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Item 8

This is the Taylor Mine

DL., 1984

REPORT OF A PRELIMINARY EXAMINATION OF THE EASTER MINE, LOCATED ABOUT TWENTY MILES SOUTHWEST OF CALIENTE, LINCOLN COUNTY, NEVADA, ON JUNE 16, 1933.

By Alfred Merritt Smith, E.M.

INTRODUCTION

This examination was made while the writer was employed as mining engineer for the Nevada State Bureau of Mines. At the time I was making a study and report of the mineral resources of southern Nevada in the vicinity of Boulder Dam, with the idea of listing these numerous resources and assembling the data for publication by the Bureau. On this examination I was accompanied by Mr. E. C. D. Marriage, the principal owner of the property, himself a graduate mining engineer from the University of Cambridge, England. The several assay certificates and smelter statements of the shipments made from the property were supplied by Mr. Marriage.

TOPOGRAPHY

Chokecherry Min. Quad.
T 55, R 66 E
UTM {N 4154 200 / E 0709 330

The mine lies in a rough area of high, broken volcanic mountains. It is reached over a road running southerly down the canyon from Caliente, to a point ~~some twelve or fifteen~~ eight miles south of the town, and thence westerly over a winding mountain grade ~~some four or five~~ six miles, reaching an estimated elevation of about six thousand feet. Not far to the west of the property, over the summit of the mountain possibly five miles, is the famous mining

district of Delamar.

GEOLOGY

The district is composed of igneous rocks of Tertiary origin, mostly andesites and rhyolites. These occur in the form of distorted flows, dykes and tuffs. Insufficient time was spent to pass on the complex. I am of the opinion that it is not far from a contact with rocks of sedimentary origin which predominate in the Delamar district to the west, where the principal ore bodies are found in quartzite.

The geological feature most pertinent to this report in the vicinity of the mine is a normal fault which has a general northwesterly strike, being almost north and south at the southern end, but curving westerly through an exposed length of about one thousand feet. The footwall of this fault is exposed for a vertical height of three hundred feet or more, and to a large extent is covered with a layer of hard quartz, which has given rise to a false impression that the entire mountain is composed of quartz. The sheet of quartz is merely an exposed portion of the footwall of a vein which had been formed along the fault prior to the time the eastern side had been depressed - or the western side elevated. Because of the hard nature of the quartz on the footwall of this vein it has resisted erosion, and in many places stands as an inclined wall showing plainly the striations scoured by the descending hanging-wall area to the east. The total vertical displacement may have been considerably more than three hundred feet, for there is no means of determining how much of the top portion of the west

side has been eroded away. West of this rhyolite dyke is a bed of light colored comparatively soft rhyolite tuff which has been eroded away more than the dyke, thereby leaving the rhyolite dyke standing up as a ridge or comb, extending northerly and southerly.

Subsequent to the formation of the vein and the formation of the fault, additional faulting took place easterly and westerly across the dyke, as indicated in the accompanying sketch. There is very little mineralization along these east and west faults, and the displacement on all of them has been very slight, amounting in most cases to not more than from two to eight feet. On these cross fractures some slight silicification and mineralization has taken place at their points of intersection with the large north and south fault. This mineralization is adjacent to the hard quartz footwall. This mineralization is only at the point of contact with the main north and south vein, as proved by an adit at the point marked "A" on the plat, which was driven through the quartz wall into the rhyolite dyke on one of the east and west fractures. A few feet beyond the mouth of the tunnel the fracture is tight and shows but little silicification, and no mineralization. This condition will undoubtedly prove to be true with all of the series of six or seven observed cross fractures which occur at intervals of from fifty to two hundred feet along the course of the main vein adjacent to and parallel to the rhyolite dyke. The only points where any important mining has been done are marked "A" and "B" on the accompanying sketch. "A" is the tunnel referred to above, the face of which is in the barren rhyolite dyke, and which if continued will eventually penetrate the bed of soft rhyo-

lite tuff. "B" is a shaft, slightly inclined to the east. It passed through a mineralized zone formed on the contact of the east-west fracture with the main vein, and at the bottom, estimated to be some forty feet from the surface, was still in the east-west cross fracture, and had apparently passed through the mineralized zone and was bottomed in the barren dyke. It was suggested that the owners drift easterly from the bottom of the shaft and thereby ascertain if the pay shoot which had produced substantial amounts of good grade gold-silver ore, would not be found to continue downward along the true footwall of the main north and south vein. Some months later I heard that this suggested work had been carried out and that a substantial body of milling grade ore had been encountered east of the bottom of the shaft.

A similar condition exists at the points marked "C", "D", "E" and "F" on the sketch, where cross fissures exist and where there has been a slight east and west displacement of the vein. It is suggested that these points be carefully prospected by sinking.

At the point marked "C" on the plat a short tunnel was driven into the rhyolite dyke. The miner who did this work may have assumed that the entire mountain was quartz, for it is not apparent that this work was done upon a cross fissure. As soon as the hard quartz wall had been penetrated the drift entered the barren rhyolite dyke. I was reliably informed that the entire face of the mountain, covered with the quartz sheet, carries low values in gold and silver, running from one to three dollars a ton.

TRANSPORTATION

The Salt Lake-Los Angeles branch of the Union Pacific Railroad passes through Caliente, which is a railroad division point. Caliente has a population of about ~~five~~ fifteen hundred, has several stores and ~~two~~ good hotels, and from there ~~improved~~ oiled highways extend north and south. From Caliente a good natural dirt county road, gravelled in places, also extends southerly down Meadow Valley Wash and Meadow Valley Creek through a chain of small ranches. Some ~~fifteen or twenty~~ eight miles south of Caliente along this county road a new grade road has been constructed up the mountain by the mine owners for a distance of ~~some four~~ any miles. Although this road is narrow, steep in places and has numerous sharp turns, it is passable to automobiles and all supplies have gone in and ore has been trucked out over it.

WATER

~~About two miles~~ One mile west or above the mine at a higher elevation are springs that could be utilized to bring in water sufficient for a small milling operation, and amply sufficient for mining and domestic purposes. About a mile east of the mine and at a lower elevation is located Mud Springs, from which water for present use is hauled in tanks. Until two years ago some water flowed down the canyon by the mine and a small spring was located in the canyon about a quarter of a mile above the mine, from which water was obtained. The continued drought has caused this source to dry up, and water no longer flows by the mine. In most of the adjacent canyons are located springs, and it is probable that from

some of these sources a suitable water supply can be obtained to carry on both mining and milling operations.

TIMBER AND VEGETATION

There is a rather scattered growth of juniper and pinon pine over the area in which the mine is located. Some of this can be used for mine timbering and it does very well for fuel. In general, the country is covered with black sage and supports a ~~fair~~ excellent growth of natural weeds and grasses suitable for the grazing of livestock.

MINING AND ORE VALUES

The cross fracture or vein in the tunnel at the point marked "A" on the plat has a strike of South 80° East and dips 70° North. At its juncture with the main fault the ore shoot on this vein is from six to eight feet wide and carries values of from $10 to $20 per ton in gold and silver. A winze was put down ~~fifty~~ thirty feet on this pay shoot, from which one or more shipments of ore have been made yielding values as shown on the accompanying reports from the American Smelting & Regining Company. A tunnel was driven on this cross fissure for a distance of about one hundred and twenty feet from the mouth. As the tunnel progressed the fissure became tight and the mineralization decreased. The pay shoot was encountered only twelve feet in from the mouth of the tunnel, and was drifted on northerly and southerly for a total distance of about twenty-two feet. There is good reason to assume that this pay shoot may extend downward to a considerable depth.

The shaft shown at the point "B" was driven completely through this pay shoot and bottoms in barren dyke rock. If it had been inclined more to the east it probably would have heen in ore for its entire depth. The main fault or vein is an excellent zone for mineralization at the intersection of cross fractures such as this. The movement on the main fault has been so profound that the fault and vein undoubtedly extend to great depth.

Desultory prospecting was done at the points marked "C", "G", "L" and "M". At the point marked "C" ore of milling grade was said to have been found in the mouth of the tunnel, as might have been expected; but, similar to the condition existing at "A", the face of the tunnel is in barren dyke rock. The work at "G" seems to have been done on the assumption that the entire hillside is quartz, and that by boring into it better values might be found. The work at this point does not seem to have been on a cross fracture, and of course there is no hope of finding any ore at such a point. The point marked "F" shows a pronounced cross fracture having a horizontal displacement of several feet. It is partly obscured by massive blocks of quartz which have fallen down the hill, and no mining has been done there. It is a most likely place and should be prospected. No doubt a study and search for small veins intersecting the main fault would reveal a number of other places favorable to prospecting.

CONCLUSION

In conclusion I will state that for the amount of mining and prospecting that has been done, the Easter Mine is a very

promising property. There is reason to believe that ore shoots may extend to great depth along the principal north and south fault. An examination of the surrounding country will probably show several springs from which gravity flow of water may be obtained to reduce the cost of mining. It is probable that more mining and development would have been done if the area was more accessible. The property will justify the expenditure of a substantial sum of money, and stands an excellent chance of developing into a profitable mine.

CERTIFICATE OF ASSAY

PHONE WASATCH 4696

ALONZO F. BARDWELL
Assayer and Chemist
158 South west Temple Street
Salt Lake City

Aug - 27 - 1934

E.C.D.Marriage.--
Easter Mine.-

Mark	No	Gold Ozs. Per Ton 2000 lbs.	Silver Ozs. Per Ton 2000 lbs	
	35.	0.40	2.40	4' E- face lower stope
	36.	0.50	2.70	5 ft above #35
	37	0.53	2.35	5' above #36
	38	0.48	2.60	2' 6" below tunnel level w.s.winze

Signed
Alonzo F. Bardwell

Charges, $4.00

CERTIFICATE OF ASSAY

PHONE WASATCH 4696

ALONZO F. BARDWELL
Assayer and Chemist
158 South West Temple Street
Salt Lake City

Oct- 31-1934-

E.C.D.Marriage,-
Easter Mine.-

Mark	No.	Gold ozs. per ton 2000 lbs.	Silver ozs. per ton 2000 lbs.	
Sample-	1	0.60	2.80	---- 7 Tons. Oct-28-1934
	2	1.14	2.46	Face E. drift- 3' 6"
	3	0.28	1.92	Gouge.-
	4.	1.52	3.88	3' ---- 6' above #2

Signed
Alonzo F. Bardwell

Charges, $4.00

Certificate of Assay
PIOCHE ASSAY OFFICE
Pioche, Nevada

M Easter Mine May 26, 1934.

Description	Gold Ounces	Silver Ounces
No. 5	0.75	3.6

Earl T. Godbe ASSAYER

AMERICAN SMELTING AND REFINING CO.
Garfield Plant

Garfield, Utah Aug. 19, 1933
Phil Dolan Lse.

Bought of Phil Dolan, Caliente, Nevada Mine Easter Mine Lot No. 1
Sampled by GP Class Crude Shipping Point Caliente, Nevada
Avg. 8/7 to 8/12
Quotations 909-22 Silver .36042

Assays		Gold oz.per ton	Silver oz.per ton	Insol. per cent.	Iron per cent
A.S.& R.Co	O	.93	3.8	93.9	2.8
	D	.945	3.8		
Bardwell	O	.96	4.04		
	D	.97	4.13		
Settlement Assay		.95125	3.9425	93.9	2.8

Car Initial	Number	Values Per ton			
UP	63781	Gold	@ 19.00	18.07	
		Silver, 95%	@ .36042	1.35	
				19.42	
Wet weight		76940			
Less moisture	1.5 %	1154	Less total deductions	3.00	
Dry weight		75786	@ $16.42	per ton	$622.20
			Freight advanced (80000 Min.) @	3.20	128.00
			Assaying		6.00
			Net proceeds		$ 488.20

AMERICAN SMELTING AND REFINING CO.
Garfield Plant
Salt Lake City, Utah, June 29, 1934

Bought of Phil Dolan Mine Easter Mine Lot No. 2
(Final settlement)
Received 6/12/34 Sampled by GP Class Crude Shipping Point Caliente, Nev.
Quotations Gold 34.9125 Silver .64125

Assays		Gold oz.per ton	Silver oz.per ton
A.S.& R.Co.	O	.64	3.3
	D	.70	3.3
Bardwell	O	.70	3.5
	D	.70	3.5
Umpire Union	O	.705	
Settlement Assay		.70	3.4

Car Initial	Number	Values per ton			Deductions per ton	
UP	201029	Gold	@ 31.81825	22.27	Base	3.00
		Silver, 95% Min. .5	@ .64125	1.86	10% Xes.over 20.00 gr	.41
						3.41
					a/c labor	
Wet weight	115780			24.13	increase	.06
Less moisture					Total	
1.5%	1736			3.47	deductions	3.47
Dry weight	114044		@	20.66	per ton	1178.07
		Freight advanced @	4.00	2.31		236.88
		Assaying				6.00
		Net proceeds				$ 935.19

AMERICAN SMELTING AND REFINING CO.
Garfield Plant
Salt Lake City, Utah, Sept. 8, 1934

Bought of Phil Dolan Mine Easter Mine (final settlement) Lot No. 3.
Received 8/29/34 Sampled by GP Class crude Shipping Point Caliente, Nevada
Quotations ____ Gold 34.9125 Silver .64125

Assays		Gold oz.per ton	Silver oz.per ton
A.S.& R.Co.	O	.53	3.00
	D	.535	2.95
Bardwell	O	.52	3.08
	D	.54	3.16
Settlement Assay		.53125	3.0475

Car Initial Number		Values per ton			Deductions per ton	
UP	62545	Gold @ 31.81825	16.90		Base	3.25
		Silver, 95% Min. .5 @ .64125	1.63		a/c labor increase	.06
Wet weight	89120		18.53			
Less moisture 3.4%	3030	Less total deductions	3.31		Total deductions	3.31
Dry weight	86090	@	15.22	Per ton	$ 555.14	
		Freight advanced @ 2.80		124.77		
		Assaying		6.00	130.77	
		Net proceeds			$ 524.37	

AMERICAN SMELTING AND REFINING CO.
Garfield Plant
Salt Lake City, Utah. Jan 4, 1935

Bought of E.C.D.Marriage Mine Easter Mine (Final settlement) Lot No. 4
Received 12/24/34 Sampled by GP Class crude Shipping Point Caliente, Nevada
Quotations ____ Gold 34.9125 Silver 64125

Assays		Gold oz.per ton	Silver oz.per ton
A.S.& R.Co.	O	.545	2.55
	D	.54	2.5
Bardwell	O	.56	2.58
	D	.56	2.62
Settlement Assay		.55125	2.5625

Car Initial Number		Values per ton			Deductions per ton	
UP	63251	Gold @ 31.81825	17.54		Base	3.25
		Silver, 95% Min. .5 @ .64125	1.32		Labor increase	.06
			18.86			
Wet weight	53260					
Less moisture 5.5%	2930	Less total deductions	3.31		Total deductions	3.31
Dry weight	50330		15.55	Per ton	$ 391.32	
		Freight advanced @ 3.83		101.99		
		Assaying		6.00	107.99	
		Net proceeds			$ 283.33	

AMERICAN SMELTING AND REFINING CO.
Garfield Plant
Salt Lake City, Utah, May 6, 1935.

Bought of E.C.D.Marriage Mine Easter Mine (Final settlement) Lot No. 5
Received 4/23/35 Sampled by GP Class crude Shipping Point Caliente, Nevada
Quotations ____ Gold 34.9125 Silver .74604 Avg. 4/22 to 4/27

Assays	Gold oz.per ton	Silver oz.per ton
A.S.& R.Co.	.57	2.7
Bardwell	.585	2.9
Settlement Assay	.5775	2.8

Car Initial	Number	Values per ton			Deductions per ton	
UP	62400	Gold	@ 31.81825	18.38	Base	3.25
		Silver,95% Min. .5	@ .74604	1.72	10% Xes.over 20.00	.01
						3.26
				20.10	labor increase	.06
Wet weight		85100				
Less moisture 3.5%		2978	Less total deductions	3.32	Total deductions	3.32
Dry weight		82122	@ $	16.78	per ton	$689.00

Freight advanced @ 3.20	136.16		
Emergency frt.@ 7%	9.53	145.69	
Hauling @ 2.25		95.74	
Assaying		3.00	244.43
			444.57
less advance			200.00
Net proceeds,			$ 244.57

Form S. L. 24f 10M 5-2-33

Copy

AMERICAN SMELTING AND REFINING CO.

GARFIELD PLANT

GARFIELD, UTAH. Aug. 19, 1933

(167) Item 8

BOUGHT OF Phil Dolan, Caliente, Nevada MINE Easter Mine LOT NO. 1

Phil Dolan Lse.

SAMPLED BY GP CLASS Crude SHIPPING POINT Caliente, Nevada

Avg. 8/7 to 8/12

QUOTATIONS 8-9-33 SILVER .36042 LEAD COPPER

ASSAYS		GOLD OZ. PER TON	SILVER OZ. PER TON	LEAD PER CENT	COPPER PER CENT	INSOL. PER CENT	ZINC PER CENT	SULPHUR PER CENT	ARSENIC PER CENT	IRON PER CENT
A. S. & R. CO.	D	.95	3.8	-	-	93.9				2.8
	D	.945	3.8							
Bardwell	D	.96	4.04							
	D	.97	4.13							
UMPIRE										
SETTLEMENT ASSAY		.95125	3.9425	-	-	93.9				2.8

CAR INITIAL	NUMBER	WEIGHT
UP	63781	

VALUES PER TON			
GOLD	@	19.00	18.07
SILVER, 95%	@	.36042	1.35
LEAD, LESS	@		
COPPER, LESS	@		
			19.42

DEDUCTIONS PER TON	
BASE	
INSOLUBLE % @	
ZINC % @	
SULPHUR % @	
DEBIT	
IRON % @	
TOTAL DEDUCTIONS	

WEIGHT OF LOT

WEIGHT OF SACKS

WET WEIGHT 76940

LESS MOISTURE 1.5 % 1154

DRY WEIGHT 75786 lb

37.893 tons

LESS TOTAL DEDUCTIONS 3.00

@ $ 16.42 PER TON $ 622.20

FREIGHT ADVANCED (80000 Min.) @ 3.20 128.00

ADVANCES

SAMPLING

CHECKED

CORRECT

UMPIRE

ASSAYING 6.00 134.00

Rates, except on contracts, subject to change without notice

MEM

NET PROCEEDS $ 488.20