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REPORT

ON

TOHOQUA MINING COMPANY

AT

LEADVILLE, NEVADA

Examination May 20-22, 1917.
Report May 31st, 1917.
By H. W. Stotesbury.

REPORT ON
TOHOQUA MINING COMPANY
LEADVILLE, NEVADA.

The Tohoqua Mining Company is incorporated under the laws od Nevada, with a capitalization of 1,000,000 shares, par value $1.00. Of this amount 854,000 shares are offered for sale, 45,000 are in the treasury, and 101,000 are held by eleven different persons. John Harnan, President, Wm. P. Seeds, Vice-President, and John F. Heeney, Secretary-Treasurer, are the only officers and directors of the Company, and are all residents of Reno, Nevada, where the offices of the Company are located in Room 217 Clay Peters Building.

LOCATION:

The Company owns two full patented claims an d one full unpatented claim in the Leadville Mining District, Washoe County Nevada, about 40 miles morth of the station of Gerlach on the Western Pacific Railroad. The mine may be reached in about three hours by auto from that station.

EQUIPMENT:

The Company is at present operating its mine through a tunnel and underground winze, the ore being run through a small concentrator located at the moutn of the tunnel. The mine is fully equipped with surface and underground hoists, cars, rails, pipe and all necessary tools for carrying on operations on a small scale, all work being done by hand. The underground hoist is run by compressed air furnished by a small compressor in the mill, as is also a small sinking pump at the bottom of the winze. The surface hoist is a 25 H.P. gasoline hoist at the old (Harnon) Shaft

and is not in use at the present time.

Power for the mine and mill is furnished by two 80 H.P. Three cylinder gasoline engines, direct-connected to electric generators. One of these supplies electric power for the compressor and lights, and the other furnishes the power for the mill through a belt and shafting. At present one engine is dismantled for repairs.

The compressor is small and inadequate for supplying air for the hoist, pump and machine drills, and it would be necessary to install a larger one if machine drills should be used.

There are two mills on the property, the upper or old one being out of use and partially dismantled, while the lower one is fully equipped and in daily use. The equipment consists of crusher rolls, screen , tables and vanners, and is capable of treating approximately 60 tons of mine ore per day. The concentrates are sacked and shipped by wagon to Gerlach and thence by rail to Salt Lake.

There are two saloons, a bunkhouse and a boarding house in the camp, but these do not belong to the Company and are operated by private parties.

MINE WORKINGS:

There is one vein on the property which stands nearly vertical and strikes east and west, and it is on this vein that all of the work has been done. Neither hanging wall nor footwall has been pros-ected by cross-cuts in the search of parrallel veins.

At the upper or western end of the property the vein has been opened up at a depth of 50 feet and of 100 feet by avertical shaft, the Harnon Shaft, from which two other levels were driven at depths of 150 and 200 feet. These workings have been abandoned for several years and are badly caved, and for the most part inaccessible. Wherever it was possible to gain access to these workings thevein had been stoped out or was entirely barren, so the inference is that no ore remains in any of the old workings which are inaccessible. A considerable amount of good ore was shipped from this part of the mine by leasers and by the Company.

so that it is not at all probable that any ore was left whcih could have been removed at a profit.

From the eastern end of the property another tunnel has been driven, which cuts the vein at a depth of 200 feet below the surface. This is now the main working tunnel, and the mill is located at its portal. A new winze has been sunk from this levle to a depth of 190 feet, or 390 feet below the surface, and levels driven on the vein at depths of 90 feet, 140 feet and 190 feet respectively.

On the upper, or 90 foot level, the vein has been developed for a distance of 800 feet along its strikes, and has been stoped wherever any pay ore occured. Most of these stopes are inaccessible, and the ones which it was possible to examine showed but a very small amount of ore in sight. Samples Nos. 100, 101, and102 were taken on this lever, No. 100 being taken across a small streak of good looking ore near the West face, and the other two at the tops of two small stopes. In each case the lens of ore was but a few feet in length and would represent only a small amount of ore in sight.

On the second, or 140 foot level, the vein has been developed for a distance of 700 feet, but all ore has been stoped and there is no ore in sight.

On the lowest, or 190 foot level, the vein has been developed for 400 feet along its strike and is being drifted on both east and west, with ore showing in or near both faces. One of the largest and best stopes in the mine is located on this level, the ore shoot having extended through to the level above and at times having a width of four feet. The greatest length on the level is about 75 feet. This stipe is now supplying the bulk of the ore for the mill. All but two of the remaining samples were taken on this level the vein being sampled wherever there was any ore in sight.

GEOLOGY AND CHARACTER OF VEIN:

The vein occupies a fault zone in andesite, and consists of irregular lenses and shoots of high grade lead and zinc sulphides mixed with a little quartz and carrying a considerable amount of

silver. Several andesite dikes of a slightly different texture than the wall-rock cross the vein at right angles, but do not seem to affect it in any manner, so it is probable that the dikes are older than the vein. There is no evidence of faulting, except along the hanging-wall of the vein.

A small amount of water comes in on the 140 and 190 foot levels of the winze, but this is easily handled by running a small sinking pump for a short time each day. The fault zone containing the vein is cruched and contains a considerable amount of gouge, so that the ore is easily mined, but the ground does not stand for any great length of time after it is removed. The ore occurs in lenses in the gouge, varying in width from two or three inches up to four feet, and having various lengths, so that it is not possible to estimate ore reserves with any degree of accuracy. As a rule the gouge and crushed andesite in the immediate vicinity of the ore carry a considerable amount of the sulphides disseminated through them, and most of this is removed by concentration. Occasionally detached boulders of high grade ore are found.

MINING AND MILLING FACILITIES:

The property is easily accessible, a good road leading directly to the mill. Freight from Gerlach to the mine is hauled at the rate of $10.00n per ton, and concentrates are hauled to the railroad for the same price. Auto trucks owned by the Company would reduce this cost considerably.

Water for the mill is piped from springs in the near vicinity, and much more is available than is being used at present, although the present supply is not sufficient to operate the mill continuously, storage tanks being used, which are allowed to fill between shifts.

There are no electric power lines in that part of the state, so that it would be necessary to depend entirely upon gasoline or steam for power.

The mine is at present being operated on a small scale. To increase production would require the sinking of the main winze

to develop further ore reserves, the installtion of another compressor and machine drills, repairs to the main tunnel and winze, and the installation of a large hoist underground. The output of the mill could be increased by developing a larger water supply and by adding another shift.

ORE RESERVES AND VALUES:

There is only a small amount of ore in sight on the property, as development work has not been kept ahead of stoping to any great extent, and it will not be possible to estimate this accurately because of the manner in which it occurs.

On the lower level the vein seems to be as well defined as on the upper levels, and the samples taken at this elevation show the ore to be of average width and value. The vein still shows in both faces of the ;evel, and there is reason to believe that it will extend to a considerable depth below the level, as the fault zone and walls are as well marked as in the upper levels, and show no signs of termination.

There is also reason to suspect the presence of ore in some of the undeveloped pillars between stopes on the upper levels of the winze, although none may show in the stopes surrounding them.

The accompanying copies of smelter returns give a good idea of the value of the ore and concentrates which have been shipped.

From these returns it will be seen that (1) four lots of crude ore (probably sorted) shipped from the upper workings, a total of 63.36 tons average $124.53 per ton: that (2) concentrates shipped from June, 1910, to May, 1917 a total of 1,333.51 tons averaged $105.00 per ton.

The last three lots of concentrates shipped, a total of 87.3 tons, came almost entirely from the lower level and averaged $152.27 per ton, this probably being an average value of the concentrates obtained from the ore mined from the stopes on this level.

Although no figures could be obtained, it is thought that about one ton of concentrates is obtained from 10 tons of mine ore.

TERMS:

The bulk of the stock of the Tchoqua Mining Company is held by John Harnon, President, who holds 854,000 shares; 45,000 shares are in the treasury, and the balance, 101,000 shares, is held by eleven different persons.

Mr. Harnon asks $85,000.00 cash for his stock, which would also give control of the treasury stock, or a total of 899,000 shares. The balance of the stock can probably be secured at a reasonable price.

It is also possible that Mr. Harnon would give an option on his stock for a substantial cash payment and the balance in installments. In this case it would be necessary to get a lease and option on the property and do enough work to prove its value.

RECOMMENDATIONS:

It is not possible to figure any definite amount of ore in sight because of the irregulatities of the ore bodies, but considering the persistence of the vein and the amount and value of the ore which has already been shipped, together with the good values showing on the lower level, the property is evidently worthy of further consideration.

It is not recommended, however, that a cash price of $85,000.00 be paid for Mr. Harnon's stock without doing enough work on the property to prove the existence of the vein at greater depth. A cash payment of ten or fifteen thousand dollars to obtain an option on the stock would be returned to a company operating the property for several months under lease, from ore obtained from the mine.

MAPS:

Stope-assay plan accompanies this report. This is an east-west section through the plan of the vein. Location and value of samples are shown. No horisontal plan of the mine is shown as there is no recent survey to be had, and all workings are on the vein, approximately parallel and one below the other.

COPY OF SMELTER RETURNS ON CRUDE ORE

FOR

TOHOQUA MINING COMPANY

LOT NO. 7 Date 8-30-1911.

Assays	Oz. Gold	Oz. Silver	% Lead	%Zn.
	.015	188.67	55.5	9.85

Dry weight - 27332 lbs. @ $125.45 per ton - $1714.40

Frt. Advanced @ 8.25 " " 115.36

NET PROCEEDS - $1599.04

LOT NO. 8 Date 1-29-12

Assays	Oz. Gold	Oz. Silver	% Lead	% Zn.
	.01	203.3	54.4	9.6

Dry Weight - 9464 lbs. @ $145.00 per ton - $ 686.14

Freight Advanced @ 8.25 " " - 39.95

NET PAYMENT - $ 646.19

LOT NO. 10 Date 1-29-12

Assays	Oz. Gold	Oz. Silver	% Lead	% Zn.
	.01	176.70	34.8	12.2

Dry Weight - 27292 lbs. @ $115.85 per ton - $1580.89

Freight Advanced @ 8.25 " " - 115.17

NET PAYMENT - $1465.72

LOT NO. 11

Assays	Oz. Gold	Oz. Silver	% Lead	% Zn.
	.02	185.50	41.1	11.3

Dry Weight - 62642 lbs. @ $128.00 per ton - $4009.00

Freight Advanced @ $8.25 per ton - $264.33
Acct. Error Lot 10 in Freight - 23.03 287.36

NET PAYMENT - $3721.73

COPY OF SMELTER SETTLEMENTS ON CONCENTRATES

FROM TOHOQUA MINING COMPANY

LOT NO. 1950-A Date Dec, 16th, 1916.

GROSS	PRECENT MOISTURE	MOISTURE	DRY
56060	2.8	1570	54490

BASIS OF SETTLEMENT

ASSAYS		PRICES	GROSS VALUE	LOSS	VALUE PER TON
.017	Oz. Gold	Nothing under .03	-	-	-
155.9	" Silver	76¢	$118.48	5%	$112.56
41.5	% Lead @	$1.18 per Unit	49.11	10%	44.20
17.6	% Zn.	10% Free	-	-	-

VALUE PER TON - - - - $156.76
TREATMENT - - - - - - - 4.17

NET VALUE PER TON - - $152.59

Dry Weight of Ore - 54490 lbs. @ $152.59 per ton - $4157.31
Less Freight - - 56680 " @ 7.50 " " - 213.55

$3944.76
Sampling - - - - - 31.57

Check No. 6790 - $3913.09

LOT NO. 1969-A Date March 10th, 1917.

WEIGHTS

GROSS	PERCENT MOISTURE	MOISTURE	DRY
43000	2.2.	946	42054

BASIS OF SETTLEMENT

ASSAYS		PRICES	GROSS VALUE	LOSS	VALUE PER TON
-	Oz. Gold	-	-	-	-
140.2	" Silver	77-3/8¢	$108.48	5%	$103.06
32.5	% Lead	1.30 per Unit	42.25	10%	38.02
20.1	% Zn.	10% Free	-	-	-

VALUE PER TON - - - $141.08
TREATMENT - - - - 6.08

NET VALUE PER TON - $135.00

Dry Weight of ore - 42054 lbs.@ $135.00 per ton - $2838.64
Less Freight - 43280 " @ 7.50 " " 162.30
$2676.34
Sampling, etc.. - 26.94

$2649.40
Umpire Charge - 2.33

$2647.07

LOT NO. 2001-A

Date - May 8th, 1917.

WEIGHTS

GROSS	PERCENT MOISTURE	MOISTURE	DRY
72960	2.9	2116	70844

BASIS OF SETTLEMENT

ASSAYS	PRICES	GROSS VALUE	LOSS	VALUE PER TON
.02 Oz. Gold	-	-	-	-
152.00 " Silver	73-5/8¢	$111.91	5%	$106.31
39.5 % Lead	1.50 per Unit	59.25	10%	53.32
16.0 % Zn.	10% Free	-	-	-
		VALUE PER TON - - - -		$159.63
		TREATMENT - - - - -		3.94
		NET VALUE PER TON - -		$155.69

Dry Weight of Ore - 70844 lbs. @ $155.69 per Ton - $5514.85
Less Freight - 73635 " @ 8.00 " " - 294.54

$5220.31
Sampling, etc. 37.00

$5183.31
Umpire Charge 2.33

$5180.98

LOT NO. 2005 - A

Date - May 8thm 1917.

WEIGHTS

GROSS	PERCENT MOISTURE	MOISTURE	DRY
65240	3.3	2152	63088

BASIS OF STELEMENT

ASSAY	PRICES	GROSS VALUE	LOSS	VALUE PER TON
.015 Oz. Gold	-	-	-	-
151.00 " Silver	74-3/4¢	$112.87	5%	$107.23
35.6 % Lead	1.50 per Unit	53.40	10%	48.06
16.0 % Zn.	10% Free	-	-	-
		VALUE PER TON - - -		$155.29
		TREATMENT - - -		3.97
		NET VALUE PER TON - -		$151.32

Dry Weight of ore - 63088 lbs. @ $151.32 per Ton - $4773.24
Less Freight - 65760 " @ 7.50 " " - 246.56

$4526.68
Sampling, ect. - 33.67

$4493.01

LOT NO. 2035 - AA

Date - May 25th, 1917.

WEIGHTS

GROSS	PERCENT MOISTURE	MOISTURE	DRY
41140	1.1	452	40688

BASIS OF SETTLEMENT

ASSAYS	PRICES	GROSS VALUE	LOSS	VALUE PER TON
.01 Oz. Gold	-	-	-	-
141.8 " Silver	74-5/8¢	$105.82	5%	$100.53
34.7 % Lead	1.65 per Unit	57.25	10%	51.53
15.5 % Zn.	10% Free	-	-	-

VALUE PER TON - - - $152.06

TREATMENT - - - - 4.24

NET VALUE PER TON $147.82

Dry Weight of Ore - 40688 lbs. @ $147.82 per Ton - $3007.25

Less Freight - 41410 " @ 7.50 " " 155.29

$2851.96

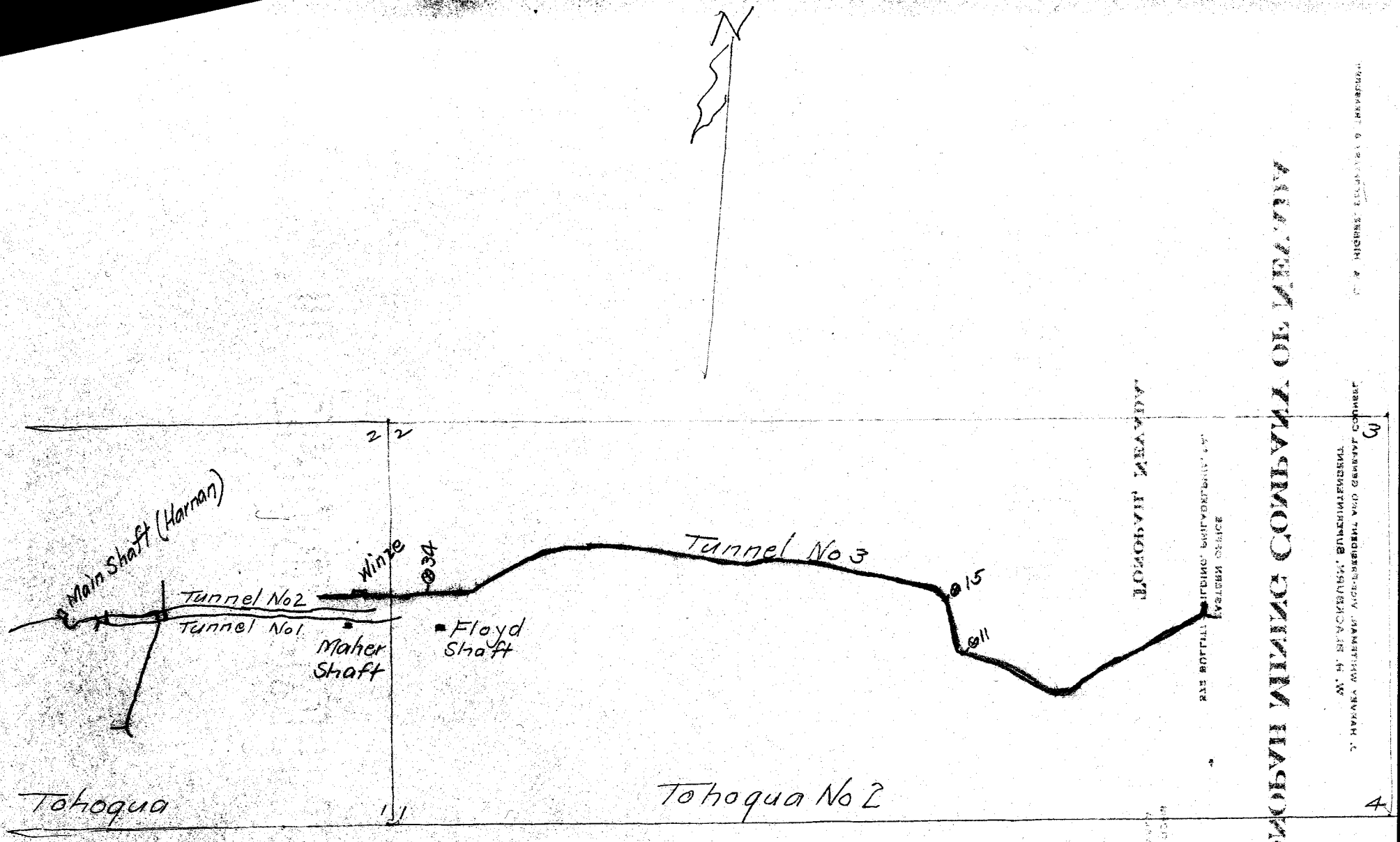
SAMPLING, ETC. - 25.33

$2826.63

SAMPLES

AG. AT 74¢. LEAD AT $1.70 per UNIT ZN. DEDUCTED 10¢ PER UNIT OVER 10%

NO.	WIDTH	OZ. GOLD	OZ. SILVER	% LEAD	% ZN.	VALUE	DESCRIPTION
100	14"	tr.	58.90	16.90	5.88	$72.31	4" Gouge
101	8"	tr	7.40	0.30	11.86	5.48	4" Ore Much Zn.
102	6"	tr	43.00	13.60	4.11	54.94	G.S. from Pile
103	2.5'	.02	74.48	18.80	9.00	87.07	1 ft. ore
104	1.7'	tr	7.40	.60	2.70	6.49	2" Ore
105	2.6	tr	.48	.30	3.54	.92	Very little Ore
106	1.5'	tr	.64	.20	3.59	.81	Mostly Gouge
107	1.5'	tr	11.90	.80	6.29	10.16	Little Ore
108	1.7'	tr	38.30	13.10	4.68	50.61	Some Ore
109	1.9'	Tr	6.60	.40	3.59	5.56	Little Ore
110	2.7'	tr	26.60	5.00	13.05	27.27	Mostly Ore
111	1.7'	.02	65.58	15.50	10.66	74.68	" "
112	2.8'	tr	40.30	9.90	6.81	46.65	Little "
113	1.6'	tr	24.10	4.70	6.50	25.82	Little "
114	1.8'	tr	17.40	1.70	4.58	15.77	" "
115	2.3'	tr	6.30	.50	4.16	5.51	Very Little Ore
116	1.6'	tr	48.10	6.60	7.75	46.81	Some Ore
117	2.0'	tr	18.50	7.60	9.46	26.61	G.S. from Pile
118	1.3'	tr	39.60	.30	7.75	29.81	Some Ore
119	1.3'	tr	53.00	2.20	3.64	42.96	" "
120	-	tr	18.50	1.20	3.59	15.73	Tailings at Old Mill
121	-	.04	102.56	27.60	17.12	120.68	Concentrates New Mill



THE FLOYD MINING COMPANY OF UTAH

PROPERTY MAP

AS BUILT

MINING DIVISION

SCALE

W. M. BUCKNER, MINING ENGINEER

THE MINING DIVISION OF THE UTAH CONSOLIDATED MINING COMPANY

W. M. BUCKNER, MINING ENGINEER

TRANSCRIPT 6 OF 6 HIGHWAY SURVEY

AMENDMENT