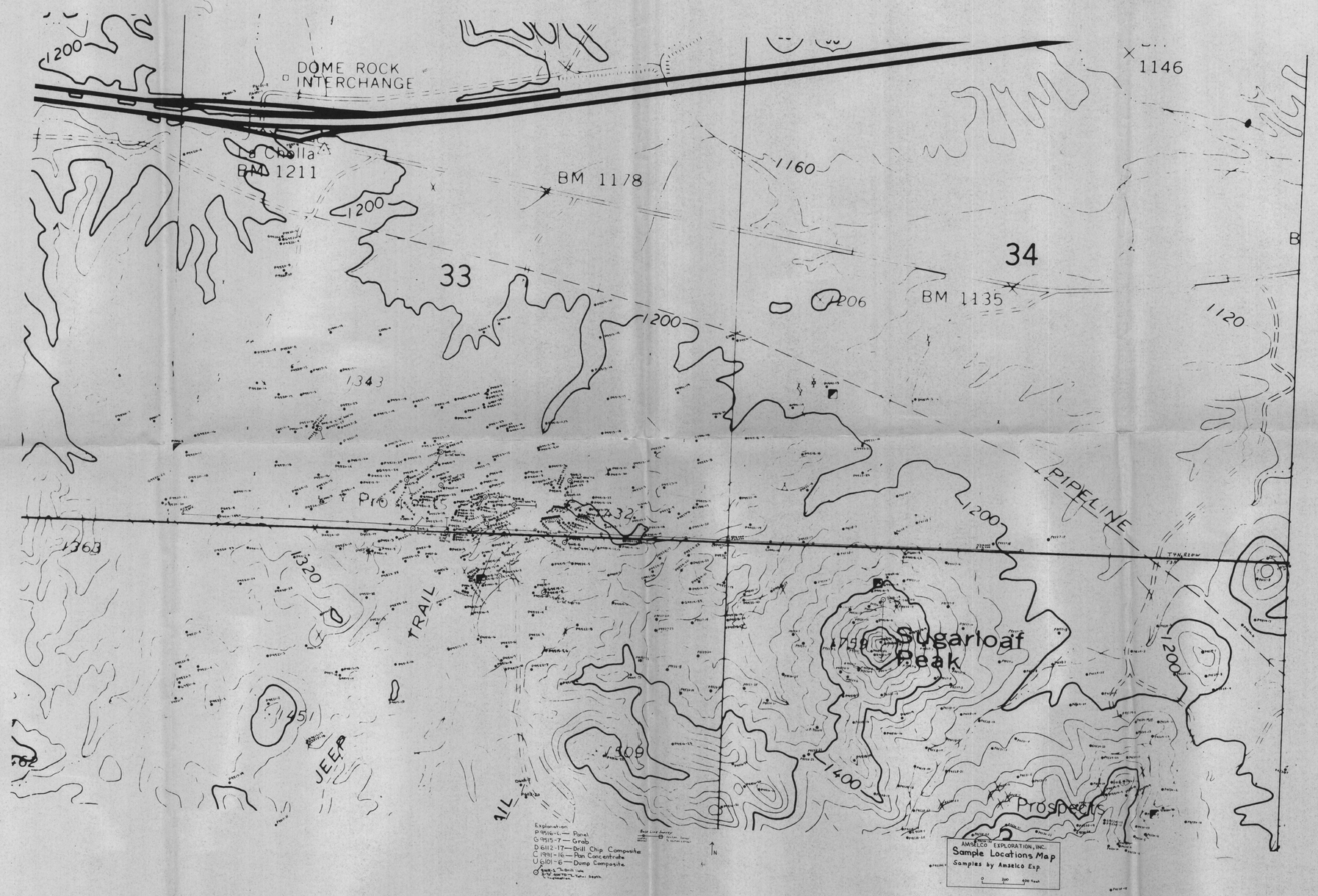
All gold and silver assaying done on the project has been by fire assay performed by AMSELCO, Jacobs and Skyline. Checks between Skyline and Jacobs often show some divergence but with no consistent pattern, suggesting a possible free gold problem. Silver assays also vary from lab to lab and could indicate a matrix problem. The Jacobs numbers agree more closely with results from metallurgical samples. Any further sampling should be large in size (50 lbs) as well as large assay charges, i.e., 5 assay ton.

SUMMARY AND CONCLUSIONS

The Sugarloaf Peak prospect near Quartzsite in western Arizona hosts probable epithermal, hot-springs type gold mineralization in altered and metamorphosed Jurassic(?) volcanic sediments, flows and intrusive rocks. Surface sample results have indicated widespread, high level gold values over that part of the property unerlain by sericitically altered rocks whereas As, Sb, and Te anomalies are more consistently found in peripheral argillically altered rocks. Drilling of 28 holes in both anomalous areas has shown gold values at depth only in areas with anomalous surface gold values. Mineralized holes typically have intercepted scattered zones from 25' to 75' thick averaging from .015 - .020 gold. No "ore grade" intercepts or "ore holes" have been intersected. No distinct mineralized horizon or trend has emerged from work to date.

The widespread and high level gold values and the intriguing geologic setting as well as drill results to date suggest that additional drilling may be warranted in areas not adequately tested to date. One such area is northwest of Sugarloaf Peak in a permissive area about 2000' N-S by 2500' E-W. This area has consistently high gold values somewhat higher and more widespread than the area drilled extensively by AMSELCO. No more than 10 holes of 300' depth should adequately test the potential of this area. Unfortunately, this area is bisected by buried telephone cables, and oil and gas pipelines and a portion of the area is in claims not controlled by Westworld (Figure 2). Information gained through drilling in this area will certainly help in generating a geologic and mineralization model for the entire area. This model will stimulate and guide efforts toward evaluating and/or defining other permissive areas for possible drill testing.

While it is probable that drilling in permissive areas will return values similar to those already known from previous drilling in the area, a doubling of the grade (.04 opt gold) or the discovery of a high grade zone to blend with lower grade mineralization is certainly possible. I recommend that we approach Mr. Dausinger with a proposal to joint venture the property with the provision that we are obligated only to perform 1986-1987 assessment work on the 132 claims via drilling and assaying expenses totaling over $13,200.00. A 3000' drilling program is anticipated with a total budget of about $35,000 or less.


DOME ROCK
INTERCHANGE
La Cholla
BM 1211
BM 1178
1160
1146
1200
33
34
BM 1135
1206
1120
1343
PIPELINE
1363
1320
TRAIL
JEEP
1451
1234
1200
Sugarloaf
Peak
1400
Prospects
Explanation
P 9916-1 — Panel
G 9915-7 — Grab
D 6112-17 — Drill Chip Composite
C 1991-16 — Pan Concentrate
U 6101-6 — Dump Composite
AMSELCO EXPLORATION, INC.
Sample Locations Map
Samples by Amselco Exp.
0 300 600 Feet
N

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MOON MTN. SE QUADRANGLE
ARIZONA–YUMA CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
SE/4 MOON MTN. 15' QUADRANGLE

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1970. Field checked 1971

Projection and 10,000-foot grid ticks: Arizona coordinate system, west zone (transverse Mercator)
1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue. 1927 North American datum

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION

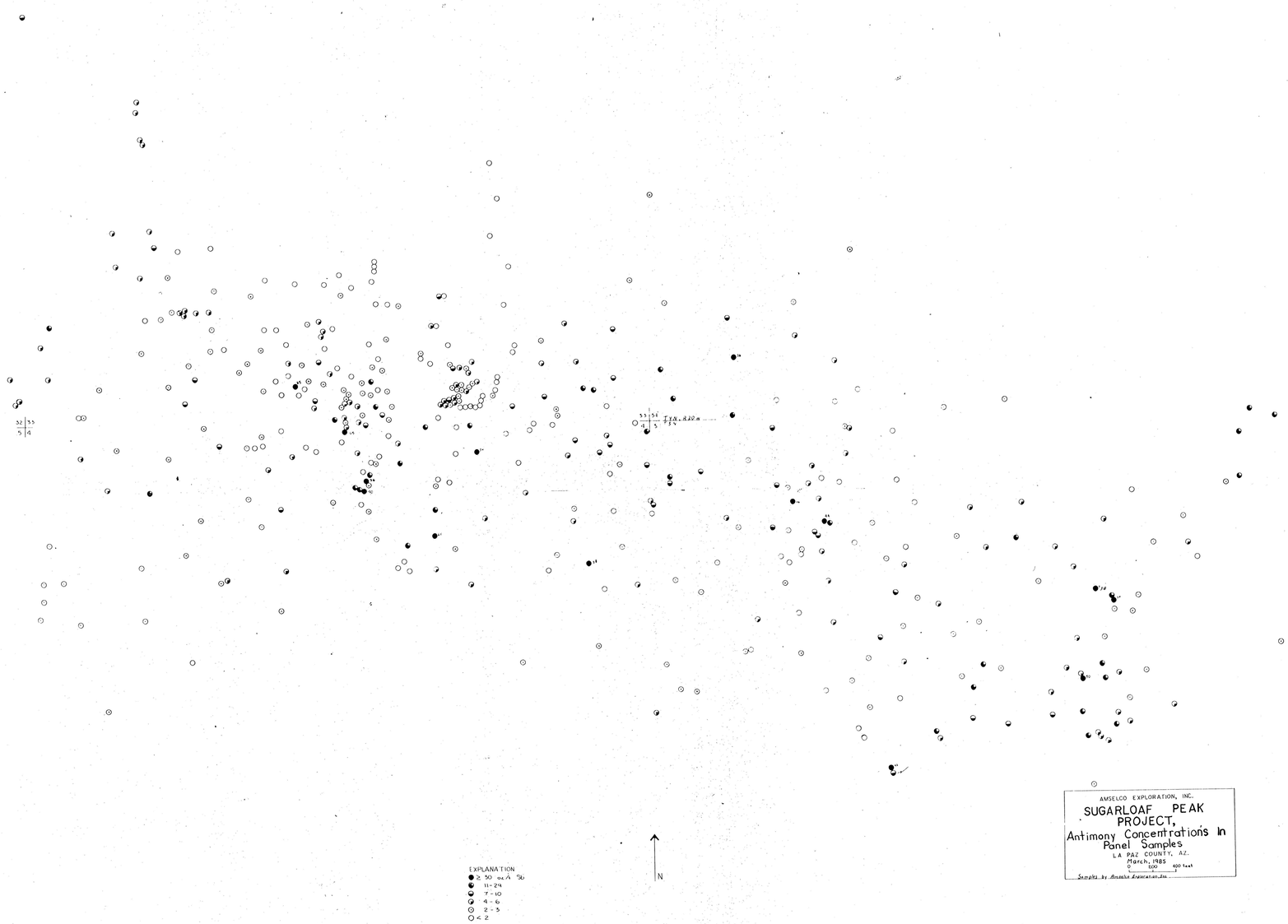
Primary highway, hard surface — Light-duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route — U. S. Route — State Route

MOON MTN. SE, ARIZ.
SE/4 MOON MTN. 15' QUADRANGLE
N3345—W11415/7.5

1971

AMS 3151 IV SE—SERIES V898

EXPLANATION
≥0.050 oz/t Au
0.010 - 0.049
0.010 - 0.009
0.006 - 0.009
0.003 - 0.005
< 0.003
N
AMSELCO EXPLORATION, INC.
SUGARLOAF PEAK
PROJECT,
Gold Concentrations In
Panel Samples
LA PAZ COUNTY, AZ
March, 1985
0 100 200 feet
Samples by Amselco Exploration Inc


EXPLANATION
≥ 50 oz/T Sb
11-24
7-10
4-6
2-3
< 2
N
AMSELCO EXPLORATION, INC.
SUGARLOAF PEAK
PROJECT,
Antimony Concentrations In
Panel Samples
LA PAZ COUNTY, AZ.
March, 1985
0 100 200 400 feet
Samples by Amselco Exploration Inc.

AMSELCO EXPLORATION, INC.

SUGARLOAF PEAK PROJECT,

Silver Concentrations In Panel Samples

LA PAZ COUNTY, AZ.

March, 1985

0 200 400 feet

Samples by Amselco Exploration, Inc.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DOME ROCK MTS. SW QUADRANGLE
ARIZONA—YUMA CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 DOME ROCK MTS. 15' QUADRANGLE

check for low relief altered mica schist, etc, also along fault zone

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1970. Field checked 1971

Projection and 10,000-foot grid ticks: Arizona coordinate system, west zone (transverse Mercator)
1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue. 1927 North American datum

Where omitted, land lines have not been established

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
GN MN 1°25′ 25 MILS 14° 249 MILS

SCALE 1:24 000
1 ½ 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

QUADRANGLE LOCATION
ARIZONA

ROAD CLASSIFICATION
Primary highway, hard surface
Light-duty road, hard or improved surface
Secondary highway, hard surface
Unimproved road
Interstate Route
U. S. Route
State Route

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

U.S. GOVERNMENT PRINTING OFFICE: 1973—784—300/4

DOME ROCK MTS. SW, ARIZ.
SW/4 DOME ROCK MTS. 15' QUADRANGLE
N3330—W11422.5/7.5

1971

AMS 3151 III SW—SERIES V898

32 | 33
5 | 4
33 | 34
4 | 3
T4N R10W
T3N
AMSELCO EXPLORATION, INC.
SUGARLOAF PEAK
PROJECT,
Thallium Concentraions In
Panel Samples
LA PAZ COUNTY, AZ.
March, 1985
0 200 400 feet
N
Samples by Amselco Exploration Inc.
EXPLANATION
≥ 10 PPM
8 - 10
6 - 7
4 - 5
2 - 3
1 - <1

AMSELCO EXPLORATION, INC.

SUGARLOAF PEAK PROJECT,

Mercury Concentraions In, Panel Samples

LA PAZ COUNTY, AZ.

March, 1988

0 800 400 feet

Sampler by Amselco Exploration Inc.

AMSELCO EXPLORATION, INC.

SUGARLOAF PEAK PROJECT,

Arsenic Concentrations In Panel Samples

LA PAZ COUNTY, AZ.

March, 1983

0 200 400

Samples by Amselco Exploration Inc.

AMSELCO EXPLORATION, INC.

SUGARLOAF PEAK PROJECT,

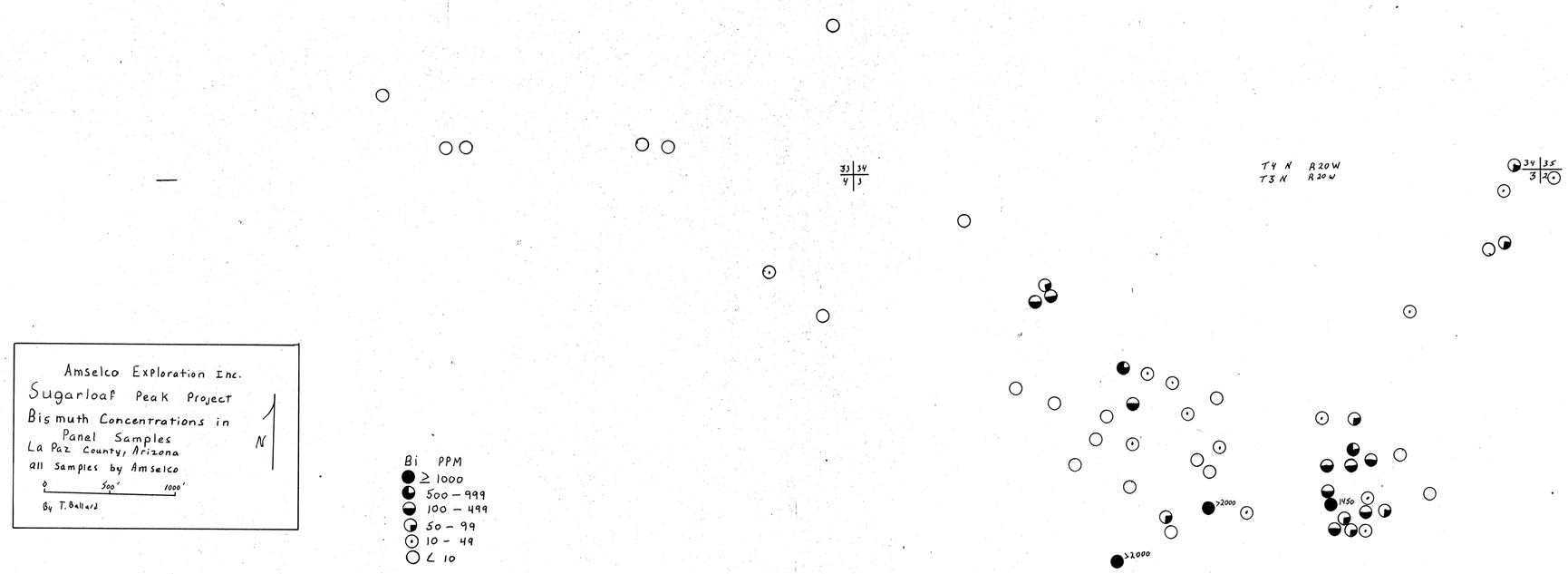
Tellurium Concentrations In Panel Samples

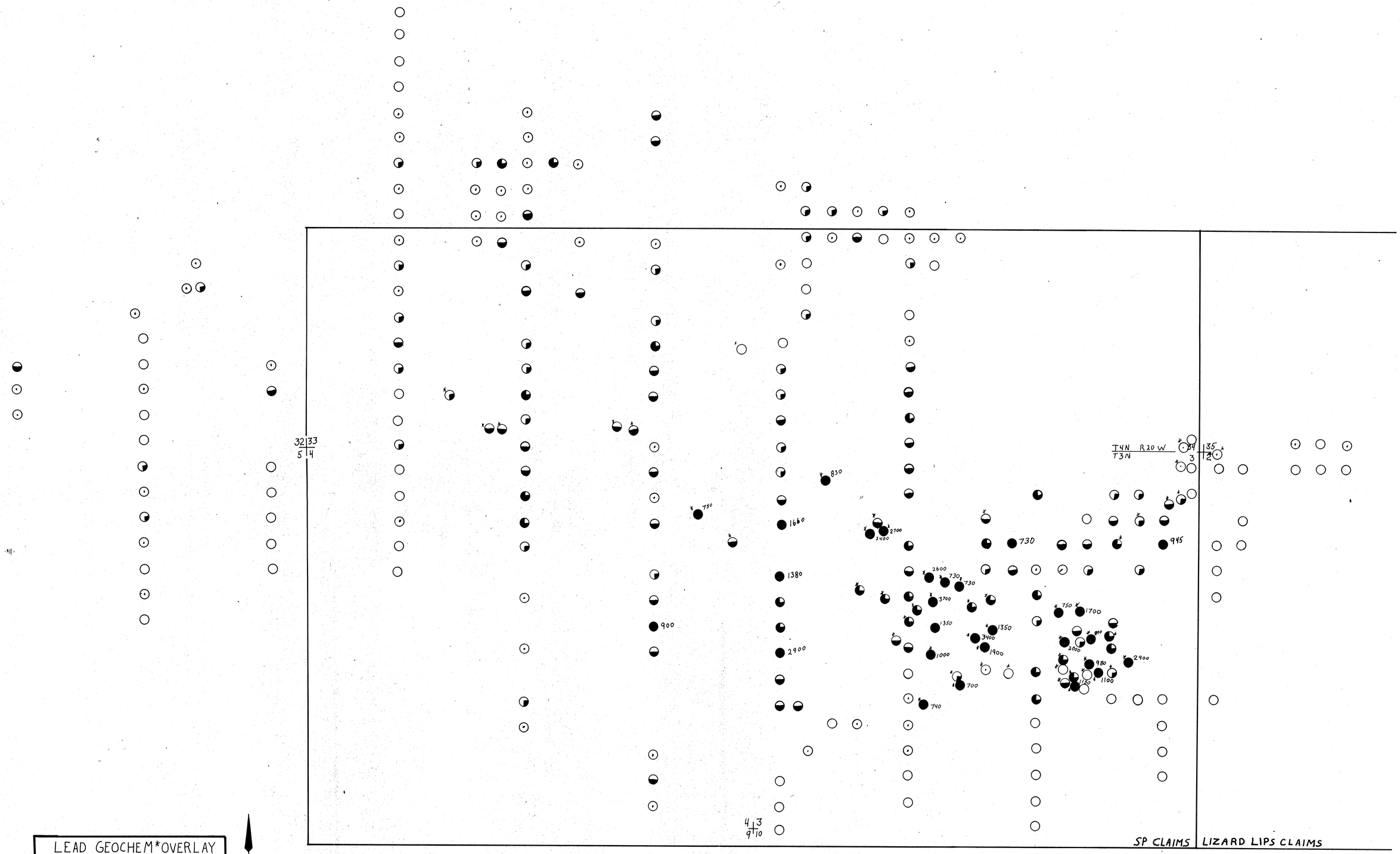
LA PAZ COUNTY, AZ.

March, 1985

0 200 400 feet

Samples by Amselco Exploration Inc.


Amselco Exploration Inc.
Sugarloaf Peak Project
Bismuth Concentrations in
Panel Samples
La Paz County, Arizona
all Samples by Amselco
0
500'
1000'
By T. Ballard
N
Bi PPM
≥ 1000
500 – 999
100 – 499
50 – 99
10 – 49
< 10
33 | 34
4 | 3
T4 N R20W
T3 N R20W
34 | 35
3 | 2
>2000
>2000
1450



LEAD GEOCHEM*OVERLAY
SUGARLOAF PEAK PROJECT
La Paz County, Arizona

*Data from rock chip(?) samples collected by Kerr McGee Co. 1973
Approximately Located

0' 500' 1000'

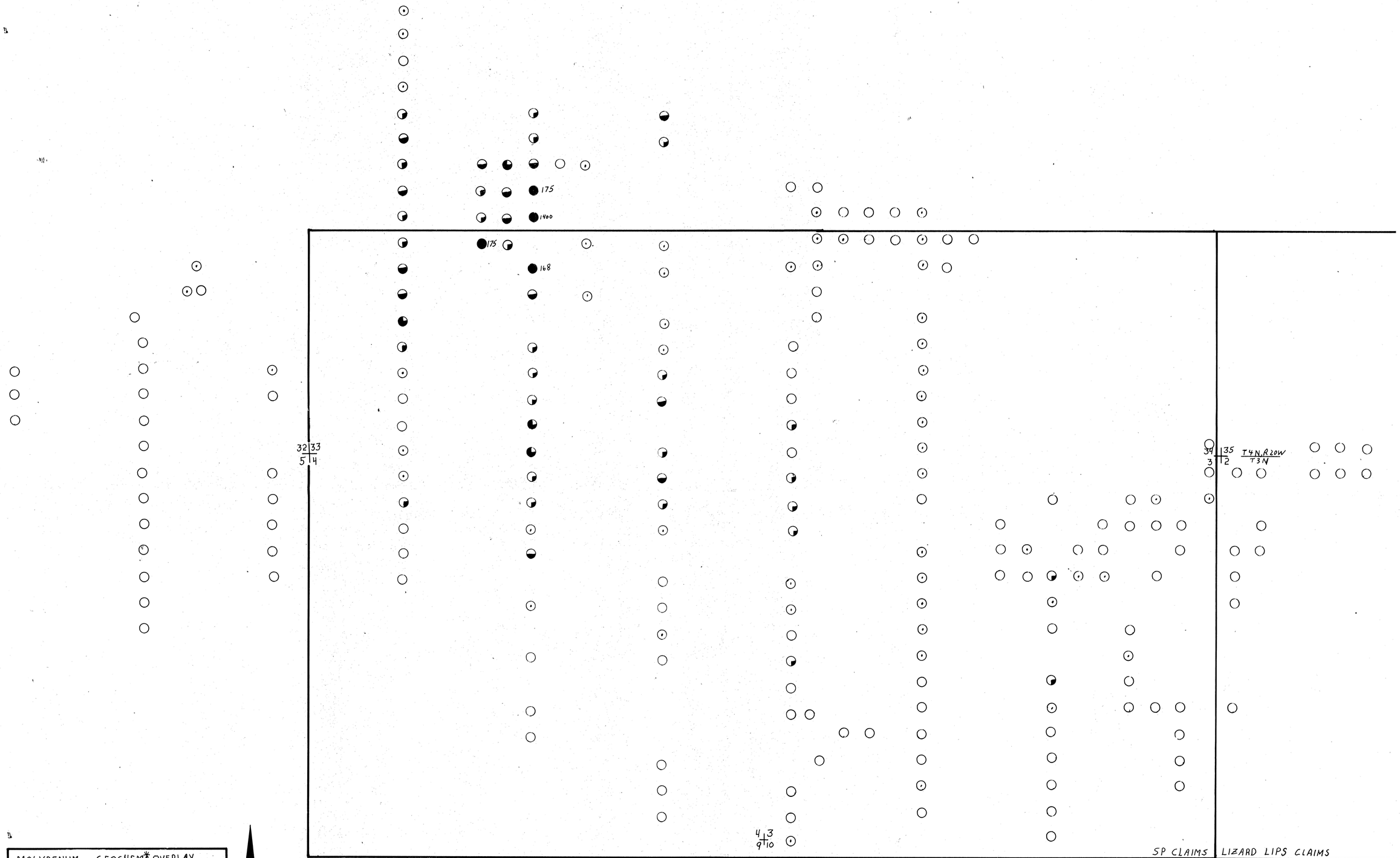
By T. Ballard 3/85

N

EXPLANATION

- 0–19 PPM Pb.
- 20–49
- 50–99
- 100–299
- 300–699
- ≥ 700

- Kerr McGee Samples
- *Amselco Samples



MOLYBENUM GEOCHEM* OVERLAY
SUGAR LOAF PEAK PROJECT
La Paz County, Arizona

*Data from rock chip(?) samples collected by Kerr McGee Corporation, 1973; Approximately Located.

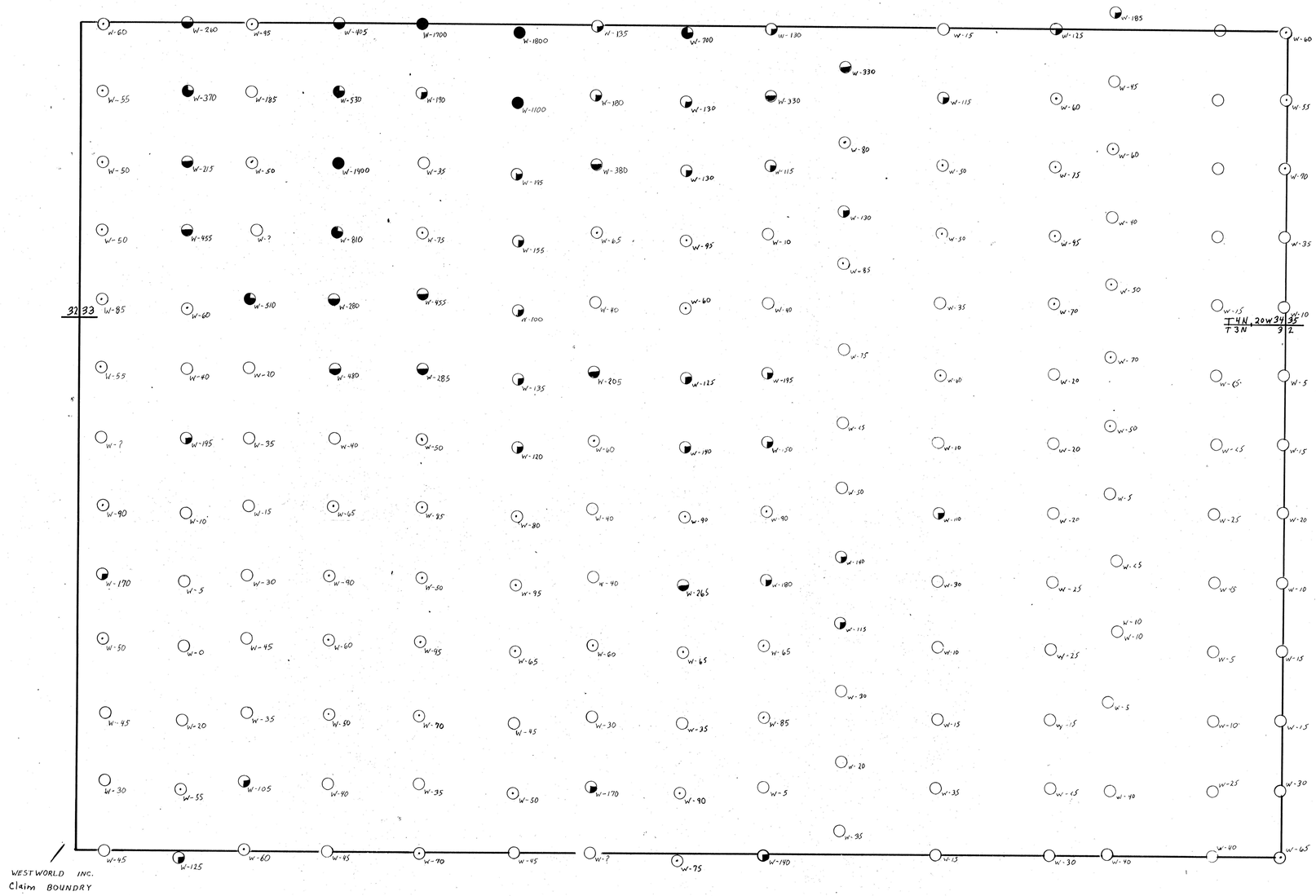
0' 500' 1000'

By T. Ballard 3/85

N

EXPLANATION

- 0-4 PPM MO.
- 5-9
- 10-29
- 30-49
- 50-99
- ≥ 100



Samples by Wallaby Enterprises Inc.- ppm Zn

Symbols
- 0-49 ppm Zn
- 50-99 ppm Zn
- 100-199 ppm Zn
- 200-499 ppm Zn
- 500-999 ppm Zn
- > 1000 ppm Zn

N

ZINC GEOCHEM OVERLAY
SUGARLOAF PEAK PROJECT
LA PAZ COUNTY, ARIZONA

0' 500' 1000'

by D Schwartz March 1985

TOM - THOUGHT YOU MIGHT BE INTERESTED —
I FIND IT HARD TO BELEIVE.

5-10-84

9-110a
(Nov. 1926)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CHEMISTRY AND PHYSICS

Report No. D-1681 Cont'd. For L. S. Gardner
(Callaghan's memorandum of April 15, 1943)

Alunite
Sugar Loaf Peak, Yuma Co., Ariz.

42-A-20 Soft white crushed schist in the lense with the alunite veins
42-A-4 Pale buff, hard, dense vein material

	42-A-20	42-A-4
SiO_2	70.20	6.20
Al_2O_3....(total)	6.91	34.00
Fe_2O_3	1.26	8.60
CaO	None	None
Na_2O	3.50	1.40
K_2O	5.26	7.57
H_2O	.90	7.00
TiO_2	.38	< .05
SO_3	4.53	33.85
BaO	Present	...
PbO	Present	...
B_2O_3	Present	...
	92.94	98.67
Available Al_2O_3	4.48	21.56
Pt...(oz. per ton)	1.0	
Pd	Trace	
Rh	Trace	

Copy to L. S. Gardner 10-8-43 JBD

-ooo-

By Samuel H. Cress

Reported October 4, 1943.

R. C. Wells
Chief Chemist.

SKYLINE LABS, INC.
1775 W. Sahuaro Dr. • P.O. Box 50106
Tucson, Arizona 85703
(602) 622-4836

REPORT OF ANALYSIS

JOB NO. ULE 021
June 6, 1984
PAGE 1 OF 1

MR. J.W. ALLAN
P.O. Box 8695
Catalina, Arizona 85738

Analysis of 15 Pulp Samples

ITEM	SAMPLE NO.	Pt (ppm)
1	SP29-1	<.01
2	SP29-2	<.01
3	SP29-3	<.01
4	SP28-2	<.01
5	SP28-3	<.01
6	SP28-4	<.01
7	SP28-5	<.01
8	SP41-1	<.01
9	SP41-2	<.01
10	SP41-3	<.01
11	SP41-4	<.01
12	SP41-5	<.01
13	SP65-1	<.01
14	SP64-1	<.01
15	SP64-2	<.01

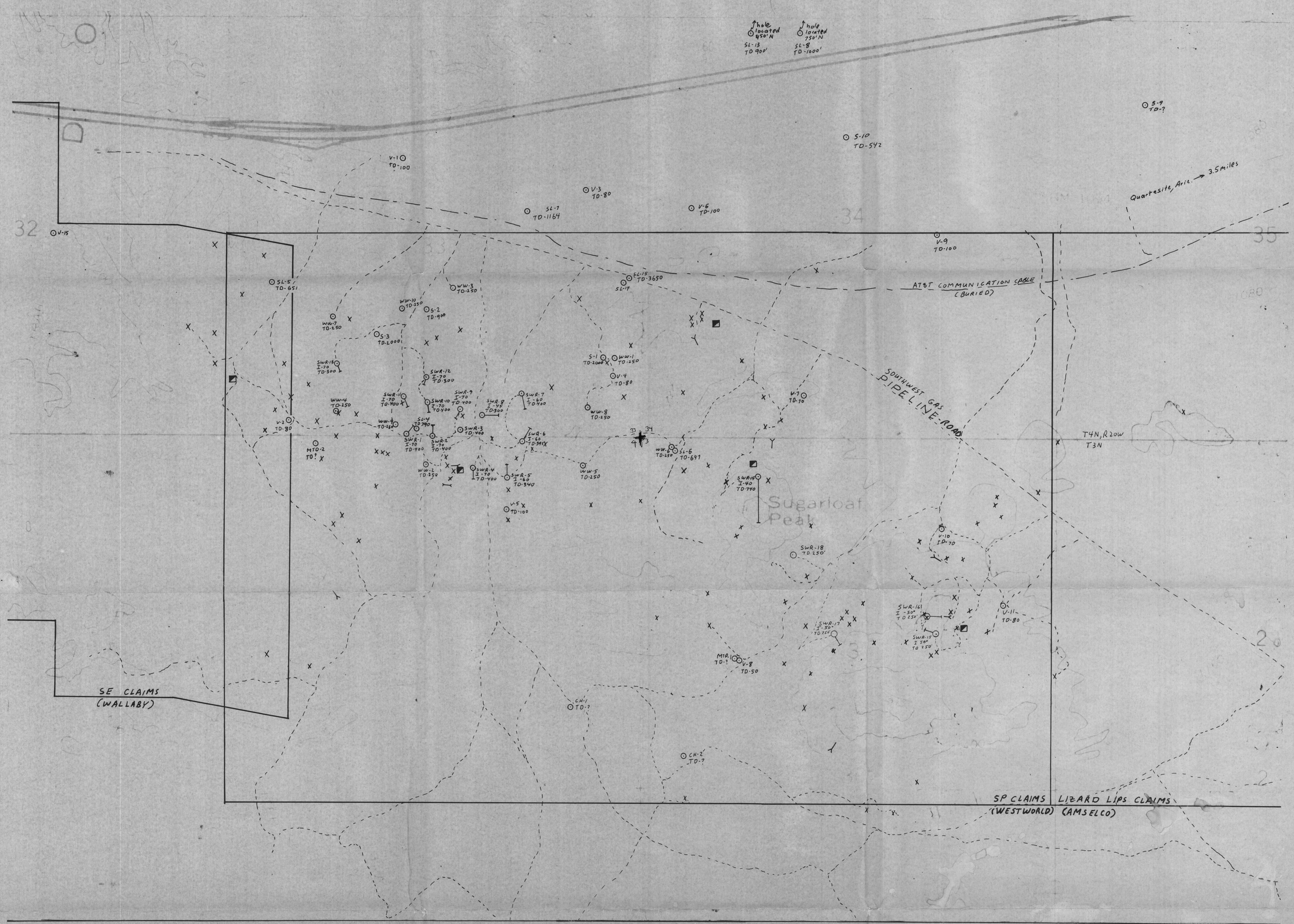
cc: Mr. H.E. Matson
P.O. Box 44171
Tucson, Arizona 85733

William L. Lehmbeck
Manager

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122



AMSELCO EXPLORATION, INC.

SUGARLOAF PEAK PROJECT

LA PAZ CO., ARIZ.

Drill Hole and Claim Location* Map

March 8, 1985

0 500 1000 FEET

* Major lode claim blocks shown only. Conflicting lode and placer claims not shown.

N

EXPLANATION

Symbols

X Prospect pit

Adit

Shaft

Dirt-gravel road

SWR-2 I-70° TD-400 — Inclined drill hole showing hole number, inclination (I), and total depth (TD) in feet.

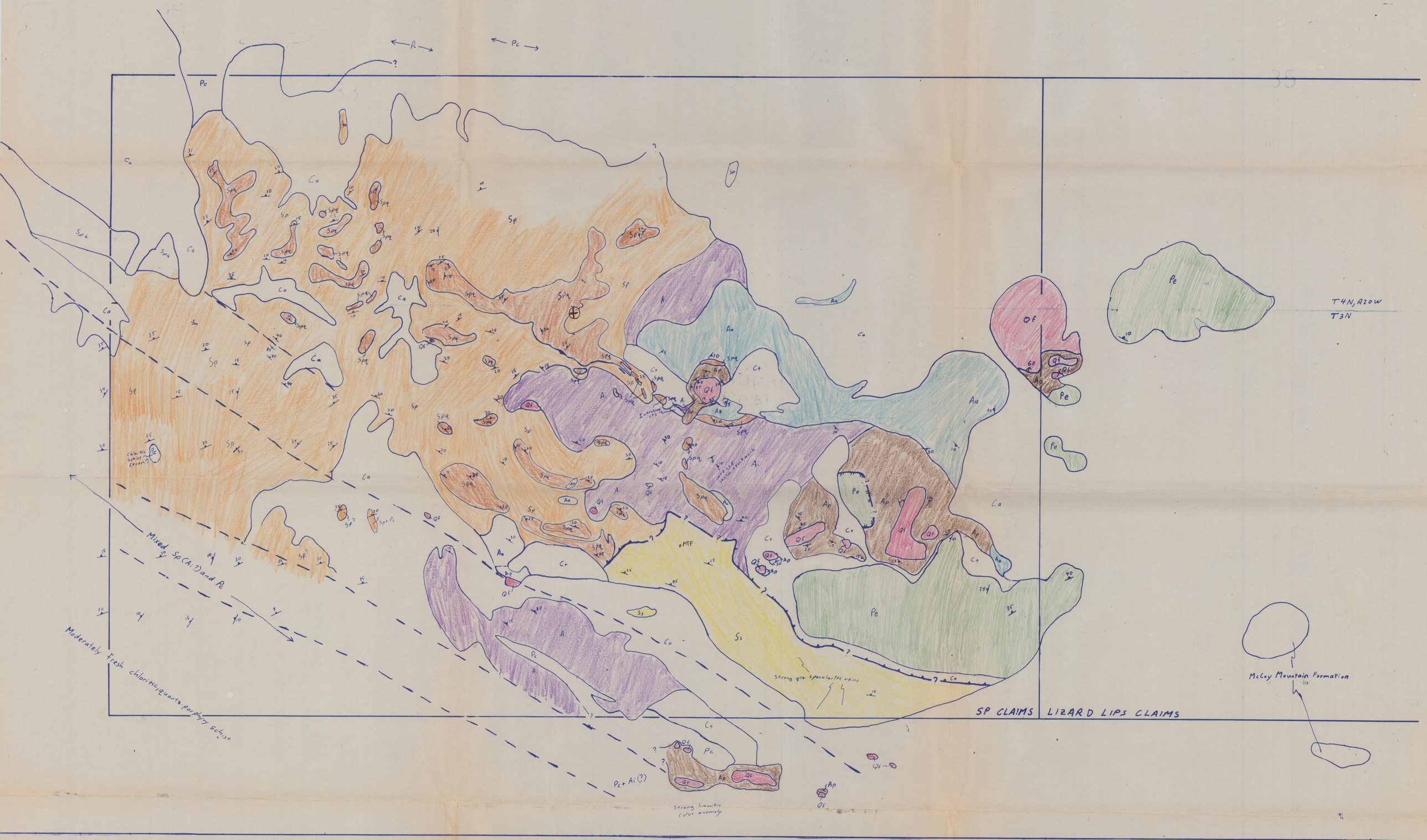
WW-3 TD-250 — Vertical drill hole showing hole number and total depth in feet.

Availability of drill information

Holes	Company	date drilled	Hole Type**	Geological log ***	Analyses***					
					Au	Ag	Cu	Pb	Zn	Mo
SWR	Amselco	1984	H-RV	X	X	P				
WW	Westworld	1983	R	X	X	X				
V	Kerr-McGee (validation)	1972	R	P			P	P	P	P
S or SL	Cogdon & Carey	1968(?)	D and/or R	P	S		X	X	X	X
MTP	McIntyre-Porcupine	?	D?							
CH	Stonewood	?	C							

** H-RV - Hammer, reverse circulation
R - Rotary, Conventional
D - Diamond
C - Churn

*** X - Complete or nearly complete information
P - Partial information
S - Spot assays on SL-8 and SL-13, drilled beyond indicated claim boundaries, north of Int. 10.
Blank - no information is available currently



AMSELCO EXPLORATION, INC.

SUGARLOAF PEAK PROJECT

LA PAZ CO., ARIZ.

Alteration and Structural Geology

T. Young, March 1, 1985

0 500 1000 FEET

N

EXPLANATION OF SYMBOLS

- Contact between alteration or geological boundaries; gradational unless indicated in rock descriptions
- Strong aerial photo lineament
- Low-angle fault – questionable, inferred
- Low angle normal fault – questionable, inferred gravity slide (?)
- 15 Strike and dip of foliation

ROCK-ALTERATION DESCRIPTIONS*

- **Ca** Cover – alluvium.
- **Ct** Cover – talus
- **Pc** Propylitically altered rock – chloritic matrix; may also include simple metamorphic assemblage or deuteric alteration.
- **Pe** Propylitically altered rock – epidote groundmass; may represent stratigraphically divided meta volcanic rock of somewhat different composition to bulk of rock exposed.
- **Sp** Sericitic altered rock – nonsilicified with pyritic groundmass (limonites).
- **Spq** Sericitic altered rock – same as above, weakly to moderately silicified.
- **Sph** Sericitic altered rock (?) – soft, bleached schist with strong, earthy hematitic stain
- **Ss** Sericitic altered rock (?) – coarse muscovite (?) schist with widely spaced, low-angle quartz-specularite veins. Local pyrophyllite.
- **Ai** Argillic alteration – illite (?) – Allophane dusting (?) groundmass, punky, bleached. (Interpreted by S.J. Williams as allophane (supergene) overprint on sericitically altered schist.)
- **Aa** Argillic alteration – alunite veins – stockwork cut clay (?) altered schist.
- **Ap** Argillic alteration (advanced) – pyrophyllite schist
- **Qf** Quartz-flooded rock – intense silicification; textural destruction; locally brecciated, healed by subsequent silicification; light and dark gray zone from unidentified contamination. Contact with surrounding pyrophyllite schist, sharp and steep.

*Except for limited exposures of the McCoy Mountain Formation in the eastern map area, as indicated, all bedrock consists of weakly metamorphosed, quartz-porphyry crystal tuff (?) of probable rhyodacite composition. A K-Ar date on plagioclase of 173 m.y. from a correlated sequence in the McCoy Mountains of California was reported by G.S. Polka (1973, Geology of the McCoy and Palen Mountains, southeastern California: Ph.D. Dissertation, Univ. of Calif. at Santa Barbara, 160 p.). The McCoy Mountain Formation consists of repeated sequences of phyllite and quartzite that rest discordantly on the meta-volcanics (Harding, L.C., 1982, Tectonic significance of the McCoy Mountain Formation, southeastern California and southwestern Arizona: Ph.D. Dissertation, Univ. of Arizona, Tucson, p. 29). Based on interpretation of paleomagnetic data and Polka's age determination, Harding (1982, p. 167-174) limited the age of deposition from 135 to 150 m.y.

A472 - rep grab at qtz from dump. pits expose shallow N dip 2'-2' thk qtz vein. qtz, white, (coarse, w/) large amt. of lim in splotches. Wallrocks dip shallowly N and S, sometimes conform to vein. Wlrx are gray schist. Sandy texture, was sbd. Loc. rutile and disg. py cubes

Richard Claims Lode
loc. by Cushman & Fred Scott
BLM# 83546, loc. Feb. 26, 1985
-says is in Sec. 7-??!

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

CUNNINGHAM MTN. QUADRANGLE
ARIZONA—YUMA CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
SE/4 DOME ROCK MTS. 15' QUADRANGLE

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1970. Field checked 1971

Projection and 10,000-foot grid ticks: Arizona coordinate system, west zone (transverse Mercator)
1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue. 1927 North American datum

Where omitted, land lines have not been established

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 20-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Primary highway, hard surface — Light-duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route — U. S. Route — State Route

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1974

CUNNINGHAM MTN., ARIZ.
SE/4 DOME ROCK MTS. 15' QUADRANGLE
N3330—W11415/7.5

1971

AMS 3151 III SE—SERIES V898