

THE BRAZOS - MINE.

This mine consists of the Brazos, Red Chief, Pleasant Valley, Little Chief and May Queen Quartz Mining Claims; each being full claims, 600 feet wide and 1500 feet long.

SITUATION.

These claims are in the County of Baker, State of Oregon, 12 miles east of Baker and two miles north of Pleasant Valley.

ACCESSIBILITY.

This property is reached by good wagon road from Baker, Oregon, or from Pleasant Valley, a station on the main line of the O. W. R. & N. Railroad, and but two miles from the mine as stated. The R.R. has a service of two trains each way daily.

FORMATION.

This property is in what is known as a Quartzite Diorite, slate and porphyry formation, having its beginning at Look Out Mountain and striking to the north of west to the Elkhorn Mountains, a distance of forty miles.

This formation in the main lode of this zone are true fissure veins, in slate or quartzite and slate. The development and geological features of all the mines along this zone indicate great persistency of depth and increased value of the veins.

The lode embraced in these five claims can be traced the length of the two claims Brazos and Pleasant Valley, or 3000 feet.

In this zone in each direction from the Brazos, there are several mines operating in considerable depth, showing a continuation of the surface characteristics on these two claims. Further mention of these properties will follow.

The strike of the lodes to the southeast and the dip of the vein as explored, is about 33 degrees from the horizontal to the south.

The ore is of a granulated oxidized and white quartz. The values are carried in sulphides as well as free gold, and in depth the ore bodies are wider. The Brazos and Pleasant Valley claims are patented.

D E V E L O P M E N T.

This mine is developed with a crosscut tunnel 150 feet long. At this point it cuts the ledge which is four feet wide, and the ore shoot on the tunnel level is 150 feet long. Samples taken every 20 feet along the vein gave the following results:

Commencing 40 feet south of crosscut tunnel and sampling north,

Sample No. 1.	-----	\$10.00
2.	-----	11.30
3.	-----	8.00
4.	-----	6.20
5.	-----	5.20
6.	-----	7.00
7.	-----	6.20

Making an average of \$7.70 per ton on the tunnel level. These samples were taken on the east side of the drift across the vein, and show by tests that 70% of the values can be saved by amalgamation. The drift on the tunnel level is 300 feet long. An upraise has been made on the vein from the tunnel level to the apex of the ledge. Upraise is 175 feet long, and samples taken every ten feet on the upraise for sixty feet and along the stope gave an average of \$8.00 per ton. A mill run was made of 100 tons from upraise and stope and yielded at the rate of \$5.50 per ton free, there being no concentrators in the mill. The ore was hauled a distance of twelve miles to the Perry mill where the test was made. A double compartment shaft was sunk 200 feet deep.

Each compartment is five feet four inches long and four feet six inches wide between timbers, making a desirable working shaft for all practical purposes. At the 100 foot level the shaft cuts the vein. From ^{drift} which point a ~~shaft~~ has been run 500 feet, showing an ore shoot 200 feet in length. The ore chute was encountered 30 feet from the shaft, and the ledge on this level is five feet wide. Samples taken every six feet on this level along the ore shoot gave the following results:

Sample No. 1.	-----	\$4.15
2.	-----	7.26
3.	-----	4.15
4.	-----	7.26
5.	-----	10.90
6.	-----	5.50
7.	-----	12.16
8.	-----	4.31
9.	-----	4.31
10.	-----	13.24
11.	-----	3.24
12.	-----	3.16

Sample No. 13.	\$ 4.23
14.	12.24
15.	4.23
16.	12.16
17.	3.30
18.	8.50
19.	10.75
20.	4.37
21.	6.50
22.	4.37
23.	5.50
24.	4.30
25.	13.26
26.	4.30
27.	12.16
28.	6.14
29.	13.18
30.	10.75

Making an average of \$7.33 per ton, of which by amalgamation test, 35% can be saved. The balance of a high grade sulphide can easily be saved by concentration.

At the 200 foot level a crosscut has been run 60 feet, and 75 feet more will cut the ledge at that level.

T R E A T M E N T .

These ores are admirably suited for concentration and amalgamation through a mill and concentrators, with a loss not to exceed 10% of the assay value. The concentrates readily yield their metals by the cyanide treatment.

E S T I M A T E -- O F -- P R E S E N T - O R E R E S E R V E S .

From crosscut level up the upraise 60 feet and on the ore shoot 150 feet long will estimate 2770 tons at \$8.00 per ton or a total of \$22,180.00. From the 100 foot level to the tunnel level on dip of the vein 133 feet and on ore shoot 200 feet long will estimate 10,230 tons at \$7.33 per ton, or a total of 74,985.90. Making the total of present ore reserves \$97,145.90. Total cost of extraction and reducing \$33,500.00.

M I N I N G F A C I L I T I E S

There is no timber on the property, but can be had by auto from the Railroad two miles haul or from Baker by truck twelve miles haul. Wood from the hills ten miles haul or coal from the R.R. two miles.

W A T E R .

There is but one spring of water on the property, and only affords enough for domestic use.

It is impossible to get water other than sinking, and judging from the conditions at other properties on this same mineral belt, and in the immediate vicinity, sufficient water will be encountered by sinking another 200 feet for all mining purposes, and for milling. The water was increasing rapidly the last fifty feet the shaft was sunk.

The Virtue and White Swan both had sufficient water at 350 feet for all purposes. These mines are but one and one half miles from the Brazos. In sinking the present shaft a Cameron sinking pump was used throwing only 28 gallon per minute and kept the mine clear of water.

ADJOINING DEVELOPMENT AND HISTORY.

The Virtue mine so well known as an old producer is but one and one half miles from the Brazos and on the same mineral belt, has produced over two million dollars. and is down 800 feet.

The White Swan is but 4500 feet north of the Brazos and has produced one million of dollars.

Other mines close by all had water at 350 feet sufficient for all purposes.

Respectfully

W. T. YOUNG

Brazos Mine

Gold

NAME			OLD NAMES	PRINCIPAL ORE	MINOR MINERALS
TLOS	R4LE	Sec.11	<u>PUBLISHED REFERENCES</u>		
T	R	S	<u>MISCELLANEOUS RECORDS</u>		
..... Baker			COUNTY	Lindgren 01:726	
..... Virtue			AREA	Parks & Swartley 16:43	
..... about 3700 4100			ELEVATION	Gilluly, Reed & Parks 33:79	
.....			ROAD OR HIGHWAY	Gilluly 37:100	
..... about 2 mi. Pleasant Valley			DISTANCE TO SHIPPING POINT	Ore. Metal Mines Handbook 14A pg-103	
PRESENT LEGAL OWNER (S) .. Albert Geiser				<u>MISCELLANEOUS RECORDS</u>	
..... W.C. Fudge				Address .. Baker, Ore.	
.....			 " "	
.....				
.....				
OPERATOR	
Name of claims	Area	Pat.	Unpat.	Name of claims	Area Pat. Unpat.
.....				
.....				
.....				
.....				
<u>EQUIPMENT ON PROPERTY</u>					
.....					

DEPARTMENTAL RECORDS ON FILE IN

EQUIPMENT AND VESSEL RECORDS

PLAT

Brazos Mine Baker

Handwritten notes and signatures in the right margin.

copy

Virtue Dist.

REPORT

ON THE

BRAZOS MINE

by

W. T. Young

Sept. 7, 1901

Location

The Brazos mine is located in the Northeast corner of Township 10 S. R. 41 E. W. M. Baker County, Oregon, about 12 miles Southeast of Baker, 2 miles North of Pleasant Valley and about an equal distance Southeast of the White Swan Mine. The elevation of the mine is about 4,100 feet above the sea level.

The Oregon Trail Highway and the main line of the O. W. R. & N. Railway pass through Pleasant Valley. A passable auto road serves the mine but a much shorter road with better gradient can be cheaply constructed down Brazos Creek to Pleasant Valley, a total distance of not to exceed 2 miles.

Power

Electrical power of the E. O. L. & P. Co., has recently been installed in the White Swan Mine, 2 miles to the northwest, and the line can be extended to the Brazos property at a cost of \$1,000.00 per mile.

History

The property is located in the vicinity of some of the richest mines of the district. The Virtue Mine, 3 miles to the Northwest has produced over \$2,000,000 and the White Swan has produced about \$250,000. This latter mine was shut down for a number of years but recently has been re-opened and re-equipped and is again in the production list.

The Brazos Mine was developed by cuts, tunnels and shafts and about 1900 an abortive attempt was made to cyanide the ore without crushing. This resulted in failure and the property was closed down remainin idle ever since.

All the ore extracted from the mine workings, aside from a small amount which was cyanided, has been hauled to the Ferry Custom Mill for treatment, reported to be \$60,000.

Property

The Brazos property consists of three patented and twelve unpatented mining claims, covering a length along the strike of the vein of about 7,500 feet.

Maps

This report is accompanied by three maps.

Map No. 1, is a plan of a portion of the property showing most of the claims with the surface and underground workings and approximate apex of the vein, with elevations. Scale 200 feet to 1 inch.

Map No. 2, is a plan of the underground workings on the Brazos Claim, showing the vein out-crop, position of vein in the tunnel, on the 100 feet shaft level and its probable position on the 200 feet shaft level. Scale 50' to 1".

Map No. 3, is a transverse projection showing a cross section of the workings on the Brazos Claim and the position of the vein in same, also probable position of the vein on the 200' level. Scale 50' to 1".

Geology & Vein System

The country rock in which the Brazos vein occurs is a dark argillite, or slate. The enclosing rock in the vicinity of the main tunnel on the Brazos Claim is sort clay Breccia, wherein the fragmental pieces are largely jasper. This is probably of shallow depth.

The vein can be traced more or less continuously throughout the length of three claims. It is evident from the material on the dumps of the shaft on the Brazos Claim and the tunnel on the Queen Bee Claim that these workings penetrated the argillite below the fractured zone, exposed in the Brazos tunnel.

On the Pleasant Valley claim the formation is much harder and undisturbed. The argillite strikes Northwesterly and dips about 40 degrees to the Southwest. The vein consists of quartz associated with a brown vein filling and a bluish gouge. The vein averages from $2\frac{1}{2}$ ' to 5', strikes Northwesterly and dips to the Southwest about 40 degrees.

The vein in the main tunnel on the Brazos Claim is of a very different character from that in the Pleasant Valley Claim although it corollates perfectly with it and with the surface out-crop of quartz on the north end of the Brazos Claim.

The vein in the Brazos Claim is some 4' to 5' wide and consists largely of clay bands carrying fragmental pieces or nodules of quartz. Where the quartz is in abundance the gold content of the vein is higher than where the quartz is absent.

The clay filling of the vein at this point is undoubtably due to the crushing and re-arrangement of the brecciated country rock along the movement plane of the vein fissure. This movement is undoubtably post mineralization and the clay filling, found in the Brazos tunnel, does not extend to any great depth in the shaft workings.

There is some evidence of intrusive dikes being present but little is known of their genetic importance.

The vein on the 100' level of the shaft evidently was undisturbed as it is authoritatively reported that the vein was followed continuously to the Northwest from the shaft for 300' with commercial ore body of 200' in length.

Waldemar Lindgrin in his report, "THE GOLD BELT OF THE BLUE MOUNTAINS OF OREGON," page 726, has this to say of the Brazos Mine, in part:

"Two miles north of Pleasant Valley and the same distance south of the White Swan is a vein covered by the Pleasant Valley and Brazos Claims.

A black argillite, most of it soft and crushed, and without clearly defined bedding planes, forms the country rock. The vein strikes northwesterly and dips 20 to 40 degrees southwest."

Sampling

I attach very little significance to samples taken on the vein in the Brazos tunnel, where the vein filling consists almost exclusively of crushed vein matter intimately mixed with clay gouge derived from the soft enclosing rock. Therefore, I took only four samples in this tunnel and raise, as follows:

No. 4	4.5' wide	\$7.00 per ton, in gold
No. 5	4.0' "	1.40 " " " "
No. 6	1.8' "	1.40 " " " "
No. 7	3.5' "	3.85 " " " "

As is evident from the material on the dump of the Brazos shaft, the vein occurs in the argillite, such as will be encountered in future mining operations. The shaft being full of water, it is impossible to obtain any first hand information but I have in my possession the result of sampling by W. T. Young on the 100' level, contained in his report written at the time the Brazos shaft was being operated.

Mr. Young was a Mining Engineer of good reputation and standing, who was connected with the property during the development period. His results should be competent.

Paraphrasing his report, we have as follows:

"The ore is of a granulated oxidized and white quartz. The values are carried in sulphides as well as free gold, and in depth the ore bodies are wider.

A double compartment shaft has been sunk 200 feet deep. Each compartment is five feet four inches long and four feet six inches wide between timbers, making a desirable working shaft for all practical purposes. At the 100 foot level the shaft cuts the vein. From which point a drift has been run 300 feet, showing an ore shoot 200 feet in length. The ore shoot was encountered 30 feet from the shaft, and the ledge on this level is five feet wide. Samples taken every six feet on this level along the ore shoot gave the following results:

Sample No. 1	\$ 4.15
Sample No. 2	7.26
Sample No. 3	4.15

Sample No. 4	\$ 7.26
Sample No. 5	10.90
Sample No. 6	5.40
Sample No. 7	12.16
Sample No. 8	4.31
Sample No. 9	4.31
Sample No. 10	13.24
Sample No. 11	3.24
Sample No. 12	3.16
Sample No. 13	4.23
Sample No. 14	12.24
Sample No. 15	4.23
Sample No. 16	12.16
Sample No. 17	3.30
Sample No. 18	8.50
Sample No. 19	10.75
Sample No. 20	4.37
Sample No. 21	6.50
Sample No. 22	4.37
Sample No. 23	5.40
Sample No. 24	4.30
Sample No. 25	13.26
Sample No. 26	4.30
Sample No. 27	12.16
Sample No. 28	6.44
Sample No. 29	13.18
Sample No. 30	10.75

Making an average of \$7.33 per ton, of which by amalgamation test 75% can be saved.

The blance of a high grade sulphide can easily be saved by concentration.

At the 200-foot level a crosscut has been run sixty feet, and seventy-five feet more crosscutting will cut the ledge at that level.

These ores are admirably suited for amalgamation and concentration through a Huntington roller mill and over Johnson concentration tables, with a loss not to exceed 10% of the assay values. The concentrates readily yield their metals by the cyanide treatment. A very simple and inexpensive method. I would estimate from the test I have made that the cost of mining and extracting the precious metals at \$2.50 per ton.

From the 100-foot level to the tunnel level on the dip of vein 135 feet, and on an ore shoot 200 feet long will estimate 10,230 tons at \$7.33 per ton (old price), or a total of \$74,985.90."

The average of the foregoing samples is \$7.33 per ton at the old price of gold. In Young's report he claims that 75% of the gold can be recovered from this ore by amalgamation and that the balance of the value is contained in a sulphide readily amenable to concentration. Young's average of \$7.33 at the old price of gold would be about \$12.83 at the present price. With a 95% mill efficiency, \$12.00 per ton should be recovered from the ore.

Estimates

From the information at hand, it is impossible to determine how high the ore extends above the 100' level, to where it encounters the brecciated country exposed in the tunnel, but from the appearance of the dump there must be a considerable portion of the vein between the 100' level and the tunnel in the undisturbed argillite. For each 100' level is available for mining, we will have an ore shoot 200' long, 5' wide and 75' high, capable of producing 6,250 tons. Based upon Young's sampling this should return, at least, \$12.00 per ton, giving a gross value of \$75,000 to this block of ground.

For the ore between the 200' level and the 100' level, we have 12,500 tons, or a gross value of \$150,000, making a total of above the 100' and 200' levels of 18,750 tons and a gross value of \$225,000.

$200 \times 5 \times 75 - 6,250 \text{ T. } @ \text{ } \12.00	\$75,000
$\frac{\quad}{12}$	

$200 \times 5 \times 150 - 12,250 \text{ T. } @ \text{ } \12.00	150,000
	\$225,000

For each 100' of depth, \$150,000 of ore should be added to the reserves.

The development work thus far accomplished in the shaft is extremely limited and additional ore bodies along the vein will probably be opened in future development. An outcrop of quartz at point 8, near the north end of the Brazos claim, a distance of 750' from the Northwest face of the 100' level is very inviting and should be explored at depth.

Mining Facilities and Costs

The property is devoid of any timber but owing to its proximity to rail transportation this is no serious handicap.

A spring conveniently located is available for domestic water and without doubt, ample water for milling purposes can be pumped from the mine.

Mining and milling costs should not exceed \$4.00 per ton, shaft sinking \$30 per foot, and drifting and crosscutting \$10 per foot.

Development

Pleasant Valley Claim

The development on the Pleasant Valley claim consists of several open cuts and an incline shaft with drifts therefrom. This incline is driven southwesterly on the vein, at a dip of 24 degrees. The total depth obtained is 130' with a 40' drift to the Northwest and 20' to the Southeast.

The Brazos Claim

Development on the Brazos claim consists of several cuts, a tunnel and a shaft. The tunnel is a crosscut for 140' where it encounters the vein. A drift was run to the Southeast for about 100'. The Northwest drift is supposed to be 200' long but is caved full at a point about 35' North of the crosscut.

From a point directly opposite the crosscut a raise has been driven on the vein through to the surface, a distance of about 140'. Some stoping has been done from this raise. The dip of the vein in the drift is about 40 degrees to the Southwest.

The two compartment shaft, which is supposed to have been sunk 200' vertically, with a level at 100' and 200' points, is full of water and therefore, inaccessible. On the 100' level a drift is supposed to have been driven 300' Northwesterly exposing an ore shoot 200' in length. All of the ore taken from this opening is supposed to have been hauled to a Customs mill and treated.

(September 1, 1938--Since been pumped out)

On the 200' level a crosscut has been driven into the hanging wall country 60' toward the downward continuation of the vein. It will be necessary to extend this crosscut about 60' further in order to reach the vein.

Queen Bee Claim

Aside from one or two open cuts, the workings on the Queen Bee Claim consist of a shaft and tunnel, both of which are caved.

From the position of the shaft it appears that it is located in the hanging wall of the vein and in the brecciated zone such as is found in the Brazos tunnel. No ore is exposed on the dump.

The tunnel, which is supposed to be about 200' in length, was evidently driven in the argillite and probably reached the vein although no ore is in evidence on the dump. It is reported, however, that ore was shipped from this tunnel.

Recommendations

From the data available, I can recommend that the shaft be unwatered, the 100' level resampled and the 200' level crosscut extended to the vein.

The unwatering of the shaft can be accomplished by the temporary installation of a gasoline hoist and a gasoline surface-operated pump, augmented by bailing. Possibly the water can be removed by the bucket, without pumping.

The necessary repairs to the collar of the shaft are trivial.

A head-frame at the shaft, and a small shack, is all the construction necessary for a summer operation, as the crew can be cared for in the vicinity, or in Baker.

Conclusions

In summing up the data obtained on the ground, in connection with that taken from the Young report, and information obtained from old-timers who were familiar with the shaft workings, I conclude that the Brazos Mine offers a very attractive mining opportunity wherein the uncertainty of the investment is brought to a minimum.

The initial expense required in checking the ore conditions in the shaft workings is small, and the probability of developing a mine of no mean proportions at a very small outlay, is great.

The possible ore values, tonnage and returns are set forth in the following tabulations.

Level	Possible Tons Reserve	Probable Value per Ton	Gross Value	Extraction Cost	Net Value of Ore
100 ft.	6,250	\$12.00	\$75,000	\$25,000	\$50,000
200 ft.	12,500	"	150,000	50,000	100,000
400 ft.	25,000	"	300,000	100,000	200,000
	<u>43,750</u>	<u>12.00</u>	<u>525,000</u>	<u>175,000</u>	<u>350,000</u>

Cost of Mine & Milling Plant and Completion of 200' level Development	50,000
Development of 400' level shaft 200' @ \$30.00	6,000
Crosscutting 360' @ \$10.00	3,600
Driftin 300' $\frac{1}{2}$ \$10.00	3,000
	<u>62,600</u>

Possible net value of mine at 400' level \$287,400

No estimate has been made of ore below the 400' level, or on the longitudinal extensions of the mine workings along the vein. The possibility of developing additional ore is not to be overlooked.

Respectfully

(Signed) F. CUSHING MOORE

REPORT OF THE BRAZOS MINE

The Brazos Mine, consisting of three patented quartz claims; namely the Pleasant Valley, the Brazos, and the Queen Bee. Each claim being a full 600 feet wide by 1500 feet long. (Note at present this property includes (12) additional claims held by location, making a total of (15) claims.

Property is located 12 miles south-east of Baker, and 2 miles north of Pleasant Valley, Oregon, and is reached by wagon road, connecting with the Old Oregon Trail Hi-way. Pleasant Valley is a station on the O. R. N. (now UNION Pacific) railroad. (Note) Electric Power lines less than one mile from this property.

INFORMATION

A well defined quartz vein crosses the length of the three claims, and appears to be a true fissure vein in slate, or quartzite and slate. The development and geological features of all the mines along this zone indicate great persistency of depth and increased values of the veins. The ore is of a granulated oxidized and white quartz. The values are carried in sulphides as well as free gold. In depth the ore bodies are wider.

The property is developed with a cross cut tunnel 150 feet at which point it cuts the ledge. At this point of intersection the ledge is four feet wide and the ore shoot on the tunnel level is 150 feet long. Samples taken every twenty feet along the vein gave the following results.

(NOTE) As values in report, of which this is a true copy, are given in gold at \$20.00 per ounce, the figures have been changed and samples computed with gold at \$34.50 per ounce. This is the approximate amount received for fine gold from the Federal Government after deducting Mint Charges.

Commencing 40 ft. south of cross cut tunnel and sampling north.

	oz.	Value
SAMPLE No. 1--	.50	\$17.25
" " 2--	.565	19.49
" " 3--	.40	13.80
" " 4--	.31	10.55

AVERAGE-- .3925 oz. \$12.97 Value per ton.

The drift on the tunnel level is 300 ft. long. An upraise has been made on the vein from the tunnel level to the Apex of the ridge. Upraise is 175 feet long and samples taken every ten feet on upraise for 60 feet and along the stope and yielded at the rate of \$5.50 per ton Free. Some 150 ft. east of the tunnel portal a double compartment shaft has been sunk making a desirable working shaft for all practical purposes. At the 100 ft. level the shaft cuts the vein from which point a drift has been run 300 ft. from the shaft, and ledge on this level is five feet wide. Samples taken every 6 ft. on this level along the ore shoot gave the following results:

	OZ	VALUE
SAMPLE No. 1	.208	\$ 7.18
2	.363	12.52
3	.208	7.18
4	.363	12.52
5	.50	17.25
6	.27	9.32
7	.608	20.98
8	.215	6.42
9	.215	6.42
10	.662	22.84
11	.162	5.59
12	.158	5.45
13	.211	7.28
14	.612	21.00
15	.211	7.28
16	.608	20.98
17	.165	5.70
18	.425	14.56
19	.532	18.54
20	.218	6.51
21	.375	12.94
22	.218	6.51
23	.27	9.32
24	.215	6.42
25	.668	22.95
26	.215	6.42
27	.608	20.98
28	.322	11.11
29	.659	22.74
30	.526	18.53

AVERAGE .367 \$12.46 at \$35.00 Value

At the 200 ft. level a cross cut has been run 60 ft. and 75 ft. farther on will cut the ledge at that level.

TREATMENT OF THE ORE

This ore is admirably suited for amalgamation, and concentration through a Hintington Mill (Roller) and over Johnson concentration tables, with a loss not to exceed 10% of the assay value. The concentrates readily yield their metals by the cyanide treatment, a very simple and inexpensive method. I would estimate from the test I have made, the cost of mining and extracting the precious metals at \$2.50 per ton. From cross cut tunnel level up the upraise 60 ft. and on the ore shoot 150 feet long will estimate 2770 tons at \$8.00 per ton, or a total of \$22160.00 (38,226) from the 100 ft. level to the tunnel level on dip of the vein 195 ft. and on the ore shoot 200 ft. long will estimate 10,230 tons at \$7.35 per ton or a total of \$74,985.80 (\$127,465.80) making the total of present ore reserves \$97,155.90 (\$165,691.80) Total cost of extracting and reducing ore \$32,500.00.

MINING FACILITIES

There is no timber on the property. The nearest is some four or five miles distant. There is but one spring of water on the property. It only affords enough for domestic purposes. This has been the main drawback with this property. Judging from other properties in this same mineral belt, sufficient water will be encountered by sinking 150 to 200 ft. farther for all mining purposes. The water was increasing rapidly the last 50 feet the shaft was sunk. The Virtue Mine has sufficient water for all purposes (mining and milling) at 350 feet and the White Swan is the same at 300 feet. These mines are but $1\frac{1}{2}$ miles from the Brazo and in the same mineral belt and zone.

RECOMMENDATIONS

In sinking the shaft 200 feet farther and crosscutting the vein

on the different levels, I predict that there will be ample water for all mining and milling purposes and the shaft will not only supply sufficient water, but will be opening up Virgin Ground every foot that it goes down.

COST OF DEVELOPMENT

The shaft can be sunk 200 ft. farther for \$30.00 per foot including all expenses. Crosscutting to the vein on the different levels will cost \$7.00 per foot.

ADJOINING PROPERTY (HISTORY)

The Virtue mine, so well known as a producing property, but $1\frac{1}{2}$ miles West by direct line from the Brazos and on the same mineral belt. It has produced over \$2,000,000.00.

(Signed) W. T. YOUNG

Original--September 7, 1901

This Copy taken from copy
made August 23rd, 1938

This date--January 15th, 1940

SYNOPSIS OF REPORT

The Brazos Mine is located in Baker County, Oregon, two miles from the highway and railroad, at an elevation of 4,100'. Baker, twelve miles distant, is the supply point.

Electric power is available within two miles.

The Mine is located in the vicinity of two mines which have been great producers, The Virtue and White Swan Mines.

The property consists of three patented and six unpatented claims.

The Brazos Mine has produced between \$40,000 and \$60,000 from development work.

Three maps of claims and the workings accompany this report.

The vein is traceable practically three claim lengths. It varies from 2' to 5' in width and dips about 40 degrees in the main workings.

One ore body of commercial value has been developed. Other ore bodies should be developed along the strike of the vein. One conspicuous outcrop of quartz is within 750' of the face of the main workings.

The ore is amenable to simple and cheap metallurgical treatment, 75% amalgamation, 25% concentration.

The prevailing country rock is black argillite.

The ore, as developed on the 100' shaft level, has a length of 200', a width of 5' and a re-coverable value of \$12.00 per Ton at the present price of gold. This is based upon sampling by W.T. Young when the property was in operation. The shaft is now full of water.

Shaft timbering, with the exception of the collar set is in good condition.

Mining and milling cost should not exceed \$4.00 per ton.

Ore developed on the 100' level, according to Young's sampling, indicates about 6,250 Tons of ore at \$12.00 per Ton value, at present prices. This, after a deduction of mining and milling costs, leaves a net value above the 100' level of \$50,000.

The Vein on the 200' level has not been opened, as yet, requiring about 60' of additional crosscutting. If ore on the 200' level equals that sampled by Young on the 100' level, 12,500 tons will be available for a net value of \$100,000.

Total net value of all ore above the 100' and 200' levels is \$150,000. This does not include the cost of a camp and milling plant.

An adequate camp and milling plant of 50 tons daily capacity, including power line from the White Swan Mine, and completion of the development on the 200' level, should not exceed \$50,000.

Projecting the calculations to the 400' level adds 25,000 tons of a Net value of \$200,000.00 less development cost of \$12,600.00. Gives a total possible value for the property above the 400' level of \$287,400.00.

BRAZOS MINE

VIRTUE DISTRICT:

Is 2 miles east from shipping point, Pleasant Valley, Ore., on the Union Pacific and Old Oregon Trail. Located 35 years ago and consists of 3 patented claims and 12 unpatented claims, recorded in Baker county. Located in a hilly country; the country rock is slate and diorite, slate hanging wall, diorite footwalls; vein strata, bearing northwest and southeast; width 5 feet, length 4500 feet. Mineral is gold, assays at \$8. Water from a shaft 600 feet deep on the property; timber scarce; power from the Eastern Oregon Light & Power Company. Mine has been idle for 30 years and all surface equipment and buildings are sold. Owner is Albert Geiser, Baker, Oregon.