

0480 0079

PRELIMINARY EXAMINATION

OF THE

BLISTER CLAIM

T 32 N, R 43 E, S 19, MDBM

LANDER COUNTY, NEVADA

PAN-NEVADA, INC.

L. B. GOLDSMITH

N. J. BYRNE

MAY, 1968

INDEX

LOCATION MAP	1
INTRODUCTION	1
GENERAL GEOLOGY	2
TABLE OF FORMATIONS	2
SEDIMENTS	2
RHYOLITE	3
ALLUVIUM AND TALUS	3
STRUCTURAL GEOLOGY	3
GEOPHYSICS	4
ECONOMIC GEOLOGY	4
DIAMOND DRILLING	4
CONCLUSIONS AND RECOMMENDATIONS	5
APPENDIX	
GEOLOGICAL AND SAMPLE LOCATION MAP Pocket In	nside back cover

VALMY HUM BOLDT 40 LANGER. COUNTY BUSTER CLAIM R.43E 24 T32N 36 31 89 36 PERSHING COUNTY Town Comments 3 BLISTER CLAIM LOCATION MAP T32N R43E, S19 LANDER COUNTY NEVSUA O 1 2 8 MILES

INTRODUCTION.

The property consists of a single claim, located in T 32 N, R 43 E, sec. 19, MDBM, Lander County Nevada. Topographically it is situated 3.5 miles N 50° W of Antier Peak, 4.1 miles 5 42° W of North (Battle) Peak, at the head of the north fork of Trenton Canyon. The east end of the claim crosses a saddle between two low peaks on a ridge that trends N 20° W and forms part of Battle Mountain in the Galena Range. A road up Trenton Canyon leading onto the property is usable by 4-wheel drive vehicles able to navigate sharp switchbacks.

On a restricted areal basis of about 1 mile radially, the rocks are mostly Paleozoics of Mississippian and/or Pennsylvanian age. The formation is known as the Pumpernickel, an assemblage of dark chert, argillite, quartzite, with intricalated flows (greenstone). These rocks lie in the easterly displaced upper plate of the Galconda thrust. The nearest intrusive is in Trenton Canyon, perhaps 1 mile west of the claim; it may be a Tertiary quartz monzonite parphyry. Tertiary rhyolites and rhyolite parphyries mask parts of the area as generally horizontal flows. North trending faults of both thrust and normal types dissect the vicinity. Some parallel quartz veins carry copper values. East to north—east trending faults both cut and are cut by the northerly breaks.

Preliminary investigation of the property was performed on May 2 and 3, 1968, by N. J. Byrne and L. B. Goldsmith. Mapping was by pace and compass traverses.

The east portion of the claim has an abundance of rhyolite outcrop; to the southwest the surface dips steeply into an alluvial-filled valley that descends into Trenton Canyon.

Lithologic topographic control has some expression in the weathering resistant rhyolite capping auteropping at the higher elevations.

No report of a previous economic geology survey on the property has been found.

GENERAL

TABLE OF FORMATIONS

TALUS

ALLUVIUM

RHYOLITE

Rhyolite breccia

Rhyolitic tuff

Altered rhyolite

SEDIMENTS

Altered

SEDIMENTS.

Since exposure was limited below the rhyalites it is not certain whether the racks in the mineralized zone are sediments or altered valcanics. What appears to be a horizontal contact is exposed in the north adit. This could be the upper contact of the sediments. Below this contact the rack is highly fractured and altered, and containes the minerialization both in fractures and disseminations. It is assumed that this formation is either limestone or an argillite since some of the remnants have their characteristics and a skarn zone was found in the takes nearby. A small outcrop to the west of the adit may be part of a quartz pebble conglomerate bed but until more detailed mapping is done

RHYOLITE.

Most of the rhyolite encountered was a consistent reddish-brown, fine textured rock forming the cap of other formations on the property. The only variations were in color shades which may have been related to structure. A breccia zone was formed from the rhyolite in one location which probably resulted from intense shearing.

Rhyolite tuff and tuff breccia underlie and are interbedded with the massive rhyolite.

The tuff breccia contains particles of the rhyolite which in some cases are strained to oval shapes with parallel major axes. Interstitial metamorphic minerals also verify the exertion of tectonic forces after emplacement. A description of the tuff cannot be made here without a petrographic analysis. They are generally light colored and fine textured except where angular fragments were present. Glass grains were noted in some spots.

ALLUVIUM.

The overburden is mostly stream gravel which increases in thickness toward the lower slopes. Where cut by dry stream beds the soil exhibited variations from large boulders to clay.

TALUS.

Composed mostly of the hard, massive rhyolite the talus is widespread on the slopes forming leads downwards from the outcrops.

STRUCTURAL GEOLOGY.

An easterly trending steeply dipping fracture zone cuts the altered zone beneath the rhyolite cover. The two zones as portrayed on the plan may be one; rhyolite and over-burden cover made their delineation in any direction indeterminate. Their expression

diminishes upward within the rhyolite above the contact. Copper silicates, carbonates and minor sulphides (bornite) are present in the zone.

The north trending fault dips vertically with the west side exhibiting a downward displacement. Fracturing is present in both the altered zone and the rhyolite, complicating the mineralization interpretation. Possibly the line of intersection of the two shear planes is a locus for broadening of mineralization.

GEOPHYSICS

No conductive zones were outlined on reconnaissance traverses with the Ronka

EM 16 electromagnetic unit.

ECONOMIC GEOLOGY

No significant quantity of rock has been mined on the property.

Assay results from samples (see appendix and map) indicate commercial values in copper with associated molybdenum, gold, silver and tungsten oxide in a zone or zones of about 200' in observable diameter open in all directions. Government reports ordered 3 months ago and not yet received may aid in interpretation of structure.

Claims controlled by the Utah Mining and Construction Company entirely surround and overlap the Blister claim. They have been diamond drilling at a lower elevation in Trenton Canyon fanning holes both north and south from each setup in the canyon bottom near an intrusive body.

DIAMOND DRILLING.

The topography would make a drill programme expensive. If water were used it would have to be houled from the canyon below. Mud drilling might be a better method.

In conversation with a Longyear driller working for Utah Mining and Construction

Company in the area he stated that they cannot core drill because of the friability of

the rocks and are recovering only sludge and cuttings from tungsten carbide bits.

CONCLUSIONS AND RECOMMENDATIONS

The claim warrants further examination. Outcroppings of the mineralized area have already been sampled; check assays might be run and a few more samples taken, or a bulk sample removed.

Phase Two might follow several approaches.

- 1. (a) Attempt to deal the property to Utah Mining and Construction as it stands.
 - (b) Attempt to deal with Utah Mining and Construction for their drilling information on the surrounding area.
- 2. (a) Begin a limited drilling programme to outline the size and tenor of the oxidized part of the mineralization. In other words, several shallow holes, locations to be determined. Trenching with a D8 is an alternative; nature of weathering and topography render it doubtful if any conclusive evidence could be obtained.
 - (b) Geophysics and/or geachemical surveys might be contracted out.
 - (c) With information from 2 (a) and/or (b) make a decision for future plans.

It is recommended that Utah Mining and Construction Company be approached by the Consultant in charge, as much for obtaining information to aid development on our own as for making a property deal. This overture should be very light; it is possible that a "feeling" for the situation may be assessed.

If a property deal is made, a percentage of stock should be retained. Assessment work for 1967-63 has been completed. L. B. Goldsmith L. B. Goldsmith, Geologist Moman J. Eyme N. J. Byrne, Geological Engineer Pan-Nevada, Inc. May, 1968

ADDENDUM TO THE PRELIMINARY REPORT ON THE BLISTER CLAIM.

Additional sampling was done in the lower adit on the Blister claim on June 15, 1968.

Assay results are tabulated on the accompanying sample log.

The formation previously mapped as rhyolite is probably a silty, fine-grained chert, associated with siliceous volcanic extrusive activity.

The unit originally thought to be a tuff is a chert pebble conglomerate containing thin limestone beds.

Both units are part of the Battle Formation of Pennsylvanian age. The limy chert pebble conglomerate has been a favourable host for mineralization in the area.

On the Blister claim the Battle Formation is a fault wedge in which the attitude of the rock strikes north and dips from 0° to 20° west, approximately equal to the topographic slope. The entire thickness of the Battle Formation is about 725'; depending on the stratigraphic location of the outcrops within the formation the favourable horizon may be thin. Regional mapping indicates that the formation outcrops for at least another 1000' to the west of the west boundary of the Blister claim before disappearing beneath a thrust plate. To the east of the property the formation is terminated by a steeply dipping north-south fault of which the west block containing the Blister claim is upthrown.

The intrusive mentioned in paragraph 2, page 1, is a Tertiary granodiarite.

The assays (No. 82-86) are not as encouraging as the first results. However on close inspection it is seen that the better values in copper occur in the limestone or limy fault gauge, whereas the lower copper values occur in fractured chert.

If the west black of the N-S trending fault is indeed downfaulted as it appears to be then a mineralized limy conglomerate may lie beneath the chert. The new assays may delineate the upper horizon. The limy conglomerate should still be delineated to the north and to depth. This addendum does not change the original recommendations. 1. D. Yaldsmith L. B. Goldsmith Pan-Nevada Inc. June, 1968

ADDENDUM TO THE PRELIMINARY REPORT ON THE BLISTER CLAIM

APPRAISAL OF GEOCHEMICAL SURVEY

On November 26, 1968 a geochemical soil survey for copper was conducted on the Blister claim to check results of a previous induced polarization survey. Samples were collected from a depth of six inches at one hundred foot intervals along the I P grid as indicated by circles on the accompanying map. Locations where it was not possible to collect samples because of excessive snow are indicated by an X. The samples were dried, screened to -80 mesh, and analyzed for total copper content by Rocky Mountain Geochemical Corporation using atomic absorbtion methods.

Relative anomalies are indicated on the map by the color of the circle at the sample location; colors range from coldest for background to warmest for a strong anomaly. Hence the 16 samples in the 30 to 50 p. p. m. background range are designated by blue, the 10 samples in the 55 to 70 p. p. m. threshold range are denoted by green, the 5 samples in the 75 to 95 p. p. m. weakly anomalous range are marked by yellow, the 2 samples in the 100 to 110 p. p. m. moderately anomalous range are designated by orange, and the 2 samples containing more than 115 p. p. m. are defined by red.

It is important to note that the grouping of values into the above classifications is relative and was made on an arbitrary population count basis of the number of samples in a certain range above background. The average value of the 35 samples analyzed was 52 p. p. m. (excluding the three highest values), and since 30–50 p. p. m. is commonly a normal background range for copper in soils this range was selected for interpretative purposes.

A comparison of the geochemical and geophysical maps shows similar curved patterns concave northward from line 1W to line 5E. Although the geochemical pattern shows only

in the weakly anomalous to threshold range it is significant in revealing a similar trend to the geophysics. Since, as McPhar concluded, the area is probably only weakly mineralized a more definite pattern would be unlikely to occur. For more detailed geochemical information it would be necessary to collect more samples and analyze for additional elements, for example, mercury and molybdenum. Therefore without additional geochemical data the best existing information for planning future exploration on the 'Blister' claim is the induced polarization survey.

A more comprehensive I P interpretation should be obtained from McPhar. When weather permits some further geochemistry may be attempted. Grid trenching with a D-8 might follow but could not be considered conclusive.

L. B. Goldsmith, Geologist

J. K. Duff, Geologist

Pan-Nevada Inc. December, 1968 BIBLIOGRAPHY

BIBLIOGRAPHY

- ROBERTS, R. J., 1964, Stratigraphy and structure of the Antier Peak Quadrangle, Humboldt and Lander Counties, Nevada: U. S. G. S. Prof. Paper 459-A.
- ROBERTS, R. J., and ARNOLD, D. C., 1965, Ore deposits of the Antier Peak Quadrangle, Humboldt and Lander Counties, Nevada: U. S. G. S. Prof. Paper 459-B.
- SAYERS, R. W., TIPPETT, M. C., FIELDS, E. D., 1968, Duval's new copper mines show complex geologic history: Mining Engineering, Vol. 20, No. 3, March, 1968.

APPENDIX

SAMPLE LOGS - BLISTER CLAIM

Number	DESCRIPTION	ASSAYS					
		Au Ozs/ton	Ag Ozs/ton	Pb %	Си %	Mo %	W0 % 3
24.	Channel, 12' at rear of adit along fracture zone. Earthy material, ex- idized black and rusty, minor copper				0.700	0.000	
	stain.	Tr	0.5	None	0.730	0.002	None
25.	Channel, 20' along E wall of adit, across E-W fracture zone. Earthy material in part. Oxidized black, rusty, with minor copper stain.						
	Minor bornite in fractured quartz.	0.005	1.1	None	2.086	0.005	0.10
26.	Channel, 10' along E side of cut in front of the upper adit, across an E-W fracture zone. Immediately E of a downfaulted (N-S) rhyolite block. Fractured quartz with copper stain, and earthy rusty material. Appears like skarn in local (6") zones.	0.030	None	None	0.478	0.006	0.36
27.	Chip, 45' intermittent, of highly altered material with skarn zones. Fractures show sligkensides and are filled with copper silicates, chalcopyrite, malachite, azurite.	0.005	2.3	None	4,122	0.002	0.01
28.	Channel, 21' across E-W fracture zone, E wall of cut in front of lower adit. Earthy material in part, with some quartz stringers. Rusty, red ochre stain, and						
	minor copper stain.	0.005	None	None	0.403	None	None

Assays were performed by the Union Assay Office, P. O. Box 1528, 269 Brooklyn Ave., Sait Lake City, Utah; the original assay report, dated May 10, 1968, is signed by Gien P. Williams.

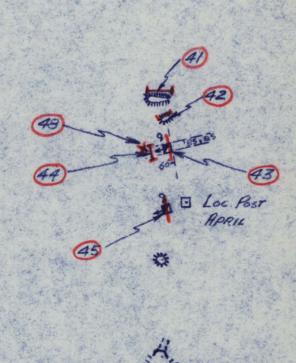
SAMPLE LOGS - BLISTER CLAIM

NUMBER	DESCRIPTION	ASSAYS					
		Au Ozs/ton	Ag Ozs/ton	Zn %	Cu %	Mo %	₩O ₃
82.	Channel, 18', from end of drift towards the portal, along the east wall. Rusty and earthy material, sheared chert.	Tr	0.1	Tr	0.025	None	0.02
83.	Channel, 33', from end of drift? trending N 57° W along SW wall to intersection with main drift. Sheared rusty chert and minor limy material. Rusty and minor black oxides.	Tr	None	None	0.126	None	0.02
84.	Channel, 20°, from end of drift to intersection, bearing N 37° E along SE wall. Raise 10° high at the end. Sheared rusty and cherty material	Tr	0.1	None	0.075	None	0.02
95.	Channel, 18', from intersection in main drift towards portal along SE wall. Rusty cherty and limy Sheared material.	Tr	None	None	0.044	None	0.02
96.	Channel, 13°, due south, along E wall to portal of adit. Rusty and black oxides; sheared.	Tr	None	None	0.151	None	0.02

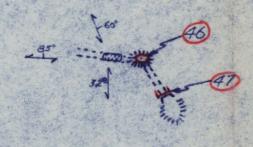
Assays were performed by the Union Assay Office, P. O. Box 1528, 269 Brooklyn Ave., Salt Lake City, Utah; the original assay report, dated June 19, 1968, is signed by Glen P. Williams.



1 Loc. Post PERS. No. 2



1 Loc. Post PERS. No. 1



LEGEND

- 9 QUARTZ VEIN

SHAFT, INCLINED

M ADIT

PIT

STOPE

160 FAULT & FRACTURE

Somere Location & Number

PAN-NEVADA INC. PRELIMINARY PACE AND COMPASS PLAN OF PERSPIRATION & APRIL T32N, R43E, SEC31, MDBM LANDER COUNTY, NEVADA SCALE: 1" - 200" JUNE 23 1968 MAPPED BY: LBG & JKD

04800079

